



VOL. 10 No. 1  
JANUARY - JUNE 2016  
ISSN: 0855-9163

GH¢10.00 \$ 20.00

# ENTVARS BUSINESS JOURNAL

INTERNATIONAL  
REFEREED  
JOURNAL



# 2016 ADMISSIONS

West University College Graduate School invites prospective applicants to apply for its Masters Programmes in the following specialisations:

## Programmes

- Taxation
- Microfinance
- Applied Accounting

## A Programmes

- Finance
- Marketing
- Entrepreneurship
- Project Management
- Human Resource Management
- Logistics and Supply Chain Management

## PROGRAMME OBJECTIVES

Our objective is not only to produce a special core of management, financial, and strategic thinkers equipped with the requisite information, technological and leadership skills to solve current global economic problems, but also equip them with Christian values of integrity, the fear of God, hard work, and excellence.

Thus, our programmes are designed to:

- Prepare students to identify, analyze and understand the interrelations among local and international business organizations.
- Develop individuals who can lead organizations towards economic success and social responsibility in the global market place of the 21st century.
- Prepare individuals to integrate information resources and technology to enable them to anticipate and manage change.

- Develop an awareness of social and environmental needs and concerns as they relate to ethical, professional and socially responsible business practices.
- Provide students with a solid core business education that emphasizes case studies, research, presentations, seminars and lectures.

## ADMISSION REQUIREMENTS

Candidates must possess a good first degree (not less than 2nd Class Lower) from a recognized University.

## DURATION OF THE PROGRAMME

The MCom and MBA Programmes run for two academic years.

## SESSIONS FOR PROGRAMMES

- Evening : Monday - Thursday (5:30pm-8:30pm)
- Weekend : Saturdays (7:30am-8:30pm)

## HOW TO APPLY

- The PUC Graduate School Admissions Forms can be obtained by Ghanaian applicants for GHS 120.00 and \$120.00 (or its Cedi equivalent) for International applicants at the following locations:

- Pentecost University College, Graduate School Campus – Kama Plaza, Labone, Accra.
- Pentecost University College, Sowutuom Campus – Sowutuom Accra

Admission forms can be downloaded from the Pentecost University College's website: [www.pentvars.edu.gh](http://www.pentvars.edu.gh). Applicants who download application forms from the website must attach a banker's draft of GHS120.00 / \$120.00 payable to the Pentecost University College Graduate School.

## FOR FURTHER ENQUIRIES

Please contact the Admissions Office on either 0240 505 507 or 0503 816 721 between 9:00am and 8:30pm (Monday to Saturday)

## ADDED BENEFITS OF THE PROGRAMMES – Exemptions from the following Professional bodies:

**MCom Applied Accounting:** ICAG (Level 1&2, except Public Sector Accounting & Financial Management)

**MBA Finance:** ICAG (Levels 1&2, except Public Sector Accounting & Financial Management)

**MBA Logistics & Supply Chain**  
 Management  
 Management Automatic Chartered Institute of Logistics

**MBA HRM Professional (Level 1 & 2)**

**MCom Taxation:** CITG's Professional Level Examinations and two subjects from Final Level 1

facebook  
pentecost university college

twitter  
pentvars

skype  
www.pentvars.edu.gh

ADAG 074

Empowered to serve

# Contents



Admissions, Accra-Ghana // TEL: +233 302 730495 // E-mail: [pucgs@pentvars.edu.gh](mailto:pucgs@pentvars.edu.gh) // Website Address: [www.pentvars.edu.gh](http://www.pentvars.edu.gh)

## 4 Editorial

---

### 9 Enlightened Inquiry

10 **Authentic Leadership** [Defining Reality]  
*Captain Sam Addaih (Rtd.)*

13 **“Educational Transformation for Corporate Success in the 21st Century: A Human Resource Practitioner's Perspective”**  
*Stella Agyenim-boateng (Mrs.)*

---

### 19 Main Articles

20 **The Effect of Aggressive Working Capital Management Policy on the Performance of Listed Companies in Ghana**  
*Moses Oppong, Alexander Owiredu & Rebecca Davis*

32 **An Empirical Assessment of Supply Chain Effectiveness Using Exploratory Factor Analysis (EFA) Approach: The Case of Selected Beverage Firms in Ghana**  
*Ernest Ofori-nyarko*

51 **Evaluation of Debt Recovery Strategies of Micro-Finance Institutions in The Greater Accra Region of Ghana**  
*Mr. Akrobor, S. T*

69 **Examining the Tax Implications for the Adoption of International Financial Reporting Standards (IFRS) in Ghana**  
*Abedana, V. N., Adom-frimpong, K., Omane-antwi, K. B.*

92 **Relevance of Public Relations in Building the Corporate Reputation of an Organisation: An Exploratory Study of Two Manufacturing Organisations in Ghana.**  
*Albert Anani-bossman & vida Osei Bonsu*

---

### 105 Students' Corner

106 **Earnings Management: The Dark Side of Financial Reporting**  
*Prof. John B. K. Aheto*

---

### 119 Economic & Financial Report

119 **Ghana: Economic Strategic Report – Q1 2016**

---

### 133 Guidelines to Contributors

---

### 137 Subscription Form

# EDITORIAL BOARD MEMBERS

NAME	DESIGNATION	POSITION/INSTITUTION
1. Prof. J. B. K. Aheto	Chairman (External)	Visiting Professor - PUC Graduate School
2. Prof. K. B. Omane-Antwi	Deputy Chairman (Internal)	Vice Rector/Dean of Graduate School - Pentecost University College (PUC)
3. Prof. Samuel Adams	External Member	Dean – School of Public Service and Governance, Ghana Institute of Management and Public Administration (GIMPA)
4. Rev. Dr. Emmanuel Apea	Internal Member	Lecturer, Pentecost Theological Seminary (PTS) & Coordinator, School of Theological Education by Extension (STEE) – PUC
5. Dr. Robert Darko Osei	External Member	Lecturer, Institute of Statistical, Social and Economic Research (ISSER) – University of Ghana, Legon
6. Dr. Paul Onyina Adjei	Internal Member	Head of Department of Management Studies – PUC
7. Dr. (Mrs.) Akua Darkoah Frimpong	External Member	Dean of Students & Lecturer – Wisconsin University College
8. Dr. Elizabeth N. Appiah	Internal Member	Head of Department of Economics and Marketing Services – PUC
9. Captain Sam Addaih (Rtd.)	External Member	Management Development Consultant & Adjunct Lecturer – PUC Graduate School
10. Mr. Albert Anani-Bossman	Internal Member	Lecturer, Department of Communications Studies – PUC
11. Mr. Kofi B. Kukubor	External Member	Governance and Policy Analyst
12. Mr. Paul Danquah	External Member	Director of IT Infrastructure - University of Professional Studies, Accra (UPSA)

13.	Mrs. Jessie Amable	External Member & Editor-in-Chief	Lecturer, Ghana Institute of Languages - Accra
14.	Ms. Doris. Adabas Kuwornu	External Member	Media Consultant & Director, Enigma Images Limited
15.	Ms. Ophelia Ablorh	External Member	C.E.O - ROLHAB Services (Human Capital Development)
16.	Ms. Doris Argee	Secretary & Production Coordinator	Executive Secretary to the Dean - PUC Graduate School

## INTERNATIONAL MEMBERS

NAME	DESIGNATION	POSITION/INSTITUTION
1. Prof. George M. Puia	Member	Saginaw Valley State University – U. S. A  Dow Chemical Company Centennial Chair in Global Business/Associate Dean for External Relations and Faculty Research
2. Prof. Joseph Ofori Dankwa	Member	Professor of Management College of Business and Management Saginaw Valley State University – U. S. A
3. Mr. Charles Kingsley Marful	Member	National Director of Human Resources for Ernst & Young – Canada
4. Dr. S.T. Kwame Boafo	Member	Adjunct professor, Caribbean Institute of Mass Communication, University of the West Indies, Mona Campus, Kingston, Jamaica  Former Director of UNESCO Kingston Cluster Office for the Caribbean and Representative to 17 Dutch and English-speaking Caribbean Countries

## COMING OUT OF THE WOODS

Since 2013, Ghana has been in the woods and on the high seas with regard to its economy. The nation's indexes of major economic indicators have significantly deteriorated and have been very disturbingly poor. Much of the blame has been put on Ghana's energy and power sectors. As a result of neglect and lack of proper long-term energy and power planning, the nation now has to pay dearly with the resultant "dumsor" and attendant economic problems that are currently adversely affecting all sectors and segments of the economy. The resulting prolonged and deep decline in Ghana's economic performance is well known to all in the country. The nation's annual budget for the last three years had to be revised a number of times. In effect, the country is going through what may be referred to, at best, as economic recession and, most appropriately, as economic depression. This, in reality, represents the downside of our national economic or business cycle.

The current poor economic performance of the nation has adversely affected the nation more than the earlier global economic and financial crisis - the credit crunch of 2007. Ghana came out of that global financial crisis relatively unscathed. To some extent, either we seemed not to have been part of the world or have not been integrated into the global economy. The effects of the "dumsor" however are clearly reflecting the fact that our basic economic problems or business

cycle are more home-grown than imported. Our economic relevance in the world is undeniably insignificant. Our business cycle and its causes are essentially undefined and unknown. Indeed, Ghana behaves as if it is not subject to the normal economic or business cycles that even the best economies are exposed to.

Although there is no one agreed universal official definition of the term economic recession or depression, there is a general recognition that the term refers to a period of significant decline in economic activity. When short periods of economic declines become frequent, the situation ceases to be referred to as recession. Most economic commentators and analysts use, as a practical definition of recession, two consecutive quarters of decline in a country's real (inflation-adjusted) gross domestic product (real GDP) - the value of all goods and services a country produces adjusted for inflation. Although this definition is a useful rule of thumb, it has its drawbacks. A focus on GDP alone is too narrow, and it is often better to consider a wider set of measures of economic activity to determine whether a country is indeed suffering economic recession or depression. Thus, using other indicators in addition to the GDP can provide a much timely gauge of the state of an economy.

After nearly a year of falling commodity prices, rising unemployment, increasing personal and corporate bankruptcies and failures, falling stock prices, and declining public confidence, people who lost their jobs and the greater

number of investors who experienced substantial losses in the stock market now know what recession is - beyond official definitions. Although many economists use declines in gross domestic product to define a recession, others use employment, industrial production, manufacturing production, trade sales, personal income, and so on. The immediate short-term consequences of economic recession and depression typically include increased unemployment, decreased consumer, business and public spending, loss of consumer confidence, and declining stock prices and profits.

As a matter of fact, most developed free-market economies of the world use a broader definition and consider a number of measures of economic activity to determine the dates of recessions. In the USA, the Business Cycle Dating Committee defines a recession as "... a significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in production, employment, real income, and other indicators. A recession begins when the economy reaches a peak of activity and ends when the economy reaches its trough." Consistent with this definition, the Committee focuses on a comprehensive set of measures including not only GDP, but also employment, income, sales, and industrial production to analyze the trends in economic activity and determine appropriate corrective fiscal and monetary measures that need to be taken.

The term business cycle refers to economy-wide fluctuations in employment, production, trade, and general economic activity. Many people in Ghana are at a loss as to whether the country's current economic problems qualify as recession or depression. An economic recession implies a slowdown in economic activity characterized by less consumer spending and, often, also by higher unemployment rates. Generally accepted indicators of a nation's economic recession in the developed nations or economies are usually a decline of gross domestic product for at least two consecutive quarters and a sudden increase in the relevant measure of unemployment. However, since it takes a significant time to compile and verify these economic data, a recession may be well underway or even over before certain government agencies officially realise and declare it. The leading,

lagging, and co-incidental indicators of economic activities and of recession or depression are often nation-specific.

Economic recessions and depressions are theoretically different. In essence, an economic recession is an extended period of decline in general business activity. An economic depression, on the other hand, involves a much longer period of more pronounced or drastic decline in a national or international economy. In the advanced countries, this is typically reflected by at least three consecutive quarters of falling real gross national product and gross domestic product. Economic recession reflects a period of general economic decline, defined usually as a contraction in the GDP for a certain period. It is marked by high unemployment, stagnant wages, and fall in retail sales. A recession generally does not last longer than one year and is much milder than a depression. Although economic recessions are considered a normal part of capitalist or unplanned economies, there is no general consensus among economists about its causes. Recessions are the low points of the normal economic cycle. A depression, on the other hand, is defined as a severe and sustained recession. It is a recession that is unusually longer lasting, severer, and more pervasive in reach or effect than the more frequently occurring recessions. Recession is a normal (albeit unpleasant) part of the normal business or economic cycle of a nation.

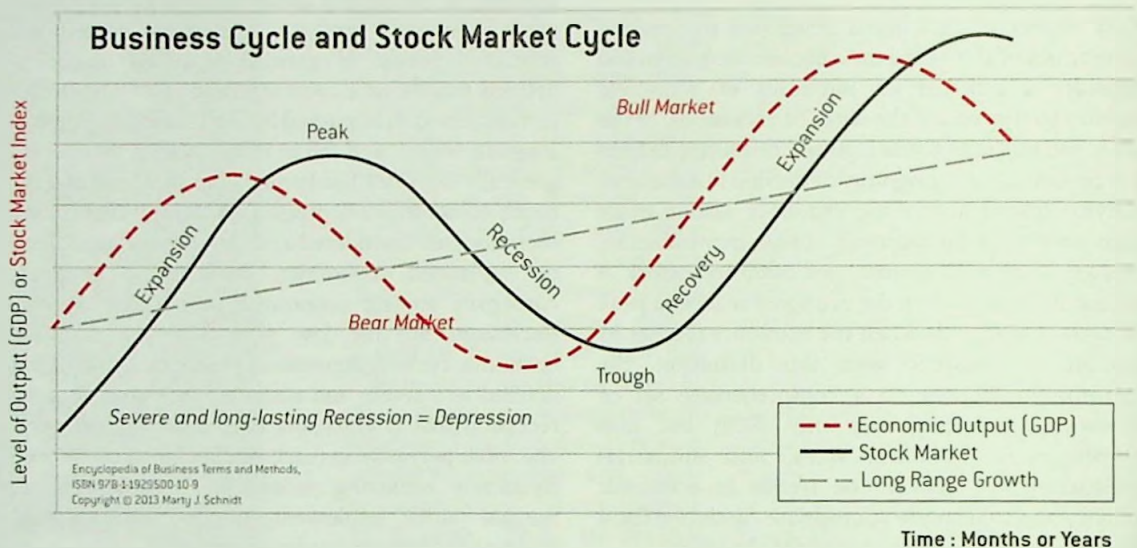
During recession, demand and economic activities are normally stimulated by the government and industry. Under sound macroeconomic policies, taxes and interest rates usually fall to stimulate the economy - prop up general demand - by offering cheap rates at which to borrow money. A nation's "Index of Leading Economic Indicators" provides the signs of economic decline and hence potential recession or potential depression. Globally, records of the predictive ability of many nations of correctly anticipating and predicting - hence preparing for recessions - are at best questionable.

Recession and depression are associated with and are integral parts of a nation's business or economic cycle. This term is used in several ways in business or economics. The first and primary meaning of

business cycle refers to fluctuations in economic output in a country or countries, characterized by well-known phases of peaks, troughs, recession, depression, recovery, and expansion. The business cycle or economic cycle in this sense may be accompanied by changes in stock market prices, known as the stock market cycle. The second meaning of business cycle sometimes refers to stages in the life span of a single company. In this regard, important phases in a company's life may include: birth (or start up), growth, maturity, decline, and demise. Progress through these cycles

may be impacted heavily by the economic or business cycle. The third meaning of business cycle also refers to phases in the life of an on-going business entity covering a year or several years.

The most familiar use of the terms business cycle or economic cycle refers to changes in economic activity within a country or countries. The figure below (by the Encyclopedia of Business Terms and Methods, 2013) of business cycle and stock market cycle shows how the different phases of the business cycle correspond to increases or decreases in GDP. It depicts recession or depression and expansion.



Overtime, the GDP of most countries tends to grow, as suggested by the "Long Range Growth" line in the figure. The long range growth curve may be considered a baseline, around which economic output may fluctuate as the economy enters different phases of the business cycle. Stock market prices (the Stock Market Cycle) tend to rise or fall in anticipation of changes in the economy (GDP). In reality, the "cycle" tends to be less predictable, less regular, and less smooth than the figure above suggests. In addition, the length, severity, and sequence of the various phases in many nations may differ from what is shown in the figure.

The business or economic cycle is definitely different from "seasonality" or "seasonal fluctuations" in business or in an economy. Seasonal fluctuations tend to impact some businesses and industries more than others and they are tied

predictably to calendar seasons or to short-lived events. By contrast, the business or economic cycle has broad impacts across companies, industries, and calendar seasons. While the business cycle is defined and measured primarily in terms of national GDP, progress through its phases is felt most keenly by individuals and businesses in terms of changes in employment or unemployment, wholesale sales and retail sales; new building loans and new building starts, or building closures and property foreclosures; business startups and business growth, or business failures.

During recessions and depressions governments and private industry alike are keenly motivated to act on measures that might move the economy back into recovery and expansion. Any attempt to remedy an economic downturn, however, has to start with an accurate understanding and assessment of the



underlying cause and the relevant factors that would most likely trigger off recovery. This phase is central to the field of macroeconomics and, not surprisingly, it is a field characterized by competing theories, speculations, and a few established laws or theories dating back to Adam Smith and Keynes.

A number of factors are known to be associated with upturns or downturns in any economy, although the extent to which they are either causes or results is not often well known or agreed by all. These causal factors determine, to a very large extent, the necessary and relevant remedies. These factors include an imbalance in a country's money supply, inflation, and interest rates (monetary policy issue); excessive government spending, especially deficit spending or borrowing; consumer and business confidence - optimism or pessimism - regarding business growth and inflation; large increases or decreases in the price of the essential inputs to production; weak demand for goods and services - the central factor in Keynesian economics. Unlike the classical economists, it is established by the Keynesian view that during recessions and depressions, the government, utilizing monetary (money supply and interest rates) and fiscal policies - government's spending, transfer payments, taxing, and borrowing policies - should act decisively to increase aggregate demand by either increasing the money supply through reduced interest rates and/or increasing government spending, reducing taxes, increasing employment, and increasing purchasing power of the economic agents.

Keynesians believe that during recession or depression, if demand could be increased, output and employment could be expanded and the economy would return to its expansion or full employment potential. During a recession, Keynesians argue, that, rather than balancing its budget, the government should increase its spending, reduce taxes, and shift its budget toward a deficit. According to Keynesians, higher levels of government spending would directly increase total demand. Further, lower taxes would increase the after-tax incomes of households and they would spend most of that additional income, which would also stimulate total demand. Thus, the Keynesian prescription to cure a recession is a larger budget

deficit, easing of conditions for corporate borrowing, reduced taxes and the like.

In contrast, if the economy was experiencing a problem with inflation during an economic boom, Keynesian analysis called for restrictive fiscal policy to temper excessive demand. In this case, reductions in government spending, higher taxes, and a shift of the budget toward a surplus would reduce total demand and thereby help to fight an inflationary boom.

Economic recessions are often portrayed as short-term events. However, the consequences of high unemployment, falling incomes and profits, and reduced economic activity can have long-term or lasting consequences on individuals, corporations, and governments. In each case, an economic recession can lead to "scarring" - that is, long-lasting or permanent damage to the economic situations of consumers, corporations, nations, and the broader global economy at large.

As far as Ghana is concerned, it is rather unfortunate that we seem to have decided to play politics with every issue. We refuse to think critically and strategically about common national issues with the interest of Ghana at heart. We have not found a way for the various interested parties to work collaboratively to determine the true causes of national problems and to jointly find lasting solutions to them. We blame long festering problems on the governments in power at the time. Hence, in the process, for political expediency, various Ghanaian governments tend to decide to merely patch up and only put mere bandages on clearly festering cancerous wounds and provide "PARA" for terminal brain cancers!


Political oppositions find solace in mere criticisms without offering any credible and realistic long-term alternatives. They resort to political grandstanding and exploitation of the largely illiterate, gullible, hero-worshipping, and uninformed populace. The citizenry follow blindly without any critical analysis of issues. As a nation, Ghana has refused to think, much more think critically, and use its collective brain to solve our problems. The so called CSOs, much touted but often incompetent, and biased, and the media that seems to be only and largely

interested in protecting funding pretend that they are speaking with the voice of the people without any accountability to the same people. Indeed, one often wonders with whose voice they pretend to be speaking.

It is about time we, as a nation and ordinary people, understand that there is a need for collective decisions in the interest of the nation and our future generation, some yet unborn. At the moment, one wonders whether politicians are in business to deceive and merely to serve their own self-interest. It appears that the more they discredit others, the better their chances, or =so they think.

Our successive governments often seem to be at sea and in the woods as to the real causes of our long standing economic problems. Without the faintest idea of the causes, we cannot design relevant cures with pretensions and grand standing. While nations faced with depression and recession significantly reduce interest (to even negative rates) and taxes, we seem to find solace in increasing interest rates and

taxes, even in times of depression. We take joy in increasing rates of existing taxes and inventing dubious and crippling new ones – just to raise government revenue. We focus only on lost government revenue in recession and depression in the midst of massive unemployment, underemployment, and massive economic downturn. Malaysia and Singapore that we often point to as models to emulate did not develop with political divisiveness and self-interest at the expense of national interest. We seem to be seriously abusing and hiding behind so called and irresponsible freedom of speech and democracy to wreak havoc on the nation and the most vulnerable. We, the people, including the "veranda boys" and now "kayayoo girls", must wake up and demand accountability, reasoned judgement, substantiation, and critical thinking from all - without any exception whatsoever - in the interest of the nation and the future generations. The nation must come first in all that we do!

A blue-toned photograph featuring a calculator in the top left corner, a stack of coins on the right side, and a line graph on a document in the center. The graph has a y-axis with numerical values: 6,000, 6,250, 6,500, and 6,750. The title "ENLIGHTENED INQUIRY" is centered over the graph in a bold, sans-serif font, with horizontal lines above and below the text.

# ENLIGHTENED INQUIRY

# AUTHENTIC LEADERSHIP [DEFINING REALITY]

CAPTAIN SAM ADDAIH (RTD.)

Leaders are all very different people. Any prospective leader who buys into the necessity of attempting to emulate all the characteristics of a leader is doomed to fail. The one essential quality you must have to lead is to be your own person, authentic in every regard. The best leaders are autonomous and highly independent. Those who are too responsive to the desires of others are likely to be persuaded by competing interests, quick to deviate from their course or unwilling to make difficult decisions for fear of offending. The advice is simply to be yourself.

## Developing your Unique Leadership Style

To become authentic, each of us has to develop our own leadership style, consistent with our own personality and character. Unfortunately, the pressures of an organization push us to adhere to its normative style. But if we conform to a style that is not consistent with who we are, we will never become authentic leaders. Great world leaders – George Washington, Abraham Lincoln, Martin Luther, Mother Theresa, Kwame Nkrumah, Nelson Mandela – all had very different styles. Yet each of them was an entirely authentic human being. There is no way you could ever attempt to emulate any of them without looking awkward. The same is true of business leaders. What counts is the authenticity of the leader, not the style.

Nonetheless, it is important that you develop a leadership style that works well for you and is consistent with your character and your personality. Over time you will have to sharpen your style to be effective in leading different types of people and to work in different types of environments. This is integral to your development as a leader.

Being true to the person you were created to be means accepting your faults as well as using your strengths. Accepting your shadow side is an essential part of being authentic. The problem comes when people are so eager to win the approval of others that they try to cover their shortcomings and sacrifice their authenticity to gain the respect and admiration of their associates.

## Dimensions of Authentic Leaders

Bill George has determined through many experiences in leading others that authentic leaders demonstrate five qualities: understanding their purpose; practicing solid values; leading with heart; establishing connected relationships; and demonstrating self-discipline.

Acquiring the five dimensions of an authentic leader is not a sequential process; rather, leaders develop them throughout their lives.

**Understanding Your Purpose:** To become a leader, it is essential that you first answer the question,

“Leadership for what purpose?” If you lack purpose and direction in leading, why would anyone want to follow you?

Many people want to become leaders without giving much thought to their purpose. They are attracted to the power and prestige of leading an organization and the financial rewards that go with it. But without a real sense of purpose, leaders are at the mercy of their egos and are vulnerable to narcissistic impulses. There is no way you can adopt someone else’s purpose and still be an authentic leader. You can study the purposes others pursue

and you can work with them in common purposes, but in the end the purpose for your leadership must be uniquely yours.

To find your purpose, you must first understand yourself, your passions, and your underlying motivations. Then you must seek an environment that offers a fit between the organization's purpose and your own. Many leaders search for years to find the purpose of their leadership. It is relatively easy to state your purpose early in life, but much harder to develop a passion for it. Passion for your purpose comes when you are highly motivated by your work because you believe in its intrinsic worth, and you can use your abilities to maximum effect.

**Practising Solid Values:** Leaders are defined by their values and character. The values of the authentic leader are shaped by personal beliefs, developed through study, introspection, and consultation with others – and a lifetime experience. These values define their holder's moral compass. Such leaders know the “true north” of their compass, a deep sense of the right thing to do.

While the development of fundamental values is crucial, integrity is the one value that is required in every authentic leader. Integrity is not just the absence of lying, but telling the whole truth, as painful as it may be. If you don't exercise complete integrity in your interactions, no one can trust you. If they cannot trust you, why would they follow you? According to Max De Pree, “When leaders indulge themselves with lavish perks and the trappings of power, they are damaging their standing as leaders.”

**Leading with Heart:** Sometimes people are referred to as being bighearted. What is meant is that they are open and willing to share themselves fully with others, and are genuinely interested in them. Leaders do that, they have the ability to ignite the souls of their employees to achieve greatness far beyond what anyone imagined possible.

Some leaders behave as though they have no compassion for anyone. It is your life experiences that open up your heart to have compassion for the most difficult challenges that people face along life's journey. Far too many leaders wall themselves off

from people who are experiencing the full range of life's challenges, hardships, and difficulties. They often avoid intimate relationships, even with their friends and loved ones.

Developing your heart means following your own path and being open to all of life's experiences. It means being in touch with the depths of your inner being and being true to yourself. It requires that you know who you are, your weaknesses as well as your strengths. It is in developing compassion that we become authentic human beings.

**Establishing Enduring Relationships:** The capacity to develop close and enduring relationships is one mark of a leader. Relationship is the mirror in which we see ourselves as we are. Unfortunately, many leaders of major companies believe their job is to create the strategy, organizational structure, and the processes. Then they just delegate the work to be done, remaining aloof from the people doing the work.

The detached style of leadership will not be successful in the 21st century. Today's employees demand more personal relationships with their leaders before they will give themselves fully to their jobs. They insist on having access to their leaders, knowing that it is in the openness and the depth of the relationship with the leader that trust and commitment are built. Authentic leaders establish trusting relationships with people throughout the organization as well as in their personal lives. The rewards of these relationships, both tangible and intangible, are long lasting.

**Demonstrating Self-Discipline:** Self-discipline is an essential quality of an authentic leader. Without it, you cannot gain the respect of your followers. It is easy to say that someone has good values but lacks the discipline to convert those values into consistent actions. None of us is perfect, but authentic leaders must have the self-discipline to do everything they can to demonstrate their values through their actions.

Leaders are highly competitive people. They are driven to succeed in whatever they tackle. Authentic leaders know that competing requires a consistently high level of self-discipline to be successful. Being

competitive is not a bad thing; in fact, it is an essential quality of successful leaders, but it needs to be channeled through purpose and discipline. Sometimes we mistake competitive people – those who generate near-term results by improving operational effectiveness – for genuine leaders. Achieving operational effectiveness is an essential result for any leader, but that alone does not ensure authenticity or long-term success.

Leaders are always being examined under the microscope. Their behaviour are observed, discussed, and dissected by their employees as well as by a myriad of outsiders. To be authentic, leaders must behave with consistency and self-discipline, not letting stress get in the way of their judgment. They must learn to handle any kind of pressure and stay cool and calm. Handling unexpected challenges requires being in peak condition. Becoming an authentic leader involves many years of hard work, some pain and suffering, and the wisdom that comes from experiencing life at the fullest. It is only in the “wilderness” and “crucible of life” that we develop into authentic leaders.

Authentic leaders have a steady and confident presence. They do not show up as one person one day and another person the next. Integration takes discipline, particularly during stressful times when it is easy to become reactive and slip back into bad habits. Leading is high-stress work. There is no way to avoid stress when you are responsible for people, organizations, outcomes, and managing the constant uncertainties of the environment. The higher you go, the greater your freedom to control your destiny but also the higher the degree of stress. The question is not whether you can avoid stress but how you can control it to maintain your sense of equilibrium.

Authentic leaders are constantly aware of the importance of staying grounded. Besides spending time with their families and close friends, authentic leaders get physical exercise, engage in spiritual practices, do community service, and return to places where they grew up. All are essential, Bill George will conclude, to their effectiveness as leaders, enabling them to sustain their balance.

---

ABOUT THE AUTHOR

**Captain Sam Addaih (Rtd.)**

He is a Management Development Consultant and an Adjunct Lecturer at the Pentecost University College Graduate School.

# “EDUCATIONAL TRANSFORMATION FOR CORPORATE SUCCESS IN THE 21ST CENTURY: A HUMAN RESOURCE PRACTITIONER'S PERSPECTIVE”

STELLA AGYENIM-BOATENG (MRS.)

During my formative years, I used to hear about Aggrey-Fraser-Guggisberg Memorial Lectures, JB Danquah Memorial Lectures, etc. To my youthful mind at the time, such lectures caused the families of such great people perpetual pain and anguish. I remember asking my mother why people took delight in causing pain to the families of these distinguished personalities who had been great pillars of our society. She laughed and explained to me that it was done to honour the memory of these personalities as well as provide the platform to discuss issues of national importance. She buttressed her point further with an Akan proverb; “Se wo fro dua pa ena ye pia wo” literally meaning “it is only when you distinguish yourself that you are celebrated”.

As a human resource practitioner, with extensive international experience and exposure, I have come to understand the need for celebrating success. In Ghana, we can boast of our past glories regarding education. The older generation recall the keen rivalry that existed between Nigerians and Ghanaians at the educational and intellectual levels. There was “quality education” and deep respect and profound appreciation for the value of education then. Education was the leveller and the hope of many to get them out of poverty. Parents sacrificed a lot, even in the villages, to ensure that their children got good education. Teachers were equally motivated to impart knowledge selflessly. Indeed, all the essential parties needed to provide quality education and educational service delivery were active participants.

A few decades ago in Ghana, it was not uncommon to see high ranking officers or executives of great companies who had only a Middle School Leaving Certificate as their highest level of academic

qualification. The quality of the education and training they received adequately equipped them with what they required to succeed in their chosen careers. As the years went by, it became the norm for organizations to visit our institutions of higher learning and recruit prospective graduates promising them houses and cars just because the knowledge, skills, and training they had acquired were exactly what these organizations required to be successful.

As recently as the 1980s and 1990s, a first degree or its equivalent was all that a person needed to be employed as a manager or a senior staff. These graduates moved up the corporate ladder faster due to the substance that they were made of. Junior staff were also inspired by the exploits of their senior colleagues to pursue higher academic laurels. Once they upgraded themselves, these junior staff were moved into senior positions. It is important to indicate that their movement into managerial positions was not based only on the fact that they had become graduates but rather that their appreciation of corporate culture, knowledge, and analysis have been greatly enhanced.

Not quite long ago in Ghana, we did not have a lot of educational institutions and it did not cost so much to educate and train people. The government or state was the dominant provider of educational services. However, the products of such institutions propelled the organizations where they worked from one level of success to another. Unfortunately today, the exact opposite is what we see. Educational institutions from crèche to tertiary level have sprung up in virtually every nook and cranny of the country. These schools charge exorbitant fees. Sadly, some of them churn out “half baked cookies” who are found wanting when they enter the corporate world. It is

therefore not surprising that these days many organizations, as part of their recruitment exercise, oblige prospective employees to go through diagnostic exams, SHL exams, case analysis, game play, role play, power-point presentations, and many more in addition to several progressive stages of interview. This is to ensure that only the very best get employed. I give credit to educational institutions which, inspite of all odds, have still maintained high academic and moral standards.

Education has great social importance especially in modern, complex industrialized societies. Philosophers of all periods, beginning with ancient sages, devoted to it a great deal of attention. Our current educational system in Ghana is characterized by troubles of varying degrees. If these are not tackled as an emergency, they will become a canker and eat into the very fabric of our society. A Common refrain: 'EDUCATION IS THE ONLY KEY!' Unfortunately, this key is now rusty and unable to open the doors to the corporate world. There is an urgent need for some lubrication.

Among the myriad of factors that contribute to Ghana's current educational problems and progressive decline, is our collective negative attitude towards education. From the early stages to the tertiary levels, quality education no longer occupies the pedestal it once did in Ghana. Professionalism and professional pride in teaching and learning is generally missing. Supervision is very lax because everybody thinks they are doing the other a favour. In some schools, teachers go to school with cookies such as meat-pie, cake, rock-buns, "kulikuli", "onkada", ice-creams and doughnuts to sell to the students instead of teaching them. Sometimes, they have a favourite student who they mandate to sell the wares on their behalf. At other times too, all the students are forced to buy these wares even if they have to come and pay for them the following day. So, at a young age, school children acquire the wrong perception that money is an end in all. This wrong perception drives school children out of school early in pursuit of money, which eventually eludes them because they have no strong educational pillars to build on.

A sound mind we are told lives in a clean body and environment. What do we see now? Dilapidated

buildings are used as classrooms and in some instances one room is used by two different classes. School buildings are in such pathetic states that they do not even encourage effective learning anymore. It is therefore not surprising that more and more teachers are refusing to go to such places when posted there.

The influx of technology and its affordability should be a positive influence on our educational system. However, instead of using such gadgets for learning activities, students are usually found either sampling their ringtones or showing-off with their latest tune upload. They are either blue-toothing, texting, or 'whatsapping' in class or playing games while their teachers are teaching. Students these days hardly read books other than their course materials, which they only find imperative to read during examinations periods. It is appalling to engage some of these students in a chat because their vocabulary is woefully flawed and limited.

The honest truth is that educational standards in Ghana have fallen significantly and drastically. Rather than taking steps to reverse this declining trend, the blame game as to who is behind or causing the falling standards of education, continues to rage on in Ghana.

Parents blame governments and teachers for not providing quality education to their children; governments blame teachers for not doing much in the provision of quality education; and teachers are not happy that government is not providing adequate and necessary teaching and learning materials to help them to deliver effectively. Teachers in turn blame parents for not providing their children with the right training and for shirking their responsibilities as parents. Communities are no longer involved in the education of children.

In this fast changing and technologically-driven world, a total transformation of our educational system is what is required to make us competitive and also meet the needs of corporate organizations. It is in this regard that I consider "Educational Transformation for Corporate Success in the 21<sup>st</sup> century" the most appropriate theme for this article.



The educational systems in our country do not correspond directly to the economic realities prevailing outside the school systems. Instead of training professionals and equipping them with employable practical skills, we have pushed practical hands-on-training to the background in favour of 'fun classroom environments'. We theorise on what language to teach in and the value of native language as a panacea for our woefully declining educational standards. Our fathers and forefathers were taught in the same English language as our children are now being taught in. What is now missing is much more than language as a medium of instruction or teaching and learning. Success in the global world is not determined by what language we speak as by our intellectual competence.

Let me share a few thoughts around what needs to be done in a bid to transform Ghana's educational sector to its past glory and in the process to enable it meet the needs of the highly competitive global corporate environment. There is no doubt that some of the courses being pursued in our institutions of higher learning need to be repackaged significantly and differently. Consequently, there is the urgent need for a total refresh of these courses to reflect current business or market trends and needs of Ghana. New or revamped courses, which will contribute to the growth and development of organizations and nations, should replace courses which have no practical place and relevance to the corporate world or nations today. This way, the curriculum of these institutions would be tailored to meet organizational and national needs. In this regard, there is a compelling need for very close and meaningful practical collaboration between the educational institutions, employers, governments, and communities. It is not good enough and it is definitely not acceptable for employers to only complain about the poor quality of the products and the irrelevance of courses and programmes of the higher educational institutions in Ghana without engaging in any sustainable self-initiated collaborative remedial actions.

There is the need to develop skills-based curricula and build institutional and human resource capacity to deliver such curricula. Closing the digital skills gap or divide will be key, if our graduates are to flourish in the fast evolving Ghanaian and global

labour market. As traditional trades and sources of employment disappear, twenty-first century technology is taking their place. Employers regularly complain that school leavers or graduates do not have the appropriate skills for a digital workplace. It is therefore vital that our students are sufficiently supported to realize the potential of information and communication technologies. The need to build well-resourced digital labs for schools at all levels with trained resource persons cannot be over-emphasized. Let us translate ideology, theory and conceptualization to realization and implementation. Corporate bodies must stand up to substantially support such initiatives. It becomes more collaborative when there is genuine and self-imposed partnership between the corporate world and academia.

We need to move away from churning out theoretical graduates to practical graduates. The private sector is most attuned to the changing skills needed for work-place success. We need to promote employer involvement in curriculum discussions. This will not only ensure that students learn key career skills, but foster partnerships to improve job chances once students graduate. One of the ways through which we can get this done is for educational institutions to partner with corporate bodies. Through this partnership, corporate bodies could furnish the educational institutions with the type of training and skills set that organizations require at any point in time or into the future. I therefore call on the appropriate government bodies and associations of employers or the private sector to support this initiative.

For students to construct knowledge, they need the opportunity to discover for themselves and practice skills in authentic situations. Providing students access to hands-on activities and allowing adequate time and space to use materials that reinforce the lesson being studied creates an opportunity for individual discovery and construction of knowledge to occur.

Equally important to self-discovery is having the opportunity to study things that are meaningful and relevant to one's life and interests. Developing a curriculum around student interests fosters intrinsic motivation and stimulates the passion to learn.

Also, our educational system would have to be transformed and reformed such that students can undertake mandatory and supervised long vacation attachments and internships during their 4-year period of study. This would enable them to experience corporate or real work life. During such internships, students could be put on various projects where they will be expected to directly apply some of the principles learnt in school. Their appreciation of corporate life will no doubt influence their choice of careers as they prepare to enter the world of work. The quick argument here will be that "... but every vacation, students in the tertiary institutions are obliged to undertake internship". The question is: do we really have monitoring mechanisms to check if they were present in those businesses they claim to have undertaken their internship in? If indeed they were, what kinds of learning took place and what kinds of projects did they engage in? Do we follow up with the companies to ascertain how the students fared when benchmarked with other students from similar institutions? Do the companies really care about the students on board? Such initiatives will set the clarion call for certain positive variations to occur in our learning methodologies.

Closely related to this is the appointment of key personalities in the corporate world to periodically speak to students on their career choices and also serve as guest lecturers on topical issues relevant to organizational growth and development. These people can also serve as role models and help shape the career paths of students as they prepare for the challenging corporate world of the 21st century. If perhaps currently we are doing this but it is on a very low scale, then let us give it more prominence so society can take a bolder look to make it a lot more attractive and useful. Every employer today is protective of the employer brand and will not, under any circumstances, compromise on that. Employees and students need to be 'brand ambassadors'.

One key inclusion for final year students before they enter the world of work is how to present and position themselves at interviews. They must appreciate strategic positioning, understand organizational perspectives, workplace communication, confident-driven individuals, presentation skills, ability to make thought-provoking and information-based decisions etc. It

will be appropriate for practitioners to spend time with students to groom them in the above areas as they prepare for the world of work.

We need to promote high-quality and relevant vocational educational programmes. This should be one of the key focus areas of governments. This is because in the current corporate world, the chains of degrees that one has acquired are really not as critical as the skills one has acquired and one's ability to put them to use. Thus, once a person has a relevant vocation, it is quite easy to fit into the world of work. Are we making students to appreciate the stark realities in the world of work? Is there any curriculum that touches on ATTITUDE, COMMUNICATION, and other soft skills that are imperatives for successful careers? Is our focus still only on the hard core specialist skills? If businesses today have to choose between the devil and the deep blue sea i.e. between unwillingness and inability, they will hire people who are willing but not able than people who are able but not willing. In the first place, the willingness will make them appreciate the need to build their capability but when ability is clouded by unwillingness, the battle is lost before the first shot is fired because any investment in such an individual will be worthless.

What are these required soft skills and what are the live examples and testimonies that students need to know? Collaboration between business and academia will bring these to the fore and, therefore, prepare students adequately for the world of work. It is time to consider entrepreneurship as a mandatory course from the senior high school through to the tertiary levels. The aim should be to make students imbibe the idea of coming out of school to run their own enterprises and eventually be employers themselves. Such initiatives should be given a lot of visibility through public relations promotions as a way of influencing like minds and exposing others to consider exploring such opportunities. This will reduce graduate unemployment considerably.

A recent study conducted by a think tank into the curriculum of teacher training institutions in West Africa revealed that the curriculum does not contain anything that will ultimately train teachers to be innovative and creative. These findings are most unfortunate. When teachers are trained to be

innovative, they will in turn teach students to be creative and constantly think of introducing new ideas into the organizations where they will eventually find themselves. Therefore, the redesigning of the current teaching and learning methods and the building of a much stronger curricula is imperative.

Our schools need to be challenged in ways that enable learners to adopt and apply new working techniques to be entrepreneurial, and at the same time create awareness that as the work world changes, students, schools, teachers, and employers must also change. Creative thinking with capital support can produce entrepreneurs who will eventually expand the opportunities for work and by that reduce or eliminate the graduate and youth unemployment syndromes. During vacations and sabbaticals, teachers can partner with industry or business to spend some time where open discussions and, or observations can enhance their understanding of industry practices. They can then pass on these to their students when they go back to their classrooms. Such first-hand information is worthwhile to bridge the gap between industry and academia. It has the potential to turn out students who will be a better blend of corporate practices and academic excellence.

The consumers that corporate bodies serve today are highly sophisticated. We, as employers need employees who can be a step ahead always with the view to satisfying consumers needs and thereby retaining them.

Our educational sector, when transformed, should be able to see the following:

- Students equipped to learn how to learn ( and not just learn facts and recall them)
- Students prepared to meet corporate and socio-economic needs of the nation.
- Students with marketable skills.
- Unearthing of the creative talents which are dormant or hidden in the students.
- Students with developed critical thinking and problem solving skills.
- Scientifically and technologically literate graduates.
- Graduates with high moral standards.

- Students with good combination of soft and hard skills.
- Students who can multi task, who are adventurous and not risk averse.
- Students who are innovation-hungry.
- Students who are ambitious and competitive.
- Students with curious and analytical minds.
- Students with entrepreneurial mind-sets.

In a world, which is rapidly becoming a global village as a result of the development of sophisticated communication technologies, our educational sector should be transformed to ensure that all students become computer literate and able to access information on the Internet. This is where the government can collaborate with private computer companies to set up computer labs in our schools for reasonable fees. The teachers can also use this facility to give assignments to students, provide uninterrupted feedback, keep a database on students, encourage research, and make continuous assessment more teacher-friendly and student-friendly.

The time for "Chew, Pour, Pass, and Forget" is over. This is the time for analysis that derives results; - not analysis paralysis. Let us also pay attention to students who are psychomotor driven – technically but not 'grammar school' oriented. These hands-on students are equally important to society, which now needs them more than ever before.

In conclusion, let me emphasise that we must recognise that if we do not reform or transform our educational system now, we will be seriously letting down future generations who will be competing in this modern world without the requisite 21st century skills. Education is at the heart of every human progress. Educating the citizenry and students, driving innovation, and promoting social equity are needed in every society, especially the developing ones. The very best educational systems prepare people to be successful, productive, and engaged members of society. These systems provide appropriate knowledge, skills, and relevant experiences that enable students to obtain jobs that promote social equity and economic growth. This is what we need in Ghana in the 21st century. I therefore call on the government, civil society, and

all stakeholders to heed this clarion call. All hands are urgently required to be on deck now, otherwise posterity will NEVER forgive us. As Robin Cook said, "... Education is more than a luxury; it is a


responsibility that society owes to itself." We need to discharge that responsibility dutifully for the sake of posterity.

ABOUT THE AUTHOR

---

**Stella Agyenim-Boateng (Mrs.)**

She is the Director of Human Resource at Vodafone Ghana.



MAIN  
ARTICLES

# THE EFFECT OF AGGRESSIVE WORKING CAPITAL MANAGEMENT POLICY ON THE PERFORMANCE OF LISTED COMPANIES IN GHANA

MOSES OPPONG, ALEXANDER OWIREDU & REBECCA DAVIS

## Abstract

Working Capital Management is an important part of the financial management activities of companies as it tends to have effect on liquidity and overall profitability of organisations. It is argued in finance literature that an optimal working capital enhances profitability. Traditional studies on working capital management have tried to prove this by examining the effect of working capital management on the profitability of companies. We deviate from this norm by examining the effect of aggressiveness of working capital management policy on the profitability of Ghanaian registered companies. Using the financial statements of 21 Ghana Stock Exchange listed companies covering the period 2006 to 2011, we examined how their return on equity and return on assets were influenced by the aggressiveness of the working capital policy. Data obtained was analysed using regression analysis. Our empirical results show a negative relationship between working capital management policy and the measures of profitability adopted. We conclude that management cannot increase profit by adopting a very aggressive working capital management policy.

---

**Key word:** Profitability; Working Capital Management Policy; Aggressive Finance Policy; Aggressive Investment Policy; Cash Conversion Cycle.

## INTRODUCTION

Working capital management entails deliberately taking decisions to maintain a balance between two contrary objectives of the ability to maintain liquidity as well as add value to the business. In theory and practice, a high level of current assets creates excess liquidity and impacts negatively on profitability whereas insufficient level of current assets leads to loss of liquidity and consequently interrupts business operations. As the global economy struggles to fully emerge from the devastating effect of the credit crunch, managers of companies have come under immense pressure to create value for shareholders. Where owing to the nature of the business, the entity has to maintain high level of inventories and receivables, working capital can lock up a substantial portion of the company's financial resources. The cost to such an entity would be very high. However, a company can create value and reduce risk of loss of liquidity by carefully managing its level of current assets and liabilities. It would be important to monitor the components of working capital of the organization.

From the viewpoint of the finance function, working capital management may be misconstrued to some extent to be limited to a small activity. It is sometimes believed that working capital management simply involves making sure that an organization is able to finance the difference between the current assets and current liabilities. People who believe in this view would consequently be satisfied for as long as the entity is able to generate adequate cash to pay its current liabilities and when they fall due. Contrary to this view, Uyar (2002) believes that a total approach that covers the company's activities relating to payable, receivables and products is much desirable.

Additional finance research on working capital management has tended to focus on selected components of working capital and their impact on profitability of companies. Conventionally their attempts have been to assess how those variables influence their dependent variables. Uyar (2009),

Bagchi and Khamrui (2012) examined the relationship between working capital management and firm performance. Banomyong (2005), Raheman et al (2010), Bieniasz A and Golas Z (2011) and a host of others have all examined the effect of certain aspects of working capital management on profitability. Sadly, the effect of the working capital management policies on the financial performance of companies has not been extensively explored. A key objective of this research is to find out whether the working capital policies of companies have influence on their performance.

Jose Md L, Lancaster C and Stevens J L (1996) observed that "firms with glowing long-term prospect and healthy bottom-lines do not remain solvent without liquidity management". Some companies adopt an aggressive working capital management policy to address the challenges discussed above. An aggressive working capital policy is the one in which an entity maintains a minimal investment in current assets while it relies extensively on current liabilities. The purpose of an aggressive working capital management policy is to limit an entity's investment in current assets by enhancing the efficiency of their use. The effect is that, the entity will have less money at the bank, less inventory in storage, up-to-date receivables, and possibly supplier's payment period at the maximum limit.

An aggressive working capital management policy may be pursued from two sides: the asset side and the liability side. The asset side involves ensuring that the current asset to total asset ratio is very low. This will ensure that excess liquidity and its attendant costs are avoided. The liability side ensures that the current liability to total assets ratios is high. This may increase value to the business because the company would be able to avoid some costs of finance provided it is able to meet payable periods. Both sides require careful planning and monitoring to sustain that delicate balance.

## Contribution to Knowledge

Review of literature on the subject matter reveals that there is no study about the impact of aggressive or conservative working capital management policy on the firm profitability in Ghana. This article contributes to literature on the effect of aggressive working capital management and profitability in several ways. Firstly, it focuses on the Listed

Ghanaian companies. Secondly, the study validates as well as disputes some of the foreign empirical research on the subject matter. In essence, since there are geographical, national as well as industrial dimensions to the applicability of research findings, the authors hope to add value to existing literature.

## LITERATURE REVIEW

Nazir and Afza (2009) investigated the relationship of aggressive/conservative working capital policies with the accounting and market measures of profitability of Pakistani firms using a panel data set for the period 1998 – 2005. Weinraub J. H and Visscher S (1998) proxy definition of aggressive working capital policy and aggressive financing policy was used. They found a significantly negative relationship between aggressiveness of working capital policies and accounting measures of profitability. Their conclusion implied that managers could not create value if they adopted aggressive working capital management and funding policies. This finding is at variance with Deloof (2003) but confirmed their findings in earlier studies. Their result was further validated by examining the impact of aggressive working capital management on market measures of profitability as postulated by the Tobin's q model (a classic 1968 statistical measure of the ratio between a physical asset's market value and its replacement value). The results of the Tobin's q were in line with the accounting measures of profitability. They however, stated that investors gave value to firms that were more aggressive in managing their current liabilities.

Barine (2012) examined the effect of improved gross working capital position (arising from improved access to bank finance) on the profitability of 22 Nigerian Listed Firms. His results showed that return on improved working capital position was far less than the cost of capital of those companies sampled. The firms were using short-term financing schemes which were more expensive. He observed

that actual profits of quoted firms in Nigeria was higher but the percentage of operating profit to gross working capital was lower than the cost of working capital. Thus the improved gross working capital position of the quoted firms had not improved their profitability. Barine argued that this was an indication that firms were inefficient in their use of the working capital. One would have expected that since financial institutions tend to have a predominantly different composition of working capital, the researcher would have excluded them from the sample. This was however not the case.

Gill et al (2010) studied the relationship between working capital management and profitability of US firms with the view to establishing the direction of impact; positive or negative. The financial statements of US manufacturing firms for the period 2005 – 2007 were used. They found a significant but negative correlation between accounts receivable period and profitability (measured using gross operating profit). That suggests that management of companies could create shareholder value by reducing accounts receivable periods. They also found a significantly positive correlation between cash conversion cycle and profitability; meaning that firms could create value by increasing the cash conversion cycle. That seems to suggest that operational profitability to a greater extent determines how managers act in terms of account receivable management. Their finding was sector-specific and as such could not be easily generalised to the non-manufacturing sectors. Secondly, the use of book values rather than market values somehow limits the predictive value of their findings.



Uyar (2009) examined the relationship of Cash Conversion Cycle (CCC) with firm size and profitability. The sample size for the study comprised 166 Turkish companies listed on the Istanbul Stock Exchange. Size was measured using Net Sales and Total Assets whereas profitability was measured using Return on Equity (ROE) and Return on Assets (ROA). Using the financial statement for the year 2007, the researcher found a significantly negative correlation between CCC and the variables; firm size and profitability. Two points stand out. Firstly, the larger the firm size, the shorter the CCC; indicating that small firms have a longer CCC. Secondly, he found a significantly negative correlation between the CCC and ROA but an insignificant relationship between CCC and ROE. His conclusion was that, when the CCC is shorter, firms may not need external funding and hence incur lower borrowing costs. The use of a single-period statistics indicates that both micro and macro economic variables could affect the generalisation of their findings.

Abadi and Abadi (2012) examine the determinants of working capital requirements in Palestinian industrial corporations. They tested the effect of 7 variables namely: CCC, Operating cash flow, ROA, Firm size, debt level, economic growth and interest rate on loans. Their findings showed that there was a significantly positive correlation between working capital requirements and the first three variables; meaning an increase in any of the those variables would lead to a significant increase in the working capital of companies sampled. They found that firm size and leverage were significant but negatively related to working capital requirements. They did not find any significant correlation between working capital requirements and economic growth and interest rate. This means that the working capital levels of Palestinian corporations are not affected by economic growth and interest rates. Their findings are mostly consistent with earlier studies by Nazir and Afza (2009). However, some of the findings are at variance with some earlier studies on the subject matter including Narendre, V., Menon, S., & Shwetha, V. (2009) who found that firm size has positive correlation with the working capital in the Indian cement industry.

Filbeck and Krueger (2005) in their studies concluded that working capital varies with economic cycles and are therefore dynamic. Therefore in times of high business volatility, companies tend to use large amounts of working capital but adopt an aggressive approach in times of low volatility. Other studies show that when there are more fluctuations in future cash flows the cash held and short-term investment of a company will increase, so managing operating cash flow will have a significant effect on a company's working capital management. Ranjith's (2008) study on Thai firms.

Al-Mwalla (2012) examined the impact of working capital management on company profitability and value. She measured the profitability of the company using ROA and firm value using Tobin's q. The study found that a conservative working capital investment policy has a positive impact on company profitability and value; while aggressive working financing policy has a negative impact on firm's profitability. A further finding of the study was that leverage has no effect on profitability and value while firm's size, sales growth and economic growth have impact on both profitability and value.

Bieniasz and Golas (2011) assessed the influence of working capital management on the food industry enterprise profitability in Poland and selected Eurozone countries. Their findings were that, in the national food industry, larger firms have shorter cash conversion cycle and higher profitability. Their study also showed that in all the different sizes of companies, there existed a negative correlation between profitability on one hand and inventory cycles, accounts receivable cycles and accounts payable cycles. The implication is that managers can not increase profit by prolonging these cycles.

Singh and Asres (2010) examined the determinants of solvency level of firms and its impact on profitability as well as the relationship between profitability and liquidity of firms. The financial statements used comprised 250 Indian Manufacturing firms for the period 1999 to 2008. The independent variables used in the study included sales, return on assets, current ratio, and cash conversion cycle. Enyi's (2005) formula for the calculation of the working capital requirements of a company was used. Three important findings were

made. First, they found a significant difference in the solvency level of companies in the same industry. This indicates that firms in the same industry may not necessarily follow similar solvency management policies. They also found a statistically strong influence of working capital adequacy on profitability. They therefore concluded that firms

with adequate working capital in relation to their operational size perform better than those without adequate working capital. Additionally, they found that the size of a firm (measured using sales) and cash conversion cycle affects the short term debt needs of a firm.

## RESEARCH METHODOLOGY

The purpose of this research is to contribute to a very important aspect of financial management known as working capital management with reference to Ghana. The study will show the effect of aggressive/conservative working capital policy on firm profitability. This section of the research deals with the methodology. We shall discuss the variables included in the study, sampling and the sources of data.

## POPULATION, SAMPLING AND DATA

Owing to the relatively small number of quoted companies on the Ghana Stock Exchange (GSE), all companies formed part of the population of the study. Companies in the financial sector were excluded from the study because they are highly regulated and as a result, managers in that industry have little leverage over the working capital structure. Eleven (11) companies were accordingly excluded because of this condition. For any company in the other sector to be included in the sample, it needed to meet further criteria. First, the company must have remained on the GSE and must not have delisted or ceased operations during the six-

year period spanning 2006 to 2011. Secondly, the company's financial statement must be in the public domain; either from the GSE, the Registrar General's Department or at [www.annualreportsghana.com](http://www.annualreportsghana.com). Two companies were removed because they delisted during the period. Another company was excluded from the study because one of its financial statements was not available. In all, fourteen companies were rejected leaving twenty-one qualifying companies (see table 1). Using all the qualifying companies is very relevant as it avoids sampling and its likely problems of bias and subjectivity.

**Table 1: Summary of Qualified Sample**

Description	No. of Companies
Companies Listed on GSE during the time	35
<b>Less:</b>	
Companies in the financial and regulated sector	11
Companies that delisted	2
Companies whose financial statement was unavailable	1
<b>Total qualifying companies</b>	<b>21</b>

## DATA SOURCES

To ensure that the study is appropriately carried out, data required for the study must be readily available, reliable, from the right source and must be legitimately obtainable. Bearing this in mind, the information was obtained from the following sources: The Registrar General's Department's Register of Companies; The Ghana Stock Exchange Fact Book 2010 and The Annual Report Website ([www.annualreportsghana.com](http://www.annualreportsghana.com)).

Information on the Registrar General's Department on quoted companies is in the public domain and

could be obtained by all interested parties at a marginal cost. Ghana's Company Code of 1963 Act 179 requires all registered companies in the country to file audited annual financial reports with the Registrar General. One may reasonably expect companies filing their reports would have complied with the provisions and as such make their information reliable. The GSE Fact Book 2010 contains the key financial reports of all quoted companies in the country for the five years ending December 2009. Financial data for 2010 and 2011 was downloaded from the online site identified above.

## VARIABLES USED IN THE STUDY

Empirical literature on the relationship between the aggressiveness of working capital policies and their impact on profitability has used various proxies to measure the aggression. This study uses Aggressive Investment Policy (AIP) and Aggressive Finance Policy (AFP), two proxies defined by Wienraub and Visscher (1998).

### Aggressive Investment Policy (AIP)

A company may adopt either an aggressive investment policy or a conservative investment policy. The use of an AIP results in a lesser investment in current assets as a proportion of the total assets available to the company, whereas a

conservative working capital policy will result in a higher current asset investment compared to the total assets. When a company's investment in current assets increases compared to the total assets, that company is said to be following a conservative working capital policy. The opposite holds for an aggressive working capital policy. There is no rule as to what proportion of a company's investment in assets must be tied in current assets. However, the level of investment in current assets is theoretically thought to carry risk as well as return. Management of companies have to exercise a choice between those levels bearing in mind the various costs and benefits associated with it. To measure the level of aggression, the following ratio was used.

$$\text{AIP} = \frac{\text{Current Assets (CA)}}{\text{Total Assets (TA)}} \quad \text{where a lower ratio means an aggressive policy}$$

### Aggressive Financing Policy (AFP)

Similar to the investment policy, a firm may adopt an Aggressive Financing Policy or a Conservative Financing policy. Financing policy seeks to explain how the current assets of the company is financed. A firm adopting an aggressive financing policy utilises a higher level of current liability and less non-current liabilities. A conservative working capital

relies largely on non-current liabilities. Reliance on larger current liabilities places the short-term liquidity of the organisation at risk especially when the current assets are far less or are not easily convertible into cash. Where the aggression in investment is financed by short-term sources which attract higher costs, the effect of those costs on the

profitability of the company could be very damaging. Therefore managers of companies must strike a delicate balance between profitability and the costs associated with the funding of their

investment in current assets. For the purpose of this study, an aggressive financing policy is calculated using the following ratio:

$$\text{AFP} = \frac{\text{Current Liabilities (CL)}}{\text{Total Assets}}$$

Where a higher ratio means a relatively aggressive financing policy.

## PROFITABILITY

Nazir and Afza (2009) examined the effect of aggressive working capital policy on profitability using measures from two perspectives; Accounting perspective and Market perspective. The accounting perspective uses Return on Assets (ROA) whereas the market measures used Tobin's q. This study uses the Return on Equity (ROE) and ROA. These measures of profitability were calculated using the year by year total values stated in the relevant financial statements.

## RETURN ON ASSETS (ROA)

Return on assets is a key profitability ratio which measures the amount of profit that a company makes as a percentage of its asset base. The ROA compares net profit after tax to the book values of a company's assets. ROA measurements include all of a company's assets – both those which arise from liabilities to creditors as well as those which arise from contributions by shareholders. The ROA gives users of financial information an idea as to how efficiently management uses company assets to generate profit. A company is profitable if its ROA is

relatively high. Return on assets may also give an indication of the capital intensity of the company. When using ROA as a comparative measure, it is best to compare it against a company's previous ROA figures or the ROA of a similar company.

The ROA is measured using the ratio:

$$\text{ROA} = \frac{\text{Net profit after tax}}{\text{Book Value of Assets}}$$

## RETURN ON EQUITY (ROE)

In real sense, ordinary shareholders are the real owners of the company. They assume the highest risk in the company. They rank last for payment of dividend and additionally have very fluctuating dividend mostly dependent on availability of profit and cash. That is to say that whereas management can not refuse payment of dividend to preference shareholders, the same rule does not apply to the ordinary shareholders. The ordinary shareholders

are more interested in the profitability of a company and as such judge the performance of a company on the basis of return on equity capital of the company. Shareholders regard the ROE as the ultimate test of an entity's profitability. The ROE measures the amount of net income available to the ordinary shareholders as a percentage of shareholders equity. It is however not the ultimate measure of the superiority of the financial performance because a

higher ROE may be as a result of a higher gearing which is equally very dangerous. The shareholders equity comprises the issued share capital plus undistributed reserves; whether realized or not. The profit used for the calculation of ROE is the final

profits available to equity shareholders as dividend, therefore the preference dividend and taxes are deducted in order to arrive at such profits. The formula of return on equity capital ratio is:

$$\text{Return on Equity Capital} = \frac{[\text{Net profit after tax} - \text{Preference dividend}]}{\text{Equity share capital}}$$

where a higher ROE only means a higher profit.

## STATISTICAL ANALYSIS

Nazir and Afza (2009) assessed the impact of aggressive working capital on company performance by applying the panel data regression analysis. Performance measures used were the ROA and ROE.

## THE REGRESSION MODELS:

The study adopted simple linear regression and multiple regression models. Four cases of the models have been looked at in which ROA and ROE were taken as dependent variables. The models were with the help of Statistical Product and Service Solutions (SPSS).

$$ROA = \beta_0 + \beta_i AIP + \varepsilon \dots (1)$$

$$ROE = \beta_0 + \beta_i AFP + \varepsilon \dots (2)$$

$$ROA_i = \beta_0 + \beta_1 AIP_i + \beta_2 AFP_i + \varepsilon \dots (3)$$

$$ROE_i = \beta_0 + \beta_1 AIP_i + \beta_2 AFP_i + \varepsilon \dots (4)$$

$\beta_0 =$  Intercept of the regression line

$\varepsilon =$  Random error

$\beta_i =$  regression coefficient

## THE REGRESSION MODELS:

The regression models above have been tested to satisfy the necessary regression model assumptions through the following hypotheses:

### Hypothesis 1:

H0: ( $\beta_0 = 0$ ) The model intercept is zero (there is no intercept)

H1: ( $\beta_0 \neq 0$ ) The model intercept is not equal to zero (there exists an intercept)

### Hypothesis 2:

H0: ( $\beta_1 = 0$ ) The regression coefficient is zero (No relationship between the dependent and the independent variable)

H1: ( $\beta_1 \neq 0$ ) The regression coefficient is not zero (There is a relationship between the dependent and the independent variable)

In table 1 below, the intercepts are all negative values. Testing the hypothesis at a 5% (0.05) significance level, we reject the null hypothesis that the intercepts are zero for the two models. As a rule of thumb, when the p-value is less than the significant level, we reject the null hypothesis. Therefore, it is concluded at 5% significance level that there exist intercepts for each model.

Considering table 1 again reveals that the p-values for the coefficients are less than the significance level of 5%. This leads to the conclusion that the null hypothesis is rejected at 5% significance level that there is no relationship between the dependent and independent variables.

### Overall Fit of the Regression Model

The p-value from the Analysis of Variance (ANOVA) is used to check the overall fitness of the model to the data. A smaller p-value (i.e. lower than the significant level) indicates that the model is significant. The p-value for the ANOVA is lower, thus confirming significance of the models.

## ANALYSIS

**Table 1: Simple Linear Regression Analysis of Performance Measures and Working Capital Investment / Financing Policy**

	ROA	ROE	ROA	ROE
Variables	AIP	AIP	AFP	AFP
Intercept ( $\beta_0$ )	-11.556	-38.801	15.587	12.814
Coefficient ( $\beta_1$ )	0.253	0.758	-0.305	-0.296
P-value( $\beta_0$ )	0.007	0.001	0.000	0.0046
P-value ( $\beta_1$ )	0.001	0.000	0.000	0.002
P-value [ ANOVA ]	0.001	0.000	0.001	0.002

### Simple Linear Regression Models for Aggressive Investment Policy

$$ROA = -11.556 + 0.253AIP \quad \dots (5)$$

$$ROE = -38.801 + 0.758AIP \quad \dots (6)$$

From models (5) and (6), the coefficient of the AIP, that is CA/TA is positive. This indicates a negative relationship between the degree of aggressiveness of investment policy and return on assets and return on equity. As the CA/TA increases, the degree of aggressiveness decreases, the ROA and ROE increase. It is important to note that in this instance, rate of increase in the ROE is higher.

### Simple Linear Regression Models for Aggressive Financing Policy

$$ROA = 15.587 - 0.305AFP \quad \dots (7)$$

$$ROE = 12.814 - 0.296AFP \quad \dots (8)$$

From models (7) and (8), the coefficient of the AFP, that is CL/TA is negative. This indicates a negative relationship between the degree of aggressiveness of financing policy and return on assets. As the CL/TA increases, the degree of aggressiveness increases, and return on assets and return on equity decrease.

### Multiple Regression Models

**Table 2: Multiple Regression Analysis of Performance Measures and Working Capital Investment and Financing Policies**

Variables	ROA	ROE
Intercept	0.369	-26.442
Coefficient (AIP)	0.321	0.829
Coefficient (AFP)	-0.319	-0.330
P-value (Intercept)	0.889	0.019
P-value [ AIP ]	0.000	0.000
P-value [ AFP ]	0.000	0.000
P-value [ ANOVA ]	0.000	0.000
Durbin-Watson	1.147	1.545

$$ROA_t = 0.369 + 0.321AIP_t - 0.319AFP_t \quad \dots (9)$$

$$ROE_t = -26.442 + 0.829AIP_t - 0.330AFP_t \quad \dots (10)$$

From model (9) and (10), the coefficient of the AIP, that is CA/TA is positive. This indicates a negative relationship between the degree of aggressiveness of investment policy and return on assets. As the CA/TA increases, the degree of aggressiveness decreases, and return on assets and return on equity increases.

From model (9) and (10), the coefficient of the AFP, that is CL/TA is negative. This indicates a negative relationship between the degree of aggressiveness of financing policy and return on assets and return on equity decrease. As the CL/TA increases, the degree of aggressiveness increases, and return on assets and return on equity decreases.

## CONCLUSION

This study investigates the effect of aggressiveness of corporate working capital management policy on their performance using listed companies in Ghana for the six-year period from 2006 to 2011. Regression model was used to examine the effect of aggressive/conservative working capital investment and the financing policies on two measures of profitability; ROA and ROE. The study finds a negative relationship between the two measures of profitability and the two measures of working capital policy adopted in the study. As listed

companies pursue a less aggressive investment policy by increasing its current assets, profitability (measured by ROE and ROA) increases. Again, when companies adopt a less aggressive financing policy by reducing its current liabilities, profitability reduces. Listed companies in Ghana report negative returns if they follow an aggressive working capital policy. Managers can not generate profit by adopting a very aggressive working capital management policy.

## REFERENCE

- Abbadi, S. M and Abbadi, R. T. (2010). The Determinants of Working Capital Requirement in Palestinian Industrial Corporation. *International Journal of Economics and Finance*, Vol.5, No.1.
- Abdul, R and Mohamed, N. (2010). Working Capital Management and Profitability-Case Study of Pakistani Firms. *Internal Review of Business Research Papers*, Vol.3 No1, pp.279-300.
- Al-Mwalla, M. (2012). The Impact of Working Capital Management Policies on Firm's Profitability and Value: The Case of Jordan. *International Reserach Journal of Finance and Economics*, 85, 147-153.
- annualreportsghana. (2015, 03 15). annualreportsghana. Retrieved from [www.annualreportsghana.com](http://www.annualreportsghana.com)
- Bagchi, B and Khamrui, K. (2012). Relationship between Working Capital Management and Profitability: A Study of Selected FMCG Companies in India. *Business and Economics Journal* 2012, 1-11.
- Banomyong, R. (2005). Measuring the Cash Conversion Cycle in anInternational Supply Chain. *Annual Logistics Research Network (LRN) Conference Proceeding*, Plymouth, UK, 7-9.
- Barine, M. (2012). Working Capital Management efficiency and Corporate Profitability. *Nigeria Journal of Applied Finance & Banking*, Vol.2, No2.
- Bieniasz, A and Golas, Z. (2011). The Influence of Working Capital Management on the Food Industry Enterprises Profitability. *Contemporary Economics*, 5 (4), 68-81.
- Brigham, E. F and Ehrhardt, M. C. (2004). *Financial*

- Management: Theory and Practice. New York: 11th Edition, South-Western College Publishing.
- Carpenter, M. D and Johnson, K. H. (Vol. 18, No.3, p.106). The Association between Working Capital Policy and Operating Risk. *Financial Review*, 1983.
- Deloof, M. (2003). Does Working Capital Management Affect Profit of Belgian Firms. *Journal of Business, Finance and Accounting*, Vol. 30, Nos. 3-4, pp. 573-587.
- Elijelly, A. M. (2004). Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Marke. *International Journal of Commerce and Management*, Vol. 14, No.2, pp.48-61.
- Filbeck, G and Krueger, T. (2005). Industry Related Differences in Working Capital Managemen. *Mid-American Journal of Business*, Vol. 20, No. 2, pp.11-18.
- Gardner, M. J, Mills, D. L and Pope, R. A. (1986). Working Capital Policy and Operating Risk: An Empirical Analysis. *Financial Review*, Vol. 21, No.2,p.31.
- Ghosh, S. K and Maji, S, G. (2004). Working Capital Management Efficiency: A Study on the Indian Cement Industry. *Management Accountant*, Vol.39,No.5,pp.363-372.
- Gill, A., Biger N and Mathur, N. (2010). The Relationship between Working Capital Management and Profitability. *Business and Economics Journal*, Vol. 2010, pp.1-9.
- Gitman, L. A. (2005). *Principles of Managerial Finance*. New York: 11th Edition, Addison Wesley Publishers.
- Gombola, M.J and Ketz, J. E. (1983). Financial Ratio Patterns in Retail and Manufacturing Organisations. *Financial Management*, Vol.12, No.2, pp.45-56.
- Gupta, M. C and Huefner, R. J. (1972). A Cluster Analysis Study of Financial Ratios and Industry Characteristics. *Journal of Accounting Research*, Vol. 10, No.1, pp.77-95.
- Gupta, M. C. (1969). The Effect of Size, Growth and Industry on the Financial Structure of Manufacturing Companies. *Journal of Finance*, Vol. 24,No.3, pp. 517-529.
- Hall, C. (2002). Total Working Capital Management. *AFP Exchange*, Vol. 22, No.6, pp.26-32.
- Harris, A. (2005). Working Capital Management: Difficult, but Rewarding. *Financial Executive*, Vol. 21, No.4, pp.52-53.
- Howorth, C and Westhead, P. (2003). The Focus of Working Capital Manageemnt in Uk Small Firms. *Management Accounting*, Vol.14, No.2, pp.94-111.
- Johnson, C. G. (1970). Ratio Analysis and the Prediction of Firm Failure:Comment. *Journal of Finance*, Vol. 25, No.5, pp.1166-1168.
- Jose, M. L., Lancaster, C and Stevens, J. L. (1996). Corporate Returns and Cash Conversion Cycle. *Journal of Economics and Finance*, Vol.20, No.1, pp.33-46.
- Lamberson, M. (1995). Changes in Working Capital of Small Firms in Relation to Changes in Economic Activity. *Mid-American Journal of Busniess*, Vol.10, No.2, pp.45-50.
- Lazaridis, I and Tryfonidis, D. (2006). Relationship between Working Capital Management and Profitability of Listed Companies in the Stock Exchange. *Journal of Financial Management and Analysis*, Vol.19, No.1, pp.26-35.
- Long, M. S., Malitz, I. B and Ravid, S. A. (1993). Trade Credit, Quality Guarantees, and Product Marketability. *Financial Management*, Vol. 22, No.4,pp117-127.
- Maxwell, C. E, Gitman, L. J and Smith, S. A. M. (1998). Working Capital Management and Financial-service Consumption Preferences of US and Foreign Firms: A Comparison pf 1979 and 1996 Preferences. *Financial Practice and Education*, Vol.8, No. 2, pp.46-52.
- Moyer, R. C, McGuigan, J. R and Kretlow, W. J. (2005). *Contemporary Financial Management*. New York: 10th Edition, South-Western College Publishing.
- Narendre, V, Menon, S and Shewtha, V. (2009). Factors Determining Working Capital Management in Cement, Industry. *South Asian Journal of Managemtn*, 15(4), 64-78.
- Nazir, M. S and Afza, T. (2009). Impact of Aggressive Working Capital Management Policy on Firm's Profitability. *The IUP Journal of Applied Finance*, 15 (8), 19-30.
- Pinches, G. E, Mingo, K. A and Caruthers, J. K. (1973). The Stability of Financial Patterns in Industrial Organisations. *Journal of Finance*, Vol. 28, No.3, pp.389-396.
- Pinches, G. E. (1992). *Essentials of Financial*



- Management. New York: 4th Edition, HarperCollins College Publishers.
- Ranjith, B. A. (2008). *The Impact of Firms' Capital Expenditure on Working Capital Management: An Empirical Study across Industries in Thailand*. *International Management View*, 4(1), 11-24.
- Rehman, A. (2006). *Working Capital Management and Profitability: Case of Pakistani Firms*. COMSAT's Institute of Information Technology (CIIT), Islamabad, Pakistan.
- Shin, H. H and Soenen, L. (1998). *Efficiency of Working Capital and Corporate Profitability*. *Financial Practice and Education*, Vol.8, No.2, pp.37-45.
- Singh, K and Asress, F.C. (2010). *Determining Working Capital Solvency Level and Its Effect on Profitability in selected Indian Manufacturing Firms*. *International Journal of Research in Commerce, Economics & Management*, 1(2), 52-57.
- Smith, K. (1980). *Profitability versus Liquidity Tradeoffs in Working Capital Management in Reading on the Management of Working Capital*. New York: West Publishing Company, St. Paul.
- Smith, M. B and Begemann, E. (1997). *Measuring Association Between working Capital and Return on Investment*. *South Africa Journal of Business Management*, Vol.28, No. 1, pp.1-5.
- soenen, L. A. (1993). *Cash Conversion Cycle and Corporate Profitability*. *Journal of Cash Management*, Vol.13, No. 4, pp.53-58.
- Teruel, P. J. G and Solano, P. M. (2005). *Effects of Working Capital Management on SME Profitability*. *International Journal of Managerial Finance*, Vol.3, No.2, pp.164-177.
- Uyar, A. (2009). *The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey*. *International Research Journal of Finance and Economics*, 24,47-54.
- Van Horne, J.C and Wachowicz, J. M. (2004). *Fundamentals of Financial Management*. New York: 12 Edition, Prentice Hall Publishers.
- Weinraub, H. J and Visscher, S. (1998). *Industry Practice Relating to Aggressive Conservative Working Capital Policies*. *Journal of Financial and Strategic Decision*, Vol. 11, No.2, pp.11-18.

#### ABOUT THE AUTHORS

---

##### **Mr. Moses Oppong**

He is a full-time Lecturer at Pentecost University College (PUC), Faculty of Business Administration (FBA) at the Department of Accounting and Finance. He also lectures at PUC Graduate School located in Labone – Accra. Moses is a Professional Accountant, specializing in Financial Management, Compliance and Strategic Planning.

He could be reached on 020 723 3400 and email: [mosesopponggh@gmail.com](mailto:mosesopponggh@gmail.com)

---

##### **Mr. Alexander Owiredu**

He is a full-time Lecturer at PUC, Faculty of Business Administration (FBA). He is the Acting Head of Department of the Department of Accounting and Finance. He also lectures at PUC Graduate School located in Labone. He specialised in Accounting and Taxation.

He could be reached on 024 370 1922 and email: [owiredualex@yahoo.com](mailto:owiredualex@yahoo.com)

---

##### **Ms. Rebecca Davies**

She is a full-time Lecturer at PUC, Faculty of Engineering Science and Computing (FESAC) at the Department of Actuarial Science.

She could be reached on 054 370 8736 and email: [rdavis@pentvars.edu.gh](mailto:rdavis@pentvars.edu.gh)

# AN EMPIRICAL ASSESSMENT OF SUPPLY CHAIN EFFECTIVENESS USING EXPLORATORY FACTOR ANALYSIS (EFA) APPROACH: THE CASE OF SELECTED BEVERAGE FIRMS IN GHANA

ERNEST OFORI-NYARKO

---

## Abstract

There has been little contribution to academic debate and knowledge in terms of what constitutes supply chain (SC) effectiveness. This study therefore assessed supply chain effectiveness using selected beverage firms in Accra, Ghana. A quantitative research technique was primarily employed in this study. Participants were senior employees in the selected beverage firms. The simple random sampling procedure was used to draw 214 respondents from the population. Exploratory Factor Analysis (EFA) was the main statistical tool of data analysis and presentation. Results reveal that SC effectiveness is defined by two constructs. The first construct is SC strategy and this accounts for the highest variance (53.7%) in SC effectiveness. This construct is made up of variables relating to the general approach and strategy to supply chain management. The second construct is SC outcomes, and this accounts for 20.1% of the total variation in SC effectiveness. This construct is made up of variables relating to the end-results of SC management in an organization. For beverage firms to maximise SC effectiveness therefore, they need to focus on implementing the best SC strategy that will yield expected SC outcomes.

---

**Keywords:** Supply chain, supply chain management, supply chain effectiveness, supply chain strategy, supply chain outcome, beverage firms

## Introduction

As contended by Janvier-James (2012), the supply chain literature is fast expanding owing to increasing attention being given to the subject of supply chain by researchers. This situation is logically as a result of the utmost relevance of supply chain to organisational performance. Supply chain management (SCM) has therefore become one of the main management functions on which the performance and growth of businesses rest. But what might be the primary goal of supply chain management?

The goal of supply chain management is to form and manage a well-coordinated network of suppliers, manufacturers, warehouses and stores that serves as a medium of distributing goods and services (Wong and Wong, 2007). Since a business makes its revenues and profit from the production and sales of goods, it is logical to say that supply chain management is basically aimed at organisational growth. Yet the effectiveness of supply chain management on organisational growth is contingent on one condition (Olugu and Wong, 2009; Rajagopal and Sulaiman, 2009), and this condition has to do with how effective the entire supply chain management process is.

In the subject's literature, supply chain effectiveness (i.e. effective supply chain) is a major recognised concept. An effective supply chain is recognised as one that addresses an organisation's pre-determined purpose of SCM (Groznik and Maslaric, 2010). In this context, the organisation's purpose of SCM at the implementation stage might vary from one organisation to another, but the primary purpose of a SCM is common to all firms (Olugu and Wong, 2009), that is to keep goods and services in a well-coordinated network of suppliers, manufacturers, stores and customers as a basis of attaining short and long-term corporate performance (Rajagopal and Sulaiman, 2009; Olugu and Wong, 2009). From a personal viewpoint, an effective supply chain is one in which all challenges and risks of supply chain are

duly controlled and minimised. This assertion is supported by Olugu and Wong (2009), who contend that risks and challenges must be sufficiently minimised to achieve SC success. Simply, an effective supply chain is therefore the one that generates outcomes that: (1) satisfy the SC success criteria of management in the face of controlled SC challenges and risks (Ab Talib and Hamid, 2014); and (2) promote organisational performance in the short term, and organisational growth in the long term (Lambert, 2008; Kristofik et al., 2012). It could consequently be said that supply chain effectiveness is a measure of supply chain success and its effect on organisational performance and growth.

It is worth mentioning that SCM literature acknowledges what an effective supply chain management is but fails to provide empirical evidence on it. Several studies (e.g. Attaran, 2012; Ab Talib and Hamid, 2014; Anyanful and Nartey, 2015) have produced models on what supply chain success and its critical determinants are. Some studies (e.g. Attaran, 2012; Marwah, Thakar and Gupta, 2014) also provide empirical evidence on the general effect of supply chain on organisational performance and growth. Yet the literature, on a limited scale, touches on supply chain effectiveness. This situation reflects a major gap in the literature because supply chain cannot impact the organisation significantly without being effective. For firms to make the best of SCM, practitioners need to understand SC effectiveness, its underlying variables and its relationship to organisational performance. This evidence in the literature is lacking in a Ghanaian context.

This study therefore seeks to assess supply chain effectiveness among selected beverage companies in Ghana. Key players in the beverage sector are chosen for this study owing to the fact there are some real-life challenges that the selected firms need to resolve using recommended strategies of SC effectiveness in this study.

## Objective of the Study

This paper assesses the dimensions of supply chain effectiveness using Exploratory Factor Analysis (EFA). Thus this paper identifies what constitutes SC effectiveness in the selected beverage firms in Ghana.

## Significance of the Study

It is hoped that this study will generate a model that supply chain practitioners in the beverage sector can use to achieve and maximise supply chain effectiveness. The study is also expected to provide evidence on how to make the best of supply chain management in beverage firms in terms of factors to consider in managing supply chains.

Academic debate on the subject of SC effectiveness is incomplete, especially in a Ghanaian context. This study shall contribute to this debate and expand the subject's literature. Consequently, students and future researchers who would want to conduct related studies can use this study as a reference work.

## Literature Review

In the literature, definitions of supply chain have a bearing with theory and practice. While some definitions (such as that of Janvier-James, 2012) are tailored from a theoretical perspective, other definitions (e.g. that of Olugu & Wong, 2009) are developed to address practices of SC in all sectors.

Janvier-James (2012, p. 194) defined supply chain by quoting Beamon (1998) as "a structured manufacturing process wherein raw materials are transformed into finished goods, then delivered to end customers". Again in Janvier-James' paper, (2012, p. 194) supply chain is defined by Bridgefield Group (2006) as "a connected set of resources and processes that starts with the raw materials sourcing and expands through the delivery of finished goods to the end consumer". The study of Olugu & Wong (2009) contains one of the most detailed definitions of supply chain. Thus supply chain is a combined system that is made up of planning, sourcing, making and development of processes with its constituent parts to include material suppliers, production facilities, distribution centres and customers connected together through the feed-forward-flow of materials as well as feedback flow of information.

Supply chain management (SCM) is a set of approaches utilised to efficiently integrate suppliers, manufacturers, warehouses and stores so as to

produce and distribute products and services to the customers in the right quantities, at the right locations, at the right time, minimising the system wide cost while satisfying the service level requirements (Wong & Wong, 2007, p. 362). Furthermore, supply chain management is viewed as a business process that seeks to ensure efficient and effective flow of products, materials services, information from the supplier through to the customer (Ab Talib & Hamid, 2014). In view of these definitions and the understanding offered by them, supply chain management provides a framework of strategies for integrating suppliers, manufacturers, warehouses and stores so as to produce and distribute products and services to the customers.

The primary goal of supply chain is made evident from these definitions and conceptions. According to Wong & Wong (2007), the goal of supply chain management is to form and manage a well-coordinated network of suppliers, manufacturers, warehouses and stores that serves as a medium of distributing goods and services. Since a business (e.g. Accra Brewery Limited, Guinness Ghana Brewery Limited, Coca Cola Company, etc.) makes its revenues and profit from the production and sales of goods, it is logical to say that supply chain management is basically aimed at organisational growth. But it is worth saying that the contribution of supply chain to firm performance and growth is

dependent on SC success and effectiveness. Later in this review, SC success and effectiveness are explained. Yet the impact of supply chain management on organisational performance is contingent on one condition (Olugu & Wong, 2009; Rajagopal & Sulaiman, 2009), and this condition has to do with the effectiveness of the entire supply

chain management process.

Some models underpin the concept and practice of supply chain from the perspective of SC effectiveness. In the next section, the theoretical review is geared towards relating the subject matter of this study to appropriate models.

## Related Model

Firstly, SC effectiveness and how it emanates from the SC process or practice are underpinned by the model of Li et al. (2006). This model has four (4) major components, which are: (1) Level of information sharing, (2) Quality of information sharing, (3) Customer relationships, (4) Strategic supplier partnerships. The model is developed based on the argument that these four components form the basis of effective coordination in supply chain. The scope of the model is interwoven with The Model of Integrated Information Systems and Business Processes (Lambert, 2008). This model assumes that, supply chain entails some key stages of activities:

- Stage 1:** Supply of raw materials to the firm from external suppliers
- Stage 2:** Manufacturing, which is made possible by materials supplied by external suppliers
- Stage 3:** Distribution of finished goods to retail points
- Stage 4:** Retail, which is the destination for accessing produced goods by the customer
- Stage 5:** Customer consumption

The Model of Integrated Information Systems and Business Processes recognise flow of information as

## The Nature of Supply Chain

The nature of supply chain embraces standard activities and practices. However, researchers have used their unique ways of explaining these standard activities and practices based on the sector on which their studies are based and the variables of interest (Mensah et al., 2014). With respect to the variables associated with the present study, the nature of

the medium in which the five stages are accomplished (Li et al., 2006; Lambert, 2008). Yet the most critical recognition of practitioners in this model is the fact that activities are initiated and implemented at each stage within the specified time periods (Lambert, 2008). Moreover, the model recognises the reversible flow of information; thus from suppliers to the organisation and from the organisation to suppliers.

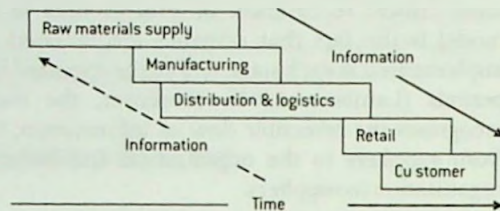
With respect to this current study, the five stages defined by The Model of Integrated Information Systems and Business Processes and the four components of Li et al.'s (2006) model form the basis of SC effectiveness. This is assertion is made in view of the idea that SC can only impact the organisation when its standard stages and activities are initiated and implemented in accordance with the five stages outlined above (Mallik, 2010; Marwah et al., 2014). Since the model of Li et al. (2006) incorporates some other measures of supply chain success such as risk control, it is worth saying that The Model of Integrated Information Systems and Business Processes, and the model Li et al.' (2006) provide a framework of activities, for that matter variables, for measuring SC effectiveness in this study.

supply chain is better explained from the perspective of The Model of Integrated Information Systems and Business Processes which is prominently enshrined in the literature.

As shown in Figure 1, supply chain involves the first stage of supply of raw material from external

suppliers. Though the manufacturing process constitutes the second stage of SC, Okino & Cattini (2011) contend that this stage cannot exist without access to raw materials from suppliers. They added that activities in supply chain are systematic, with one stage leading to the next stage. The third stage of supply chain is distribution of finished goods and management of logistics (Lambert, 2008). In the beverage sector, this stage involves distribution of finished products to major depots across the country.

**Figure 1:** A Conceptualisation of the Nature of Supply Chain



Source: Lambert (2008)

From depots, finished goods get to retail centres, from where customers access them. The stage in which finished goods are sent to retail centres is the last but one stage of supply chain (Olugu & Wong, 2009). The final stage of supply chain is the stage where customers access finished goods from retailers for consumption (Okino & Cattini, 2011). It

## Supply Chain Effectiveness

The bulk of the SCM literature is made up of what constitutes the role, impact and challenge of supply chain (Attaran, 2012) and what drives supply chain success across various sectors (Attaran, 2012; Anyanful & Nartey, 2015), though the manufacturing and construction sectors are the most commonly covered. To some extent also, the literature recognises what supply chain effectiveness (Borgström, 2012) is, but this dimension of the literature is often evidently discussed in the context of SC success and organisational growth objectives. Based on the argument of some researchers such as Kuei & Madu (2001) and Kurien & Qureshi (2011), there seem to be some level of contradiction in what the literature identifies as SC effectiveness relative to SC success. To understand what SC effectiveness is,

is argued by Lambert (2008) that the nature of supply chain is not defined by just the five stages. Rather, it involves how information flows along and across all stages in a cyclical fashion. This is to say that supply chain involves the integration of suppliers to the organisation and the organisation to customers.

With respect to a theoretical framework of Rajagopal & Sulaiman (2009) and The Model of Integrated Information Systems and Business Processes which defines the complete nature of supply chain, activities and stage of supply chain are initiated and implemented within suitable time periods. Thus raw materials must come to the organisation within a specified time and finished goods must go to customers at a specified time. As to when finished goods get to customers is dependent on when raw materials arrive, while sale of finished goods can influence how soon raw materials are accessed from suppliers in the supply chain (Lambert, 2008; Thakkar et al., 2008). To this end, the technical and time demands of the nature of supply chain determine SC success and effectiveness. Invariably, the network of teams, suppliers and customers in a supply chain must be timely coordinated to engender expected sales and revenues, as well as continuity in supply chain. In the next section, SC effectiveness is discussed to throw light on this assertion.

there is the need to know what constitutes organisational effectiveness.

Organisational effectiveness is defined as a standard of how well an organisation is meeting the demands of the various departments and teams that are concerned with its activities (Pfeffer & Salancik 2003, p. 11). They added that organisational effectiveness, ideally, is a construct "for doing the right things" or having validity of outcome. The question is "what happens when the right things are done" in the organisation? According to Borgstrom (2012), doing the right things in all departments and teams leads to the realisation of organisational growth objectives. From this assertion, one can easily conceptualise what SC effectiveness is.

The SCM literature recognises what an effective supply chain or effective SCM is. An effective supply chain is recognised as one that addresses an organisation's pre-determined purpose of supply chain (Borgström, 2012; Groznik & Maslaric, 2010). In this regard, the organisation's purpose of SCM at the implementation stage might vary from one organisation to another, but the primary purpose of an SCM is common to all firms (Olugu & Wong, 2009); thus to keep goods and services in a well-coordinated network of suppliers, manufacturers, stores and customers as a basis of attaining short and long-term corporate performance (Rajagopal & Sulaiman, 2009; Olugu & Wong, 2009). Based on this understanding, an effective supply chain is the one in which all challenges and risks of supply chain are duly controlled and minimised to realise the firm's supply chain objectives. This assertion is supported by Olugu & Wong (2009), who contend that risks and challenges must be sufficiently minimised to achieve SC effectiveness. Simply, an effective supply chain is therefore the one that generates outcomes that meet two criteria: (1) satisfy the SC success criteria of management in the face of controlled SC challenges and risks (Ab Talib & Hamid, 2014); and (2) promote organisational performance in the short term, and organisational growth in the long term (Rajagopal & Sulaiman, 2009; Olugu & Wong, 2009). It could consequently be said that supply chain effectiveness is a measure of supply chain

success and its effect on organisational performance and growth.

It is logical to say that SC effectiveness is not the same as SC success, at least based on the two criteria to be fulfilled in the organisation to engender SC effectiveness. The acceptable definition of SC effectiveness incorporates SC success. Invariably, SC success is part of SC effectiveness. On the basis of this assertion, Borgström (2012) argue that not all successful supply chain processes lead to supply chain effectiveness. As a reminder, SC success is achieved when all the quality criteria of a SC process are met Beamon (1998). However, the fact that the quality or success criteria are met is different from SC making a desired impact on the entire organisation. To this end, SC effectiveness is a measure of SC success and the significant positive effect (in the form of augmented growth or performance) made by SC success on the organisation (Borgström, 2012; Kuei & Madu, 2001). It is therefore evident that SC effectiveness is the primary expectation of management but not SC success, though SC success forms the basis of SC effectiveness. In view of this argument, organisations need to rather focus on how to achieve SC effectiveness (Borgström, 2012). In the next section, the empirical literature on SC effectiveness is reviewed.

## Empirical Review

The SC empirical literature is quite elaborate, especially in terms of the effect of supply chain on business performance and the critical success factors of supply chain. Some studies (e.g. Borgström, 2012) have also been focused on an examination of supply chain effectiveness.

The first related research of interest is the study of Borgström (2012). In his study, SC efficiency and effectiveness were conceptualised as two terms relevant to supply chain management. The researcher used the resource dependence perspective's definitions and recent development and usage of efficiency and effectiveness from the literature. The analytical framework was in three steps: Dualism, duality and beyond. First, efficiency

and effectiveness are described as two independent constructs (i.e. as a dualism). Thereafter efficiency and effectiveness were described as two interrelated constructs; thus as a duality. Finally, he analysed the constructs beyond the duality applied to a supply chain context. His resulting framework shows that efficiency and effectiveness cannot be seen as independent in a supply chain context with focus on processes. The evaluation is neither of a relation nor of an organization but of an organization of relationships. In the analysis of efficiency and effectiveness the main difficulties are time, boundaries, and interdependencies.

The study of Borgström (2012) underpins this study and is relevant to this study on the basis of how it

provides an understanding of the measurement of SC effectiveness. In this respect, his framework identifies SC Effectiveness as a measure (from the perspective of the evaluator) an external standard of how well an organisation is meeting the demands of the SC team or group and other teams and stakeholders that are concerned with its activities. This conceptual idea has a bearing with the definition of SC Effectiveness by Groznik & Maslaric (2010). They define SC effectiveness as a SC process that addresses an organisation's pre-determined purpose of SCM. In essence, the framework of Borgström (2012) provides ideas for measuring SC effectiveness once the roles of SC in the chosen organisations are known.

A second related study of interest is the study of Groznik & Maslaric (2010). In their study, they analyse practitioners' experience that relates to their understanding of "SC Effectiveness". These researchers found in their study that effective supply chain management (i.e. SC Effectiveness) requires a high degree of coordination and information sharing between partners in the supply chain. In this respect, Olugu & Wong (2009) reveals that the primary purpose of an SC is to keep goods and services in a well-coordinated network of suppliers, manufacturers, stores and customers as a basis of attaining short and long-term corporate performance. It is therefore worth saying that the finding of Groznik & Maslaric (2010) is corroborated by the conceptualisation of SC Effectiveness by Olugu & Wong (2009). So like the study of Borgström (2012), their study provides an understanding of what metrics go into the measurement and reworking of supply chain effectiveness.

It is worth saying that the studies of Borgström (2012) and Groznik & Maslaric (2010) have been conducted as qualitative researches whose findings are limited to theoretical deductions and opinions of experienced practitioners. Thus their study provides no verifiable quantitative evidence of what SC Effectiveness and its dimensions are. Some studies (e.g. Kuei & Madu, 2001; Marwah et al., 2014; etc.) therefore provide some extent of remedy to this weakness. The problem is that most of these researchers did not work on SC Effectiveness; rather they used "SC Success" as an indicator of this construct.

Kuei & Madu (2001) conducted a quantitative study in which the determinants of SC effectiveness are examined. In their study, they argued that SC success is an indicator of SC effectiveness; hence they rather focused on determinants of SC success as a basis of knowing determinants of SC effectiveness. They used a population of electronic firms in Taiwan. In their study, they formed a framework of factors that influence success in supply chain management within electronic organisations. In their framework, the factors found to drive SC effectiveness are organisation integration (teamwork), top management leadership/commitment, supplier participation, competitive benchmarking and learning. They concluded that a SC process that is successful or leads to success is effective. Invariably, SC success translates into SC effectiveness.

It can be seen that the reviewed studies such as the study of Borgström (2012), Groznik & Maslaric (2010) and Kuei & Madu (2001) have made some contributions to academic debate. However, the subject's empirical literature comes with several gaps. These gaps are discussed in the next section.

Gaps in the literature

As posited by Janvier-James (2012) and acknowledged earlier, SC success and SC effectiveness cannot be the same, though they may be related. But many researchers (Groznik & Maslaric, 2010; Borgström, 2012; Marwah et al., 2014) have used SC success in place of SC effectiveness. This contradiction and conflict is a major gap in the literature. A remedy of this gap is very critical because some recent studies such as Marwah et al. (2014) have been conducted based on the study of Groznik & Maslaric (2010) with the misconception that SC Success is an indicator of SC effectiveness, or the two constructs can be used interchangeably.

Moreover, most of SC effectiveness studies (e.g. Groznik & Maslaric, 2010; Borgström, 2012) have been conducted as qualitative researches. However, the frameworks produced by these studies, precisely the study of Borgström, (2012), reveals SC effectiveness as a construct. A construct is a variable that cannot be measured directly but can be measured using several observable or manifest variables (Suhr, 1999). Though constructs can be



conceptualised in qualitative studies as done in some studies (e.g. Groznik & Maslaric, 2010; Borgström, 2012), Suhr (1999) argues that quantitative research methods are the best means of confirming them in practice. Nonetheless, the literature does not show any identifiable evidence on a confirmation of SC effectiveness.

Generally, academic debate on the subject of SC effectiveness is incomplete. This argument is made in view of the fact that researchers have not given much attention to it relative to other subjects. As a result, the scope of the literature does not address SC problems in individual sectors and firms such as the ones on which this study is based. A large proportion of studies focus on SC success, which in a personal opinion, is likely to become over-researched soon. While the studies of Borgström (2012), Groznik & Maslaric (2010) and possibly a few other researchers provide a weak base of academic debate on the subject, more studies are required on it.

The above-mentioned gaps boil down to a lack of a model of SC effectiveness, at least at a general level. Since every organisation has its unique Dynamic Capability, SC would contribute a different dimension of effectiveness in each firm (Borgström, 2012). Consequently, individual firms need a model that can be tapped in enhancing and maximising SC effectiveness. The fact is that this model does not exist in the context of the selected firms on which this study is based, or there is no identifiable model of SC effectiveness that can be used to address the SC problems of these firms.

The above gaps in the literature provide several implications for this study. These implications call for the need for the subject's literature gaps to be addressed, as previously recommended by Groznik & Maslaric (2010).

## Conceptual Framework

An understanding of the nature of SC in an organisation or a group of organisations is fundamental to identifying ways of improving SC effectiveness (Borgström, 2012). This is another way of saying that one cannot find a remedy to a problem when the problems are not known. Hence, this study captures a detailed assessment of the nature of SC in the selected beverage firms.

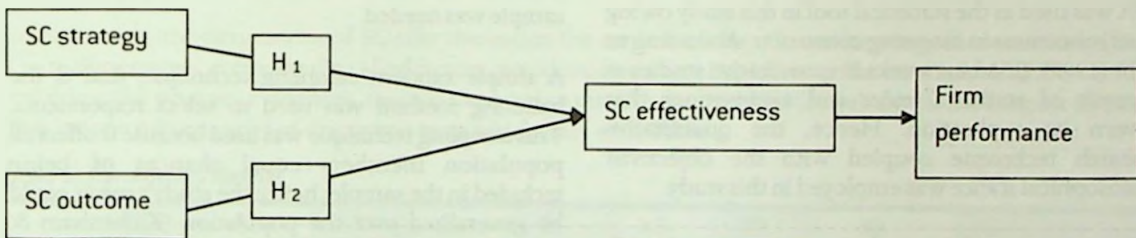


Figure 2: A Conceptualisation of the Dimensions of SC Effectiveness

Source: Researcher's Own Construct

In exploring the practical nature of a construct, one is able to explore its dimensions (Suhr, 1999). Similarly, understanding the nature of a construct is detailed in its assessment using Factor Analysis (Suhr, 1999; Ringner, 2008). On the basis of these facts, this study captures an examination of SC effectiveness as a construct using Factor Analysis, precisely Exploratory Factor Analysis. In this assessment, the dimensions of SC effectiveness are

identified, but the link between SC effectiveness and a firm's performance, as identified in the framework, is left to future research. As seen in the diagram, each dimension of SC effectiveness impacts SC effectiveness.

Upon knowing the extent to which SC effectiveness relates to firm performance, strategies can then be suggested for maximising SC effectiveness in the

selected firms. The researcher would however want to leave a comparison of the SC Effectiveness and SC Success constructs, as identified in the previous section, for future research work. The conceptual framework of this study is shown in Figure 2.

In exploring the practical nature of a construct, one is able to explore its dimensions (Suhr, 1999). Similarly, understanding the nature of a construct is detailed in its assessment using Factor Analysis (Suhr, 1999; Ringner, 2008). On the basis of these facts, this study captures an examination of SC effectiveness as a construct using Factor Analysis, precisely Exploratory Factor Analysis. In this assessment, the dimensions of SC effectiveness are

identified, but the link between SC effectiveness and a firm's performance, as identified in the framework, is left to future research. As seen in the diagram, each dimension of SC effectiveness impacts SC effectiveness.

Upon knowing the extent to which SC effectiveness relates to firm performance, strategies can then be suggested for maximising SC effectiveness in the selected firms. The researcher would however want to leave a comparison of the SC Effectiveness and SC Success constructs, as identified in the previous section, for future research work. The conceptual framework of this study is shown in Figure 2.

## Hypotheses

Based on the conceptual framework represented by Figure 2, findings are expected to support the following hypotheses:

- H1: Supply chain strategy (SC Strategy) is a significant dimension of SC effectiveness in the selected beverage firms
- H2: Supply chain outcome (SC Outcome) is a significant dimension of SC effectiveness in the selected beverage firms

## Methodology

In this research, the primary goal is to use Exploratory Factor Analysis to identify the dimensions (i.e. constituents) of SC effectiveness. EFA was used as the statistical tool in this study owing to its robustness in assessing constructs. According to Suhr (1999), EFA best works in quantitative studies as a result of statistical rules and assumptions that govern its application. Hence, the quantitative research technique coupled with the objectivist philosophical stance was employed in this study.

The population of the study is employees in the SC, marketing, sales, production and operations departments at the head office of ABL, GGBL, CCGL and SBC Beverages Ghana Limited. These companies were used in this study in view of the fact that they had a strong SC management structure that formed a basis of measuring SC effectiveness and its dimensions. The target population constituted senior employees who had worked in their respective firms for at least 2 years. Participants were expected to have worked in the companies for at least 2 years to ensure that they responded based on ample work

experience. The population of such employees in the chosen firms was 407. Since data could not be collected on all these members of the population, a sample was needed.

A simple random sampling technique, that is the balloting method was used to select respondents. This sampling technique was used because it offers all population members equal chances of being included in the sample; hence the study's result could be generalised over the population (Kichenham & Pflieger, 2002). The simple random sampling technique was used to draw a sample size of 214 respondents. This sample size was chosen based on the argument that a sample size which is at least 50% of the study population for large samples is adequate for a quantitative study (Creswell, 2003; Kichenham & Pflieger, 2002), where a large sample is not less than 30 participants (Creswell, 2003). Since the number 214 is more than 50% of the population size, the study's sample size is considered representative.

Primary data was used in this study to measure SC effectiveness and consequently its dimensions (i.e. SC

strategy and SC outcome). A structured questionnaire was used to collect primary data, with a five-point likert scale used to assess the SC effectiveness constructs. Items of SC Effectiveness were derived based on the theoretical framework represented by Figure 1 and the SC effectiveness framework of Borgström (2012). Hence questions asked to measure SC effectiveness in the questionnaire were based on these frameworks. This was done to ensure that data collected was valid.

A number of steps were taken to ensure that the instrument for collecting data was valid and reliable. Firstly, the questionnaire was submitted to some research experts for assessment and validation. Moreover, items of the questionnaire were chosen based on the objective of the study and were based on standard constructs used in related studies. The questionnaire was also associated with comprehensive guidelines that enabled respondents to complete it appropriately. These and many other measures taken formed the basis of the validity and reliability of the questionnaire used.

A Chronbach's alpha value of 0.802 was realised for the SC effectiveness construct. According to Drost (2011), a construct with a Chronbach alpha value of 0.7 or more is sufficiently reliable. In essence, the

instrument used to measure SC effectiveness and its dimensions was adequately reliable.

Questionnaires were administered by hand delivery. This method was used because a majority of respondents preferred it to e-mail delivery of questionnaires. Moreover, respondents were more willing to respond to printed copies of questionnaire. In data collection, 209 questionnaires were successfully completed out of 214 distributed, representing a response rate of 98%.

SPSS Version 21 was used to analyse data as a result of its robustness for quantitative data analysis and in terms of EFA. Exploratory Factors Analysis was used to assess the dimensions of SC effectiveness. This statistical tool was used for several reasons. Firstly and as argued by Suhr (1999) and Ringner (2008), this stool is an efficient tool in reducing the dimension of SC effectiveness and putting its manifest variables into the hypothesised constructs (i.e. dimensions). Moreover, this statistical tool was used because its application satisfied basic requirements such as normality of data. Yet the application of EFA satisfied other basic statistical requirements such as the need for significant correlation between most pairs of manifest variables. In the next section, primary statistical requirements satisfied are identified.

## Findings

In this section, the dimensions of SC effectiveness in the context of the selected beverage firms are identified. These dimensions, contextually called factors, are identified using Exploratory Factor Analysis (EFA). Before unfolding the primary evidences, there is the need to test the data applied for validity in the context of EFA. This is done using a series of diagnostic tests which start with Table 1.

**Table 1: Correlation Matrix**

	X1	X2	X3	X4	X5	X6	X7	X8	X9
X1	1.000	.911	.393	.131	.868	.637	.542	.276	.866
X2	.911	1.000	.232	-.033	.850	.557	.494	.326	.702
X3	.393	.232	1.000	.714	.442	.619	.213	-.040	.302
X4	.131	-.033	.714	1.000	.164	.442	.213	-.201	.265
X5	.868	.850	.442	.164	1.000	.676	.471	.381	.735
X6	.637	.557	.619	.442	.676	1.000	.659	-.009	.568
X7	.542	.494	.213	.213	.471	.659	1.000	.050	.564
X8	.276	.326	-.040	-.201	.381	-.009	.050	1.000	.425
X9	.866	.702	.302	.265	.735	.568	.564	.425	1.000

Source: Researcher's SPSS Output

In Table 1, we expect at least most of the correlations between variables to be high to ensure that the EFA is sufficiently valid and strong. It can be seen that most of the correlations are positively high as expected. This means that a pair of most of the variables would generate a positive effect. Generally,

the correlations point to a valid EFA, and variable clusters with high correlation coefficients belong to the same factor. Table 2 further diagnoses the appropriateness of the study's sample in the context of EFA

**Table 2: KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.556
Bartlett's Test of Sphericity	Approx. Chi-Square	1913.061
	DF	36
	Sig.	.000

Source: Researcher's SPSS Output

Table 2 contains the KMO and Bartlett's tests. These tests verify the appropriateness of the sample in the context of EFA. Consequently these tests further ascertain the validity of the EFA. The general rule of thumb is that the KMO Measure of Sampling Adequacy takes on a value closer to 1 while Bartlett's Test of Sphericity is significant at a chosen level of significance, which is 5% in this study. From the table, the KMO measure, which is 0.556, is quite close to 1. Moreover, the Bartlett's test is very much significant at the chosen level of significance ( $p < .05$ ). Hence, the EFA is associated with an appropriate sample size, and this buttresses the validity found in the correlation matrix table, Table 1.

**Table 3: Anti-image Correlations**

Variable	X1	X2	X3	X4	X5	X6	X7	X8	X9
Anti-image correlations	0.290	0.270	0.242	0.252	0.273	0.252	0.151	0.149	0.250

Source: Researcher's SPSS Output

**Table 4: Communalities**

Variable	X1	X2	X3	X4	X5	X6	X7	X8	X9
Extraction	.905	.842	.754	.787	.852	.785	.671	.665	.780

Source: Researcher's SPSS Output

A final verification of the validity of the EFA is done using Table 3, which contains the anti-image correlations. These correlations must be as close to zero as possible to ensure that the EFA is sufficiently valid. Usually, values at 0.30 or less suggest a very valid and strong EFA (Suhr, 1999). In Table 3, most of the anti-image correlations fall in this range. Hence, the EFA could be viewed as the one which is strong and valid.

With respect to the first three tables, results of the diagnostic tests confirm that the dimensions of SC effectiveness identified in the context of EFA are valid.

In Table 4, variables which form part of a dimension or factor are extracted or identified. This table shows values called communalities or extraction, and they measure the extent to which a variable is part of a dimension of SC effectiveness. These values are equivalent to R Square values in linear regression analysis. Thus higher values indicate that the corresponding variable relates strongly with a dimension. In the table, each variable is part of a dimension; thus none is removed. This is because none of them has an extraction value less than 0.50, which is generally the minimum value a variable that forms part of a factor can assume. This evidence is supported by the validity of the EFA as seen in the

diagnostic analysis. Yet the communalities can only help to know the individual strengths of the variables but cannot reveal the dimensions or factors and their variations. The factors extracted and their variations are shown in Table 5.

**Table 5: Total Variance Explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	4.829	53.653	53.653	4.829	53.653	53.653	4.659
2	1.812	20.132	73.785	1.812	20.132	73.785	2.641
3	.886	9.842	83.627				
4	.612	6.805	90.431				
5	.394	4.372	94.804				
6	.186	2.072	96.875				
7	.164	1.824	98.699				
8	.103	1.140	99.838				
9	.015	.162	100.000				

Extraction Method: Principal axis factoring.

Table 5 shows the factors formed by the 9 variables. In the context of this table, a factor has an Eigen value not less than 1. Thus a factor cannot have an Eigen value to be less than 1. On the basis of this criterion, it is worth saying that 2 factors (dimensions) have been formed by the 9 variables. The first factor accounts for 53.7% of the total variation; the second accounts for 20.1% of the total variation. The higher the variation accounted by a factor, the more critical the factor is to SC

effectiveness, or the more this factor underpins SC effectiveness. A total of 73.8% of the variation is accounted for the two factors or dimensions. Since the total variation accounted is greater than 50%, it suggests that the two factors contribute a higher part of what is SC effectiveness in the selected beverage firms. At this level however, nothing is known as to which among the 9 variables make up a dimension. Table 6 shows a classification that addresses this gap.

**Table 6: Classification of Variables**

Factor	Variable	Denotation
Factor 1	X1	Strategy
	X2	
	X3	
	X4	
	X5	
Factor 2	X6	Outcome
	X7	
	X8	
	X9	

Source: Researcher's Construct

In Table 6, the first five variables (i.e. X1 to X5) make up the first factor which accounts for 53.7% of the total variation. This factor is termed by the researcher "Strategy". It is so-called owing to the fact that it is made up of variables that constitute the strategic approach to SC and SC effectiveness. The second factor, "Outcome", is made up of X6, X7, X8 and X9, and accounts for 20.1% of the total variation. Please refer to Table 6 in the Appendix to identify variables represented by X1 to X9. Evidently, the Strategy factor constitutes a greater part of SC effectiveness relative to the outcome. It could also be said that the strategy factor is more critical to supply

chain effectiveness among the selected beverage firms. Figure 3 shows a framework of findings.

Based on the above findings, two dimensions define SC effectiveness in the selected beverage firms. These dimensions are Strategy and Outcome. Though Strategy is seen to make the highest contribution to SC effectiveness in terms of influence, there is the need to use regression analysis to buttress this evidence and to render it more informative. In this section therefore, the relative effects of each dimension on SC effectiveness are examined.

**Table 7: Correlation Between SC Effectiveness and Factors**

		SC Effectiveness	Strategy	Outcome
Pearson Correlation	SC Effectiveness	1.000	.847	.623
	Strategy	.847	1.000	.670
	Outcome	.623	.670	1.000
Sig. [1-tailed]	SC Effectiveness	.	.000	.000
	Strategy	.000	.	.000
	Outcome	.000	.000	.
N	SC Effectiveness	209	209	209
	Strategy	209	209	209
	Outcome	209	209	209

Source: Researcher's SPSS Output

Table 7 shows the correlation between SC Effectiveness and each of the dimensions identified, Strategy and Outcome. It can be seen that the strongest positive correlation exists between SC Effectiveness and Strategy ( $r = .847, p < .05$ ). This means that SC Effectiveness is improved as each of

the dimensions is enhanced in practice in value. These significant correlations between the factors and SC Effectiveness form the basis of the regression analysis, which commences at Table 8.

**Table 8: Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.847 <sup>a</sup>	.718	.716	.54902	
2	.851 <sup>b</sup>	.723	.721	.54480	2.034

a. Predictors: (Constant), Strategy

b. Predictors: (Constant), Strategy, Outcome

c. Dependent Variable: SC Effectiveness

Table 8 shows the model summary of the prediction of SC Effectiveness from Strategy and Outcome. In the first model, Strategy alone accounts for about 71.8% of the variation. In the second model, the two predictors account for 72.3% of the total variation. This means that Outcome alone accounts for less than 1% of the variation in the context of regression analysis. Moreover, the Durbin-Watson value is very

close to 2, and this satisfies the independence-of-error assumption of a multiple linear regression analysis. Hence, regression corroborates findings of the EFA in terms of variation, but it accords a higher value to Strategy relative to Outcome. This means that Strategy has a stronger effect on SC Effectiveness in terms of regression.

**Table 9: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	158.696	1	158.696	526.485	.000 <sup>b</sup>
	Residual	62.395	207	.301		
	Total	221.091	208			
2	Regression	159.950	2	79.975	269.456	.000 <sup>c</sup>
	Residual	61.141	206	.297		
	Total	221.091	208			

a. Dependent Variable: SC Effectiveness

b. Predictors: [Constant], Strategy

c. Predictors: [Constant], Strategy, Outcome

Table 9 shows an ANOVA test associated with the prediction of SC Effectiveness from the two factors. This test verifies if the regression analysis is a better way of expressing the relationship between SC Effectiveness and each of the factors relative to the correlation values shown in Table 8. This test is done at 5% significance level. From the table, the ANOVA test is significant for the first model,  $F(1, 207) =$

$526.5$ ,  $p = .000$ , and second model,  $F(2, 206) = 269.5$ ,  $p = .000$ . This confirms that regression analysis is a better way of expressing the relationship between SC Effectiveness and each of the factors, relative to the correlation values. This implies that the coefficients table, which is Table 10, can reliably be interpreted.

**Table 10: Coefficients<sup>a</sup>**

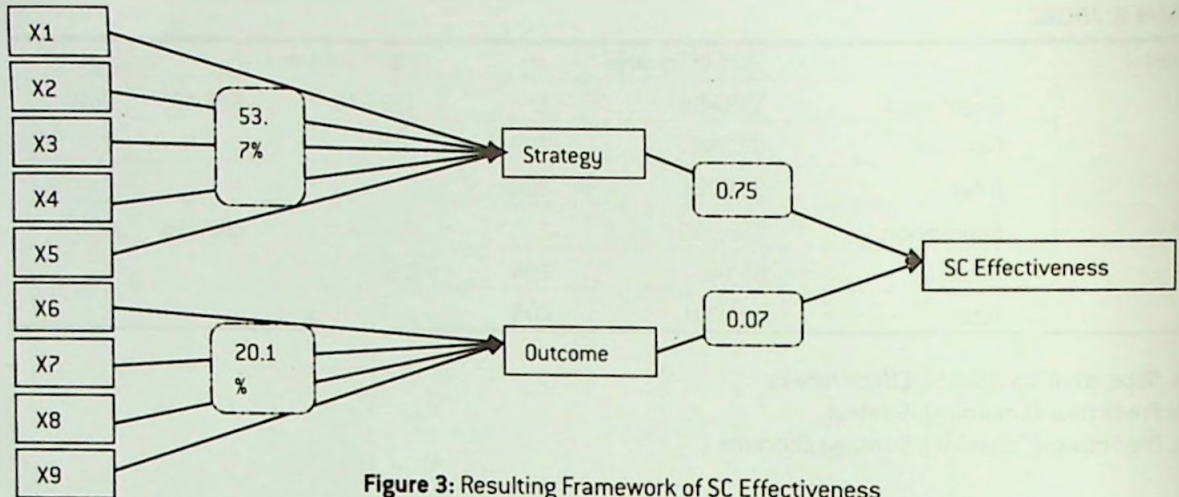
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	{Constant}	1.333	.089		14.971	.000		
	Strategy	.753	.033	.847	22.945	.000	1.000	1.000
2	{Constant}	1.251	.097		12.903	.000		
	Strategy	.693	.044	.779	15.798	.000	.552	1.813
	Outcome	.070	.034	.101	2.055	.041	.552	1.813

a. Dependent Variable: SC Effectiveness

Table 10 shows the coefficients table of the prediction of SC Effectiveness from the four factors. In the first model, Strategy ( $t = 22.95$ ,  $p = .000$ ) significantly predicts SC Effectiveness at 5% significance level. In the second model, Outcome ( $t = 2.05$ ,  $p = 0.041$ ) significantly (but weakly) predicts SC Effectiveness. The validity of these results is seen in the fact that each of the VIF value is far less than 5,

which desirably indicates a lack of multi-collinearity across the two factors. Results of the regression analysis and Exploratory Factor Analysis are conceptualized in Figure 3. The relationship between SC effectiveness and SC strategy and SC outcome is expressed as follows:

$$\text{SC effectiveness} = 0.69 \cdot \text{Strategy} + 0.07 \cdot \text{Outcome} + 1.33$$



**Figure 3: Resulting Framework of SC Effectiveness**  
Source: Researcher's Construct (Based on Findings)

Figure 3 conceptualises results of the EFA and regression analysis. It can be seen that Strategy, in terms of both EFA (53.7%) and regression (0.75), contributes a larger amount of effect on SC Effectiveness relative to Outcome. This generally indicates that SC Effectiveness is largely dependent on suitability of SC strategy, while outcome of SC depends on this strategy. Based on evidence reached in the analysis, the two hypotheses are supported by the data.

## Discussion

In the analysis, SC effectiveness is found to have two dimensions, namely Strategy and Outcome. "Strategy" accounts for the highest amount of variation in SC effectiveness, with the variation accounted being 53.7%. This factor or dimension constitutes the technical aspect of SC chain management such as a good SC plan, a competent SC team or human resource, availability of appropriate material and technology, a suitable SC strategy, well-implemented communication, monitoring, control and risk management procedures, to mention but a few. The fact that this dimension accounts for the highest variation signifies that measures and activities that constitute

SC strategy more highly underpin SC effectiveness relative to the end results. Though no empirical evidence corroborates this result, Groznik & Maslaric (2010) and Borgström (2012) argue that SC effectiveness is mainly based on what strategies go into supply chain management. On the basis of this argument, Groznik & Maslaric (2010) posit that a suitable and well-implemented strategy in terms of planning, implementation and risk control leads to SC effectiveness.

"Outcome" is the second dimension of SC effectiveness identified. It accounts for 20.1% of the



total variation. Some of its variables are: (1) SC leads to successful access to raw materials; (2) SC leads to successful distribution of finished goods to consumers; and (3) SC meets the criteria of success established. In their paper, Kurien & Qureshi (2011) and Borgström (2012) contend that these variables are the expected results of an effective SC management. In this context, the fact that "Outcome" accounts for the least amount of variation does not mean that it is not important. It practically implies that "Strategy" forms the bulk of what constitutes SC effectiveness, while this strategy is the basis of results of SC, which are embodied by "Outcome" in this context.

This scenario explained above which was reached through Exploratory Factor Analysis (EFA) is confirmed and buttressed at the level of regression analysis. Thus, "Strategy" accounts for the highest effect on SC effectiveness at a variation of 72.3%. "Outcome", at this level, accounts for 1% of the total variability on SC effectiveness. This evidence confirms that the bulk of SC effectiveness is captured in terms of SC strategy, or the suitability of SC

strategy and how well it is implemented are fundamental to SC effectiveness. This confirmation at the level of regression reflects the validity and reliability of the evidence, as acknowledged by Suhr (1999).

An aspect of the study's finding that is strongly supported by the literature is the fact that the level of SC effectiveness among the selected beverage firms is just slightly above average; thus the level of effectiveness could be further improved and maximised. This scenario is characteristic of the subject's literature in terms of theoretical argument. Firstly, Janvier-James (2012) expressed the view that SC success and effectiveness always have room for improvement owing to the prevalence of SC challenges, risks and bottlenecks. A similar statement is made by Hines (2004). Borgström (2012) is of the view that SC effectiveness cannot assume a perfect level, unless all bottlenecks of SC management are mitigated, which is not possible in a majority of cases. It is in view of this that firms are required to always find suitable strategies of maximising SC effectiveness.

## Conclusion & Recommendations

SC effectiveness is defined by two constructs or dimensions. The first construct is referred to as "Strategy" and accounts for the highest variance (53.7%) in SC effectiveness. The second construct is termed "Outcome", and this accounts for 20.1% of the variation. Comparatively therefore, SC effectiveness is based on what strategies go into SC in terms of appropriateness and implementation. Logically, implementation of appropriate strategies would lead to the second dimension of SC effectiveness, which is desired "Outcome". This assertion is made in view of the effect of each dimension on SC effectiveness.

There is a positive correlation between SC effectiveness and Strategy ( $r = .847, p < .05$ ). Moreover, Outcome makes a strong positive relation with SC Effectiveness ( $r = .670; p < .05$ ). This means that SC Effectiveness is improved as each of the dimensions is enhanced in practice and in theory. Also, Strategy ( $t = 22.95, p = .000$ ) significantly affects SC Effectiveness at 5% significance level,

while Outcome ( $t = 2.05, p = 0.041$ ) significantly predicts SC Effectiveness. The respective variations accounted for are 71.8% and 1%. The difference in the variations accounted for indicates that Strategy has a stronger effect on SC Effectiveness in terms of regression relative to Outcome. This in turn suggests that Strategy is more critical to SC effectiveness than Outcome. Of course, outcomes cannot be favourable if strategies are not appropriate and are not well implemented.

The two hypotheses of the study are therefore supported by the data. Hence, supply chain strategy is a significant dimension of SC effectiveness in the selected beverage firms. Also, supply chain outcome is a significant dimension of SC effectiveness in the selected beverage firms.

The beverage firms must therefore maximise SC outcome and consequently SC effectiveness by enhancing their SC strategy and its implementation. The firms can enhance SC strategy by using well-

skilled and trained human resource; modern and appropriate technologies; and effective communication as a basis of an effect network of stakeholders involved. There must be frequent

evaluation of performance for risk control. There is the need to optimise needed resources and monitor network efficiency in terms of flow of materials and goods.

## Limitations and Suggestions for Future Research

Though a random sampling process was used to select participants in this study, results can only be generalised over the four beverage companies selected. This means that findings could not reflect an industry-wide situation, or findings could not be generalised over the beverage sector in Ghana. This limitation is as a result of not being able to capture a representative sample of firms in the sector in view of time and financial resource constraints.

SC management is geared towards desired firm performance. Hence another limitation of this study is the inability of the researcher to assess the

link between SC effectiveness and firm performance.

Future researchers are therefore encouraged to focus on the link between SC effectiveness and firm performance, or extend the scope of their studies to examining these relationships. There is the need for future studies to capture the entire beverage sector, more practically in terms of a representative sample of beverage firms. This would provide an opportunity for future researchers to assess SC effectiveness in the entire sector rather than the four firms captured in this study.

## References

- Ab Talib, M.A., Hamid, A.B.A. (2014). Application of Critical Success Factors in Supply Chain Management, *International Journal of Supply Chain Management*, 3 (1): 22-33.
- Agyei, E.K., Sarpong, K.O., Anin, E.K. (2013). The Challenges of Supply Chain in the Gold Mining Sector of Obuasi Municipality of Ghana, *International Journal of Business and Social Research*, 3 (9): 34-44.
- Ai-Chin, T., Hon-Tat, H., Md Yusoff, R., Rasli, A. (2010). A Proposed Conceptual Model of Determinants of Supply Chain Performance in the Malaysian Electronic Manufacturing Services (EMS) Industry, *International Journal of Business and Social Science*, 1 (1): 137-144.
- Anyanful, T.K., Nartey, E. (2015). Critical Success Factors in Supply Chain Management in the Banking Sector In Ghana: Introducing Socio-Economic Factors and Availability of Financial Resources, *International Journal of Retail Management and Research*, 5 (1): 1-16.
- Attaran, M. (2012). Critical Success Factors and Challenges of Implementing RFID in Supply Chain Management, *Journal of Supply Chain and Operations Management*, 10 (1): 144-165.
- Barreiro, P. L., Albandoz, J. P. (2001). Population and sample: Sampling Techniques, *Management Mathematics for European Schools*, pp. 3-18.
- Bartlett, J. E., Kotrlík, J. W., Higgins, C. C. (2001). Organisational Research: Determining Appropriate Sample Size in Survey Research, *Information Technology, Learning, and Performance Journal*, 19 (1): 1-8.
- Beamon, B. (1998). Supply Chain design and analysis: Models and methods. [Online] Available: <http://www.damas.ift.ulaval.ca/~moyaux/coupfouet/beamon98.pdf> (January 3, 2015).
- Borgström, B. (2012). Exploring efficiency and effectiveness in the supply chain: A conceptual analysis, *Jönköping International Business School*, pp. 1-10.
- Bridgefield Group. (2006). Bridgefield group erp/Supply Chain (SC) glossary. [Online] Available: <http://bridgefieldgroup.com/bridgefieldgroup/glos7.htm#P> (January 3, 2015).
- Chiu, H. N. (1995). The Integrated Logistics

- Management System: A Framework and Case Study, *International Journal of Physical Distribution & Logistics Management*, 25 (6): 4-22.
- Creswell, J.W. (2003). *Research Design Qualitative, Quantitative and Mixed Methods Approaches*, Second Edition, SAGE Publications, International Educational and Professional Publisher, pp. 3-15.
- Creswell, R.D. (2008). *The Selection of a Research Design, The three Types of Research Designs*, pp. 3-16.
- Drost, E.A. (2011). *Validity and Reliability in Social Science Research, Education Research and Perspectives*, 38 (1): 105-123.
- Enporion, Inc (2009). *Supply Chain Organization Models that Drive Success*, pp. 2-7.
- Groznik, A., Maslaric, M. (2010). *Achieving competitive supply chain through business process re-engineering: A case from developing country*, *African Journal of Business Management*, 4 (2):140-148.
- Hines, T. (2004). *Supply chain strategies: Customer driven and customer focused*. Oxford: Elsevier.
- Janvier-James, A.M. (2012). *A New Introduction to Supply Chains and Supply Chain Management: Definitions and Theories Perspective*, *International Business Research*, 5 (1): 194-205.
- Kichenham, B. Pfleeger L. F. (2002). *Principles of survey research, populations and samples*, *Software Engineering Notes*, 27 (5): 17
- Krejcie, R. V., Morgan, D. W. (1970). *Determining sample size for research activities*, *Educational and Psychological Measurement*, 30: 232-256.
- Kristofik, P., Kok, J., de Vries, S., Hoff, J. (2012). *Financial Supply Chain Management – Challenges and Obstacles*, *ACRN Journal of Entrepreneurship Perspectives*, 1 (2): 132-143.
- Kuei, C., Madu, C.N. (2001). *Identifying critical success factors for supply chain quality management (SCQM)*, *Asia Pacific Management Review*, 6 (4): 409-423.
- Kurien, G.P., Qureshi, M.N. (2011). *Study of performance measurement practices in supply chain management*, *International Journal of Business, Management and Social Sciences*, 2 (4): 19-34.
- Lambert, D. (2008). *Supply Chain Management: Processes, Partnerships, Performance*, 3rd edition.
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T.S., Subbarao, S. (2006). *The impact of supply chain management practices on competitive advantage and organizational performance*, *Omega*, 34 (1). 107-124
- Mallik, S. (2010). Hossein Bidgoil. ed. *The Handbook of Technology Management: Supply Chain Management, Marketing and Advertising, and Global Management*, vol. 2 (1 ed.). Hoboken, New Jersey: John Wiley & Sons, Inc., p. 104.
- Marwah, A.K., Thakar, G., Gupta, R.C. (2014). *Determinants of Supply Chain Performance of Indian Manufacturing Organizations*, *International Journal of Business Research and Management*, 5 (1): 14-27.
- Mensah, C., Diyuoh, D., Oppong, D. (2014). *Assessment of Supply Chain Management Practices and It Effects On the Performance of Kasapreko Company Limited in Ghana*, *European Journal of Logistics Purchasing and Supply Chain Management*, 2 (1):1-16,
- Ngai, E. W. T., Cheng, T. C. E. and Ho, S. S. M. (2004). *Critical Success Factors of Web-based Supply Chain Management System Using Exploratory Factor Analysis*, *Production, Planning & Control*, 5 (6): 622 - 630.
- Okino, D.D., Cattini, O.J. (2011). *Assessment of the Brazilian Cash Operation through the Approach of Sustainable Supply Chains*, *Journal of Operations and Supply Chain Management*, 4 (2): 71-85.
- Olugu, E.U., Wong, K.Y. (2009). *Supply Chain Performance Evaluation: Trends and Challenges*, *American J. of Engineering and Applied Sciences*, 2 (1): 202-211.
- Pfeffer, J., Salancik, G.R. (2003). *The external control of organisations: A resource dependence perspective*. Stanford, Calif.: Stanford Business Books, p. 11.
- Quesada, H., Gazo, R., Sanchez, S. (2012). *Critical Factors Affecting Supply Chain Management: A Case Study in the US Pallet Industry*, *Pathways to Supply Chain Excellence*, pp. 35-55.
- Rajagopal, P., Sulaiman, S.Z.M. (2009). *Assessing the effectiveness of supply chain partnering with scalable partnering as a moderator*, *International Journal of Physical Distribution*

- & Logistics Management, 39 (8): 649-668
- Rice, J. (1995). *Mathematical statistics and data analysis*, Duxbury Press, United States, Beverly Hills, pp. 48-67.
- Ringner, M. (2008). What is principal component analysis? *Nature Biotechnology*, 26 (3): 303-304.
- Rozar, N.M., Mahmood, W.H.W., Ibrahim, A., Razik, M.A. (2014). A Study of Success Factors in Green Supply Chain Management in Manufacturing Industries in Malaysia, *Journal of Economics, Business and Management*, 3 (2): 287-291.
- Suhr, D.D., (1999). *Principal Component Analysis vs. Exploratory Factor Analysis*, University of Northern Colorado, Paper 203-230, pp. 1-11.
- Thakkar, J., Kanda, A. Deshmukh, S.G. (2008). Supply chain management in SMEs: development of constructs and propositions, *Asia Pacific Journal of Marketing and Logistics*, 20 (1): 97-131
- Thoo, A.C., Huam, H.T., Md Yusoff, R., Md Rasli, A., Hamid, A.B.A. (2011). Supply chain management: success factors from the Malaysian manufacturer's perspective, *African Journal of Business Management*, 5(17): 7240-7247.
- Wong, P.W. and K.Y. Wong, 2007. Supply chain performance measurement system using DEA modelling. *Ind. Manage. Data Syst.*, 107: 361-381.
- Wagner, S.M., Grosse-Ruyken, P.T., Erhun, F. (2012). The Link between Supply Chain Fit and Financial Performance of the Firm, *Journal of Operations Management*, pp. 3-32.

## Appendix

Item Number	Item	Dimension
1	Is well-planned	SC strategy
2	Has the requisite human resource	
3	Is associated with the requisite materials and technology	
4	Designed with a suitable strategy	
5	Is associated with well-implemented communication, monitoring, control and risk management procedures	
6	Leads to successful access to raw materials	SC outcome
7	Leads to successful distribution of finished goods to consumers	
8	Meets the criteria of success established	
9	Leads to the expected impact on organisation	

### ABOUT THE AUTHOR

#### Ernest Ofori-Nyarko

He is a Lecturer at the Faculty of Business Administration, Department of Economics and Marketing Services at the Pentecost University College.

He could be reached on 0244299056 and email: [ernest\\_oforinyarko@yahoo.com](mailto:ernest_oforinyarko@yahoo.com).

# EVALUATION OF DEBT RECOVERY STRATEGIES OF MICRO-FINANCE INSTITUTIONS IN THE GREATER ACCRA REGION OF GHANA

MR. AKROBOR, S, T

## Abstract

Debt recovery is crucial if micro-finance institutions are to achieve self-sufficiency and sustainability. The main purpose of the study was to evaluate the effectiveness of debt recovery strategies used by microfinance institutions in Accra. The study specifically investigated the strategies put in place by the institutions to minimize risk of loan non-repayment; assessed the strategies adopted by the institutions to recover debt from clients; and examined the level of effectiveness of the debt recovery strategies used by the institutions. A structured questionnaire was used to gather data from employees of the selected microfinance institutions. Ten microfinance Institutions in the Greater Accra region of Ghana were sampled. Overall, 60 employees were sampled comprising 10 management staff and 50 credit officers. The study found that the institutions adopted a number of strategies including demand for collateral security; early disbursement of loan; extensive screening of clients etc., to reduce the risk of loan default. The institutions also used seizure of collateral; deductions from savings; deduction from guarantors' income; and legal actions to recover loans in default from clients. The debt recovery strategies of institutions were effective in improving overall operational efficiency and profitability. The study recommends that microfinance institutions improve on their effectiveness in debt recovery in order to remain viable within the microfinance environment.

**Key Words:** Micro-finance, collateral, security, loan default, non-repayment and debt recovery.

## INTRODUCTION

### Background to the Study

Micro-finance institutions aim at providing financial services to low-income clients who are not considered credit worthy by conventional banks. The financial intermediation is supposed to help them build up assets and manage their highly irregular cash flows (Collins et al., 2009). In order to spread this form of assistance to the poor more rapidly and to make them independent of the benevolence of donors, the sustainability and profitability of the institutions play a central part. A key to achieving scale, operational and financial self-sufficiency is to reduce the percentage of loans in arrears or lost. To maintain good portfolio quality, micro-finance professionals must understand what causes arrears or loan loss and how arrears or loan losses can be managed. To be able to reduce the debt levels, micro-finance institutions need to put in place proactive and effective strategies to recover debt from their clients. This study therefore evaluates the strategies put in place by selected micro-finance institutions to recover debt from the clients.

Micro-finance involves the provision of financial service to poor people who own very small businesses or business projects (Marzys, 2006). Micro-finance consists primarily of providing financial services, including savings, micro-credit, micro-insurance, micro-leasing, and transfers in relatively small transactions designed to be accessible to micro-enterprises and to low-income households. Micro-finance may be complemented by non-financial services, especially training, to improve the ability of clients to utilize the facilities and manage their businesses or personal financial offers effectively.

Micro-finance clients are typically self-employed, low income entrepreneurs in both urban and rural areas. Clients are often traders, street vendors, small scale farmers, service providers, artisans, and small producers such as blacksmiths and seamstresses. Usually, their activities provide a stable source of income (often from more than one activity). Although they are poor, they are generally not considered to be the poorest of the poor (Ledgerwood, 1998).

Researches indicate that over the last 20 years, the "micro-finance industry" has expanded considerably, particularly in Asia, Africa, and Latin America. Thousands of micro-finance NGOs (Non-Government Organisations) were established to provide micro-loans using individual and group lending methodologies. In the 1990s, while many of the NGOs failed to reach scale or financial sustainability, others led the way in demonstrating that poor people, particularly poor women, are excellent borrowers, when provided with efficient, responsive loan services at affordable or commercial rates. Again, micro-finance institutions can provide micro-loans to poor people in an efficient and financially sustainable way. Micro-finance lending savings and other financial services to poor people – is an effective way to help poor people help themselves build income and assets, manage risks, and work their way out of poverty (Daley-Harris, 2002).

It is worth noting too that though the motivation behind the global micro-finance movement was poverty alleviation, it paid for itself and even made profits. This potential, perhaps more than anything else, accounts for the emergence of micro-finance onto the global stage.

The basic objective of micro-finance is to give loans to the needy. Loans in less developed countries are made for a variety of purposes. They are for housing and for "start-up" businesses so that farmers can buy inputs for agricultural production - rice seeds, fertilizers, and agricultural tools. Loans are also used for a variety of non-crop activities such as dairy cow raising, cattle fattening, poultry farming, weaving, basket making, leasing farm and other capital machinery and woodworking (Yunus, 1994). Credit is also issued to groups consisting of a number of borrowers for collective enterprises, such as: irrigation pumps, building sanitary latrines, power looms, leasing markets or leasing land for cooperative farming. The potential for loan uses are virtually endless and differ between villages and countries. Due to the fact that there is no such thing as a 'typical' developing country, loans provide a source of income for diverse activities chosen specifically by the borrower.

In Africa, there is a large demand for micro-finance by the poor and low income people. This high demand necessitated the inclusion of micro-finance into the formal financial system. (Africa Development Bank, 2006). It was the recognition of this need in Ghana that led to the promulgation of the Non-Bank Financial Institutions Law 1991 (PNDCL 328) to regulate these institutions. Rural and Community Banks are regulated by the Banking Act 2004 (Act 673). According to the 2010 Bank of Ghana Report, the number of registered non-bank financial institutions in the country were 46 with total assets of GH¢1,131.52 million representing an increase of 20.6% over the total assets of the previous year.

### Statement of the Problem

The problem of debt recovery for micro-finance institutions in Ghana has been reported by the Ghanaian Times (April, 2010) concerning the Micro-finance and Small Loan Centre (MASLOC), which was set up by the government in 2006 to provide credit facilities to small businesses. MASLOC has been involved in several legal battles to try to recover debt from defaulting businesses. The high default rate of borrowers has been identified as one of the most significant causes of high interest rates in Ghana (Institute of Economic Affairs, 2011). Another classic case is the then Unique Trust Financial Services Limited (now UT Bank Limited). Unique Trust Financial Services Limited engaged in 24-hour loan deliveries to clients which saw many of the clients unable to pay for the loans within the stipulated times. This led to seizure of properties of individuals and companies.

The pertinent questions that arise relate to the kinds of strategies put in place by the micro-finance institutions to minimize the risk of loan loss; to recover debt from clients, and how effective are these debt recovery strategies. Finding answers to the above concerns is purpose of this study.

### Objectives of the Study

The objectives of the study are outlined as follows:

- i. To find out the strategies put in place by the micro-finance institutions to minimize risk of loan non-repayment by their clients.
- ii. To examine the strategies adopted by micro-finance institutions to recover debt from clients who default in payment.
- iii. To examine the level of effectiveness of the debt recovery strategies of the micro-finance institutions

### Research Questions

To achieve the specific objectives of the study, the following research questions have been formulated

- i. What strategies are put in place by micro-finance institutions to minimize risk of loan repayment by their clients?
- ii. What strategies are adopted by micro-finance institutions to recover debt from clients who default in payment?
- iii. How effective are the debt recovery strategies adopted by the micro-finance institutions?

## LITERATURE REVIEW

### Concept of Micro-Finance Institutions (MFIS)

The definition of micro-finance institutions proposed by some authors and organizations are seemingly different from one another. However, the essence of the definitions is usually the same in which micro-finance refers to the provision of financial services primarily savings and credit to the

poor and low income households that do not have access to commercial banks (Arsyad, 2005). Legerwood (1998) defines it as the provision of financial services (generally saving and credit) to low income clients. Robinson (2001) defines it as small scale financial services, primarily credit and saving, provided to people who farm or fish or herd and who operate small enterprises or micro enterprises

where goods are produced, recycled, repaired, or sold; who provide services; who work for wage and commission; who gain income from renting out small parcels of land, vehicles, animals, or machinery tools; and other individuals and groups at the local level of developing countries both in rural and urban areas.

### Objectives of Micro-Finance Institutions

Selecting a target market for financing depends on the micro service provider and the perceived demand for financial services. In any country, there are under served enterprise and households, ranging from the ultra-poor, who may not be economically active, to small growing enterprises that provide employment in their communities. This range or continuum constitutes the demand size for micro-finance services. Often, the supply side does not offer corresponding continuum services. Micro-finance institutions need to supply services that fill the gaps and integrate the under served group into the market.

According to Ojo (2009), the goal of micro-finance institutions as development organisations is to service the financial needs of especially under served market as a means of meeting national economic development objectives. These development objectives generally include one or more of the following:

- to reduce poverty,
- to empower women or other disadvantaged population groups,
- to create employment,
- to help existing business grow or diversify their activities, and
- to encourage the development of new businesses.

### Products and Services of Micro-Finance Institutions

Micro-finance institutions provide similar products and services to their customers as formal sector financial institutions do. The scale and method of delivery differ, but the fundamental services of

savings, loans, and insurance are the same. Notwithstanding this, to date most efforts to formalize micro-finance have focused on enterprise lending (loan for enterprise formation and development), which remain by far the dominant product offered by the MFIs (Nourse, 2001; Woller, 2002). This however, has slowly begun to change. Increasingly today, MFIs have begun to offer additional products, such as savings, consumption or emergency loans, insurance, and business education.

Nourse (2001) reviews the context and rise of micro-finance products and argues that there is a need for the poor and not just credit products. He goes on to argue that MFIs need to provide tailored lending services for the poor instead of rigid loan products. Supporting this latter assertion of Nourse (2001), Ejjah (2001) developed a model of small construction management contractors and MFIs in developing countries that provides a tailored lending structure for micro enterprise contractors.

In Ghana, similar practices exist where micro-finance institutions target the very poor in society. Before one qualifies to benefit from the facility of the MFIs, one must participate in every activity that is organized by these MFIs in relation to micro loan (NBSSI, 2013).

Microcredit is most often extended without traditional collateral. If physical collateral is required for borrowing, most MFI clientele would be unable to participate due to their extreme poverty level. Because borrowers do not have physical capital, MFIs focus on using social collateral, via group lending. Group lending encompasses a variety of methodologies, but all are based on the principle of joint liability. In essence, the group takes over the underwriting, monitoring, and enforcement of loan contracts from the lending institutions (Wenner, 1995). Under joint liability, each group member is made responsible for the loans of other group members. If one member defaults, the other group members are required to cover the loan from their own resources, and if they do not, they lose access to future loans. It is thus in each member's interest to ensure that the other members pay. Almost all the MFIs in Ghana practice the same method that is adopted in lending credit to their clientele.

According to Woolcock (2001), social collateral also



works through reputational effects on group members in which repayment of group loans is seen by group members as necessary to maintain their social standing in the community.

Within the lending function of microfinance, it is useful to divide loans into enterprise loans and consumption/emergency loans. As mentioned above, the loan programmes typical of MFIs almost entirely consist of enterprise loans. Nonetheless, significant unfulfilled market demand also exists for consumption and emergency loans (Woller (2002). The demand for consumption / emergency loan is evident in developing countries through the thriving business of the local money lenders. Traditional money lending is stereotyped as a loan shark preying on the desperation of the poor. It charges exorbitant interest rates and employs unsavory collection methods. The traditional money lenders, however, provide a valuable service for the poor people who require quick and flexible access to or infusions of cash to meet their immediate and pressing consumption needs. It also enables the poor to cope with emergencies like savings, consumption or emergency loans which form an integral component of poor household's risk management and coping strategies.

Those in the microfinance industry, who assume that formal MFIs would drive the traditional money lenders out of business have been shocked to learn that the demand for money lenders has remained robust, even among clients of microfinance programmes. A good illustration is the case described by Perry (2002) in which women money lenders in Senegal used loans from a local MFI to finance their own money lending businesses. It turns out that the terms of the loans offered by money lenders (rapid loan approval, flexible terms, repayment periods measured in days or weeks, and lump-sum payments at exorbitant interest rates) makes them generally ill-suited as a source of enterprise financing. Also, the terms of enterprise loans offered by MFIs (slow turnaround, inflexible terms, repayment periods measured in months or a year and regular small payments at relatively low interest rates) are generally ill-suited for emergency/consumption purposes.

Ismail and Ahmad (1997), for example, discuss the

role of pawnshop lending in Malaysia. They report that Malaysia pawnshops have increased in importance as lending institutions and are projected to continue to do so due to more affordable transportation, interest rate regulation, and financial liberation, among other factors. Along with the lending function, a market for savings exists in poor areas around the world. Savings services offered by MFIs can be divided into forced and voluntary savings, with forced savings far exceeding voluntary savings. In a forced savings programme, micro-finance participants are required to save a minimum amount each week or other set period of time. Forced savings ostensibly teach financial discipline and provide the MFI with additional information about clients. In practice, forced savings serve primarily as a form of cash collateral. Rules regulating when and how clients may withdraw forced savings are typically highly restrictive. In Ghana, microfinance institutions have also adopted the same style.

The second form of savings is voluntary, flexible savings (Nourse, 2001; Montgomery, 1996). Millions from all strata of poor do not operate enterprises, but they do save, albeit often in very small amounts and at inconsistent intervals (Beverly & Sherraden, 1999). Savings are integral to poor households risk management strategies. They constitute the first line of defence to help poor households cope with the external shocks, emergencies and life cycle events to which they are exposed. They also play a crucial role in allowing the poor to take advantage of productive investment opportunities (Grosh & Somolekae, 1996).

A reasonable estimate of the market for savings among the poor indicates that savings demand substantially exceeds the demand for enterprise loans. (Christen, 2001) reports that over a space of two to three years, retail banks in Latin America opened millions of small deposit accounts in countries in which MFIs added fewer than two hundred thousand (200000) loan savings. Moreover, savers typically exceed borrowers by large multiples.

Characteristically, many poor households have managed risk and coped with external shocks through a combination of informal social support network, savings, and borrowing from informal

moneylenders. Participation in micro-finance programmes offers another set of risk management and coping options for poor households. Participation in formal micro insurance schemes offers yet another option. Just as the demand for formal savings and loans exist among the poor, it is also believed that there exists a large demand for formal insurance (Churchill, 2002). Although micro insurance is in the early stages of development, efforts are being made to formalize and design the process. However, there are some success stories (e.g. FINCA Uganda offers its clients health and other types of insurance through an AIG subsidiary based in South Africa). The overall progress is modest.

This overview of issues related to microfinance products and services would not be complete without a brief discussion of integrative approaches – integrating non-financial services (usually education) with financial services to microfinance. According to Edgcomb (2002), Dumas (2001) used case methodology to analyze MFIs offering integrated business development training. They conclude that business development training significantly improves micro enterprise performance and micro entrepreneur empowerment.

A final issue worth mentioning is the provision of equity in lieu of credit for enterprise formation and start-up capital. Pretes (2002) discusses several cases of this practice in East Africa. They refer to this service as providing enterprise equity; however, in finance vernacular, this service would most likely be considered as a loan. Whereas the setting of interest rates in a profit financial institution is determined by the rate that will maximize shareholder wealth, MFIs face unique issues in setting an appropriate interest rate. If MFIs charge rates deemed too high, they may hinder their ability to help the poor pull themselves out of poverty as well as price very poor persons out of the market for loans.

Excessive interest rates may also lead to MFI losses as borrowers who cannot pay default on loans and, in the case of group lending, bog down the solidarity of the groups. On the other hand, due to the small principal amounts inherent with microcredit, little economies of scale exist in the lending process to

cover fixed costs. MFIs, moreover, operate with very high administrative costs per dollar lent relative to formal financial institutions. Thus, to achieve financial self-sufficiency, MFIs have to charge relatively high interest rates.

### The Impact of Micro-Finance Institutions

MFIs attempt to assess the impact of micro-finance as measured by their effect on clients, their enterprises, households, and the communities in which they live. As a general rule, MFIs work toward a double bottom line – financial and social – unlike the typical financial institutions which work solely toward a financial bottom line. Measuring financial returns is relatively straight-forward. Micro-finance has borrowed liberally from the financial accounting and performance standards in the formal financial sector. Concepts such as return on equity, return on assets, portfolio at risk, and so forth are increasingly becoming the lingua franca of the micro-finance industry. Measuring social return, however, is anything but straightforward. In practice, the specific social impacts of microfinance are hard to pin down and harder still to measure. Impact assessments require adoption of research methodologies capable of isolating specific effects out of a complicated web of causal and mediating factors and high volumes of random environmental noise. In addition, there is the problem of attaching specific units of measurement to tangible and intangible impacts that may or may not lend themselves to precise definition or measurement. The difficulty and cost inherent in assessing social impact are such that most MFIs do not try to assess social impact. Nonetheless, donors and policymakers have a legitimate interest in assessing the social returns to their social investments. Some knowledge of social impact is therefore necessary for MFI management and other stakeholders (e.g., donors and policymakers) to assess overall programme effectiveness. Information on financial performance alone gives an incomplete picture of programme performance.

Interest in the social impact of micro-finance has led to a number of impact studies published in scholarly journals. Some of these studies assess microfinance programmes in Bangladesh. Khandker (1998) find that programme credit has a significant impact on

the well-being of poor households and that this impact is greater when credit is targeted at women. Other studies in Bangladesh focus on the question of female empowerment (Schuler et al., 1997; Steel et al., 2001). All but one find evidence that microfinance programme participation exerts a statistically significant impact on one or more aspect of female empowerment, such as contraceptive usage or intra-household decision-making. The sole Bangladesh study failing to find significant impact is by Goetz and Gupta (1996). They found that significant portions of the women's loans were controlled by male relatives, thereby limiting the women's ability to develop meaningful control over their investment activities.

Analyzing four programmes in Bolivia, Mosley (2001) shows that assets and income increased commensurately with initial poverty levels, but also that MFI services may increase vulnerability if borrowers over-leverage. Bolnick and Nelson (1990) finds that MFI participation had a positive impact on enterprises that were typically small, labour intensive and growing, although the impact was far from uniform across sectors and target variables. Copestake et al. (2001) find that borrowers who were able to obtain two loans experienced high growth in profits and household income compared to a control sample. However, borrowers who never qualified for the second loan were actually worse off due to MFI collection mechanisms. Wydick (1999) finds that upward class structure mobility increases significantly with access to credit. Using the same Guatemala data set in a subsequent study (2002), he also finds that rapid gains in job creation after initial credit access were followed by prolonged periods of stagnant job creation. Dun (2001) finds that programme clients enterprises performed better than non-client enterprises in terms of profit, fixed assets, and employment. Finally, Anderson et al. (2002) analyze 147 MFIs and find that micro-finance participation increased environmental awareness of participants.

Other impact studies address trade-offs that need to be considered when performing micro-finance impact assessments. Wydick (1999) constructs a theoretical model to analyze the economic trade-off between future returns to schooling and their return to child labour in Guatemalan household

enterprises. He finds that in some states, micro-credit increases the probability that children will attend school; however, during certain states of moral hazard, the cost of schooling may outweigh the benefits of child labour. Kevane and Wydick (2001) find that targeting microenterprise credit at poor women appears to imply a trade-off between economic growth in favour of poverty reduction and child welfare. In particular, female entrepreneurs of child bearing age create significantly fewer jobs than male entrepreneurs. Each of the impact assessment studies cited above, with one noted exception, provide evidence of positive impacts of micro-finance. Other impact assessment studies, however, fail to find significant impacts. In his assessment of Thai MFIs, Coleman (1999) finds that "naïve" estimates of impact failing to control for self-selection and endogenous (non-random) programme placement significantly over estimate programme impacts. He generalizes this finding to other impact assessments, arguing that most impact studies neglect the issues of self-selection and endogenous programme placement. This leads to systematic over statement of impact.

## **Performance and Management of Micro-Finance Institutions**

Performance of micro-finance can be determined through monitoring efforts, more frequent visits to borrowers by institutions to see at first hand whether the micro loans taken are being put to their intended purpose. In Ghana, institutions that are involved in micro-finance adopt measures that they use to check on their borrowers to see whether they are putting the loan into productive activities.

Bhatt and Tang (2001) discuss micro-finance institutions (MFIs) vehicles, technologies and performance assessments and conclude that the future success of micro-finance will depend on MFI designs tailored to specific clients. Bhatt and Tang's assertion highlights the importance of research to develop sound practising of MFI design and management. The primary consideration which needs to be included in their lending policy should be determination of an optional interest rate charge to borrowers, whether to lend to groups or to individuals. Fafchamps (1997) uses simulation

methodology to show that interest rate subsidization has little impact on whether people in India invest in non-divisible and irreversible profitable project. MFIs should explore in detail the choice between offering group loans or individual loans.

According to Woolcook (2001), MFIs rely on social collateral within groups to secure their loans. Gomez and Santor (2001) provide empirical evidence of the importance of social collateral. In an empirical study of 612 group borrowers and 52 individual borrowers in Canada, they report that group lending and the presence of neighbours have a positive correlation with self-employment earnings. It followed that borrowers with higher earnings will have an easier time of servicing their micro loan. In Ghana, group loan works effectively as compared to individual ones. Because group members serve as a collateral in case of a default (NBSSI, 1996).

Milgram (2001) presents the case of MFIs in the Philippines that attempt to become self-sufficient too quickly, resulting in targeting people who already owned operating business. She argues that MFIs rush to self-sufficiency forced it to be at odds with its original mission of targeting the very poor and facilitating the creating of micro enterprises. Churchill (2002) and Norell (2000) also addresses attempts to incorporate existing banking practices into MFIs.

Pitt and Khandker (1998) use data from Bangladesh over the period of 1991-1992 to test the hypothesis that women use borrowed funds more efficiently than men. Finally, Woller (2002) reviews the costs and benefit of MFI commercialization and its impact on mission drift. He concludes that the benefits of commercialization outweigh the costs, but recommends that MFIs remain poverty alleviation focused.

### **Strategies of Micro-Finance to Minimize the Risk of Loan Repayment**

The micro-finance industry has come up with solutions to its debt recovery problems to help provide credit profitably with low interest rates to people, who lack the above mentioned signals. The

following section presents the most important strategies.

### **Extensive Screening**

Extensive screening by credit officers, despite high marginal costs, is a major feature of micro-financial credit risk assessment and decision policies. Screening is carried out by credit officers who visit the home and business place of loan applicants. They interview applicants thoroughly to assess their financial situation and make a judgment of their character (Schreiner, 2002).

### **Joint-Liability Groups**

In joint-liability groups, the members are liable for each other's loans. The peers perform the initial screening and the monitoring of the loan upon which the bank saves screening and monitoring costs. The instalments can be collected by the group. This generates effects of scale. Social ties serve as reputation capital and represent a sort of social collateral. In case of non-repayment, the person faces social sanctions. The joint-liability lending methodology dates back to the mid-19th century but has been reintroduced into the development context by the Grameen Bank (Ghatak & Guinnane 1999).

### **Repayment Incentives: Increasing Loan Size and Decreasing Interest Rates**

Good repayment behaviour can be incentivized by increasing loan size in response to the timely payment of instalments. Clients who want to grow their loan size will avoid falling into arrears. Accordingly, interest rates can be reduced in the course of the customer relationship to incentivize long adherence to the program. Dropouts are costly for MFIs because they can destabilize loan groups and represent a loss of reputation capital (Wright, 2001).

### **Statistical Credit Scoring**

A relatively recent approach, derived from conventional lending methodology, is statistical credit scoring. Schreiner (2000) proposes to use

regression models to predict the future performance of clients upon the past performance of clients with the same characteristics. Schreiner (2000) also points to the sensitive issue of discrimination. Statistical scoring implies the consideration of inalterable determinants such as age, business activity, or place of residence. If not applied with due care, statistical scoring can lead to discrimination.

## Empirical Literature

Norell (2000) discusses techniques that MFIs can use to reduce arrears which include following-up quickly on loans in arrears, forming strong solidarity groups, updating and enforcing credit policies, and concentration on the scope of lending. Many MFIs target primarily or exclusively women. This practice is based on the common belief that women invest the loan in productive activities or in improving family welfare more often than men, who are assumed to consume rather than invest loan funds.

Fischer and Ghatak (2010) further disclosed that a study carried out in the Philippines did not find any statistical difference in the rate of repayment of loans by people in a group (joint liability) and people who borrow individually (personal liability). They however warned that the study was not conclusive since the customers of the bank had all been borrowing in a group, therefore although a joint liability situation did not exist, the informal peer monitoring still continued in the case of individual liability. They further discussed studies on high frequency payments which revealed mixed results. Some studies found that high frequency payments lead to a higher default rate, other studies found the opposite and some studies found out that the frequency of payment is not significant in determining whether a borrower defaults or repays.

A study conducted in the United States of America (Bhatt & Tang, 2002) on four micro-finance institutions found that the educational level of a borrower and the proximity of a borrower's business to the lending agency, were the factors that were statistically significant in determining the likelihood of a borrower repaying a credit facility. The study also found that where borrowers incur less transaction cost (including waiting time), they

are more likely to repay the loan. Finally, the study found out that the probability of sanctions also makes a borrower more likely to pay back a loan. Another surprising result was that there was no difference between the repayment behaviour of a borrower who earned steady income from employment and the borrower who operated his own business. On the basis of their findings, they suggested that micro-finance programmes in the United States have to adopt the following strategies in order to maximize the rate of repayment of loans:

1. Identify borrowers with the ability to run a viable business (emphasis on educational level)
2. Offer training and technical assistance to the borrower.
3. Move closer (physically) to the customer.
4. Adopt effective sanctioning mechanisms against defaulters.

Contrasting these findings is a study conducted in Malaysia by Roslan and Karim, (2009). They found out that the most important factors that determine the likelihood of borrowers to repay the loans made out to them from micro-credit institutions include:

1. The gender of the borrower (i.e. a male borrower is more likely to default than a female borrower).
2. The type of activity (i.e. borrowers involved in service activities are more likely to repay than those involved in production activities).
3. The training offered to clients (i.e. borrowers who are offered training are more likely to repay than those who lack proper training).
4. Amount lent (i.e. the higher the amount lent, the lower the risk of default).
5. Payment period (i.e. the longer the payment period, the higher the risk of default).

Another study by Oke, Adeyemo, and Agbonlahor (2007), conducted in South-Western Nigeria discovered a repayment rate of about 90 per cent. It also found out that members' spending on socio-cultural activities was positively related to repayment; a currency point increase in penalty for lateness will reduce repayment rate by 0.88 per cent; improvement in income will increase the rate of repayment; increasing banking opportunities in the area will improve microcredit repayment; access to adequate business information will increase

repayment rate by 29 per cent; members who belong to co-operative societies are the ones who had better repayment rate. Delay of disbursement of loans reduced repayment rate by 0.98 per cent.

Berger and DeYoung (1995) indicated that one major problem, which the banks in India are facing is the problem of recovery and overdue loans. The reasons behind this may vary for different financial institutions as it depends upon the nature of the loans. Here, an attempt was made to find out some

of the causes of loans default. The recovery officers of different banks were interviewed to find out the causes of loan default. The reasons may be useful for the banks for the better recovery of loans in future. The following were identified to be the main causes of default of loans to the industrial sector: improper selection of an entrepreneur; deficient analysis of project viability; unrealistic terms and schedule of repayment; lack of follow-up measures; and default due to natural calamities.

## METHODOLOGY

### Research Design

Johnson et al. (2001) defined research design as a plan that guides the researcher or the investigator in the process of collecting, analyzing and interpreting observation. According to Yin (1994) the best method to use for a study depends on the purpose of the study and the accompanying research questions. However; Academicians believe that a research may have more than one purpose which may change over time (Zikmund, 2000)

A research methodology can be descriptive, exploratory, and explanatory. The researcher adopted descriptive methodological approach to achieve its purpose of evaluating the effectiveness of debt recovery strategies in micro-finance institutions. Descriptive research aims to describe phenomena and needs accurate observations. The research design must focus on the validity and reliability of the observations (Terre-Blanche et al., 2006). This study is descriptive because it sought to describe the nature of existing strategies put in place to minimize the risk of loan default, the debt recovery strategies adopted, and their effectiveness in the micro-finance

institutions. A structured questionnaire was used as the main primary data collections instrument. The data was analysed using descriptive statistics such as percentages, means, and standard deviations to present the findings.

### Population and Sampling

The study specifically, targeted micro-finance institutions in the Greater Accra Region of Ghana. Employees such as management and credit officers were targeted. As of March 2013, there were 71 licenced micro-finance companies in Ghana out of which 39 were based in the Greater Accra region. The questionnaires were sent to ten (10) employees of each of the 25 micro-finance institutions out of the 39 in the regions. Only 10 micro-finance institutions responded to the questionnaires which represent a response rate of 40%. The total number of respondents was 60 (comprising 10 managers and 50 credit officers). The selection of the micro-finance was by simple random sampling since every micro-finance institutions in the region had a chance of being selected. Table 1 summarizes the sampling process

**Table 1: Sampling Process**

Number of MFIs targeted	Number of questionnaires delivered	Number of MFIs sampled	Number of questionnaires returned		Response rate for MFIs	Respondents, response rate
25	250	10	Management	Credit officers	40%	24%
			10	50		
			60			

## Data Collection Instruments

For the purpose of this study, data collection was done by using a structured questionnaire. The questionnaire was structured into four sections outlined as follows. The first section (section A) assessed the general demographic profile of the respondents.

Section B covered the strategies put in place by the selected micro-finance institutions to minimize risk of loan default by their clients. This section measured the frequency at which various strategies were employed using a five-point Likert type of scale (Likert, 1932): 1 (Never), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Always). Sampled items on this section included: extensive screening, joint-liability groups, repayment incentives; increasing loan size, and decreasing interest rates, and statistical credit scoring, etc.

Section C assessed the strategies used by micro-finance institutions to recover debt. Items were measured on a five-point Likert scale: 1 (Never), 2 (Rarely), 3 (Sometimes), 4 (Often), and 5 (Always). Sampled items in this section included: legal actions, deductions from savings, seizure of collateral, payment from guarantors' income, extension of credit repayment period, etc.

Section D examined the level of effectiveness of the debt recovery strategies. The level of effectiveness of the strategies was measured on a five-point Likert type of scale: 1 (Very ineffective), 2 (ineffective), 3 (Neutral), 4 (effective), and 5 (Very effective). Sampled items include the strategies which have

lead to improvement in: credit repayment, more demand for credit, return on investment, better relationship between the institution and clients, client satisfaction, market share, etc.

## Pre-Testing of Data Collection Instrument

Pre-testing refers to a procedure that involves a trial run with a group of respondents to iron out fundamental problems in the survey design (Zikmund & Babin, 2007). Therefore, pre-testing helps to identify problems with the questionnaire, as respondents may think some questions are ambiguous, or instructions on the questionnaire are too long, or questions that should be included in the questionnaire were left out (Roberts-Lombard, 2006). To pre-test the questionnaire, a sample of 20 was sent to the target group of respondents in the selected micro-finance institutions. Items in the questionnaire which were not clear to the respondents were restated.

## Data Presentation and Analysis

Descriptive statistics such as frequency distribution was used to assess the demographic profile of the respondents. Also, measures such as mean and standard deviation were used to represent the strategies put in place by the microfinance institution to minimize risk of loan repayment by their clients; the strategies put in place to recover debt from clients; and the effectiveness of the debt recovery strategies. Data analysis was done using the Statistical Package for Social Sciences (Version, 18). Findings of the study were presented via frequency tables.

# RESULTS AND DISCUSSIONS

## Demographic Profile of Respondents

Table 2: represents the demographic characteristics of the respondents who were employees of the selected micro-finance institutions

**Table 2: Demographic Profile of Respondents**

Profile	Category	Number	Percent
Gender	Male	36	60.0
	Female	24	40.0
	Total	60	100.0
Age (years)	20-34	42	70.0
	35-49	18	30.0
	Total	60	100.0
Educational background	SHS/O-/A-Level	2	3.3
	Diploma/Professional	24	40.0
	Degree	30	50.0
	Masters	4	6.7
	Total	60	100.0
Job tenure (years)	1-5yrs	44	73.3
	6-10yrs	14	23.3
	11-15yrs	2	3.3
	Total	60	100.0

**Source:** Field survey data, 2013  
 Were: SHS = Senior High School  
 O – Level = GCE "O" Level Certificate  
 A – Level = GCE "A" Level Certificate

Regarding the gender distribution of the 60 respondents, more than half, 60% (n=36) were males while the remaining 40% (n=24), represent females. The implication is that there were more male respondents than female respondents in the selected micro-finance institutions.

With regard to the age distribution of the 60 employees selected, the majority, 70% (n=42) of the respondents were within the age group of 20 years to 34 years while the remaining 30% (n=18) were between 35 years and 49 years of age. All the respondents were 20 years and above but less than 50 years of age.

About the educational qualification of the 60 respondents, half, 50 % (n=30) had first degree qualification, 40% (n=24) held diploma/ professional qualification, 6.7% (n=4) held qualification of master degree or advanced degree and 3.3% (n=2) had SHS/ O-Level/ A-Level qualification. Overall, 96.7% had Diploma qualification or higher education (tertiary level education). This is significant because one's academic qualification may have implications for one's understanding of the issues under investigation.

Concerning the duration of work of the respondents, majority, 73.3% (n=44) had 1 to 5 years of working experience with their institutions. This is followed by those with 6 to 10 years of working experience. This group constitutes 23.3% (n=14) and the remaining 3.3% (n=2) had been working with their institution between 11 years and 15 years. It is the researcher's belief that this duration of working experience with the institution, is enough for the employees to have adequate knowledge of the issues under investigation.

### Strategies of MFIS to Minimize the Risk of Loan Repayment

The first specific objective of the study was to find out the strategies put in place by selected micro-finance institutions to minimize risk of loan repayment by their clients. Mean and standard deviation values were used to present the findings. The mean value represents the average of all the respondents and the standard deviation represents the spread of the responses on the scale. The findings are presented in Table 3.



**Table 3. Strategies of MFIs to minimize risk of loan non-repayment**

No.		N	Mean	Stdev
1	Demand for collateral security from clients	60	4.37	0.764
2	Early disbursement of loan	60	3.67	0.88
3	Undertake extensive screening for clients creditworthiness	60	3.47	1.11
4	Reducing the amount of credit to clients	60	3.43	0.82
5	Decreasing loan size to clients	60	3.30	1.02
6	Use statistical credit scoring to determine customer risk level	60	2.97	1.29
7	Lowering interest rate on loans for clients	60	2.80	1.37
8	Targeting of joint-liability groups	60	2.37	1.12
9	Giving incentives to clients who settle their debts early	60	2.30	1.36

Source: Field Survey Data, 2013

Scale: 1= Never, 2= Rarely, 3= Sometimes, 4= Often, 5= Always

The outcome as presented in the Table 3 shows that the respondents note that demand for collateral security from clients was the main strategy often (Mean; 4.0-4.99) used by the micro-finance institutions to reduce the risk of loan non-repayment by clients (Mean=4.37, Stdev=0.764). This is followed by early disbursement of loan (Mean=3.67, Stdev=0.88), extensive screening for clients creditworthiness (Mean=3.47, Stdev=1.11); reducing the amount of credit to clients (Mean=3.43, Stdev=0.82); and decreasing loan size to clients (Mean=3.3, Stdev=1.02) as the strategies sometimes (Mean: 3.00-3.99) engaged in by the institutions. The implication is that these were the strategies used by the selected micro-finance institutions to reduce the risk of loan repayment by clients.

However, the respondents noted that; the use of statistical credit scoring to determine customer risk level (Mean=2.97, Stdev=1.29); lowering of interest rate on loans to clients (Mean=2.80, Stdev=1.37); targeting of joint-liability groups (Mean=2.37, Stdev= 1.12); and giving incentives to clients who settle their debts early (Mean=2.30, Stdev=1.36); are strategies that are rarely (Mean: 2.00-2.99) used by the micro-finance institutions to reduce the risk of loan non-repayment by clients. The implication is that these strategies were not considered by the selected micro-finance institutions.

### Strategies of Micro-Finance Institutions to Recover Loan in Default

The second specific objective of the study was to assess the strategies adopted by micro-finance institutions to recover debt from clients who default in payment. The findings indicated that seizure of clients' collateral (Mean=4.23, Stdev=1.01) was the main strategy often (Mean: 4.0-4.99) used to recover loans which are in default from clients. The other strategies found from the study include: deductions from savings (Mean=3.93, Stdev=1.01), deduction from guarantors' income (Mean=3.40, Stdev=0.93); legal actions (Mean=3.23, Stdev=1.10); extension of credit repayment period (Mean=3.20, Stdev=0.61); partial write off (Mean=3.10, Stdev=0.76); and agreement with borrowers for final settlements (Mean=3.10, Stdev=0.99). These strategies are not sometimes (Mean 3.00-3.99) used by the microfinance institutions to recover loans in default from clients. The implication is that these are the main strategies used by the micro-finance institutions to recover loans in default from their clients.

The respondents, however, indicated that announcing the names of the defaulters in the mass media (Mean=2.80; Stdev=1.35); and reliance on revenue authorities to help recover loans in default (Mean=2.20, Stdev=1.45) are rarely (Mean: 2.00-

2.99) considered as strategies to recover loans in default by the selected micro-finance institutions.

Table 4 reflects the responses in this area regarding strategies used to recover loan in default.

**Table 4. Strategies used to recover loans in default**

No.		N	Mean	Stdev
1	Seizure of collateral	60	4.23	1.01
2	Deductions from savings	60	3.93	1.01
3	Payment from guarantors' income	60	3.40	0.93
4	Legal actions	60	3.23	1.10
5	Extension of credit repayment period	60	3.20	0.61
6	Partial write off	60	3.10	0.76
7	Compromise with borrowers for final settlements	60	3.10	0.99
8	Announcing the names of the defaulters in the mass media	60	2.80	1.35
9	Help from revenue authorities to recover loans from clients	60	2.20	1.45

Source: Field Survey data, 2013

Scale: 1= Never, 2= Rarely, 3= Sometimes, 4= Often, 5= Always

### Effectiveness of Debt Recovery Strategies

The third objective of the study was to examine the level of effectiveness of the debt recovery strategies used by micro-finance institutions. Again mean and standard deviation were used to present the findings. Mean values ranging from: 1.00-2.49 (ineffective); 2.50-3.49 (Neutral); 3.50-5.00 (effective) are used to interpret the findings as shown in Table 5.

**Table 5: Effectiveness of debt recovery strategies**

No.		N	Mean	Stdev
1	Improving overall operational efficiency	60	4.30	0.75
2	Increasing growth in market shares of the institution	60	4.13	0.68
3	Improving customer loyalty	60	4.13	0.93
4	Increasing profitability of institutions	60	4.10	0.95
5	Enhancing customer relation with the institutions	60	4.10	0.95
6	Improving the company's image in the financial market	60	4.10	0.84
7	Increasing return on investment to the institutions	60	4.03	0.72
8	Reducing non-performing loans	60	3.90	0.96
9	Improving customer satisfaction of service	60	3.90	0.99
10	Increasing demand for credit by clients	60	3.73	1.01
	Overall effectiveness of debt recovery strategies	60	4.04	

Source: Field Survey Data, 2013

Scale: 1= Very ineffective; 2= ineffective; 3= Neutral; 4= effective; 5= Very effective

The findings show that the debt recovery strategies used by the selected micro-finance institutions were effective (Mean; 3.50-5.00) in improving overall operational efficiency of the institution (Mean=4.30, Stdev=0.75); increasing growth in market shares of the institutions (Mean=4.13, Stdev=0.68); improving customer loyalty (Mean=4.13, Stdev=0.93); increasing profitability of institutions (Mean=4.10, Stdev=0.95); enhancing customer relation with the institution (Mean=4.10, Stdev=0.95); improving the company's image in the financial market (Mean=4.10, Stdev=0.84); increasing return on investment to the Institution (Mean=4.03, Stdev=0.72); reducing non-performing loans (Mean=3.90, Stdev=0.96); improving customer satisfaction of service (Mean=3.90, Stdev=0.99) and increasing demand for credit by clients (Mean=3.73, Stdev=1.01). This means that the debt recovery strategies are highly effective as indicated by the overall mean score.

## Discussion of Findings

Regarding the strategies used by the selected micro-finance institutions to reduce the risk of loan repayment by clients; the study identified the following as the strategies adopted by the institutions: demand for collateral security from clients; early disbursement of loan; extensive screening of clients for creditworthiness; reducing the amount of credit to clients; and decreasing loan size to clients. Schreiner (2002) also noted that for MFIs to reduce the risk of loan default, there should be extensive screening of clients for creditworthiness. However, the finding contradicted the findings of Roslan and Karim, (2009) who noted that the higher the amount of credit, the lower the risk of repayment. The current study found that one of the strategies adopted by the micro-finance institutions was to reduce the amount of credit offered to clients as a way of reducing the risk of loan default.

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

Based on the findings of the study, it can be concluded that:

- Demand for collateral security from clients; early disbursement of loan; extensive screening of clients for creditworthiness; reducing the amount of credit to clients; and decreasing loan size to clients are the main strategies adopted by the micro-finance institutions to reduce the risk of loan default.
- Seizure of collateral; deductions from savings; payment from guarantors' income; legal actions; extension of credit repayment period; partial write off; and agreement with borrowers for final settlements are the strategies used to recover loans in default by micro-finance institutions.
- The debt recovery strategies of the micro-finance institutions were perceived to be effective in improving overall operational

efficiency of the institutions; increasing growth in market shares of the institution; improving customer loyalty; and increasing profitability of the institutions.

### Recommendations

Based on the findings of the study, the following recommendations are deemed appropriate by the researchers.

- Regarding the challenge of diversion of credit by client into businesses not originally intended, it is advised that frequent follow up to seek how the loan has been applied will help solve the problem of loan diversion by clients.
- The micro-finance institutions were effective in their debt recovery strategies. The study recommends that the institutions should improve upon the level of effectiveness in debt recovery strategies in order to remain viable within the micro-finance environment.

## REFERENCES

- African Development Bank. (2006). *Microfinance Policy and Strategy for the Bank Group*.
- Anderson, C. L., Locker, L. and Nugent, R. (2002). Microcredit, social capital, and common pool resources. *World Development*, 32, 95-105.
- Arsyad L (2005). An assessment of performance and sustainability of Microfinance Institutions: A case study of Village credit institutions in Gianyar, Bali, Indonesia, unpublished PhD thesis, Flinders University, Australia.
- Berger, A. N. and DeYoung, R. (1995). Problem Loans and Cost Efficiency in Commercial Banks, Centre for Financial Institutions Working Papers, Wharton School Centre for Financial Institutions, University of Pennsylvania.
- Beverly, S. and Sherraden, M. (1999). Institutional determinants of savings: Implications for low-income households and public policy, *Journal of Socio-Economic* 28, 457-473.
- Bhatt, N., and Tang, S.-Y. (2002, June). Determinants of Repayment in Microcredit: Evidence from Programs in the United States. *International Journal of Urban and Regional Research*, 26(2), 360-79.
- Bolnick, B. R. and Nelson, E. R. (1990). Evaluating the Economic Impact of a Special Credit programme: KIK/KMKP in Indonesia, *The Journal of Development Studies* 26, 299-312.
- Christen, R. P. (2001). Commercialization and Mission Drift: The Transformation of Microfinance in Latin America, CGAP Occasional Paper No.5 Washington, DC: Consultative Group to Assist the Poorest.
- Churchill, C. (2002). Trying to Understand the Demand for Micro insurance. *Journal of International Development*, 14, 381-387.
- Coleman, B. E. (1999). The Impact of Group Lending in Northeast Thailand. *Journal of Development Economics*, 60, 105-142.
- Collins, D., Murdoch, J., Stuard, R., and Orlanda, R. (2009). *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*. Princeton: Princeton University Press.
- Copstake, J., Bhalotra, S., and Susan, J. (2001). Assessing the impact of microcredit: A Zambian case study. *The Journal of Development Studies*, 37, 81-100.
- Daley-Harris, S. (2002). *Pathways Out of Poverty: Innovations in Microfinance for the Poorest Families*. Bloomfield: Kumarian Press.
- Dumas, C. (2001). Evaluating the outcomes of microenterprise training for low income women: A case study. *Journal of Development Entrepreneurship*, 6, 97-129.
- Dun, E. (2001). Microcredit and Microenterprise Performance: Impact Evidence from Peru. *Small Enterprise Development Journal*, 12, 22-33.
- Edgcomb, E. L. (2002). What makes for effective microenterprise training? *Journal of Microfinance*, 4, 99-114.
- Ejjah, A. K. (2001). An integrated approach to financing small contractors in developing countries: A conceptual model. *Construction Management and Economics*, 19, 511-518.
- Fafchamps, M. (1997). Precautionary savings, credit constraints, and irreversible investment: evidence from semi-arid India. *Journal of Business and Economic Statistics*, 15, 180-194.
- Fischer, G., and Ghatak, M. (2010, June 10). *Spanning the Chasm: Uniting Theory and Empirics in Microfinance Research*. Handbook on Microfinance, pp. 1-17.
- Ghanaian Times. (2010, April). MASLOC News. Retrieved October 10, 2011, from Micro Finance and Small Loans Centre: <http://www.masloc.gov.gh/2/12/MASLOC-News.html?item=19>
- Ghatak, M. and Guinnane, T. W. (1999). The economics of lending with joint liability: theory and practice. *Journal of Development Economics*, 60, 195-228.
- Grosh, B. and Somolekae, G. (1994). Mighty oaks from little acorns: Can microenterprise serve as the seedbed of industrialization? *World Development*, 24, 635-53.
- Institute of Economic Affairs. (2011, May 1). The problem of High Interest Rates: Don't Control but Please Regulate. *Legislative Alert*, 19(3), pp. 1-4.
- Ismail, A. G., and Ahmad, N. Z. (1997). Pawnshop as an instrument of microenterprise credit in Malaysia. *International Journal of Social*

- Economics, 24, 1343-1352.
- Johnson, J. B., Joslyn, R. A., and Reynolds, H. T. (2001). *Political Science Research Methods* (4th Ed). Washington, DC: CQ Press.
- Kevane, M., and Wydic, B. (2001). Microenterprise Lending to Female Entrepreneurs: Sacrificing Economic Growth for Poverty Alleviation? *World Development*, 29, 1225-1236.
- Ledgerwood, J. (1998). *Sustainable Banking with the Poor Microfinance Handbook: An Institutional and Financial Perspective*, the World Bank, Washington, DC.
- Martzys, R.O. (2006). *Microfinance Institutions: Profitability at the service of Outreach. A study of Microfinance Industry in the ECA region*, MA thesis.
- Milgram, B. L. (2001). Operationalizing microfinance: Women and craftwork in Ifugao, Upland Philippines. *Human Organization*, 60, 212-224.
- Mosley, P. (2001). Microfinance and poverty in Bolivia. *The Journal of Development Studies*, 37, 101-132.
- Mutua, K., Nataradol, P., Otero, M., and Chung, B. (1996). *The View From the Field: Perspective Managers of Microfinance Institutions*. *Journal of International Development*, 6, 179-193.
- National Board for Small Scale Industries (1996) *functional industries*
- Norell, D. (2001). How to reduce arrears in microfinance institutions. *Journal of Microfinance*, 3, 115-130.
- Nourse, T. H. (2001). The missing parts of microfinance: services for consumption and insurance. *SAIS Review*, 21, 61-70.
- Ojo, O. (2009). Impact of microfinance on entrepreneurial development: The case of Nigeria. Faculty of Administration and Business, University of Bucharest, Romania
- Oke, T. J., Adeyemo, R., and Agbonlahor, M. U. (2007). An Empirical Analysis of Microcredit Repayment in Southwestern Nigeria. *Humanity & Social Sciences Journal*, 2(1), 63-67.
- Perry, D. (2002). Microcredit and women money lenders: The shifting terrain of credit in rural Senegal. *Human Organization*, 61, 30-40.
- Pitt, M., and Khandker, S. R. (1998). The impact of group-based credit programmes on poor households in Bangladesh: Does the gender of participants matter? *The Journal of Political Economy*, 106, 958-996.
- Pretes, M., (2002). Microequity and microfinance. *World Development*, 30, 1341-1353.
- Schreiner, M. (2000). *Scoring for Microfinance: Can it Work? Report*, Washington: Center for Social Development, Washington University St. Louis.
- Schreiner, M. (2002). *Scoring: The Next Breakthrough in Microcredit? Report*, Washington: Center for Social Development, Washington University St. Louis.
- Schuler, S. R., Syed, M. H., and Ann, P. R. (1997). The influence of women's changing roles and status in Bangladesh's fertility transition: Evidence from a study of credit programs and contraceptive use. *World Development*, 25, 563-575.
- Steel, W.F., and Webster, I.M. (1991). Small scale enterprise under adjustment in Ghana. *World Bank technical paper* p.138.
- Wenner, M. (1995). Group credit: A means to improve information transfer and loan repayment performance. *Journal of Development studies*, 32, 263-281.
- Woller, G. (2002). A review of impact assessment methodologies for microenterprise development programmes, in *Evaluating Programmes and Policies for Local Development*. Organization for Economic Cooperation and Development-LEED.
- Woolcock, M. (1999). Learning from failures in microfinance: What unsuccessful cases tell us about how group-based programmes work. *The American Journal of Economics and Sociology*, 58, 17-42
- World Bank. (2004, February 4). *Afghanistan: Pioneering Donor Co-ordination for Microfinance*. Retrieved October 10, 2011, from Relief Web: <http://reliefweb.int/node/142273>
- Wright, G. A.N. (2001). Dropouts and Graduates: Lessons from Bangladesh. *The Microbanking Bulletin*, 6, 14-16.
- Wydic, W. B. (1999). The effect of microenterprise lending on child schooling in Guatemala. *Economic Development and Cultural Change*, 47, 853-869.
- Yin, P. K. (1994). *Case Study Research-Design and*

Methods, Sage Publications, Newbury Park.  
Yunus, M. (1994), Grameen Bank, "Major Uses of Loan Funds", Bangladesh; Extract from key address delivered at 85th Rotary International Convention held in Taipei, Taiwan, on June 12 1994

Zikmund, W.G., and Babin, B.J. (2007). Essentials of marketing research (3rd edition). Mason: Thomson South-Western.

#### ABOUT THE AUTHOR

---

#### **Stephen T. Akrobor**

He is a Chartered Accountant and an Administrator. He holds Master of Science Degree in Internal Auditing and Management from the City University Business School (United Kingdom). He is currently a Doctorate of Finance Candidate at SMC University. His working experiences span both the private and public sectors and he has contributed immensely to the development of curriculum for HND, Graduate and Post Graduate programmes at Accra Polytechnic and University of Professional Studies, Accra (UPSA) respectively. Currently, He is the Director of Institute of Professional Studies (a Directorate in the University of Professional Studies). Before then he was the Pro-vice Chancellor and the Dean of the Faculty of Accounting. He serves on various statutory committees of the University.

# EXAMINING THE TAX IMPLICATIONS FOR THE ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS) IN GHANA

ABEDANA, V. N., ADOM-FRIMPONG, K., OMANE-ANTWI, K. B.

## Abstract

This paper examines the tax implications of listed companies in Ghana for the adoption of International Financial Reporting Standards (IFRS), particularly International Accounting Standard (IAS) 12. Financial statements from annual reports for twenty two (22) firms were used for the analysis. A theory of accounting choice was used as the theoretical framework with all other relevant related literature reviewed. A sequential explanatory strategy for mixed methods research approach was used with data sourced from three different sources; that is observation and extraction from financial statements, questionnaire and an interview guide. The results triangulate to indicate that there are tax implications following the adoption of IFRS particularly IAS 12 by listed firms in Ghana. Current year tax expenses of entities on average reduce marginally by 0.7% when restated in IFRS from GNAS. In terms of reported tax amounts by industries, manufacturing/trading entities showed increases in current year tax expenses by 13% while financial/insurance/information technology companies saw decreases in their current year tax expenses by 13.3%. It also reveals that there are no differences between GNAS and IFRS reported amounts of corporate taxes. The study provides empirical evidence to create the awareness of tax implications for the adoption of IFRSs in Ghana.

**Key Words:** International Accounting Standards, International Reporting Standards, Financial Reporting, Positive Accounting Theory, Generally Accepted Accounting Principles, Ghana National Accounting Standards Board.

## Background to the Study

Globalisation of capital markets and the internationalization of businesses require a unified universal and international accounting, reporting and disclosure set of standards. Internationalization of businesses leads to increasing volume of cross border capital flows and the growing number of foreign direct investments via mergers and acquisitions. As a result, the need for the harmonization of different practices in accounting and the acceptance of worldwide standards has arisen. Financial reporting is the preparation of published reports for users of financial statements. The issues relating to financial reporting could be traced back to 1975 with the advent of what was then known as corporate report, in England. In Ghana, following the increasing demand for financial information on companies, financial reporting has now assumed an appreciable position because it provides information that is useful to current and potential investors, shareholders, creditors and other users in making rational investment, credit, and other financial decisions. It also enables users of financial statements to assess the amount, timing, and uncertainty of prospective cash receipts about economic resources, the claims to those resources and the changes in them. Olakunori (2009) argues that, to achieve the basic objectives of financial reporting, there is the need for an acceptable coherent framework. Financial reporting framework therefore, refers to fundamental accounting assumptions, principles and methods used to prepare, present, and report financial statements for a wide variety of entities, including publicly traded and privately – held entities, non-profit organizations, and governments (Olakunori, 2009). The framework for financial reporting include localized accounting laws, regulations, rules and standards, that are determined by regulatory authorities such as the

Ghana National Accounting Standard Board (GNASB), which operates under a set of assumptions, principles, and constraints. According to Yusuf (2006), accounting framework, which is commonly described as Generally Accepted Accounting Principles (GAAP), should not be seen as a constitution but mere guidelines to those who prepare financial statements.

According to Jubb, (2005) and Jubb (2006), adoption of the International Financial Reporting Standards (IFRS) in Australia has had a profound impact on the recognition, measurement and disclosure of assets, liabilities, equity and profitability. The decision for Australia to adopt IFRS (which came into effect from 1 January 2005 for all reporting entities) has changed the reporting framework. The conversion to IFRS has a fundamental impact on a number of important areas of financial reporting and taxation. Potentially, Jubb (2006) argues that Australia's adoption of IFRS may adversely impact on an entity's thin capitalisation calculations. This is important as these firms may be denied income tax deductions relating to interest payments and associated borrowing fees on loans. This study has important implications for accounting standard setting and income tax (Taylor and Tower 2008). According to Taylor, Tower, and Neilson (2010), implementation of the International Financial Reporting Standards (IFRS) and its implication on taxes in Ghana should call for a background knowledge of IFRS, the theoretical foundation or basis on which it is rooted, empirical studies on financial reporting, definitions and components of IFRS Financial Statements, Ghana's adoption and implication of IFRS on taxes together with the benefits and challenges of IFRS to government and tax professionals generally in Ghana.

## Statement of the Problem

In recent times the development of the adoption of the International Financial Reporting Standards (IFRS) in Ghana has created concerns from various stakeholders, business-entities and other users of

financial statements information in the world of accounting. It is very imperative to note that the introduction of the IFRS has brought with it various developments in different spheres and



specializations of accounting. The advent of this standard has not only advanced the manner of financial reporting, but has financial implications for its users in Taxation, Auditing, Finance/Lenders of funds and Corporate Governance in general. Understanding tax implications of IFRS adoption will be important for finance and tax officers to consider - if they would like to help support appropriate tax results for the organization in its existence and operations. It also has a tax implication based on the divergence of the tax reporting of transactions as against the financial reporting of the same transactions as per IFRS standards and the Internal Revenue Act, 2000 (ACT 592) of Ghana. In Ghana, the Tax Authority does not impose any separate book keeping system on businesses for tax purpose. Therefore, the financial statements and books of accounts of the businesses form the basis for taxation – both direct and indirect. In such a scenario, any change in the accounting system is bound to impact the tax levy and collection. There appears to be minimal empirical studies on the transitioning from the income statement approach to the balance sheet approach due to the implementation of IFRS. Mulyadi, Soepriyanto and Anwar (2012) examine IFRS adoption and taxation issues in four regions: Africa, America, Asia Pacific and Europe. In a seminar

presentation also, several presenters provided insights into the Tax Implications of Implementing IFRSs generally. Hung and Subramanyam (2007) examine the impact on German firms due to the implementation of IFRS. Wong (2006) also investigates NZ IAS 12<sup>1</sup> effect on deferred taxes, and Ernst and Young (2004) evaluated the expected changes to deferred tax assets and tax liabilities reported in the financial position statement due to NZ IFRS<sup>1</sup>. Stent et al. (2010) also provide a more detailed study on the change to all assets and liabilities due to NZ IFRS, but did not provide any in-depth analysis on income tax and deferred tax. Mear (2011) followed Stent et al. (2010) and documented changes to income tax and deferred tax due to the implementation of New Zealand IFRS. Arguably, there have been some studies on IFRS in Ghana (Tackie, 2006; Amoako, 2010; Gyasi 2010; Agyei-Mensah, 2012) among others. Nonetheless, they fail to look at the tax implication for the adoption of IFRS in Ghana. There is however an absence or limited empirical study on the tax implications for the adoption of (IFRS) in Ghana. There is therefore the need for a study that will examine the tax implication for the implementation of IFRS in Ghana following the transition in 2007.

## **Objectives of the Study**

The general objective of the study is to examine the tax implications of IFRS reporting in Ghana. Specifically the study sought to:

- i. Examine the impact of post-IFRS adoption on corporate income taxation in Ghana.
- ii. Determine the disclosure quality level of financial and non-financial information of corporate taxes in the annual reports of Ghanaian listed companies before and after adopting IFRS.
- iii. Assess the tax costs and challenges of IFRS adoption to listed companies generally in Ghana.
- iv. Outline how corporations can manage the implication of IFRS adoption on their corporate taxations.

## **Research Questions**

From the forgoing objectives the study set out to achieve, the following research questions are also set for answers:

- i. What is the impact of IFRS adoption on corporate income taxation in Ghana?
- ii. What is the disclosure quality level of financial and non-financial information of corporate taxes in the annual reports of Ghanaian listed companies before and after adopting IFRS?
- iii. What are the tax costs and challenges of IFRS adoption to listed companies generally in Ghana?
- iv. How can corporations manage the implications of IFRS adoption on their corporate income taxes?

## Research Hypotheses

From the intended research objective and questions, the following hypotheses were set for testing. They are as follows:

- H1: There is no difference in the IFRS current year tax expense as restated and the GNAS current year tax expense.
- H2: There is no relationship between changes in disclosure quality level of IAS 12 and current year tax expenses changes.
- H3: There is no relationship between the magnitude of changes in disclosure quality index and the magnitude of change in current year tax expenses.

## Significance of the Study

Results of the study will help in examining the tax implications of IFRS reporting in Ghana and assess the benefits and challenges of IFRS adoption to government and tax professionals generally in Ghana. The findings will contribute immensely to policy formulation on the value of having a shared body of accounting standards in the corporate and financial world which will boost transparency and minimize tax evasion by corporate entities in the face of increasing globalised transaction and trading

among nations and corporate entities. Furthermore, this research is expected to increase awareness of the tax implication for the adoption of IFRS in Ghana among the accountancy and tax professionals in Ghana. It would also significantly serve as literature that would add to academic knowledge in the area of accounting standards and taxation for this specialised technical area of study in Ghana. It will do this by enriching the literature base of tax implication for IFRS reporting globally.

## Theoretical Framework - Accounting Choice

Accounting information can be looked at as having two functions: thus producing information for stakeholders, such as shareholders, and distributing the results of wealth creation. The two functions both have wealth effects for stakeholders of the business. Bushman & Smith, (2001) argue that the evaluation of projects and the control of management is influenced by the information task, and the wealth transfers are influenced by the distribution function, for instance, determining how much is on hand for dividends. It is generally agreed that any objective to construct a theory of accounting choice has to recognize the economic forces facing individuals and the egocentric character of human beings. Positive Accounting Theory (PAT) is one theory that is exclusively committed to these characteristics. It can be argued that stakeholders are inclined to influence the accounting system of the business. PAT has focused on this aspect of the accounting system, forecasting the choice of accounting rules according to the

wealth effects it has for dominant stakeholders (Watts & Zimmerman, 1986). Accounting choice is one such central theory of accounting research that came out of PAT. Accounting choice basically includes the firm manager's choice of one accounting method or procedure over another. An example is the manager's choice of using reducing balance method of depreciation over straight-line method of depreciation. Watts, (1992) suggests that accounting choice also includes the choice of using accounting standards for financial statement reporting. Watts (1992) also argues that accounting choice is important to market-based studies because without a theory of accounting choice, an entity cannot correctly specify tests of the relationship between accounting numbers and stock prices. Consistent with this argument, accounting choice should be important to taxation based studies because it could correctly specify tests of relationship between accounting numbers and the tax burden or liability of business entities. The

literature investigating the relationship between accounting numbers such as earnings and tax liability typically assumes, explicitly or implicitly, that accounting numbers communicate information to the tax authority. For example, it can be assumed that accounting earnings provide information on current and/or future tax liability or burden. Watts, (1992) posits that in the absence of taxes, the valuation model under stock market prices valuation has no predictions about accounting choice. When taxes are introduced the objective of accounting choice becomes minimization of taxes, and predictions about accounting choice can be generated to the extent that calculation of taxable income is tied to the calculation of reported income. The weakness of this theory however is to the extent that the various valuation models as in stock prices which investigate the relationship between accounting numbers and stock prices have few implications for accounting choice. Watts (1992) argues that they provide little insight into or predictions of accounting choice and its stock price effects. In addition, the critics of PAT contend that a serious theory cannot ignore the human competence to build shared phenomena, such as normative and cognitive set-ups, called

institutions, that hold back and facilitate the human ability to interpret society and hence influence human choice and action. Accounting choice studies also, have been occupied with the motives behind the accounting choice itself, and neglected the actual outcome of the choice (Francis, 2001). However, this study delves deep into examining the actual outcome, that is the tax implications for the adoption of IFRS in Ghana. The practical reason for selecting this theory follows from the fact that this theory not only distinguishes itself from separate theoretical focus, but also from separate empirical fields. In fact, according to Watts & Zimmerman, (1986) PAT has been extensively tested in capitalistic firms and principally listed firms. To conclude this theoretical framework review, it is clear that accounting choice includes choices made at firm/manager level as well as at industry, country and international level. Watts (1992) concludes by cautioning against the Securities Exchange Commission's interest in current value accounting. These comments of Watts (1992) appear relevant to IFRS and this paper in the light of increased trend of companies using IFRS as a reporting standard for their accounting financial statements.

## **The Concept of International Financial Reporting Standards (IFRS)**

Accounting and for that matter financial accounting may be defined as the process of recording, classifying, summarising, analysing and interpreting the financial transactions and communicating the results from those financial transactions to the persons or users interested in such information. Accounting like any field of study is governed by rules and regulations or norms and these rules and regulations or norms are regarded as standards. Omunuk, (1999) as cited in Proscovia (2003) defined accounting standards as the guideline statements or rules governing the preparation and presentation of financial statements issued and their application monitored by accounting boards. Globally, as of 2001, the standards guiding or regulating financial accounting is the IFRSs / IASs issued by IASB. According to Lasmin (2011) as cited in Kangarlouei, Agababa and Motavassel (2013), in the year 2010, more than 120 countries permitted the use of IFRSs in their jurisdictions. IFRS stands for International

Financial Reporting Standards issued by the International Accounting Standards Board (IASB). This Board was previously known as International Accounting Standards Committee issuing International Accounting Standards (IAS). According to Oyedele (2011), IFRS essentially comprises four types of documents: that is International Accounting Standards (IASs), International Financial Reporting Standards (IFRSs), interpretations of the International Financial Reporting Interpretations Committee (IFRICs) formerly the Standing Interpretations Committee (SICs) and IASB Framework for the Preparation and Presentation of Financial Statements. By comparison, Ghanaian GAAP is made up of the following: The Companies Code 1963, Act 179, Statements of Accounting Standards (SAS) issued by the Ghana National Accounting Standards Board (GNASB), other local legislation and industry specific guidelines such as regulations

of Bank of Ghana, Insurance Commission, and the Ghana Stock Exchange Listing Regulation 1990, (Legislative Instrument No. 150), tax laws, legislative instruments establishing SOEs, Banking Act, Security and Exchange Commission Rules, International best practice (optional). IFRSs represent a set of guidelines and principles a company may follow in financial reporting. In order to follow IFRS properly, companies must use specific regulations often called assumptions inherent in IFRS. Generally, the components of IFRS

regulations include accrual basis, going concern, stable measuring unit, and units of constant purchasing power. However, Essien-Akpan (2011), suggests that the areas of IFRS financial statements include fair representation, accounting policies, going concern, accrual basis of accounting, consistency, materiality, off-setting and comparatives. Businesses must at least adhere to these IFRS requirements in order to use these principles effectively for their financial operations.

## Relationship between Financial Accounting Reporting and Tax Accounting Reporting

Accounting is normally called the language of business and as a language: it evolves in response to the changing needs of society as the times demand. According to King (2006) as cited in Duhanhxiu and Kapllani (2012), tax accounting is developed as a separate dialect from financial accounting due to public decisions and commerce guidelines. Although at the beginning of their relationship, financial accounting and tax accounting were in some accord, today the accountants have to work hard to reconcile their respective conflicting objectives. Accounting rules and tax rules are two concepts developed by different authorities and serving different purposes. It is the contrariness of financial accounting and tax accounting objectives which make attempts to reconcile the two difficult. While the IFRSs are formulated to accomplish the objectives of financial reporting, tax rules are formulated, in part, to promote and elicit certain kinds of behavior by taxpayers. It is indeed acknowledged that financial accounting and tax accounting have diverse purposes and requirements. Financial accounting on the whole involves the preparation of information for the purpose of control and decision-making and may require interpretation as well as basically recording factual information. The main rationale of taxation accounting is typically not only to raise revenue but also to be used as a tool of government fiscal and social policy. According to Alley and Simon (2005), for a tax system to operate successfully within the law it requires a degree of certainty that may not always be appropriate for financial and commercial

accounting. Furthermore, there may be alternative methods of preparing accounts that are equally acceptable in terms of accounting standards but the choice of which might be inappropriately influenced by the taxation implication. According to Alley and Simon, (2005), an example of the adoption of the Financial Reporting Standards into the New Zealand tax legislation shows that there will always be differences, and that perfect harmonization between taxation and accounting is unlikely. Kager and Niemann (2011) however argues that there is little proof of the real extent of financial accounting differences between IFRS and tax rules (IFRS-tax differences) because firms' tax accounts are usually anonymous to the general public. There are different levels of dependences within countries and no country is able to avoid the difficult relationship between accounting and taxation. The global move towards IFRS / IASs is seen as a reason for reviewing the tenuous relationship between accounting principles and practice and taxation laws in Ghana. Several studies have explored the relationship between financial accounting and taxation and the possible implications related to the IFRSs adoption. According to Nobes (2003), current international accounting standards setters pay little regard to tax implications and would be unlikely to add taxes to the list of considerations and pressures they must take on board already. Alley and Simon (2005) argues that the relationship between accounting and taxation is an evolving one, and countries should not be developing tax policy and practice in isolation. Freedman (2008 and 2004) demonstrated that full

convergence of commercial and tax accounts will not be achieved and should not be the aim. Gielen and Hegarty (2007) have evaluated IFRSs against the principles generally considered to be appropriate for corporate taxation purposes and concluded that the accounting profit determined in conformity with IFRSs would require a significant number of adjustments to serve as a relevant tax base (taxable profit). The degree of relationship between tax and financial accounting varies greatly across countries. Countries across the globe have tended to be divided between those where there is a statutory relationship (meaning that financial accounting principles follow tax accounting rules or that tax accounting rules follow financial accounting rules) and those where there is no relationship (meaning that there are different rules for financial accounting and tax accounting). The fact that IFRS must go through due process of endorsement before becoming effective law in the Ghanaian financial regulatory system does not completely allay the constitutional concerns of the state. Furthermore, IFRS and tax law differ in their objectives. IFRS statements should provide information that is useful

to a wide range of users in making economic decisions. In order to supply the capital markets with indicators for the future performance of a firm, IFRS permit greater managerial discretion than tax rules, for example in estimating fair values. This is often assumed to be contrasting to the purpose of taxation to ensure a reliable and objective determination of taxable income. Academic literature also offers theoretical explanations for typical and essential accounting differences between IFRS and tax rules (Endres, Oestreicher, Scheffler, Spengel, Alt, Koehler, Riesselmann & Wendt, 2007). However, Kager and Niemann (2011) argue that there is not much evidence of the real scale of these differences because firms' tax accounts are generally not made known to the public. Kager and Niemann, (2011) in their study conclude that if a firm's estimated tax equity is lower (higher) than IFRS-equity, adjusted for the effect resulting from the recognition of deferred taxes, an IFRS based taxation would increase (decrease) the firm's tax burden. They also found that estimated tax equity is mostly lower than IFRS-equity.

## **The Effects/Impact of IFRS Adoption on the Taxation of Companies**

It is argued that the implementation of IFRS will impact almost every aspect of a company's operations, everything from its information technology systems, to its tax reporting requirement, to the way it tracks stock-based compensation (Yusuf, 2006). According to Mulyadi, Soepriyanto and Anwar (2012), with IFRS implementation, a new accounting standard will come with impact to the taxation issues of a country. This impact will be more obvious for Multinational Corporation as they will face tax impact of IFRS implementation in more than one taxation jurisdiction. Implementation of IFRS will create an increase of effective tax rates (ETR) or more volatile ETR. IFRS implementation could equally create an opportunity to decrease foreign tax. According to Eberhartinger and Klostermann (2007), usage of IFRS-financial report for tax calculation will simplify reporting process and minimize compliance cost. Although usage of IFRS as tax basis will increase ETR in some specific industry (Haverals, 2007) it might not do same in other industries. Leuz, Lins

and Warnock, (2009) theorized that the main impact of the transition to IFRS would be concentrated on firms, who would have to respond to changes in both financial reporting rules and also tax regulations. In the Africa region, Mulyadi, Soepriyanto and Anwar (2012) analyze the impact of IFRS adoption on tax in four countries: Libya, Nigeria, Tunisia and South Africa. They concluded that, in these four countries they still use national GAAP as tax-basis. Their overall conclusion is that, with different IFRS implementation and convergence processes between one country and another, there appears to be different responses to taxation issue. For example, for income determination, inventory valuation accepted for taxation purpose is lower of cost or net realizable value as determined in Libya Commercial Code while the Federal Inland Revenue Service (FIRS) allow usage of FIFO, average and standard cost method for inventory valuation. Policy of taxation due to IFRS implementation might be different due to the different stages of implementation i.e. early

adopters, convergence process. IFRS still voluntary or IFRS is strictly required as reporting standard. They argue that there are mixed response from government or tax authority in response of IFRS implementation. These responses vary from adjustment or change of tax regulation to support IFRS implementation, no change to the tax regulation so that tax payers are required to prepare financial report according to national GAAP or do not allow IFRS-based financial report for taxation purposes at all. It is generally understood that the adoption of IFRS would change the structure and content of financial statements. It was also predictable that the implementation of a new set of financial reporting standards may change the reported outcome and financial position of reporting entities (Hickey, Spencer, van Zijl & Perry 2003). Though the financial impact from the implementation of IFRS would vary from entity to entity, commentators have been suggesting the areas where the effects were likely to be significant. Teixeira (2004) and Bradbury and van Zijl (2005) identified income tax as among five areas where impact on a number of entities was expected. Their arguments for income tax are because of the fundamental changes in the concepts and method for recognizing deferred tax assets and liabilities when using IFRS. A large number of studies in various parts of the world have analysed the impact of IFRS on business corporations. They have found that the adoption of IFRS has had a mixed impact on various entities financial reporting and wider economic settings. Daske, Hail, Leuz, and Verdi, (2008) and Li (2010) examined the impact of IFRS adoption on international capital markets. Daske et al. (2008) found that firms adopting IFRS in the year of mandatory adoption experience large increases in market liquidity but mixed results for the cost of capital. However, Li (2010) examined the effect of IFRS on the cost of equity in the European Union and found that compulsory adopters of IFRS saw significant reductions in the cost of capital in the years of mandatory adoption, but only in countries with strong legal enforcement. Other studies have examined the effects of IFRS adoption on accounting quality. Goodwin and Ahmed (2006)

studied the impact of IFRS in Australia in relation to the size of business entities. Smaller firms saw fewer adjustments upon IFRS adoption and experienced increases in net income and equity. Larger firms in contrast, had many adjustments, insignificant increases to net income, as well as a decrease in equity. Their conclusion is that the adoption of IFRS has been found to have little impact on the accounting quality of smaller firms, and a larger impact on the accounting quality of larger firms. In a similar study, Goodwin, Ahmed and Heaney (2007) found, that on an average, IFRS caused increases in liabilities and leverage ratio and decreases in equity and earnings. These findings are consistent with the results of Hung and Subramanyam (2007), who focused on the detailed financial statement effects of adopting IFRS by using a direct comparison of financial statements prepared under IFRS and German GAAP. Additional information about the impact of IFRS adoption on financial statements comes from studies that extended the analysis to common financial ratios (Stent et al. 2010). Stent et al. (2010) found that adoption of IFRS in New Zealand led to a significant increase in liabilities and a decrease in equity for private sector entities. Adjustments to income taxes, employee benefits and financial instruments were the main reasons for increases in liabilities and decreases in equity. Wong (2006) did an investigation into the changes that will have an effect on a firm's deferred tax due to the implementation of NZ IAS 12 and Ernst and Young (2004) analysed the expected changes to deferred tax assets and deferred liabilities reported in the statement of financial position due to NZ IFRS. Mear (2011) did a more in-depth analysis on income tax and deferred tax due to the adoption of NZ IFRS. But as can be seen all these studies are outside the African terrain. There is minimal empirical study on the tax impacts or effects of reporting entities following the transition from GNAS to IFRS by Ghanaian companies. The research paper therefore investigated the changes to income tax expenses, using a sample of entities from the Ghana Stock Exchange over the period 2007 / 2006 to 2008 / 2007 which encompasses the move from GNAS to IFRS, particularly IAS 12.

## Accounting Quality of Disclosures

The objective of every financial statement is to present information on the financial position, performance and financial compliance of an enterprise that is useful to a wide range of users, including tax authorities, in making their economic decisions. The International Accounting Standards Board's (IASB) Framework states that: "The objective of financial statements is to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions", (IASB 2010). It must be noted that every statement prepared also shows the tax obligation of the entity's towards the tax authority. Sloan (2001) argues that the financial statement is the first source of independent and true communication about the performance of an entity. To be able to meet the needs of the tax authority as a user, the financial statements must not only comply with the IFRS, but must also be of high quality. The quality of financial statements is measured using four key qualitative characteristics of financial information set out within the Framework for the Preparation and Presentation of Financial Statements issued by International Accounting Standards Board (IASB 2010). These qualitative characteristics include relevance, faithful representation, comparability and understandability. IASB (2010) suggest that relevance and faithful representation are the fundamental qualities, whilst comparability and understandability are considered as enhancing qualities. The Framework suggests that these qualitative characteristics are the attributes that make the information provided in financial

statements useful to users. Even though defining corporate taxes is not straightforward, corporate taxes can be seen as the tax obligation by corporate entities towards the taxing authority reached by calculating a number of intermediate income definitions as spelt out by the various tax legislations. Corporate taxes are a substantial and important part of financial reporting. Income taxes as part of corporate taxes pose a special challenge due to the complex interaction between tax laws and accounting principles. The disclosure of these income taxes by the entities can serve as a useful starting point for the tax authority in assessing the tax liability of such an entity. In the words of Fekete (2008), IFRS disclosure compliance literature is considered as part of disclosure research. It is per this suggestion and the fact that the Chartered Institute of Chartered Accountants Ghana (ICA-G) expects all listed entities in the country to comply with these regulations that this study as part of one of its objectives, is being undertaken to check whether Ghanaian companies are complying with the disclosure requirements of IAS 1 and IAS 12. IAS 1 requires that a company whose financial reports comply with IFRSs make an explicit and complete statement of such compliance in notes. It must be noted that financial statements shall not be described as conforming with IFRSs except they submit it with all the requirements of IFRSs (including interpretations) (IAS 1.16). The research therefore, examines the quality of disclosure of taxes on their financial statements before the adoption (2006/2007) and after the adoption (2007/2008) of IFRS in Ghana.

## Costs and Challenges of IFRS Adoptions

The adoption of International Financial Reporting Standards by various jurisdictions around the globe is viewed with mixed reactions. Proponents of IFRS adoption argue that a single global accounting standard has the benefits of improving information quality across borders and will foster cross border investments. They further argue that with a single set of global accounting standard, comparability of

financial statements would be achieved leading to reduction in information processing costs associated with different national accounting standards and thereby reducing the overall cost of capital as shown by previous researches (Diamond and Verrecchia 1991; Baiman and Verrecchia 1996; Leuz and Verrecchia 2000; Easley and O'Hara, 2004; and Barth, Konchitchki, and Landsman, 2006). Indeed,

there are proponents as well as opponents who have arguments for and against the global adoption of IFRS. According to Barth (2007), the adoption of a common body of international standards is expected to have the following benefits: lower the cost of financial information processing and auditing to capital market participants as users, familiarity with one common set of international accounting standards instead of various local accounting standards by Accountants and Auditors of financial reports, comparability and uniformity of financial statements among companies and countries making the work of investment analysts easy, attraction of foreign investors in addition to general capital market liberalization. Ball (2006) stated that in many developing countries where the quality of local governance institutions is low, the decision to adopt IFRS will be beneficial. What he falls short of mentioning is whether or not, IFRS's are relevant to the developing countries and what could be the challenges of IFRS adoption to those countries. On the African continent for example, with the exception of South Africa that has shown strong commitment to IFRS adoption, most African countries (which are mostly part of the developing countries) that adopted IFRS have not managed to document clear benefits following the adoption of IFRS. Generally proponents of IFRS argue in favor of enhanced firm comparability, transparency in financial reporting and corporate governance, better regulation in financial markets, reduced cost of capital, better management of overseas operations and the list can go on. However, skeptics

on the other hand argue that what shapes financial reporting is not accounting standards but rather, the institutional arrangements in a particular economy. There is evidence to suggest that, IFRS provides better information quality than that of Local Generally Acceptable Accounting Standards. While this might seem very convincing, it is also documented that IFRS is not suitable for developing economies which are struggling to cope with issues of poverty. This is more so if the state has to raise more revenue through taxation and IFRS happens to be an impediment to this goal. As to the extent of costs, it could be argued that it would vary relative to specifics of firms, as entities earlier usage of GNAS came with or without international variation of certain standards by the firms. However, publications issues preceding the implementation of IFRS by the accounting profession hint otherwise. Ernst and Young, (2004) went far to suggest that New Zealand accounting professional should not underestimate the enormity of the change management process required in conversion from NZ GAAP to NZ IFRS. Revealing an indication to the extent of these costs, Li (2010) observed that the average compliance cost for adopting IFRS is estimated to be around £360,000 for UK companies, rising to £625,000 for companies with a market value between £1 billion and £2 billion. This paper therefore seeks to estimate the average cost of compliance to IFRS especially IAS 12 by sample entities during the transition to IFRS in the 2008 / 2007 financial year.

## Managing the Impact of IFRS on the Organisation's Tax Liability

Before 31st December, 2006 Ghanaian businesses were preparing financial statements in accordance with Ghana National Accounting Standards (GNAS), a version of the Generally Accepted Accounting Principles (GAAP) as established by the Ghana National Accounting Standards Board. In comparing the two sets of standards, the IFRS differs from GNAS GAAP in a number of areas. For example, as identified by previous authors, GNAS GAAPs are rules-based, consider historical cost, provide specific guidance, focus on application, and place emphasis on form. In contrast, the IFRS are principles-based, consider value, provide general

guidance, focus on results, and place emphasis on substance. This variation obviously calls for ways for accountants, tax experts, and finance / tax officers to manage this change. When preparing tax filings, there is no requirement in the Internal Revenue Act 2000 (ACT 592) of Ghana directing the use of one particular accounting framework or a particular methodology for calculating profit for income tax purposes. Taxpayers therefore may decide to choose the method of calculating taxable profit they believe arrives at the "truer picture" of taxable profit. This can include, but is not restricted to, GNAS. The conversion to IFRS from GNAS therefore does not in



itself change the obligations of taxpayers; it merely provides them with an alternate basis of accounting for the purposes of calculating taxable profit. Consequently, as entities convert to IFRS for financial reporting purposes, the CFOs will need to assess whether this new accounting framework is a reasonable foundation to use as a basis for tax calculations or otherwise. Following the adoption of IFRS in Ghana, as the basis for the income tax calculation or whether some alternate approach will lead to a truer picture of taxable profit that exist is not known. Just as is the case of previously usage of the GNAS, since IFRS has been adopted as the starting point for calculating taxable profit by these listed Ghanaian companies, the CFOs / CEOs need to ensure that their companies assess what, if any

adjustments to accounting profit are required to arrive at taxable profit based on the provisions of the IR Act 2000 (ACT 592) and well established business principles. These call for guidance by the tax authority or the professional body to follow in preparing their financial statements as is done in Nigeria, New Zealand, and Australia among others. However, from 2007 to date neither the GRA nor the ICA-G has issued any formal statement or guidance on how to manage the transition from GNAS to IFRS for CEOs/CFOs. The paper therefore explores the views of experts in the industry to compile by way of empirical study on how to manage the challenges of this transition from GNAS to IFRS reporting in Ghana.

## **Tax Implication for Adopting IFRS**

Getting to understand the tax consequences of IFRS will be imperative for finance officers and tax practitioners to consider if they would like to help maintain appropriate tax results for their firms. As with any tax accounting issue, the effort for an IFRS conversion will require close collaboration between finance and tax departments. According to Deloitte (2008) and Alexander and Britton (2004), the key tax considerations include conversion timing, differences in accounting for income taxes, tax accounting methods and Global tax planning. Evidently from the findings of prior studies, it is not just about the quantity of corporate taxes but the quality level of information disclosure that is vital to users of the financial statements. If there is no gain in terms of disclosing better quality level information, then the entire principle of IFRS based reporting would seem inconsistent. The quality level of information is a subjective matter, but studies have been carried out to determine whether the qualities of financial statement disclosures are materially improved on the change to IFRS. For example, a recent study suggests that moving to IFRS improves the information setting, allowing users of the financial statements to make more precise forecasts (Horton, Serafeim and Serafeim, 2013). Another study also concluded that IFRS adoption leads to better quality of information as well as more comparability among firms (Yip and Danqing, 2012). Consequently, for users of the

financial reports there is some ease that while they have more information to assimilate under IFRS that information should in addition be more important to their information needs. For the finance officer / tax officers, providing all additional information can be quite burdensome. Evidence from entities that have gone through IFRS transition indicates that a considerable amount of the transition implementation involves ensuring that the precise data are collected for disclosure in the notes. This is evident in the case of companies with complex financial instruments, where an entire standard, e.g. IFRS 7 Financial Instruments: Disclosures, is committed to descriptive and numerical revelation requirements. The implications of the decision to adopt IFRS are as numerous as they are profound. According to Okoye and Akenbor, (2014) for the accounting profession in Nigeria, the use of IFRS by Nigerian publicly held companies will create the need for effective training and education. Akinmutimi (2011) stated that corporate entities need to build capacity to drive the process and revisit their operational and internal control systems. More so, the laws need to be amended and the transition processes need to be handled efficiently, effectively and professionally in order to sustain the confidence of users of accounting services in the skills of professional accountants and tax experts or preparers.

## Research Design

The research procedure in this paper is designed to clearly examine the tax implications of listed companies in Ghana. To respond to these questions, the research design is based on what Creswell (2003) explains as a "Mixed Methods Approach", in view of the fact that it involves collecting and analyzing both quantitative and qualitative forms of data in a single study. Creswell (2003) describes this approach as "one in which knowledge claims have a tendency to be based on pragmatic justification". To him pragmatism is extra distinct as not being committed to any one system of philosophy and reality. Mixed method approach as a research methodology involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. The nature of this study demands that the researcher focuses on collecting, analyzing, and mixing both quantitative and qualitative data. Its

core objective is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either one approach only. Drawing from this, Creswell, (2003) suggests and explains six major strategies for mixed methods approach even though he points out that these do not exhaust all other possibilities. Among these six major strategies is, 'Sequential Explanatory Strategy', which best describes the method taken for this study. According to Creswell, Plano Clark, Gutmann and Hanson, (2003) sequential explanatory strategy involves the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. This study used this sequential explanatory strategy because it made use of quantitative data from annual reports of listed companies in Ghana followed by questionnaire and interview guide which solicited qualitative data from finance officers of the sample entities as shown in the appendixes.

## Sampling Procedures and Sample Size

Consistent with Hung & Subramanyam (2007), Stent et al. (2010) and Mear (2011), this study adopted two sets of financial statements for all sample entities: the first full-year IFRS financial statements and the year prior to adoption of IFRS. Prior year comparative figures, as restated under IFRS, for total income tax, deferred tax liability, deferred tax assets etc. The equivalent figures reported under old GNAS are extracted from the 'Pre-IFRS Year' financial statements. The impact of corporate income tax element was then measured as the difference between figures reported under IFRS and those reported under old GNAS (i.e. IFRS differences). Similar to prior studies (e.g., Goodwin, Ahmed & Heaney, 2008; Hung & Subramanyam, 2007; Kabin, Laswad & Islam, 2010; Stent et al., 2010), the reasons for the above IFRS differences are then investigated by analysing the reconciliations

required by IFRS 1 to determine the amounts attributable to specific accounting standards. The sample choice procedures description is presented in table 1. From the 37 listed entities, less six observations that provided invalid search results for the related years under consideration, five observations that did not report previously under GNAS as well as observations that are not in Ghana Cedis, two observations that were not listed at the time and two others that have delisted since 2008 and 2013 respectively and one other company that is under free zone and as a result, has a tax incentive from 2004 to 2014. The available population of twenty two (22) firms was classified into industries sectors. The sample size is therefore a survey of all the remaining 22 listed firms. An analysis of the population and sample is provided in Table 1.

**Table 1. Description of sample size**

Details	Number
Number of Entities listed as at 31st December 2014	37
Less: Observation of entities lacking data	(6)
Not in Gh¢, Not previously in GNAS observation	(5)
Observations that were not listed	(2)
Observations that delisted after 2008 and 2013	(2)
Free zone Company	(1)
<b>Sample size</b>	<b>22</b>

Source: Field Survey, December 2014

## Data Collection Procedures

In this study, for the first two research objectives, the researcher manually collected income tax and deferred tax information from the 2007 / 2006 to 2008 / 2007 financial statements and notes to the financial statements from listed companies on the Ghana Stock Exchange on the 31st December, 2014. Annual audited financial statements were retrieved from GSE Annual Reports Ghana (ARG) for each company in the sample. This was counter confirmed by published annual financial statements from the entities own websites but it must be noted that not all the entities had their up to date annual report published on their own websites with reference to the period under consideration for this study. The financial statements in IFRS were retrieved for the year of transition (2008 / 2007) to IFRS while those in GNAS were retrieved for the prior year (2007 / 2006). The data collection followed a three-step process: first, IFRS figures

(2007 restated) which correspond with comparative figures presented for the year prior to the shift were collected from IFRS financial statements (i.e. balance sheet, income statement, statement of comprehensive income/loss, and notes). Second, GNAS figures were collected from original GNAS statements (published in the year prior to the adoption) for the same date and period. Third, the reconciliations and explanations provided in the transition notes to IFRS statements were used to further detail differences observed in the values collected through steps 1 and 2, and categorized them into the accounting adjustments identified. In addition to the figures from financial statements, non-financial information was also collected. The non-financial information was collected through a survey questionnaire and telephone interviews to clarify responses where necessary and to obtain more detailed answers to open-ended questions.

## Data Analysis Procedures

Initially the researchers compare the changes between the reported year and restated year for income taxes and deferred taxes. That is the 2007 / 2006 year is compared to 2008 / 2007 restated year.

The researchers then analysed the income taxes and deferred taxes information provided in the reconciliation between GNAS and IFRS to explain the changes. The researchers analysed the variables

that influence the change in income taxes expenses and industry sectors. The study compared the results of industry sectors with the results reported as Mear (2011) and Stent et al. (2010) in respect of current year income taxes expenses. The research also compared the disclosure quality of GNAS and IFRS financial statements and calculated the

magnitude of changes in the disclosure quality level. It went further to test the relationship between the IFRS financial statements disclosure quality level and the magnitude of change in disclosure quality level with the current year income tax expense of sampled entities.

## Findings, Interpretations and Analysis

The firms were classified into industries to investigate the impact of IFRS adoption by industries. Equally, a disclosure quality was arguably expected to vary with industry; as such, investigation was also done to explore the differences. First, a descriptive statistics analysis of industry classification was done. From the data gathered, 45.5% were found to be the Financial / Insurance / Information Technology category; 40.9% were Manufacturing / trading category; 4.5% from Agro-processing and 9.1% from petroleum and Oils categories. They were grouped into these categories because apart from the security and exchange commission being their regulator, they are regulated by other legislation peculiar to their industries. As part of assessing the tax costs and challenges of IFRS adoption in Ghana by listed companies, the study solicited information on the cost incurred during the transition period of IFRS especially in respect of IAS 12. From the responses received from the respondents, the general view was that entities did not incur cost on individual standards per se during the implementation of the transition. But holistically they incurred cost on the entire IFRS standards as adopted and effected in the transition year. Data gathered from the questionnaire and the interview guide revealed that majority (50%) of the survey entities spent between GH¢5,000 to GH¢10,000 during the implementation of IFRS as a whole in the transition year of 2008/2007 preparation of annual reports. The least spenders were three (3) observations which represented 13.6% of the sampled firms and they spent on an average between the ranges of GH¢1 to GH¢5,000. Probing further, it was revealed that these costs were spent on areas including but not limited to external consultants' fees, staff training and capacity building cost, hiring of new expert staff and system changes. In this analysis, the study compared the 2007/2006 financial statements using GNAS to the 2008/2007 financial

statements as restated in IFRS which is expected to have incorporated other adjustments as per IAS 12. The researcher then followed it with the discussion of the changes that were observed as directly being related to the change from GNAs to IFRS in the IFRS reconciliation notes. From the comparison of the 2007/2006 and 2008/2007 financial statement, the mean magnitude of change in current year tax expense due to the adoption of IFRS is -0.7 percent. The -0.7% implies that on average, the sample firms' current year tax expenses reduced by a 0.7% in the restated amounts using IFRS. The little negative change in magnitude of change for current year tax expense is seen as a result of most of the sample entities adopting IFRS but not effecting IAS 12 in the restated year figures. By this, it implies that most firms still used GNAS standard on taxation to prepare the restated amounts in the 2008/2007 financial statements. The adoption of IFRS resulted in a no change in current year tax expense for 77.3 percent (17/22) of the observations, a decrease for 13.6 percent of the observations and 9.1 percent showed increases. The data indicate that 22.7% (5/22) of the observations reported a change in their current year tax expense. Of this percentage, there are slightly more observations at the decrease (-13.6%) than the increase (9.1%). These changes are predominately due to the deferred tax assets account that reported 11.1% (1/22) decreases. The decrease is in part justified as being due to changes in the recognition criteria for deferred taxes under IFRS as against GNAS. The net effect of this is that even though 4.5 percent of the sampled firms had their overall current year tax expense obligation reduced, the overall aggregate of that reduction is only 0.7 percent. However, the maximum and minimum values indicate that the effect of IFRS can be quite substantial for some firms especially in the case of current year tax expenses. For example, the range is

2.152 (1.153 – (-.999)) for current year tax expense. The impact of IFRS is not widespread as 59 percent (13/22) of firms sample were unaffected by the adoption of IFRS. Invariably, only 41 percent of sample firms were affected in one way of increase or decrease as a result of adopting IFRS. They were not widely affected because, as can be seen from the notes from the annual reports, though most of the firms adopted IFRS and restated the prior year figures in IFRS; they did not adopt IAS 12 as from IFRS but rather still used income taxes standard from the GNAS. Overall, there were 77.3% of the observations that did not report any changes to current year tax expenses in restating GNAS amounts into IFRS amounts as reported by sample firms in Ghana. The changes were further analysed into industry sector to investigate which industry had a greater magnitude of change as a result of the adoption of IFRS by the sample firms. From the calculations done, the financial/information technology sector saw a reduced mean magnitude of change of 13.3% in their current year tax expenses, the manufacturing/trading sector on the other hand saw an increase mean magnitude of change of 13% in their current year tax expense while the petroleum/oil sector saw no change in magnitude following the adoption of IFRS. The financial/IT sector saw this reduction as a

result of fair value valuation of its assets and financial instruments which led to a drastic reduction in deferred tax assets culminating in a reduction in current tax liabilities as well. On the other hand, the manufacturing / trading sectors saw a mean increase in magnitude of its current year tax expense as reflected in the income statement because of a huge increase by one entity deferred tax liabilities. An example of this deferred tax liability is where an accelerated depreciation of assets led to a deferred tax expense following the adoption of IFRS. In terms of the direction of changes by industries, the effects revealed that the manufacturing / trading sector had a substantial number (88.9%) of entities that never saw any change in their current year tax expense followed by the financial / IT sector which saw a 70% of entities having not experienced any change to their current year tax expenses following the adoption of IFRS. The financial/IT sector experienced a 30% of entities having their current year tax expense being reduced following the restating of the 2007 financial year statements into IFRS as reflected in the 2008/2007 annual reports. Widely spread is the observation that only the manufacturing/trading sectors saw an increase of 22.2% of sample entities having experienced an increase in their current year tax expense for the restated figures into IFRS.

## Test of Differences Between IFRS – IAS 12 and GNAS Standard on Taxations

To further examine the impact of IFRS adoption on corporate income taxation in Ghana, the study carried out a test for difference and significance (if any). This was done to show whether the IFRS – IAS 12 gives an improved corporate tax element amount as against the GNAS standard on taxation following the adoption of IFRS in Ghana. A pair sample test for independence was useful here because the variable of current year tax expenses had been measured in two different accounting standards thus the GNAS and IFRS. It is therefore the objective of the study to investigate whether the IFRS financial statements give improved corporate tax element figures than the GNAS financial statements. In other words, will the IFRS financial statements give a higher tax expense to the firms which invariably are revenue to the government? It must be noted that it is the same transactional data from which the sample firms are expressed. The pair sample t-test was performed

here because the study sought to determine whether the sample firms differ on GNAS and IFRS in respect of their tax obligation to the tax authority. Also the data observed were from the same transactional activities but only reported in two different accounting standards. The analyses are group into hypotheses set up in respect of the objectives of the study.

**H1:** There is no difference in the IFRS current year tax expense as restated and the GNAS current year tax expense.

This first hypothesis suggests that there would not be differences in current year tax expenses amounts as reported by IFRS restated and GNAS. A paired-samples t-test was conducted to evaluate the tax impact of the adoption of IFRS on current year tax expenses amounts. There was a statistically

significant decrease in current year tax expenses amount from GNAS ( $M = \text{GH}¢3,387,102.64$ ,  $SD = \text{GH}¢7,564,545.92$ ) to IFRS ( $M = \text{GH}¢1,784,452.09$ ,  $SD = \text{GH}¢2,617,572.01$ ),  $t(21) = 1.00$ ,  $p = .328$  (two-tailed). The mean decrease in current year tax expenses was  $\text{GH}¢1,602,650.55$  with a 95% confidence interval ranging from  $\text{GH}¢-1,723,810.58$  to  $\text{GH}¢4,929,111.67$ . Following from Cohen (1988) guidelines of interpretation, the p-value of .328 indicated a large effect size. Also, as usual,

probabilities more than .05 indicate the null hypothesis fails to be rejected. In this case, the p-value is more than .05 hence it can be concluded that there is no difference in the IFRS current year tax expense as restated and the GNAS current year tax expense reported in the 2007 / 2006 and 2008 / 2007 financial statements. Thus the adoption of IFRS does not lead to business entities incurring more or less current year tax expenses.

## Disclosures Quality Levels of Survey Firms

From the financial statements, notes to the financial statement, reconciliation notes to the transition in the various annual reports, the researchers extracted and measured the disclosure quality levels of all sampled firms using the IASB's IFRS qualitative characteristics adopted and modified. From Table 10, the mean score for the disclosure quality index in respect of corporate taxes disclosures for the GNAS period, (2007/2006) is 76.95% and the maximum is 92.86%, with a standard deviation of 23.83%. For the IFRS period (IFRS restated from GNAS) adoption period, 2008/2007 the mean is 95.12% and maximum of 100% and a standard deviation of 10.66%. The outcome of the disclosure quality level in respect of corporate taxes of reported firms, had a mean of 95.12% as restated, for 2008/2007 indicating an improvement in the quality of corporate taxes disclosure following the adoption of IFRS in 2007. It also indicates that most of the entities listed on the GSE are not only overwhelmingly complying with the IAS 1 and IAS 12 disclosure requirements but also fulfilling the IASB's IFRS qualitative characteristics of relevance, faithful representation, understandability, and comparability as noted by Agyei-Mensah (2013). The implication is that generally, disclosure quality of corporate taxes has increased. The magnitude of change in respect of current year tax expense also saw a mean score of -0.7%, a maximum of 115.28%, a minimum of -99.94% and a standard deviation of 33.90%. This magnitude of change in respect of current year tax expense (-0.7%) indicates that a general increase in disclosure quality level did not necessarily bring about higher taxes from the sample firms but rather reduced their current year tax expense marginally.

**H2:** There is no relationship between changes in disclosure quality level of IAS 12 and current year tax expenses changes.

The second hypothesis states that no relationship would be detected in changes in disclosure quality level of IAS 12 and the current year tax expense changes. The current year tax expense changes are measured by the amount of changes of current year tax expense in GNAS financial statement and as restated in IFRS financial statement. It is simply the IFRS restated year current tax expense minus the GNAS prior year current tax expenses. Even though there were high changes in disclosure quality level of IAS 12, the correlation is weak with  $r = 0.104$ ,  $n = 22$ ,  $p = .645$ . Therefore, the null hypothesis fails to be rejected. The correlation coefficient of .104 indicates that there is a weak relationship between the changes in disclosure quality level of IAS 12 and current year tax expense changes following the adoption of IFRS. The corresponding p-value of .645 implies that the weak correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the changes in disclosure quality level of IAS 12 and current year tax expense changes following the adoption of IFRS.

**H3:** There is no relationship between the magnitude of change in disclosure quality index and the magnitude of change in current year tax expenses.

The third hypothesis states that no relationship would be detected in the magnitude of changes in disclosure quality level of IAS 12 and the magnitude

of change in the current year tax expense of reported firms. The magnitude of change is measured by the restated year in IFRS divided by the GNAS prior year minus one. It is simply the IFRS restated year current tax expense divided by the GNAS prior year current tax expenses minus one. The magnitude of change is to measure the extent of changes, and whether these volumes of change have any relationship with the size of changes in the amount of current year tax expenses payable as restated in IFRS due to the adoption of IFRS – IAS 12. Again, though a high change in disclosure quality level was reported, a moderate positive linear relationship was observed with  $r = 0.371$ ,  $n = 22$ ,  $p$

$= .090$ . The seventh null hypothesis fails equally to be rejected. The correlation coefficient of  $.371$  indicates that there is a moderate relationship between the magnitude of change in disclosure quality level of IAS 12 and the magnitude of changes in current year tax expense following the adoption of IFRS. The corresponding p-value of  $.090$  implies that the moderate correlation observed is due to chance factors since it is not significant and that in reality, a relationship does not exist between the magnitude of changes in disclosure quality level of IAS 12 and the magnitude of changes in current year tax expense changes following the adoption of IFRS.

## Tax Challenges of IFRS Adoption in Ghana

Making changes to accounting standards may not appear to be like a strategic change by the business community, but it may change fundamentally the way that businesses are run, the way businesses success are measured and reported, and the information that firms need to keep so as to appear compliant with those changes. Finance officers/ Financial controllers/directors of sample Ghanaian firms believe that the adoption of IFRS have had significant impact on their financial reporting as well as on their internal orientation of managing the entities. Prominent among the tax challenges from the study are outlined as follows: IFRS appears too difficult to combine with national requirements e.g. IR Act, 2000 (Act 592), IFRS which uses fair value accounting is biased and not easy to manage for tax purposes, IFRS comes with high cost of compliance

by way of accounts preparations, and there is the unavailability of or limited qualified chartered accountants to help in the preparation financial and tax accounts. Included in the above tax challenges following the adoption of IFRS in Ghana are the apparent complexities and voluminous nature of financial statement in disclosure, measurement, and recognition of items, increase adjustment from financial accounting to tax accounting, the absence of general guidelines from ICA-G/CIT-G/GRA on tax treatment following IFRS adoption, the demand for a new set of skills and expertise following the emergence of technical areas and terminologies, and last but not least, the frequent reviews of IFRS standards.

## Managing the Tax Implications of IFRS Adoption

Getting to appreciate the tax consequences of IFRS will be absolutely imperative for finance officers and tax practitioners to consider if they would like to help maintain appropriate tax results for their firms. As with any tax accounting issue, the effort for an IFRS conversion will require close collaboration between finance and tax departments. This part of the thesis objective sought to examine how corporation through their finance/tax officer can manage the tax implication of adopting IFRS. Evidently from the findings, it is not only about the

quantity of corporate taxes but the quality of information disclosed that is crucial to users and ought to be included in the financial statements. There is therefore a big issue of disclosure quality and its attended voluminous notes and information. To manage this, there should be proper collaboration between finance team(s) and tax team(s) to share data and information for effective account preparations. Respondents contend that the ICA-G which is the regulatory body of IFRS should collaborate with tertiary institutions to include IFRS

in their accounting programmes syllabi. This, respondents believe can enhance the knowledge base of students who are opined to be the sustainers of IFRS future in Ghana. Equally, the ICA-G needs to align its periodic professional training requirements in line with IFAC guidelines on IFRS. They also suggest a committee of chartered accountants/tax practitioners be formed to carry out peer review and to also discuss technical and uncertain tax positions affecting IFRS measurement, recognition and interpretation. Another suggestion by respondents was that the current tax legislations may necessitate abrupt amendments in accordance with the demands of IFRS in order to guarantee a flawless adoption of the IAS 12 standard and reduce the possible areas of conflict. They agreed that, it was imperative to amend existing tax laws to achieve enforcement of compliance with the IFRS. Respondents contend

that whereas a result of IFRS implementation a different tax treatment is needed other than what is specified in the tax legislation, the relevant provisions should be amended with the intent of giving IFRS adoption a full effect and thus provide clarity to ordinary taxpayers. This, respondents indicated should include but not limited to training of staff of the large tax division of the GRA in the form of seminars, workshops, conferences among others. Capacity building of finance/tax team members of sample entities should adopt new approaches which may include a mix of classroom trainings, interactive sessions and other external workshops with the intent of acquiring a broader understanding of IFRS and its tax implications given the enormity of the challenges and technicalities that will arise each time the IAS 12 is updated.

## Summary of Findings

To examine the tax implications of IFRS adoption in Ghana by listed companies, mixed methods research is applied to three different sources of data. Even though, the population size is small ( $N = 37$ ), the sample size ( $n = 22$ ) was arrived at after eliminating samples with invalid search results, non-previous reporting under GNAS among others. The summary of the findings are as follows: First, descriptive analysis of the data collected revealed that the majority (45.5%) of firms listed on the GSE are the financial/insurance/information technology entities whereas the least are those in agro-processing with 4.5% of total sampled firms. On the issue of cost of adopting IFRS, majority (50%) of firms were reported to have spent between GH¢5,000 to GH¢10,000 during the implementation of IFRS. Areas that these amounts were spent on included consultants fees, staff training and capacity building costs, hiring of fresh expert staff as well as system changes as in software and hardware. On the impact of post-IFRS adoption on corporate income taxation in Ghana, the research provide evidence of no differences generally between GNAS and IFRS reported amounts of corporate tax elements of current year tax expenses. However, there were individual firm

differences and the magnitude of these differences and the extent to which individual entities were affected varies considerably. There is however, no enough evidence of statistically significant differences when the differences are tested using the paired sample t-test. Overall, the paired sample t-test of GNAS and IFRS reported tax amounts showed no differences between IFRS and GNAS computed amounts collectively. Largely, 77.3% of firms observed did not report any changes to current year tax expenses. In terms of industry sectors, the manufacturing/trading industry saw a positive change of 13% in current year tax expenses while the financial/insurance/information technology industry reported a decrease of 13.3% in current year tax expenses. These results have implications for the tax authority (GRA), firms, analysts, and accountancy and tax professionals both here in Ghana and other countries yet to adopt the IFRS. The disclosure quality level of IFRS showed an increase over the GNAS disclosure quality level of about 39.6%. This study provides evidence of association between the improved magnitude of disclosure quality level and the current year tax expenses as reported by the sampled firms. Largely, there is a positive (ranging from moderate to weak)



relationship between the magnitude of change in disclosure quality level of IAS 12 as in IFRS and the current year tax expenses. Nonetheless, this relationship was not statistically significant when tested with the Pearson correlation test. The tax challenges of IFRS adoption as enumerated by respondents included but not limited to apparent complexities and voluminous in disclosure, measurement, recognition of items (86%), increased adjustment from financial accounting to tax accounting (86%), the absence of general guidelines from ICA – G / CIT-G and the GRA on tax treatment following IFRS adoption (95%). The other challenges saw respondents ranging from 63% to 82% attesting that they have encountered them. Last but not least, on managing the tax implications of IFRS adoption, researchers suggested closed collaboration between finance and tax departments, a guide on tax treatment be prepared by the ICA-G /

CIT-G and the GRA for financial and tax accountants, collaborating with tertiary institutions to integrate IFRS issues in their syllabi. There were few limitations to the study. First, the sample size was limited or small. This notwithstanding, the needed data were solicited. Secondly, due to the inability of all firms to fully apply IAS 12, the results may not fully reflect the aim of this study. Counter to this, though some did not fully apply IAS 12, they applied other IFRSs that invariably have effects on corporate taxes. In addition, the study does not research the effects of other standards on corporate taxes. Another limitation is the timing of data collection since some of the respondents responsible for preparing firms' accounts were not at post during the transitions. However, most of the quantitative data were observed and extracted from reported annual reports statements published.

## Conclusion

The results triangulate to suggest that there are tax implications following the adoption of IFRS by listed entities in Ghana. The GSE is dominated by the financial/insurance/information technology followed by manufacturing/trading entities. Financial/insurance/information technology entities saw decline in their corporate income taxes burden while manufacturing/trading saw an increase in their corporate income tax liability due to the adoption of IFRS. The increased tax burden of manufacturing/trading companies implies more burden and repercussions for the Ghanaian manufacturing and trading companies. Overall, there was a marginal insignificant increase in the corporate income tax liability of all the sampled companies used in this study. By and large, there were no differences between the GNAS and IFRS

reported amounts of taxes by sample entities looked at generally. This was observed because, though a number of firms adopted IFRS, they did not apply IAS 12 but rather still applied the GNAS standard on taxations. However, entities generally showed large impact due to the adoption of IFRS but were not statistically significant in the magnitude of change of their current year tax expenses. On the disclosure quality level, it can be concluded that IFRS disclosures quality is higher than GNAS disclosure quality. Magnitude of disclosure quality level relates with corporate tax expenses but fails in statistical significance test. Tax challenges exist following the adoption of IFRS and the way forward to managing these implications are collaboration and professional guidance by expert/professional bodies.

## Recommendations and Suggestion for Future Research

From the foregoing findings and conclusion on the tax implication of IFRS adoption in Ghana, the researchers recommend that the management of tax implication should or can be shared with industry stakeholders for further discussions and debates in framing the guideline on tax treatment

due to IFRS adoption. Government should also review the corporate income tax rate of manufacturing/trading companies downwards since the adoption of IFRS led to an increase in income tax liability. Or better still government should grant tax incentives like tax holidays, location

incentives among others. Future research can be done to examine the effective tax rates of entities since the adoption of IFRS in a trend analysis longitudinal approach of study. Also, a further study

to examine any sectorial differences in corporate income taxes between manufacturing companies, banking companies and insurance companies among others could be carried out.

## References

- Agyei-Mensah B. K. (2013). Adoption of International Financial Reporting Standards (IFRS) in Ghana and the Quality of Financial Statement Disclosures. *International Journal of Accounting and Financial Reporting*, Vol. 3(2), 269–286.
- Agyei-Mensah B. K., (2012), The impact of adopting International Accounting Standards 1 (IAS 1) in Ghana: The extent of disclosures, and their relationship to corporate characteristics, *African Journal of Business Management* Vol.6 (44), pp. 10896-10905, Available online at <http://www.academicjournals.org/AJBM>
- Akinmutumi, T. (2011). Fuel subsidy to go: FG targets N500bn subsidy removal. *NationalMirror*. [online]. 20th June, 2011: pp.1-3. Available online and retrieved on 15th July, 2014 from <http://nationalmirroronline.net/new/?s=National+Mirror+June%2C+2011>
- Alexander, D. and Britton, A. (2004) Financial reporting; available online at <http://www.news.google.com/newspapers>, retrieved on 5th May, 2014
- Alley, C. and Simon, J. (2005) „The use of financial reporting standards-based accounting for the preparation of tax returns”, *International Tax Journal*, 31 (3), pp. 31-48.
- Amoako. G. K., (2010), Compliance with international financial reporting standard 7 (IFRS 7): a study of listed banks in Ghana, (Unpublished MBA dissertation, University of Cape Coast)
- Baiman, S., and Verrecchia, R.E. (1996). The Relation Among Capital Markets, Financial Disclosure, Production Efficiency, and Insider Trading. *Journal of Accounting Research* 34, 1–22.
- Ball, R., (2006). International Financial Reporting Standards (IFRS): Pros and cons for investors, *Accounting & Business Research*, 36, 5-27.
- Barth, M. E. (2007), 'Standard-setters, measurement issues, and the relevance of research'. *Accounting and Business Research*. Forthcoming.
- Barth, M. E., Konchitchki, Y., and Landsman, W. R., (2006), 'Cost of capital and financial statement transparency'. Manuscript, Stanford University.
- Bradbury, M., and van Zijl, T. (2005). Shifting to International Financial Reporting Standards. *University of Auckland Business Review*, 7(1), 77-83.
- Bushman, R., and A. Smith. (2001). Financial Accounting Information and Corporate Governance. *Journal of Accounting and Economics* 32, no. 1-3: 237-333.
- Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W., Plano Clark, V. L., Gutmann, M., and Hanson, W., (2003). Advance mixed methods research design. In: Tashakkori, A. and Teddlie, C. (eds), *Handbook on mixed methods in the behavioral and social sciences*, Sage Publications, Thousand Oaks, CA, pp 209–240.
- Daske, H., Hail, L. Leuz, C., and Verdi, R., (2008), 'Mandatory IFRS reporting around the world: Early evidence on the economic consequences', *Journal of Accounting Research*, Vol. 46(5) pp. 1085-1142.
- Deloitte (2008, January): IFRS Insights. Retrieved October 15, 2014, from [Deloitte.com: www.deloitte.com](http://www.deloitte.com)
- Diamond, D. W., and Verrecchia, R. E., (1991). Disclosure, liquidity, and the cost of capital. *Journal of Finance*, 46 (4), pp 1325 -1359
- Duhanxhiu, I., and Kapllani, V., (2012) The relationship between financial and tax accounting in Albania, *The Romanian*

- Economic Journal, XV (43), pp 45- 60
- Easley, D., and O'Hara, M., (2004). Information and the cost of capital. *Journal of finance*, 59 (4), 1553 – 1583.
- Eberhartinger, E., and Klostermann, M. (2007). What if IFRS were a Tax Base? New Empirical Evidence from an Austrian Perspective", *Accounting in Europe*, 4(2), pp.141-168.
- Endres, D., Oestreicher, A., Scheffler, W., Spengel, C., Alt, S., Koehler, H., Riesselmann, H. and Wendt, C. (2007). The determination of corporate taxable income in the EU member states (Alphen aan den Rijn: Kluwer Law International).
- Ernst & Young (2004), IFRS Impact Report, Ernst & Young, Southampton.
- Essien-Akpan I. (2011). The International Financial Reporting Standards (IFRS). The Role of the Chartered Secretary and Administrator. A paper presented at the 35th Conference of ICSAN. Lagos Sheraton Hotels and Towers. October 26th and 27th. Access on 27th July, 2014.
- Fekete, Sz. (2008), Cercetare conceptuală și empirică privind raportările financiare. Cazul sistemului contabil românesc și maghiar [Conceptual and empirical research in financial reporting. The case of the Romanian and Hungarian accounting systems], Doctoral thesis, Babeș- Bolyai University of Cluj-Napoca, Faculty of Economics and Business Administration.
- Francis, J. (2001). Discussion of empirical research on accounting choice. *Journal of Accounting and Economics*, 31, 309-319.
- Freedman, J. (2004), Aligning Taxable Profits and Accounting Profits: Accounting Standards, Legislators and Judges", *EJournal of Tax Research*, 2(1), pp.71-9.
- Freedman, J. (2008) Financial and Tax Accounting: Transparency and "Truth", in Schon (ed), *Tax and Corporate Governance* (Springer Science 2008). University of Oxford Faculty of Law Legal Studies Research Paper series, Working Paper No. 07/22. Available online at <http://ssrn.com/abstract=1085862>
- Gielen, F. and Hegarty, J. (2007), 'An accounting and taxation conundrum: a pan-european perspective on tax accounting implications of IFRS adoption', Paper prepared for the World Bank Centre for Financial Reporting Reform, Vienna, Austria. Available online at [www.worldbank.org/cfrr](http://www.worldbank.org/cfrr)
- Goodwin J., Ahmed K., and Heaney R. (2008). The Effects of International Financial Reporting Standards on the Accounts and Accounting Quality of Australian Firms: A Retrospective Study, *Journal of Contemporary Accounting & Economics*, vol. 4(2), pp. 89-119
- Goodwin, J., Ahmed, K., & Heaney, R. (2007). The effects of international financial reporting standards on the accounts and accounting quality of Australian firms: A retrospective study.
- Goodwin, J., and Ahmed, K. (2006). The Impact of International Financial Reporting Standards: Does Size Matter?, *Managerial Auditing Journal*, 21:460-475.
- Gyasi, A. K., (2010), adoption of International Financial Reporting Standards in developing countries- The case of Ghana, (Bachelor of Business Administration dissertation, VAASA UNIVERSITY OF APPLIED SCIENCES)
- Haverals, J. (2007) IAS/IFRS in Belgium: Quantitative analysis of the impact on the tax burden of companies, *Journal of International Accounting, Auditing and Taxation*, 16, pp. 69-89.
- Hickey, L., Spencer, J., van Zijil, T., and Perry, J. (2003). Adoption of IFRS – Background and Process. *Chartered Account Journal of New Zealand*, Vol. 82 (6), pp. 4-7.
- Horton, J., Serafeim, G. and Serafeim, I. (2013). Does Mandatory IFRS Adoption Improve the information Environment?. *Contemporary Accounting Research*, Vol 30(1), pp. 388 - 423
- Hung, M. and Subramanyam, K.R. (2007), "Financial statement effects of adopting international accounting standards: The case of Germany", *Review of Accounting Studies*, Vol. 12 No. 4, pp. 623-657.
- IASB (2010). *The Conceptual Framework for Financial Reporting*, London.
- Internal Revenue Act, 2000 (ACT 592), Assembly Press, Accra, Ghana.
- Jubb, C. (2005). Transition to IFRS: Listed companies' expected accounting policy impacts as revealed by AASB1047 disclosures. Working paper, Deakin University.

- Jubb, C. (2006), "How are AIFRS reconciliations to previous GAAP being disclosed?", paper presented at the AFAANZ Conference, Wellington.
- Kabir, M. H., Laswad, F., and Islam, M. A. (2010). Impact of IFRS in New Zealand on Accounts and Earnings Quality. *Australian Accounting Review*, Vol. 20(4), pp. 343-357.
- Kager, R., Niemann, R. (2011). Reconstruction of tax balance sheets based on IFRS information: A case study of listed companies within Austria, Germany, and the Netherlands, *Arqus-Diskussionsbeiträge zur quantitativen Steuerlehre*, No. 120. Available online at <http://hdl.handle.net/10419/48275>
- Kangarlouei, S. J., Agababa, M. and Motavassel, M. (2013). Understanding the framework of performing a transition to IFRS-based financial reporting. Available online at [http://media.johnwiley.com.au/product\\_data/excerpt/47/1186437/118643747-17.pdf](http://media.johnwiley.com.au/product_data/excerpt/47/1186437/118643747-17.pdf) Retrieved on 15th June, 2014.
- Leuz, C. and Verrecchia, R.E. (2000). The Economic Consequences of Increased Disclosure, *Journal of Accounting Research*, 38, Supplement: Studies on Accounting Information and the Economics of the Firm, pp. 91-124.
- Leuz, C., Lins K.V., and Warnock, F. E. (2009). Do foreigners invest less in poorly governed firms? *Rev Financ Stu* 22, 3245-3285.
- Li, S. (2010), 'Does mandatory adoption of international financial reporting standards in the European union reduce the cost of equity capital?', *Accounting Review*, Vol. 85, pp. 607-636.
- Mear, K. M., (2011). Deferred Tax – The effect of the implementation of NZIAS 12: Income Taxes, A thesis presented for a Master of Business Studies (Accountancy) at the Massey University, Albany, New Zealand.
- Mulyadi, M. S., Soepriyanto, G., and Anwar, Y., (2012). IFRS adoption and taxation issue. *International Journal of Arts and Commerce*, Vol. 1(7), pp 159-165.
- Nobes, C. (2003), *International Accounting - Technical Feature*, ACCA Global, United Kingdom.
- Okoye, P. V. C., and Akenbor, C. O. (2014). Financial reporting framework in Nigeria and the adoption of the international financial reporting standards. *International Journal of Business and Economic Development* Vol. 2(1), pp.52-63.
- Olakunori, D. (2009) Financial reporting framework; *American Economic Review*; 93 (1); pp114 – 119.
- Oyedele, T. (2011). Chartered Institute of Taxation of Nigeria (CITN): An Overview of IFRS and Challenges Posed to Professionals. Seminar on IFRS Adoption in Nigeria. Available online at [www.citn.org/others/IFRS2.pdf](http://www.citn.org/others/IFRS2.pdf)
- Proscovia, N. (2003). Determinants of effectiveness of Micro Finance Institutions (MFI) loans among selected small businesses in Kampala and Mpigi Districts. A research report submitted as partial requirement for the award of Master degree in Business Administration of Makerere University. Available online and retrieved on 15th July, 2014 from <http://www.mubs.ac.ug/docs/masters/mba/NAMAKULA%20PROSCOVIA%20MBA.pdf>
- Sloan, R. G. (2001). Financial accounting and corporate governance: a discussion. *Journal of Accounting and Economics* 32, pp. 335–347.
- Stent, W., Bradbury, M., and Hooks, J. (2010). IFRS in New Zealand: Effects on Financial Statements and Ratios. *Pacific Accounting Review*, Vol. 22(2), pp. 92-107.
- Tackie, G. (2006). International financial reporting standards convergence: a study of listed banks in Ghana. (Unpublished MBA dissertation, University of Cape Coast)
- Taylor, G., and Tower, G. D. (2008). Impact of adoption of IFRS on thinly capitalized Australian companies, In AFAANZ/IAAER conference 08, Jul 6, 2008, Sydney: Accounting and Finance Association of Australia and New Zealand.
- Taylor, G., Tower, G. and Neilson, J. (2010), "Corporate communication of financial risk", *Accounting and Finance*, Vol. 50 No. 2, pp. 417-446.
- Teixeira, A. (2004), "IFRS - the New Zealand way", *Chartered Accountants Journal*, Vol. 83, No. 3, pp. 5-8.
- Watts, R. L. (1992). Accounting choice theory and market-based research in accounting, *The British Accounting Review*, Vol. 24(3), 235-267.

- Watts, R., and Zimmerman, J., (1986). Positive accounting theory. Englewood Cliffs, New Jersey: Prentice – Hall International.
- Wong, N. (2006). Accounting for Deferred Taxes under NZIAS 12. *University of Auckland Business Review*, 8 (1), 55-59
- Yip, R. W. Y, and Danqing, Y. (2012). Does Mandatory Adoption Improve Information Comparability?, *Accounting Review* forthcoming. Available at SSRN: <http://ssrn.com/abstract=2044295> retrieved on 15th August, 2014.
- Yusuf, A.M (2006) Comparing national generally accepted accounting principles to international generally accepted accounting principles; *International Journal of Accounting*; 22 (3): pp 216–221

---

#### ABOUT THE AUTHORS

---

##### **Abedana Virgil Nbellah**

He is a Lecturer at Tamale Polytechnic. He obtained his Master of Commerce (MCom) Degree in Taxation from the Pentecost University College Graduate School.

---

##### **Prof. Adom-Frimpong**

He is a member of the Network of Academicians/Professionals at the Pentecost University College Graduate School.

---

##### **Prof. K. B. Omane-Antwi**

He is the Vice Rector/Dean of Pentecost University College Graduate School. He is also the Deputy Chairman of the PentVars Business Journal Editorial Board.

# RELEVANCE OF PUBLIC RELATIONS IN BUILDING THE CORPORATE REPUTATION OF AN ORGANISATION: AN EXPLORATORY STUDY OF TWO MANUFACTURING ORGANISATIONS IN GHANA

ALBERT ANANI-BOSSMAN & VIDA OSEI BONSU

## Abstract

In a globalised world that is also very competitive, businesses are faced with the enormous challenge of surviving and staying strong. One of such big challenges is building and managing the reputation of the organisation. Corporate reputation has been identified over the years as one of the most important intangible assets of any organisation. The success of any organisation is strongly linked to how it is perceived by its stakeholders. Scholars across various disciplines, including marketing, sociology, communication and management have devoted much attention to this phenomenon. In order to build and manage a strong reputation, an organisation must be able to communicate effectively with the stakeholders. Effective communication allows an organisation to convince and persuade its stakeholders to remain loyal in the face of keen competition. Studies have shown that public relations should be at the forefront of such communication activities. Public relations facilitates the efforts of the organisation to build and manage a positive reputation in the eyes of its stakeholders. This paper tries to understand the relevance of public relations in building the corporate reputation of an organisation. The paucity of literature in a developing country like Ghana makes this research even more essential. The qualitative research approach was used in gathering data. Face to face interviews were held with two communication managers of two multinational companies to provide input for the research. Result demonstrated that public relations plays a critical role in building the reputation of an organisation. The day to day communication activities of an organisation's PR department coupled with other activities such as social responsibility, feedback and constant engagement with the publics contributes largely to positive evaluation of the organisation. This outcome has significant implications for the practice of public relations.

Key Words: Corporate Reputation, Public Relations, Corporate Social Responsibility, Stakeholder

## Introduction

“ He who steals my purse steals trash ... but he that filches from me my good name ... makes me poor indeed.” OTHELLO ”

Reputation building and organisational performance is a topic that has been discussed at length over the last two decades. Various literature provide evidence that suggest a strong link between a good corporate reputation and various intangible and tangible assets. Indeed the business scandals involving corporate organisations and low opinion the public tends to have of corporate organisations,

especially in the past few years, demonstrates the need to build, maintain and defend reputation (Backhause & Tikoo, 2004; Balmer and Greyser, 2003; Davies, Chun, Da Silva & Roper, 2003). According to Ernst and Young, in Burke, 2011, the investment community believes that 30 to 50 percent of a company's value is intangible.

## Literature Review

### Corporate reputation

The concept of reputation rest on what has traditionally been known as “public relations”. Unfortunately public relations, in a bid to wean itself of the negativist tag, has in more recent decades taken on different identities such as “corporate communication, corporate affairs, and corporate relations among others. The recent addition of the term “reputation management” as a promotional tool for facilitating positive relations with the public has, in the words of Hutton, Goodman, Alexander & Genest, (2001), added to the identity crisis. What has worsened the situation is that, just like public relations itself, there is no single agreement on what constitute reputation. Varied definitions from both the academic and professional field suggest that reputation is really in “the eyes of the beholder”. Whereas some define it as an intangible asset that represent the past actions of a firm and describe the ability of the firm to deliver value outcomes to multiple stakeholders (Schreiber, 2011; Mahon, 2002), others describe it as perceptions and attitudes held by individual members of a particular stakeholder group, that is; views about an organisation held by individuals outside of the organisation (Burke, 2011, Highhouse, Broadfoot, Yugo, & Devendorf, 2009; Schwaiger, 2004; Wartwick, 2002). Madhok (1995) identifies trust as an essential component in a world where business operates through cooperation and relationships. Shultze, Moritsen and Gabrielsen (2006) define it as derivative of other actions and behaviours of the firm. Grunig and Yang (2005)

view reputation as a collective representation spread in the minds of multiple publics about an organisation over time. Schreiber (2011) after reviewing a number of definitions suggested two definitions, one from the perspective of the organisation and the other from the perspective of the stakeholders:

From the perspective of the organisation, reputation is an intangible asset that allows the company to better manage the expectations and needs of its various stakeholders, creating differentiation and barriers vis-à-vis its competitors. From the perspective of stakeholders, reputation is the intellectual, emotional and behavioural response as to whether or not the communications and actions of an organisation resonate with their needs and interests.

Barnett Jermier, and Lafferty (2006) also categorised reputation into three clusters after reviewing over 49 different definitions: a state of awareness, an assessment or evaluation, and an asset. Reputation as a state of awareness centres on reputation being the attention that a stakeholder gives an organization (i.e., stakeholders hold a general awareness but lack judgment about the organization); reputation as an assessment involves judgment and evaluation; and reputation as an asset emphasizes reputation as a value for the organization, which is tightly associated with its consequences.

Regardless of the definitions, one thing that is clear is that performance of an organisation is strongly

associated with its perceived reputation. Garcia and Doorley (2008) provide a formula for defining reputation as "sum of images = (performance and behaviour) + communication = sum of relationships". This definition also shows the value of communication in building reputation. Gibson, Gonzales, and Castanon (2006) postulate that "positive reputation facilitates and expedite the business of successful organisations, and conversely negative ones destroy individuals and organisations. Fombrum and Van Riel (2004) also suggest a good corporate reputation can attract customers to its products, investors to new investment, and media to favourable press coverage

Shreiber (2011) notes the importance of good reputation in blocking movement of competitors as well as producing returns to firms as they become difficult to imitate. An intangible asset ensures one has a competitive advantage as they are rare, valuable and difficult or costly to imitate, substitute and transfer (Ambrosini & Bowman, 2001; Roberts & Dowling 2002; Peteraf, 1993). According to Watson and Kitchen (2010) "reputation was, is and will always be of immense importance to organisations, whether commercial, governmental or not-for-profits". The authors believe that good reputation opens the path to acceptance and approval by stakeholders. According to Men (2013) the fact that scholarship across major disciplines such as marketing, management, economics, sociology, and communication have attempted to identify possible drivers of favourable reputation shows its importance as an organisational asset.

#### Public relations role in organisations

The value of public relations in organisations has been demonstrated by scholars and professionals alike. Rensburg and Cant (2004) suggest that public relations exist in every organisation and institution whether the organisation recognises it or not. Every action of an organisation, from phone calls to welcoming a visitor, newsletters and other activities leaves an imprint in the mind of stakeholders. An organisation whose portrayed identity does not sync with the image perceived by its public is likely to suffer reputational damage. Throughout the world, public relations has become a central pillar in the effort to communicate effectively with stakeholders.

Public relations is about developing and building an effective relationship between an organisation and its public through the use of communication (Wilcox & Cameron, 2012; Broom & Sha, 2012, Butterick, 2011). Public relations researchers believe that PR is a deliberate attempt to build the image and reputation of a business in a social context (Sharma, Sharma, & Sharma, 2013). The value of public relations can therefore not be overlooked due to the fact that PR is an essential factor in deciding the success of any organisation by developing and fostering its corporate reputation (Sharma et al. 2013).

Organisations are sometimes seen as the nexus of relationships (Jones, 1995) and having a good relationship with multiple stakeholders may be the core value of an organisation (Phillips, 2006). However, the ability to truly manage multi-stakeholder relationship cannot be wholly successful without the involvement of the public relations or communications manager. This is emphasised by Grunig and Hon (1999) who articulate that apart from the CEO, the communications profession may be the only management function that takes multi-stakeholder perspective. Van Ruler and Verčič (2002), in the Bled Manifesto, aptly sum up the role of public relations as the voice of the multi-stakeholder:

What distinguishes the public relations manager when he sits down at the table from other managers is that he brings to the table a special concern for broader societal issues and approaches to any problem with a concern for the implications of organisational behaviour towards and in the public sphere. It is precisely this concern that is implicit in definitions of public relations as "relationships management" and as "communication management", in both "image management" and "reputation management" (16).

The ability to build and manage reputation is therefore a critical component of the public relations profession. Public relations provides an institutional structure for coordinating all communication with the aim of establishing and maintaining a favourable reputation between an organization and its public (Cornelissen 2004). Wilcox, Cameron and Reber (2015) report of the



result of a survey of marketing executives by PRWeek which suggested that public relations is ranked higher in effectiveness than advertising and marketing in nine areas, including management of corporate reputation. Public relations in essence contributes highly to the development, good functioning and sustainability of any organisation. PR professionals have the ability to identify, establish and extend an organisation's sphere of influence thereby helping to establish the organisation's corporate identity and corporate reputation (Lukusa, 2009).

### **Public relations and corporate reputation**

Discussions on the role that PR professionals play / or are expected to play in building and managing the reputation of an organisation, especially in the digital age when there is an unprecedented high expectations on companies' openness, visibility, transparency, and authenticity (Men, 2013) is well documented. Several articles on the topic have been published in various communication and business journals showing a strong link between organisational reputation and organisational effectiveness (Fombrun & van Riel, 2004; Gibson, Gonzales, & Castanon, 2006; Hong & Yang, 2011; Yang & J. Grunig, 2005). In its definition of PR, the Chartered Institute of Public Relations (CIPR, UK) for instance, places emphasis on reputation management as a key component of PR. According to the CIPR, "Public relations is about reputation - the result of what you do, what you say and what others say about you. Public Relations is the discipline which looks after reputation, with the aim of earning understanding and support and influencing opinion and behaviour. It is the planned and sustained effort to establish and maintain goodwill and mutual understanding between an organisation and its publics." The purpose of public relations is to manage reputation by communicating and building good relationship with every organisation's stakeholders. A similar statement is made by the London School of Public Relations (LSPR, 2015) who believe that PR is evolving into a multi-disciplinary subject that can best be termed as "reputation management". A study by Fortune 500 also suggest that reputation management is evolving as a driving philosophy behind corporate public relations. This is corroborated by

PRNews(2000) which asserts that measuring reputation is a fundamental function of the PR department. According to PRNEWS, "one of the real values that PR brings is as a protector and developer of corporate reputation. L'Etang (2008) further notes that public relation involves the analysis of the activities of the organisation which may in one way or the other have effects on the company. Conversely, it is not "customer care" or just "promotion" of the company's reputational view but it is the anticipation of analysis of new issues that when they emerge will have great impact on the organisation and how the public of this organisation will see it. Schreiber (2011) points out that focusing on reputation management allows the practitioners to build real value for their organisations through relationships, trust, and positive business result. However, building the corporate reputation of an organisation is not easy due to the position that practitioners sometimes find themselves in. Sharma et al, (2013) suggest that it is time for PR practitioners to play their proper role towards building and promoting a positive image for their organisations. This can only be possible if practitioners are allowed to be part of the "dominant coalition" i.e take part in the formulation of policy at the stage of initiation, analysis and preparation. Grunig and Dozier (1992) argue that "Public relations must be placed high in the organization's hierarchy and must be practiced strategically if it is to make the more effective and, thus, to be excellent". Owizy (2013) concurs by indicating that for public relations to properly build and sustain a company's reputation, the profession must be granted greater recognition. Ngozika (2014), based on his research on the impact of public relations on a corporate organisation, indicated the need for PR practitioners to be consulted in policy formulation as their contributions are quite significant. Kochar (2013) measured the impact of a public relations campaign on the perceived corporate reputation of BP, in the wake of the oil crisis. The survey tried to understand the perceptions of residents of Florida after the oil spill and the Gulf Coast Restoration Campaign. Result showed that campaign effectiveness is an important indicator of corporate reputation and the success of a campaign is reflected in perceived corporate reputation. The result however indicated that the campaign was not successful in changing the

negative perception of its stakeholders. Johan and Noor (2013) also found a correlation between corporate communication and corporate reputation in their research on the role of corporate communication in building organisation's corporate reputation.

The discussion so far shows how reputation represent an organisation's past and present performance and "portrays the ability to deliver reliable desirable results to various stakeholders...

## Statement of the Problem

The purpose of this study is to understand how organisations in Ghana use public relations to build corporate reputation, especially from a different cultural context. Much of the discussion on this subject in the academic world has mainly been from the Western view point with little or no contribution from Africa. In this view theoretical development is purely based on western perspective which may or may not apply in different cultures. Although public relations is steadily becoming an integral part of organisations in developing countries such as Ghana (Wu & Baah-Boakye, 2009) not much is known about how the profession is used to build and maintain reputation. The result is that empirical evidence about the practice of the profession in other parts of the world is very scarce. Scholars therefore advocate for a descriptive account of public relations practice from individual countries to enhance the body of knowledge currently in existence, especially as public relations is now a global enterprise. One key area where there is a

.....Reputation is arguably the single most valued organizational asset. Consequently, a positive and linear relationship exists between reputation and organizational success. Positive reputations facilitate and expedite the business of successful organizations and conversely negative ones damage or destroy individuals and organisations"(Gibson, Gonzales, Leigh & Jaclynn 2006).

paucity of literature, especially in a developing country like Ghana is corporate reputation and the role PR plays in it. The paucity of literature leaves a vacuum which needs to be filled. The problems to be addressed therefore is based on the following: To investigate how organisations in Ghana use public relations to build corporate reputation with a focus on the manufacturing industry. The study will therefore contribute to literature and understanding of how public relations is practiced from a different cultural setting. This is in line with evidence from various studies(Sriramesh 2009; Bartlet and Gupta 2007; Rhee, 2005; Wu & Baah-Boakye, 2009; Kiambi, 2012) which shows that public relations cannot be practiced the same way in different settings and that a number of factors come into play in determining how PR is practiced. This paper therefore seeks to examine how PR practitioners in two manufacturing companies use communication/PR to manage/build reputation.

## Profile of the Multinational Organisations

For the purposes of confidentiality, the names of the two multinational companies will not be used in this study. This brief description will therefore be based on the products they offer. The two multinational companies are both manufacturing companies that have been operating in Ghana since the early 1990's.

The first company is into the manufacturing and marketing of carbonated soft drinks and two water brands. The second company is one of the leading manufacturers of alcoholic beverages in Ghana. However it also produces non-alcoholic beverages including one of the Malt brands.

## Methodology

For the purpose of this study the qualitative method was used to gather information from two communication managers of two multinational manufacturing companies. These companies are members of the Institute of Public Relations, Ghana and are also members in good standing. Two face-to-face in-depth interviews, lasting approximately sixty minutes, were conducted at the offices of the participants. An in-depth interview is an extensive one-on-one personal communication through which a lot of information can be acquired (Wimmer & Dominick, 2011). This helps to provide clearer understanding into the study. The qualitative approach was chosen for this study

because it enabled the researcher collect rich data from public relations practitioners. According to Wimmer and Dominick (2011) the wealth of detail provided by the in-depth interview serves as a great benefit. It therefore helped in gaining in-depth knowledge and understanding of the role and perceived contribution of PR in the above-mentioned organisations. Before the interview started, the researcher explained the purpose of the research and got permission to record the interview. The interviews consisted of open-ended questions meant to examine how public relations is used to improve corporate reputation.

## Data Analysis

Data collected were transcribed in accordance with the objectives of the study. According to Miles and Huberman (1994) qualitative analysis consist of three stages: data reduction, data display, and conclusion drawing. The analysis followed the techniques outlined by Miles and Huberman. Recurring themes and patterns were identified through the use of data reduction, short summaries and field notes. For the purpose of analysis the communication managers of the two manufacturing companies will be labelled as CM1 and CM2 respectively.

## Results

Nature of public relations: Van Heerden (2004) points out that public relations has evolved from generating "mere publicity" to building "confidence, accountability and transparency". Grunig (2001) also emphasises this by observing that PR is becoming more of a management function than a technical communication. This means that practitioners have now become strategic counsellors who are less preoccupied with publicity in the mass media. The corporate communication managers of both organisations asserted that public relations has moved from the era of being seen as just carrier of messages (publicity) to become a management function. It has become a day to day affair of drawing up strategies, meeting with the media, attending conferences and linking with other departments for the smooth running of the organisation. CM1 noted that PR is about actively engaging with internal and external publics of an

organisation. According to her "The practice has shifted to become a management function where we attend meeting with the other managers on regular basis and contribute to key decision making in order to satisfy the needs of our customers." This also corroborate the definition of public relations by Dibb, Simkin, Ferrell and Pride (2006) as "managing and controlling the process of using publicity effectively and it is the planned and sustained effort to establish and maintain goodwill and understanding between an organization and its target publics."

Concept of Corporate Reputation: In the view of the two practitioners, corporate reputation is what people say about the organisation and it is normally based on the track record of the company. CM1 stressed that "reputation is something that is done repeatedly over time. This is something that people regularly know you for or what you do consistently

and what people know you for. For instance, if an organisation is known for its credibility, that is the organisation's reputation and it is not the other way round." According to CM2 "reputation is what an organisation is known for and how the people within and outside the organisation perceive it and it is built and managed through deliberate and planned efforts of strategies and programmes."

Reputation can therefore be defined in terms of (1) the general estimation in which a person is held by the public, (2) the state or situation of being held in high esteem, (3) a specific characteristic or trait recognized in a person or thing; a reputation for courtesy (Thiessen & Ingenhoff, 2011).

**Public Relation and Corporate Reputation:** Public relations is all about managing the reputation of one's organisation. It involves product quality, employee engagement, and good investor relations. It plays different roles in achieving the desired reputation of the organisation. One of the key strategies often used to build reputation is corporate social responsibility (CSR). CSR is seen as a modern tool for establishing accountability in the business world, especially in a competitive environment. The idea of CSR is based on the reciprocal dependence between an organisation and society (Gholami, 2011). Companies now engage in CSR activities as a means of enhancing and strengthening the reputation of their brands and even boosting their bottom lines. Good corporate reputation has a strategic value for the organization that possesses it. Corporate reputation ensures acceptance and legitimacy from stakeholder groups, generates returns and may offer a competitive advantage as it creates or forms an asset that is difficult to imitate by competitors (Caven & Nomathema, 2014). The two communication managers pointed out that CSR is one of the mechanisms they use to build their organisations reputation. CM2 commented on this:

"CSR is one way that helps our company to build a very good reputation. For instance every year, we have different things we do here. Sometimes we bring in eye specialists from Spain to embark on free eye screening and eye care for the less privileged in the society and this has helped to raise how people especially our consumers see us to be and keep our brand in their minds."

Similarly CM1 made contributing remarks to this view that CSR is one clear way through which they build their reputation. She stated that in her organisation, one thing they stress is that helping others is very good for business and they also believe that an organisation cannot operate in an environment and not impact the community in which the organisation is situated, so definitely the company's presence should affect the community in a positive way:

"We have instituted a programme called the Local Raw Material Agenda where the brewery sources local raw materials such as cassava to produce beer. Previously, the farmers that grow the cassava usually cultivated on small scale because there was not a ready market for them but now they produce on large scale because we will need them to produce our beer. This is intended to sustain their livelihood so they do not become financially handicapped after marketing all their cultivations."

The communication managers of the two companies also emphasised that putting value on publicity helps to build and maintain a corporate reputation. In doing this, care is taken as to what goes out for the public knowledge. CM2 explained that "The biggest asset of every business is its reputation therefore putting a great value on publicity helps because that is what the public will know you for so if your reputation is gone, it's gone and you cannot place certain value on yourself as in the organisation."

**Factors that drive reputation:** The literature suggest a number of factors that drive positive organisational reputation. These include effective two-way communication (Murray & White, 2005; Men 2013), provision of good value and quality products and services (Dowling, 2004), strong financial performance (Fombrum et al., 200), workplace environment, (Dowling, 2004), social responsibility and accountability (Helm, 2005), and quality relationships with strategic publics (Yang, 2007). Men (2011) categorises these factors into three main domains: corporate capabilities, social accountability, and strategic capabilities. In line with these, the communication managers were asked about the factors that drive reputation in their respective organisations. Factors mentioned include

the desire for acceptance of the organisation's products and/ or service, positive feedback, being part of the organisation, interest from investors, and corporate social responsibility. CM2 added that the "responsiveness to the product or what the organisation is engaged in is one major determinant of how the public see your company to be. Another thing is that when there is innovativeness, it brings a sort of difference to the way the organisation is run. And I will also say that corporate social responsibility is a key variable that determines the reputation of a company."

**The two-way Symmetrical model:** The two-way symmetric model, which is described as practicing excellent public relations (Grunig and Hunt, 1984), focuses on ensuring that decisions of organisations are mutually beneficial between the organisation and its public. The model embraces negotiation between an organisation and its public as well as fostering mutual understanding. The two-way model provides an organization with the tools and path needed to create a strong organisational reputation built upon solid, long-lasting relationships, because both the organization and its audiences are provided with a voice in processes and developing issues or problems. The two-way symmetrical model for communication maintains both the organization's best interests and its audiences' best interests at the forefront in the most fair and balanced way possible. Through the use of this model, both the organization and its audiences can collaborate together to both grow and strengthen an overall organization, leading it to greater success (Grunig 2006).

Communication practices by the two organisations is mainly two-way. The respondents said they engaged in constant communication between customers and organisation. Customer feedback is taken seriously and worked on. This allows the organisation to build relationship with the

customers, leading to the creation of reputation for the organisation. In the words of CM1 "when our customers have issues with our products, there is a product complaints department where all complaints from our vendors and consumers are received and assessed and then feedback is given to the complainant. If there is the need for the customer to come to us, we arrange for that too. These, we believe help our stakeholders and consumers get close to us and subsequently raise our reputation." CM2 concurs with this view: "There are different stakeholders when it comes to what we do but we make sure we do not keep them afar. What we do is that, we occasionally have our promotions where we can get to interact with them through the various media platforms but most importantly, we have a customer service department where we give the numbers to the consumers to report to us anything and we do all we can to act upon what they request for or complain about."

Du Plessis (2000) notes that even though the two way symmetrical model seems at the kick-off to be the ideal model for public relations practitioners, Grunig and Grunig (1989:3) admit that few organizations apply this model in practice because their world-view of public relations does not correspond with the characteristics of this model. Grunig and Grunig (1996) however argue strongly that the model allows practitioners to "play key roles in adjusting or adapting behaviours of institutional dominant coalition, thus bringing publics and dominant coalition closer together." Through two way-way communication the two organisations have managed to build their reputation by constantly responding to customer issues and providing essential feedback as well as provision of CSR activities. They believe that when people are helped they tend to like the organisation and promote the organisation's products and services. Both parties benefit in the end.

## Discussion

The finding from the in-depth interview sheds light on the activities of public relations department especially with regards to building reputation. It is evident that the building of reputation is a core

business of public relations. Public relations practitioners do not only manage information flow, they actively engage key publics, establish strong relationships, strive to maintain a sound reputation

at all times and through all circumstances and through PR measurement, help the organisation achieve strategic organisational goals ( Public Relations Society of America – PRSA, 2012).

Public relations departments are often seen as playing the “boundary role”. They operate at the edge of the organisation by serving as a link of communication between the organisation and its publics. They are able to represent the views of the external publics and their likely reactions to decisions. The boundary role of the public relations department therefore allows it to serve as a central-intelligence gathering function (Gregory, 2012). The two communication managers in the manufacturing companies demonstrated evidence of playing the boundary covering role. They do not only send information to the media for broadcast but they also draw strategies and place value on these strategies for them to be executed. Similarly, they do not just exist as a department but engage in the strategic role of environmental scanning and making key decisions. Available literature shows scanning and monitoring the environment through constant audits to identify threats and opportunities is a way for PR to contribute to organisational strategy, effectiveness and excellence and reputation as a whole (Steyn & Puth 2000). They also bring the public's view point to the organisation which helps in any decision making and also take the organisation's side of a story to the public. Thus it can be said that the major role public relations practitioners' play is to serve as intermediaries between an organisation and its stakeholders or publics.

What is clear from the study, as indicated by Broom and Dozier (1997), is that public relations practitioners are problem-solvers and they also serve as advisors to senior management. They are responsible for extensive programme results and therefore perform the role of a communication facilitators and problem solving facilitators. This further strengthens their boundary spanning roles. The ability to influence strategic decision making through the insight they offer to management about the organisation's environment, and in particular about the organisation's relationship with key stakeholders within its environment (Kitchen, 2006).

The outcome of the study reveals that the pursuit of reputation building is not without its challenges. A key challenge is getting budgets approved. Respondents expressed concern that approval of budget tend to take a long time compared to other departments such as marketing. Sometimes they are forced to defend their budget before management decide to approve. Grunig, Grunig and Dozier (2003) note that public relations departments can only succeed if management/ the dominant coalition places a high value on public relations. Fawkes (2004) suggests that in the integrated communication process, marketing or advertising tends to achieve a dominant share of resources and relegates other areas to support roles. Though public relations is highly valued in the organisations, it still appears to compete with marketing for recognition. The widening of the media landscape, especially the traditional media, and the attendant influx of non-professionals was also seen as a major challenge. Such journalists, according to the communication managers, are unable to properly tell the story of the organisation and sometimes create problems for the organisations with their reportage. A positive media coverage is key to effective reputation and where this fails, it can affect the organisation.

What is of interest is that most of the efforts aimed at building and managing reputation is centred on the external publics despite the comments by the two communication managers that reputation management is both internal and external. Fombrum and Van Riel (2004) stress the importance of looking at reputation from the internal perspective: “Internally, a good corporate reputation helps attract and retain talents, acculturate employees, engage them in dialogues, cooperation and citizenship behaviors, and generate greater employee productivity” In view of this, more effort should be put into promoting positive corporate reputation at the internal level as well.

There is also the need to ensure that two-way symmetrical communication is effectively practiced. The two organisations can ensure effective symmetrical communication by recruiting more professionals who have formal training in public relations and are aware of the value of symmetrical communication. Excellent public relations practice

was practiced in the two organisations although this was not predominant. Involvement in management meetings, integration of communication functions

at the decision making level, and in some cases, two-way communication were present.

## Conclusion

The study analysed how public relations is used to build reputation among manufacturing companies. This study has implications for theory and practice of public relations. It seems professionals focus more on CSR, sponsorships and customer service oriented programmes as a means to build and maintain reputation. Most of the drivers of reputation, with the exception of CSR, effective two-way communication, and provision of good value and quality products and services, tend to be missing from the practice of corporate reputation management in Ghana. There is the need for

scholarship to broaden the global discussion on corporate reputation to cover other cultures especially in view of the fact that different socio-economic, political and cultural factors tend to affect the practice of public relations, as postulated by numerous research. The body of knowledge on this subject can only be complete with literature on the knowledge and practice in other cultural context. This also means practitioners must constantly measure and redefine the drivers of reputation in order to properly gauge public perception of their reputation.

## References

- Burke, R.J. (2011). Corporate Reputations: Development, Maintenance, change and repair. In G. Martin, C.L. Cooper, and R.J. Burke (Eds), *Corporate reputation: managing opportunities and threats*. Gower, England
- Barnett, M.L., Jermier, J.M., and Lafferty, B.A. (2006). Corporate reputation: The definitional landscape. *Corporate Reputation Review*, 9, 26–38.
- Backhause, K., and Tikoo, S. (2004). Conceptualising and researching employer branding. *Career Development International*. 9, 501-517.
- Balmer, J.T., and Greyser, S.A. (2003). *Revealing the corporation: perspectives on identity, image, reputation, corporate branding, and corporate-level marketing*. London: Routledge.
- Caven, M. and Nomathemba, N. (2014). Community social responsibility strategies employed by unki mine to enhance their corporate reputation. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)* 5(8): 224-228
- Davies, G., Chun, R., da Silva, R.V. and Roper, S. (2003). *Corporate reputation and competitiveness*. London: Routledge.
- du Plessis D. (2000) *Introduction to Public Relations and Advertising*. Cape Town. Juta
- Dowling, G. R. (2004). Journalists' evaluation of corporate reputations. *Corporate Reputation Review*, 7, 196–205.
- Eldman, P. M., Bahamonde, R.A., and Velasquez B.I., (2014). A new approach for measuring corporate reputation. *Revista de Administração de Empresas*, 54(1), 53-66. . Retrieved from: <https://dx.doi.org/10.1590/S0034-759020140102>. 1st December, 2014.
- Fombrun, C. J., and van Riel (2004). *Fame & Fortune*. Pearson Education, Inc. Upper Saddle River, NJ.
- Grunig, J. E., and Grunig, L. A. (1989). Toward a theory of the public relations behavior of organizations: Review of a program of research. *Public Relations Research Annual*, 1, 27-66.
- Grunig, J. E. & Hunt, T. (1984). *Managing public relations*. New York: Holt, Rinehart & Winston.
- Grunig, J. E. & Grunig, L. A. (1996). Implications of symmetry for a theory of ethics and social responsibility in public relations. Paper presented to the International Communication Association, Chicago.

- Gregory, A. (2012). *Planning & managing a public relations campaign: A strategic Approach*. 3rd ed. Kogan Page. London
- Grunig, J.E. (2006). Furnishing the Edifice: Ongoing Research on Public Relations as a Strategic Management Function. *Journal of Public Relations Research* 18(2): 151-176
- Grunig, J.E. (2001). The role of public relations management and its contribution to organisational and societal effectiveness. Retrieved on December 4th, 2015 from [http://www.instituteforpr.org/wp-content/uploads/2001\\_PRManagement.pdf](http://www.instituteforpr.org/wp-content/uploads/2001_PRManagement.pdf)
- Grunig, L.A., Grunig, J.E. and Dozier, DM. 2003, *Excellent Public Relations and Effective Organisations – A study of communication management in three countries*, New Jersey: Lawrence Erlbaum Associates.
- Gibson, D., Gonzales, J.L., and Jaclynn, C. (2006). The importance of reputation and the role of public relations. *Public Relations Quarterly*. 51 (3), 15-18
- Gholami, S. (2011) Value Creation Model through Corporate Social Responsibility (CSR) *International Journal of Business and Management*, 6(9): 148-154
- Helm, S. (2005). Designing a formative measure for corporate reputation. *Corporate Reputation Review*, 8, 95-111.
- Fawkes, J. (2012). What is public relations? In A. Theaker (Ed), *The public relations handbook*. Routledge, 4th edition. (pp. 3-20) New York, NY: Routledge.
- Hutton, J.G., Goodman, M.B., Alexander, J.B., Genest, C.M. (2001). Reputation management: the new face of corporate public relations? *Public Relations Review* 27: 247-261
- Johan, M.R.M., and Noor, N.A.Z.M. (2013). The role of corporate communication in building organisation's corporate reputation: An exploratory analysis. *Interdisciplinary Journal of Contemporary Research in Business*. 4(12): 1230-1240
- Kitchen, P.J. (2006). *Public Relations, Principles and Practices*. Thomson, Croatia
- Kochar, S.K. (2013). 'The Spill-Over Effects': Measuring BP's Gulf Coast Restoration's Campaign Effectiveness on Corporate Reputation. *Proceedings of the Public Relations Society of America*. Philadelphia, 126-140.
- London School of Public Relations (2015). Reputation management in an age of opportunity. Retrieved November 18th, 2015, from <http://www.lspr-education.com/about-lspr/lspr-pr-and-reputation-management.html>
- Men, L.J. (2013). Internal reputation management: The impact of authentic leadership and transparent communication. *Proceedings of the Public Relations Society of America*. Philadelphia. 7-22
- Men, L. R. (2011b). CEO credibility, organizational reputation, and employee engagement. *Public Relations Review*, 38, 171-173.
- Murray, K, & White, J. (2005). CEOs' views on reputation management. *Journal of Communication Management*, 9, 348-358.
- Masuku, C and Shava, T. (2014). Practices and approaches of corporate citizenship by Public Relations (PR) department at Nestle Zimbabwe to enhance corporate reputation from 2010 to 2013. *International Journal of Innovative and Applied Research*. 2(2): 32-46
- Miles, M. B., and Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Beverly Hills, CA: Sage
- Ngozika, O.B. (2014). Impact of public relations on a corporate organisation: a study of first bank of Nigeria PLC. (Research Project) Retrieved on 18 November, 2015, from <http://pubs.caritasuni.edu.ng/projects/2013-2014%20Projects/MASS%20COMMUNICATION/IMPACT%20OF%20PUBLIC%20RELATIONS%20ON%20A%20CORPORATE%20ORGANISATION.pdf>
- Owizy, S.O (2013). The role of public relations in building a sustainable corporate image: a study of Benue State Internal Revenue Service board.(Masters Thesis) Retrieved on 18 November, 2015, from [https://www.academia.edu/3050911/THE\\_ROLE\\_OF\\_PUBLIC\\_RELATIONS\\_IN\\_BUILDING\\_A\\_SUSTAINABLE\\_CORPORATE\\_I](https://www.academia.edu/3050911/THE_ROLE_OF_PUBLIC_RELATIONS_IN_BUILDING_A_SUSTAINABLE_CORPORATE_IMAGE)
- PRNEWS (2000). Measuring reputation puts PR on management's A-list. Retrieved <https://business.highbeam.com/408236/article-1G1-62985658/measuring-corporate->



- reputation-puts-pr-management-list
- Sharma, A., Sharma, A., and Sharma V. (2013). Sustaining corporate identity through better public relations. *American International Journal of Research in Humanities, Arts and Social Sciences*. 4(2), 163-166
- Schultz, M., Moritsen, J., and Gabrielsen, G (2006). Sticky reputation: analysing a rank system. *Corporate reputation review* 4(1): 24-41.
- Schreiber, E. (2002). Brand strategy frameworks for diversified companies and partnerships. *Journal of brand management*, 10(2) 122-138.
- Steyn, B. & Puth, G. (2000), *Corporate Communication Strategy*. Sandown, South Africa: Heinemann.
- Thiessen, A., and Ingenhoff, D. (2011). Safeguarding reputation through strategic, integrated and situational crisis management: development of the integrative model of crisis communication. *Corporate Communication: An International Journal*, 16(1), 8-26.
- Van-Heerden, G, 2004. *The Practice of Public Relations in Africa: A Descriptive Study*. (MCOMM Thesis). South Africa: University of Pretoria. Retrieved on January, 2014 from <http://repository.up.ac.za/bitstream/handle/2263/28138/.pdf?sequence=2>
- Watson, T., & Kitchen, P.J. (2010). *Reputation Management: Corporate Image and Communication*. In: L, Moutinho and G, Southern (Eds). *Strategic Marketing Management: A process-based Approach*. Andover, Hampshire: Cengage Learning.
- Wimmer, R.D. & Dominick, J.R. (2011) *Mass Media Research: An Introduction* Belmont, CA: Wadsworth (9th ed.).
- Wilcox, DL., Cameron, GT. & Reber, B.H. (2015). *Public Relations strategies and tactics*. 11th edition. Pearson Education.
- Yang, S. (2007). An integrated model for organization- public relational outcomes, organizational reputation, and their antecedents. *Journal of Public Relations Research*, 19, 91-121

#### ABOUT THE AUTHORS

---

##### **Albert Anani-Bossman**

He is a lecturer at Pentecost University College, Department of Communication Studies under the Faculty of Business Administration.

He could be reached on 0244767223 and email: [aanani-bossman@pentvars.edu.gh](mailto:aanani-bossman@pentvars.edu.gh).

---

##### **Vida Osei Bonsu**

She works with Global Media Alliance in Accra. She could be reached on: 0249854032.

# QualiType Limited

●●● Obsessed with Quality Passionate about Printing ●●●



GRAPHIC  
DESIGNING,



GENERAL  
PRINTING,





PRODUCT  
PACKAGING



STATIONERY  
SUPPLIES

---

**Contact us** ➔  027 7484612  P. O. Box AN 7314, Accra-North  
siawgeorge@gmail.com  
siaw.george@ymail.com



STUDENTS'  
CORNER

# EARNINGS MANAGEMENT: THE DARK SIDE OF FINANCIAL REPORTING

PROF. JOHN B. K. AHETO

## Introduction

The objective of financial accounting information is to explain financial and economic reality, including both financial performance and financial position of an entity or company. The Chief Financial Officer (CFO), often in collaboration with the CEO, develops 'perspectives' on what this economic reality is and how it should be reported. Invariably, this invites earnings management of all sorts. Earnings management includes the whole spectrum from conservative accounting through to moderate accounting, aggressive accounting, and plain fraud involving a wide range for faulty and clearly indefensible accounting judgments and choices. Earnings management reflects the given financial reporting incentives of management.

Earnings management is not new to the world. Even in biblical days, various forms of fraudulent financial reporting have been documented as in the case of Ananias and Sapphira (Acts 5:1-10 (NIV)). It is therefore not surprising that in this modern world of extreme greed and conflict of interests, various parties that owe duty to account have resorted to many dubious ways to manipulate financial reports so as to advance their personal interests at the expense of all other legitimate stakeholders.

The accounting profession and the financial regulatory bodies all over the world have been engaged in rule making and standard setting designed to purify the public disclosure and

reporting system - especially financial reporting in an environment of agency relationships. Despite the efforts by these bodies, the world is full of instances of an increasingly questionable financial reporting. Many entities resort to what is variously called or referred to as: earnings management, creative accounting, cooking the books or falsify the financial statements. Earnings management denies investors and analysts the right information for their investment decision-making to determine the attractiveness or otherwise of their investments. Management, at times with the open support or prodding of the board of directors, deliberately manipulate earnings so that the accounting income numbers match a predetermined target or expectations.

In the wake of continuing, highly publicized financial frauds and corporate failures over the last eight decades (especially the last two), the accounting profession has placed renewed emphasis on issues related to **earnings management and earnings quality**. The SECs of many nations and the public are demanding greater assurance about the quality of earnings. The Staff Accounting Bulletin (SAB) 101, *Revenue Recognition in Financial Statements*, which was issued in December 1999 in response to the Committee of Sponsoring Organizations of the Tread way Commission (COSO) report of 1992, illustrates the importance of earnings to the SEC.

## Earnings Management

Preceding the first (1992) COSO Internal Control – Integrated Framework, in the August 1990 *Management Accounting*, William J. Bruns, Jr., and Kenneth A. Merchant reported the results of their

survey of the readership of the *Harvard Business Review* (HBR). That survey described 13 earnings-management situations that the authors had directly or indirectly observed. The authors asked HBR

readers to rate their acceptability or otherwise of the situations. They characterized the results as "frightening" and observed the following:

- ? It seems that if a practice is not explicitly prohibited or is only a slight deviation from rules, it is an ethical practice regardless of who might be affected either by the practice or the information that flows from it.
- ? This means that anyone who uses information on short-term earnings is vulnerable to misinterpretation, manipulation, or deliberate deception.
- ? We have no doubt that short-term earnings are being managed in many, if not all, companies.
- ? Some of these earnings-management practices can be properly labeled as "immoral and unethical".

Earnings management reflects on-the-job ethical conflicts and risks of the professional accountants and accounting firms. There are four main ethical conflicts that confront leaders in business:

- Conflict of Interest - A leader achieves personal gain from a decision he/she makes).
- Loyalty versus truth - A leader must decide between loyalty to the company and truthfulness in business relationships.
- Honesty and integrity - A leader must decide if he/she will be honest or lie; if he/she will take responsibility for decisions and actions or blame someone else.
- Whistle blowing - Does the leader tell others (media or government authorities) about the unethical behavior of the company or institution?

Earnings Management is defined in various ways by different theoreticians in the field. These definitions include:

“... earnings management is the planning and control of the accounting and reporting system to meet the personal objectives of management.”

“... a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain.” (SCHIPPER, 1989: “COMMENTARY EARNINGS MANAGEMENT”, ACCOUNTING HORIZON).

“... earnings management occurs when managers use their judgments in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers.” (HEALY DAN WAHLEN, 1999: “A REVIEW OF THE EARNINGS MANAGEMENT”, ACCOUNTING HORIZON)

“... given that managers can choose accounting policies from a set of approved or generally accepted accounting principles (GAAP), it is natural to expect that they will choose policies so as to maximize their own utility and/or the market value of the firm. This is called earnings management.”

(SCOTT, 2012, “FINANCIAL ACCOUNTING THEORY”, SIXTH EDITION)

“... [the] misapplication of generally accepted accounting principles to actively manipulate earnings towards a predetermined target for purposes of creating an altered impression of business performance.”

“... earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of a company or influence contractual outcomes that depend on reported accounting numbers.

(A REVIEW OF THE EARNINGS MANAGEMENT LITERATURE AND ITS IMPLICATIONS FOR STANDARD SETTING', ACCOUNTING HORIZONS, DECEMBER 1999, PP. 365-383). ”

In other words, earnings or accounting income numbers are deliberately manipulated by management for the purpose of meeting the company's objectives, whatever they might be. In essence, earnings management is recognized as an attempt by management to influence or manipulate reported earnings by using specific accounting methods (or changing methods); recognizing one-time non-recurring items; deferring or accelerating expense or revenue transactions; or using other methods designed to influence short-term earnings. There are three main types of companies that are likely to adopt an earnings management policy. These companies are where executive compensation is tied to earnings; publicly traded

companies because they are under constant pressure to meet or beat analysts' earnings forecasts; and companies getting ready for major debt financing or for an IPO (Initial Public Offering).

Most earnings management techniques are often within the boundaries of Generally Accepted Accounting Principles (GAAP). Indeed, all it takes is a well-trained accountant who understands how changes in accounting judgments, accounting estimates, and accrual accounting can be used to upwardly or downwardly affect earnings. The following represents the wide spectrum of financial reporting.

	Accounting Choices	"Real" Cash Flow Choices
	<b>Within GAAP</b>	
"Conservative" Accounting	<ul style="list-style-type: none"> <li>Overly aggressive recognition of provisions or reserve</li> <li>Overvaluation of acquired in-process R&amp;D in purchase acquisition</li> <li>Overstatement of restructuring charges and asset write-offs</li> </ul>	<ul style="list-style-type: none"> <li>Delaying sales</li> <li>Accelerating R&amp;D or Advertising expenditures</li> </ul>
"Neutral" Earnings	Earnings that result from a neutral operation of the process	
"Aggressive" Accounting	<ul style="list-style-type: none"> <li>Understatement of the provision for bad debts</li> <li>Drawing down provisions or reserves in an overly aggressive manner</li> </ul>	<ul style="list-style-type: none"> <li>Accelerating sales</li> <li>Postponing R&amp;D or Advertising expenditures</li> </ul>
	<b>Violate GAAP</b>	
"Fraudulent" Accounting	<ul style="list-style-type: none"> <li>Recording sales before they are "realizable"</li> <li>Recording fictitious sales</li> <li>Backdating sales invoices</li> <li>Overstating inventory by recording fictitious inventory</li> </ul>	

Dechow &amp; Skinner, 2000

## Fraudulent Financial Reporting

Fraudulent financial reporting can have significant consequences for the organization and for public confidence in capital markets. Periodic high profile cases of fraudulent financial reporting raise concerns about the credibility of the financial reporting process and call into question the roles of auditors, regulators, and analysts in financial reporting. Due to sheer greed and conflicts of interest, the number, impact, and size of fraudulent financial reporting or financial statement frauds are increasing at an alarming rate. Some of the recent frauds include collusion between several people, as many as 20 to 30 in certain cases. This is clearly either a sign of or indication of pervasive, total moral decay in business and accounting. As a result, many

investors have lost confidence in the credibility of financial statements and corporate reports. Consequently, there is now more or heightened public and professional interest in or concern about financial statement fraud than ever before. Many accounting programmes in universities now have required courses on fraudulent financial reporting, risk management, and internal control.

Misleading or questionable financial reporting range from conservative to neutral, aggressive, and fraudulent. At the apex of earnings management is fraudulent financial reporting, which goes beyond criminality and morality. Fraudulent financial reporting is defined by some as:

“ ... the intentional, deliberate, misstatement or omission of material facts or accounting data, which is misleading and, when considered with all the information made available, would cause the reader to change or alter his or her judgment or decision - NATIONAL ASSOCIATION OF CERTIFIED FRAUD EXAMINERS, 1993. ”

Fraudulent financial reporting has been elevated to a symbol. There is a whole new level of uncertainty about profits or accounting income numbers, about the integrity of the accounting profession and of “Wall Street” or “High Street” or “Main Street” and their ever-greedy analysts and lawyers. Investors are now left painfully wondering whether they could trust corporate boards, corporations, auditors, or stock analysts.

The constraints to credible financial reporting and quality financial reports include weak or non-existent law enforcement mechanisms, abuse of shareholders' rights, lack of commitment on the part of boards of directors, lack of adherence to the regulatory framework, weak enforcement and monitoring systems, and lack of transparency, candor, and disclosure.

In accounting, many actions are classified as fraud or fraudulent. These include fraudulent financial statements and financial reporting, employee fraud, vendor fraud, customer fraud, investment scams, bankruptcy frauds, etc. The common element underlying the above schemes is deceit or trickery due to greed or unethical behaviour. The core dilemma is the management of conflicts of interest in agency relationships.

Fraudulent financial reporting often arises from conflicts of interest. It is inconceivable that all professionals in an organization simultaneously miss the red flags or signs of poor performance and imminent collapse as late as a quarter to the actual collapse. Professional competence does not often result in competent performance. Often, conflicting interests compromised independence of professionals such as accountants, credit raters, and analysts, lawyers, and consultants who become susceptible to management's undue influence. Accommodating interests of top management and the board often conflicts with a professional's duties to his or her clients. Some of these conflicts exist

within such professional engagements as accountants consulting and auditing the same client; investment banker's financial services and research analyst responsibilities, and consultants serving as management experts and as consultants.

In addition to the earlier celebrated cases like Equity Funding and Crazy Eddie, recent globally celebrated financial statement or financial reporting frauds include Enron, WorldCom, Adelphia, Global Crossing, Xerox, Qwest, Cendant, Lincoln Savings and Loans, ESM, Anicom, Waste Management, Sunbeam, etc. The list goes on and on. Some of the normal categories of these frauds include Current Executive Fraud-Related Problems; Misstating Financial Statements (Quest, Enron, Global Crossing, WorldCom, etc.); Executive Loans and Corporate Looting (John Rigas (Adelphia), Dennis Kozlowski (Tyco)); Insider Trading (Martha Stewart); IPO Favoritism (John Ebbers); CEO Retirement Perks (Delta, PepsiCo, AOL Time Warner, Ford, Fleet Boston Financial, IBM); Consulting Contracts and Use of Corporate Planes, etc.)

Many in the public as well as the accounting profession wonder about the many financial statement frauds all of a sudden in the early 2000s. Various rationalizations include the fact that good economy often masks many problems; moral decay in society; executive incentives tied to reported profits and share prices; investment analysts' expectations which reward for short-term behavior reflected in earnings and share prices; nature of accounting rules which allows unbridled judgement of the auditor and management; unethical and unprofessional behavior of auditing firms; greed by investment banks, commercial banks, and investors; failure of higher education in business to inculcate life-long ethical and moral uprightness into their graduates. With increasing stock prices, increasing profits, and increasing wealth for everyone, no one worried about potential problems. When stock



prices are tied to meeting earnings forecasts, the focus is normally on only short-term performance. Companies are heavily punished in the market for not meeting forecasts. Executives have been endowed with hundreds of millions of dollars' worth of stock options which far exceeds normal compensation that is not tied to stock price or accounting income numbers. Often, performance is based on accrual accounting earnings and stock price, but not cash flows. Fraudulent financial reporting may also be due to the long period of refusal of external auditors to accept responsibility for fraud detection despite the fact that the SEC, the courts, and the public expect them to detect fraud. The issue has often been if auditors are not the watchdogs, then who is. Many professional accountants have become greedy. The partners in auditing firms constantly audit and are exposed to executive compensation packages and see everyone else getting rich and not them. Audit has become a loss leader and receives very little serious attention, unlike tax, consultancy, or advisory services. It is easier to sell lucrative consulting services from the inside. The accounting firms all became largest

consulting firms in the U.S. very quickly. Andersen Consulting grew to compete with Accenture and in the process, a number of auditors got too close to their clients for comfort.

Professional, very shameful, and embarrassing reason that fosters fraudulent financial reporting is the lack of critical and introspective thinking among accountants and investors. The following table represents revenue and earnings of Enron during the four years preceding the date of its total collapse. There is no way that an astute professional accountant would not question the astronomical increases in reported revenue and earnings during that period. Within four years, revenue increased five-fold (\$20 billion to \$100 billion) and earnings increased nearly ten times (\$105 million to \$979 million). With sound professional skepticism, this trend is too obvious and improbable for any competent professional accountant to miss and not question.

**Table 1: Enron's Revenues and Income**

YEAR	REVENUE [BILLION \$]	INCOME (REPORTED)- MILLION \$	INCOME (RESTATED)*MILLION \$
1997	20	105	9
1998	31	703	590
1999	40	893	643
2000	100	979	827
TOTAL	191B	2,680M	2,069M

\* Without LJM1, LJM2, Chewco, and the "Four Raptors" partnerships. There were hundreds of partnerships - mainly used to hide debt.

SOURCE: AICPA 2004, 2005

It is extremely very embarrassing that there are many unsophisticated techniques used to effect financial statement frauds by even low levels of staff. These include:

- Revenue and Accounts Receivable Frauds (Global Crossing, Crazy Eddie, Quest, ZZZZ Best)
- Inventory and Cost of Goods Sold Frauds (PharMor)
- Understating Liability and Expense Frauds (Enron)
- Overstating Asset Frauds (WorldCom)
- Overall Misrepresentation (Bre-X Minerals)

By far, the most common accounts manipulated when perpetrating financial statement fraud are revenues and/or accounts receivable. The second most common way to commit financial statement fraud is to overstate inventory. The third method involve understating liabilities. Operationally or practically, the mediums used include not recording accounts payable, unearned revenue, accrued liabilities, warranty or service liabilities, loans,

contingent liabilities, or simply keeping liabilities off the books. Fraudulent financial statements also disclose asset overstatement as a common technique. These involve overstating current assets (e.g. receivables or marketable securities), pension assets, capitalized interest, assets acquired through mergers and acquisitions, inventories, and receivables.

**Table 2: Perpetrators of Fraud**

TYPES AND FREQUENCIES IF INDIVIDUALS NAMED AS PERPETRATORS OF FINANCIAL REPORTING FRAUD		
TITLE OF PERPETRATOR	FREQUENCY NAMED %	
	2007 STUDY	1999 STUDY
CEO	72	72
CFO	65	43
CEO AND/OR CFO	89	83
CONTROLLER	34	21
COO	10	7
OTHER VPs	38	18
LOWER LEVEL STAFF	23	10
NO TITLES GIVEN	16	15
OTHER TITLES	27	12

*Source: Disclosed by the SEC in an Accounting and Auditing Enforcement Release (AAER) issued during the period 1998-2007, and 1987-1997*

Table 2 above disclosed the identity of the perpetrators of the frauds handled by the SEC as covered by the studies. It also shows the percentage of the times that the individuals were identified as being part of the fraud. The COE and the CFO are clearly the top perpetrators of fraud in their organizations. The two combined account for 89% and 83% of the frauds in the two studies. The rest of the perpetrators account for far less percentage than the CEO and the CFO. The board seems to be subsumed or irrelevant in these fraud cases.

## Disclosure Fraud

Other than fraud in the numbers reported in the financial statements, fraud also occurs with regard to financial statement disclosures in the notes to the financial statements. The three main disclosure frauds are (1) overall misrepresentations about the nature of the company or its products, usually made through news reports, interviews, annual reports, and elsewhere; (2) misrepresentations in the management discussions and other non-financial

statement sections of annual reports, filings with the SEC and other regulatory agencies; and (3) misrepresentations in the footnotes to the financial statements.

It is obvious that fraudulent financial reporting comes in different forms of complexity. Compared to the other financial statement frauds, Enron was very complicated while WorldCom was a \$7 billion

fraud that involved simply capitalizing expenses (line costs) that should have been expensed. This is very simple and straight forward. Enron involved many complex transactions and accounting issues. In discussing the Enron Case, Senator John Dingell

of the USA remarked: "... What we are looking at here is an example of superbly complex financial reports. They did not have to lie. All they had to do was to obfuscate it with sheer complexity -although they probably lied too."

## Motivations for Earnings Management

The accounting literature is full of documented evidence regarding motivations for earnings management – in all of its various forms. These motivations or reasons for earnings management include: capital market expectations, contracting covenants, regulatory provisions, tax provisions, change in CEO, political expediency, and more.

**Capital Market Motivations:** The widespread use of accounting information by investors and financial analysts to help value stocks can create an incentive for managers to manipulate earnings in an attempt to influence stock price performance (including meeting analysts' expectation, or maximizing proceeds from initial share issues).

**Contracting Motivations:** Accounting data are used to help monitor and regulate the contracts between the firm and its many stakeholders (lending contracts or management compensation contracts)

**Regulatory Motivations:** The effects of two forms of

regulation that exist i.e. industry specific regulation and anti-trust regulation. Accounting standard setters have demonstrated an interest in earnings management to circumvent industry regulation (banking, utility industries). Standard setters may also be interested in earnings management for anti-trust purposes.

**Taxation Motivations:** Income taxation is perhaps the most obvious motivation for earnings management (firms use LIFO for tax purposes). However, taxation authorities tend to impose their own accounting rules for calculation of taxable income, thereby reducing firms' room to maneuver.

**Change of a CEO:** CEOs of poorly performing firms may manage their earnings (income-maximize) to prevent or postpone being fired. Alternatively, CEOs may 'take a big bath' so as to increase the probability of positive or better earnings in the future. This motivation also applies to new CEOs, especially if large write-offs can be blamed on the previous CEO.

## Earnings Management Techniques

In his remarks entitled "The Numbers Game" made on 28 September 1998 at the New York University Center for Law and Business, the then SEC Chairman Arthur Levitt described five techniques of "accounting hocus-pocus" that summarized the most glaring abuses of the flexibility inherent to accrual accounting as big bath charges; creative acquisition accounting; cookie jar reserves; materiality; and revenue recognition. The diversity of companies and motivations for earning management means that there are many techniques or methods of effecting earnings management. The most common of earnings management techniques involves simply using or taking advantage of the

flexibility that exists in GAAP (include changing depreciation method, changing the useful lives and the estimates of salvage value for depreciation, determining the allowance for uncollectible accounts receivable, estimating the stage of completion of percentage-of-completion contract, different inventory valuation methods, etc.). According to Giroux (2004), earnings management techniques include: aggressive revenue recognition (recognizing revenues early in the operating cycle); capitalizing rather than expensing of operating cost; allocating cost of assets over a longer period (increasing the estimated useful lives of fixed assets).

## INCOME SMOOTHING

In assessing the health of a company, lenders and investors alike almost always look at the quality of its earnings as a first step. However, it is nearly impossible for a company to consistently report stellar or significantly increasing periodic earnings over a long period of time. This is because a company's business activities can be affected by changes in economic cycles, seasonal changes, new legislation, and other extraordinary events. In order to "normalize" the continuous succession of ebbs and flows in financial results that is characteristic of any business or company, managers, more often than not, resort to earnings management in the form of "income smoothing".

Income smoothing is a practice under which, instead of reporting the actual good and bad earnings, an entity manipulates the earnings to report relatively stable or 'smooth' earnings by resorting to various mechanisms such as: accelerating revenues and/or delaying expenses; inappropriate accruals and estimates of liabilities; excessive provisions and generous reserve accounting; "cookie jar - income smoothing", because earnings are understated in good years and overstated in bad years; slush fund where earnings from one time frame are hidden just in case the profit from next time frame is not big enough for management to make their bonuses; material and intentional misrepresentation of results; may or may not follow rules of standard accounting practices but deviate from the spirit of rule.

The magnitude of the above constitutes the root causes of many accounting scandals over the years, especially in the developed economies. Some of these cases are very difficult to detect. In many cases, they can be very sophisticated and covert. At the heart of these are inappropriate uses of accounting practices in the form of aggressive accounting practice of inappropriately misreporting accounting income numbers or income statement amounts for the purpose of pleasing investors and inflating stock prices. In other cases, managers choose accounting policies so as to maximize their own utility and/or the market value of the firm.

In some cases, participants justify these questionable practices under the following:

- Share price effects whereby beating the analysts' estimates help to keep share price increasing;
- Borrowing cost effects where showing good results will lower costs of borrowing
- Bonus plan effects whereby management get higher bonuses for reported superior performance
- Political cost effects of keeping earnings within what is politically considered an acceptable range to make sure the firms (especially multinationals, monopolists, or oligopolies) do not attract undue citizens' wrath, strict regulatory oversight, or attention of tax scrutiny.
- Allowable accounting principle choices, estimates, and unquestioned professional judgments or extreme flexibility of accounting principles choices.

Even though there may be valid reasons for allowing accounting principle choices (entity size, economic environment, life-cycle of entity, industry peculiarities, etc.), the abuse defeats the purpose and creates problems for reliable and credible financial reporting.

One major objective of the Conceptual Framework (IASB) is to assist investors and creditors in making investing and lending decisions. The Conceptual Framework refers not only to the reliability (or truthfulness) of financial statements, but also to the relevance and predictive value of information presented in financial statements. Issues of earnings quality take into consideration those two characteristics of earnings i.e. earnings quality as a measure of the ability of reported earnings to reflect the firm's true earnings and to help predict future earnings.

## RULE-BASED VERSUS PRINCIPLES-BASED ACCOUNTING

Accounting experts and professionals have been sharply divided for a long time now on the issue of fighting earnings management and manipulation of accounting income numbers. Most attribute the phenomenon to the rule-based foundation of accounting standard setting. They advocate for principles-based system instead. The current trend seems to be going in the direction of principles-based. This, by itself, is not a panacea. Misinterpretation of the principles and wrong judgements remain uncertainties to addressing the issues of earnings management and fraudulent financial reporting.

Principle-based accounting involves a situation wherein concise statement of substantive accounting principle are based on the accounting objective being incorporated as an integral part of the standard and where few, if any, exceptions or internal inconsistencies are included in the standard. On the other hand, rule-based accounting standards imply specific details in an attempt to address as many foreseeable and potential contingencies as possible in the standard setting process. Under the rule-based system, standards become much longer, wieldy, and more complex. It provides for arbitrary criteria for accounting treatments that allow companies to structure their transactions to circumvent unfavourable financial reporting or to project more positive outcomes than reality reflects. Another widely used means for effecting fraudulent financial reporting and transactions involve special purpose entities (SPEs). These are entities (corporate or otherwise) created to fulfill narrow, specific, or temporary objectives, primarily to isolate financial risk, usually bankruptcy. Sometimes, they are used specifically to evade a specific financial reporting, taxation, or regulatory risk. SPEs are often used in complex financial engineering schemes which have, as their main goal, the avoidance of tax or the manipulation of financial statements. Possibly, the most famous example of a company using SPEs to achieve the latter goal is Enron.

The question often arises as to whether earnings management is good or bad. This issue is often addressed from conflicting multiple perspectives –

i.e. contracting, CEO, agency, abusive, and corporate governance. Under the contracting perspective, Scott, 2003, observed that under good earnings management point of view and under “efficient contracting”, it is desirable to give managers some ability to manage earnings in the face of incomplete and rigid contracts (bonus, debt covenant, and political). Thus, we would expect some earnings management to persist for efficient contracting. In “a financial reporting context, earnings management can be a device to convey insider information to the market, enabling share price to better reflect the firm's future prospects. On the other hand, for bad earnings management from contracting perspective, this can result from opportunistic manager behavior. There is the tendency of managers to use earnings management to maximize their bonuses (Healy, 1985) and for covering up debt covenant violations (Dechow, 1996).

In a financial reporting context, earnings management can be used to increase reported net income in the short run to facilitate raising new share capital. From a CEO perspective, Mulford & Comiskey (2002) observed that good earnings management provides reasonable and proper practices that are part of operating a well-managed business and delivering value to shareholders. On the other hand, bad earnings management, that is, improper earnings management, is intervening to hide real operating performance by creating artificial accounting entries or stretching estimates beyond a point of reasonableness.

From the abusive earnings management perspective, Levitt, 1998, states that: “... abuses, such as earnings management, occur when people exploit flexibility in accounting. Trickery is employed to obscure actual financial volatility. This, in turn, masks the true consequences of management's decisions.

With regard to earnings management environment, we assume good corporate governance. The governance structure includes the board of directors, the functions of the committees, the interaction of the board with top management,

internal controls, enterprise-wide risk management, and sound auditing. The external auditors must have the ability to discover significant discrepancies with GAAP (competence) and willingness to report the discrepancies to the audit committee or other relevant bodies

(independence). Under the accounting regulation and standard setting, the Securities and Exchange Commission (SEC) is responsible for regulating the entire equity capital market structure in nearly all nations.

## THE ENRON-ERA EPISODES

A number of celebrated international fraudulent financial reporting cases in the late 1990s and early 2000s has brought to the fore the issue of controlling them through proper, integrated internal control and enterprise-wide risk management frameworks. The need for properly regulating the financial reporting by publicly traded companies has also assumed heightened importance since the Sarbanes-Oxley Act of 2002 and the equally important Sarbanes-Oxley-like legislations of most developed economies. As a consequence, the COSO internal control – integrated framework of 1992 was significantly revised in 2013 to reflect current business environments or contexts and practices.

It is disturbing to note that the accounting profession and professionals do not seem to learn from even celebrated failed accounting and auditing practices. In this respect, the accounting firms and

the educational institutions have failed the students of the accounting profession. It is imperative that our accounting educational systems produce and develop morally and ethically upright future practitioners. It is indeed disturbing that only a handful of accounting educators and students are conversant with these celebrated fraudulent financial reporting episodes and the related laws.

The next volume of this journal would focus on the issues of COSO Internal Control – Integrated Framework, Enterprise-Wide Risk Management Framework, and Sarbanes-Oxley equivalent laws within the context of sanitizing financial reporting (indeed reporting in general – under the 2013 version).

## REFERENCES

- Amar, A. B., & Abaoub, E. (2010). Earnings Management Thresholds: The Case in Tunisia, *Asian Academy of Management Journal of Accounting and Finance*, 6(2): 35-56.
- Badertscher, B. (2011). Overvaluation and the Choice of Alternative Earnings Management Mechanisms, Vol. 86: 1491: American Accounting Association.
- Baker, T., Collins, D., & Reitenga, A. (2003). Stock Option Compensation and Earnings Management Incentives. *Journal of Accounting, Auditing & Finance*, 18(4): 557-582.
- Balsam, S. (1998). Discretionary Accounting Choices and CEO Compensation. *Contemporary Accounting Research*, 15(3): 229-252.
- Bartov, E., & Mohanram, P. (2004). Private Information, Earnings Manipulations, and Executive Stock Option Exercises, *Accounting Review*, 79(4): 889-920.
- Beneish, M. D. (1997). Detecting GAAP violation: implications for assessing earnings management among firms with extreme financial performance. *Journal of Accounting and Public Policy*, 16(3): 271-309.
- Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24 (1): 99-126.
- Burgstahler, D., & Eames, M. (2006). Management of Earnings and Analysts' Forecasts to

- Achieve Zero and Small Positive Earnings Surprises, *Journal of Business Finance & Accounting*, 33(5-6): 633-652.
- Byrnes, N., Melcher, R., & Sparks, D. (1998). Earnings hocus pocus, *Business Week*, 134, October 5.
- Fields, D., Lys, Z., & Vincent, L. (2001). Empirical Research on Accounting Choice, *Journal of Accounting and Economics*, 31: 255-307.
- Dechow, P. M., Richardson, S. A., & Tuna, A. I. (2000). Are Benchmark Beaters Doing Anything Wrong? SSRN eLibrary.
- Dechow, P. M., & Skinner, D. J. (2000). Earnings Management: Reconciling the Views of Accounting Academics, Practitioners, and Regulators, *Accounting Horizons*: 14(2): 335.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC, *Contemporary Accounting Research*, 13(1): 1-36.
- Erickson, M., Hanlon, M. & Maydew, E. (2006). Is There a Link Between Executive Compensation and Accounting Fraud? *Journal of Accounting Research*, 44: 113-143.
- Giroux, Gary (2004). *Detecting Earnings Management*. New York: John Wiley & Sons.
- Healy, P. M. (1985). The Effect of Bonus Schemes on Accounting Decisions, *Journal of Accounting and Economics*, 7: 85-107.
- Healy, P. M., & Wahlen, J. M. (1999). A Review of The Earnings Management Literature and its Implications For Standard Setting, *Accounting Horizons*: 13(4): 365.
- Iatridis, G., & Kadorinis, G. (2009). Earnings Management and Firm Financial Motives: A Financial Investigation of UK Listed Firms, *International Review of Financial Analysis*, 18(4): 164-173.
- International Standards on Auditing (UK and Ireland) 240 - The Auditor's Responsibility to Consider Fraud in an Audit of Financial Statements: <http://www.frc.org.uk/Our-Work/Publications/APB/240-The-auditor-s-responsibility-to-consider-fraud.aspx> (27.12.2012)
- Jones, M. (2011). *Creative Accounting, Fraud and International Accounting Scandals*: Wiley.
- Earnings Management vs Financial Reporting Fraud – Key Features for Distinguishing, 47.
- Kassem, R. (2012). Earnings Management and Financial Reporting Fraud: Can External Auditors Spot the Difference? *American Journal of Business and Management*, 1: 30-33.
- L. Perols, J., & Lougee, B. A. (2011). The Relation Between Earnings Management and Financial Statement Fraud Advances in Accounting Incorporating Advances in International Accounting 27: 39-53.
- Lee, T. A., Ingram, R. W., & Howard, T. P. (1999). The Difference between Earnings and Operating Cash Flow as an Indicator of Financial Reporting Fraud. *Contemporary Accounting Research*, 16(4): 749-786.
- Mahdi, S., & Ali, M. (2009). Firm Size, Audit Regulation and Fraud Detection: Empirical Evidence from Iran, *Management*, 4(1): 5-19.
- Marinakakis, P. (2011). An Investigation of Earnings Management and Earnings Manipulation in The UK. PhD thesis, University of Nottingham.
- Mark S. Beasley, Joseph V. Carcello, Dana R. Hermanson: *Fraudulent Financial Reporting: 1987-1997, An Analysis of U.S. Public Companies* (1999), Research Commissioned by the Committee of Sponsoring Organizations of the Treadway Commission.
- Mark S. Beasley, Joseph V. Carcello, Dana R. Hermanson, and Terry L. Neal: *Fraudulent Financial Reporting: 1998-2007, An Analysis of U.S. Public Companies* (2010), Research Commissioned by the Committee of Sponsoring Organizations of the Treadway Commission.
- Mulford, C. W., & Comiskey, E. E. (2002). *The Financial Numbers Game, Detecting Creative Accounting Practices*. New York : John Wiley & Sons, Inc.
- Perols, J. L., & Lougee, B. A. (2011). The Relation Between Earnings Management and Financial Statement Fraud, *Advances in Accounting*, 27(1): 39-53.
- Rocco, R. V. (1998). Fraud Auditing, *Managerial Auditing Journal*, 13(1): 4-71.
- Roychowdhury, S. (2006). Earnings Management Through Real Activities Manipulation, *Journal of Accounting and Economics*, 42(3): 335-370.
- Sarbanes-Oxley Act, 2002

- Schipper, K. (1989). Earnings Management, *Accounting Horizons*; 3(4): 91.
- William R. Scott *Financial Accounting Theory* (7th Edition) 7th Edition, Pearson; (February 20, 2015)
- Shuto, A. (2007). Executive Compensation and Earnings Management: Empirical Evidence from Japan, *Journal of International Accounting, Auditing and Taxation*, 16(1): 1-26.
- Stlowy, H., & Breton, G. (2004). Accounts Manipulation: A Literature Review and Proposed Conceptual Framework. *Review of Accounting & Finance*; 3(1): 5.
- Sun, L., & Rath, S. (2008). Fundamental Determinants, Opportunistic Behavior and Signaling Mechanism: An Integration of Earnings Management Perspectives. *International Review of Business Research Papers*, 4(4): 406-420.
- Wells, J. T. (2009). Fraud: The Occupational Hazards, *Accountancy Age*.  
<http://www.accountancyage.com/aa/feature/1748964/fraud-occupational-hazards>.
- Yaping, N. (2005). The Theoretical Framework of Earnings Management LA Structure théorique du management des revenus, *Canadian Social Science*, 1(3): 32-38.
- Zang, A. Y. (2011). Evidence on the Trade-Off between Real Activities Manipulation and Accrual-Based Earnings Management, *The Accounting Review*, 87(2): 675-703.
- Report of the National Commission on Fraudulent Financial Reporting, 1987.

ABOUT THE AUTHOR

---

**Prof. John B. K. Aheto**

He is the Chairman of the PentVars Business Journal Editorial Board. He is also a visiting Professor at the Pentecost University College Graduate School.

He could be reached on 024 388 2445 and email: [koblaheto1231@yahoo.com](mailto:koblaheto1231@yahoo.com).



# ECONOMIC & FINANCIAL REPORT

## Ghana: Economic Strategic Report – Q1 2016

### Highlights

#### Short Term Outlook

- Confidence in the Ghanaian economy appears to have improved now that the authorities are engaged with the IMF on an economic reform and stabilisation programme.
- However, growing external headwinds, in particular, tightening global financing conditions and slower growth in China will have negative implications for the country's capital and currency markets through Q1 16.
- Inflation is likely to remain in high double digits in Q1 and into Q2 16; the December acceleration in the producer price inflation to 10.5% points to further rise in inflation in Q1.
- However, adverse effects of recent petroleum price adjustments are likely to fade away by end-Q2, helping to ease inflation (albeit remaining high).
- While this increases the scope for an interest rate cut, we do not envisage this to happen in the next two months.
- The Monetary Policy Rate will likely remain elevated at around 26% to early Q2 16 due to high inflation expectations and exchange rate concerns.
- Although ongoing reforms have helped to slow the rate of depreciation of the GHS, we expect the currency to hover around GHS3.97-4.10:USD1 over the next two months as progress is made with the IMF advised reforms.
- However, GHS pressures will remain acute due to robust import demand and high, albeit falling, GHS liquidity.
- T-bill yields could remain around 24-25% as investor uncertainty over reforms holds prices down.

#### Key Risks, Triggers & Pressure Points

- A further fall in oil, cocoa and gold prices would add pressure to FX reserves, weakening the GHS outlook.
- Poor progress with reforms will undermine stabilisation efforts, raising inflation and GHS concerns.
- Further hikes in US interest rates could increase capital outflows, raising exchange rate risk.
- Extended eurozone depression, slowing activity in China, and higher oil prices all pose potential challenges.

## 1 Economic and Market Review

Despite growing headwinds, the short-term economic outlook for Ghana appears to be improving; this is reflected in the IMF's press release posted on 13 January 2016 regarding the successful second review of economic and financial progress supported by the USD918 mn Extended Credit Facility (ECF) approved on 3 April.

- In early January 2016, the IMF completed the second review of Ghana's economic performance, enabling a further disbursement of US\$115 mn, which brings total disbursement under the ECF to US\$ 343.7 mn.
- The IMF noted that implementation of the programme has been broadly satisfactory, particularly the government's fiscal consolidation efforts, which are on track.

Table 1: Key Economic and Financial Indicators

	Feb-15	Nov-15	Dec-15	Jan-16	Feb-16f
Oil production (000 bpd)	104	108	108	105	105
Brent oil price (USD/b)	58.9	45.8	38.9	32.6	32.8
Gold price (USD/oz)	1,227	1,085	1,071	1,096	1,150
Cocoa price (USD/tonne)	2,922	3,306	3,289	2,924	2,810
Foreign reserves (USD bn)	4.67	6.03	5.88	5.83	5.80
Import cover (months)	3.1	3.0	3.0	3.1	3.1
USD1:GHS (avg, end-period)	3.515	3.813	3.805	3.953	3.985
Inflation (%)	16.5	17.6	17.7	19.0	19.2
Monetary Policy Rate (%)	21.0	26.0	26.0	26.0	26.0
AIBOR (overnight, %)	23.0	25.2	25.3	25.3	25.4
T-bill (91-day, %)	25.8	23.7	22.9	22.8	22.6
2 Year note (%)	23.0	24.0	23.3	23.0	24.1

e = estimate

Source: Bank of Ghana, IMF, Bloomberg, Ecobank Research.

While medium-term prospects are good, supported by rising energy production, the short-term outlook remains weak although it is improving now that the authorities are engaged with the IMF on an economic reform and stabilisation programme.

- Real growth is estimated to have slowed to around 3.8% in 2015, down from 4.0% 2014 and although real GDP is likely to remain in the positive trajectory in 2016 (supported by ongoing implementation of reforms under the IMF-supported USD918mn Extended Credit

Facility), we expect the business environment to remain challenging.

- o Slower growth registered in 2015 was owing partly to sluggish activity in the mining and quarrying sector, specifically gold-mining and crude oil sub-sectors, which experienced major difficulties during the year as a result of the commodity price slump.
- o Power shortages and GHS weakening (albeit at a slower pace than previous year) were also major constraints to economic activity during the year.

- o Agriculture (25% of GDP) continued to perform well, supported by strong activity in forestry and livestock. However, the agricultural sector continued to be undermined by weaker cocoa output from the start of the 2014/15 season (Oct-Sep) – see below.
  - o Services (52% of GDP) also expanded, boosted by strong growth in communications and retail and other trade services. However, high interest rates and GHS weakening undermined bank activity, and power shortages undermined prospect for hotel and restaurants.
  - Gold production weakened in 2015 as large-scale and artisanal miners cut output to reduce costs amid weakening gold prices (Table 1). In Q4 2015, gold receipts contracted 28% year on year (y/y), marking its fifth consecutive y/y contraction since Q4 2014 underlining major difficulties in the gold sector, in particular, low gold prices, high operating costs and inadequate power supply.
    - o Although gold prices have rebounded somewhat above the USD1,200 per ounce (since mid-February 2016 - amid growing headwinds in the global economy and concern over central banks' ability to stimulate their economies, mainly the EU, Japan and China), output in 2016 is likely to fall due to ongoing challenges alluded to above.
  - Cocoa output in 2015/16 is on track to recover from the precipitous slump in outturn in the 2014/15 season, when output fell by 24% to around 700,000 tonnes. However, the recovery is likely to be modest as disruptions in the weather affect the quality of mid-crop beans this season.
  - Oil production remains below target due to problems preventing full output of 120,000b/day being reached.
  - As of mid-February Brent oil prices had increased to USD33/b – up USD5/b from its recent low reached in late January. While this should go some way towards boosting oil exports, Ghana remains a net-oil importer, which suggests that higher oil prices will have a negative impact on the external account, adding pressure to the GHS.
- The GHS continued to weaken up to early February, down 3.6% YTD amid increased USD demand. However, this compares with a depreciation of 5.1% over the same period of 2015.
- o Much of the improvement over previous year is owing to improved market confidence following IMF intervention in April 2015. This has been driven by increased availability of USD by the Bank of Ghana; the USD1.8bn Cocobod syndicated loan in September, the USD1bn Eurobond issuance in October and IMF disbursement. The Bank of Ghana has also tightened its policy stance to support the GHS.
  - o Low oil prices (which helped to reduce import costs), and the government's effort to reduce spending also helped to support the GHS; the budget account recorded a cash deficit equal to 5.6% of GDP against a programme target of 6.8% of GDP in the first 11 months of 2015.
  - Interbank exchange rate pressures have eased somewhat following the start of IMF advised reforms in early April, but remain high.
  - Annual inflation accelerated 19% y/y in January driven by rising food and non-food prices, GHS weakening pushing up prices of imported goods, and sustained high fiscal spending ahead of the general election this year.
  - Although falling generally, short term yields have remained elevated around 22-24% due to the effect of the 400bp rise in the Monetary Policy Rate (MPR) between August and November 2015, accelerating inflation and rising inflation expectations, and GHS weakening.

**Table 2: Performance of Key Indicators**

Indicator	Strong	Adequate	Weak
Oil price (Brent, USD/b)	>100	99 - 80	79 - 60
Oil production (000 b/d)	>100	99 - 90	89 - 80
Gold price (USD/oz)	>1,200	>1,000	>800
Cocoa price (USD/tonne)	>2,600	>2,400	>2,200
AIBOR (overnight %)	<10	11 - 15	16 - 20
T-bill rate (91 day %)	<12	12 - 14	15 - 18
USD1:GHS (mom % change, bp)	<20	20 - 35	35 - 50
FX reserves (months of imports)	>5.0	4.5 - 3.5	3.5 - 2.5

## 2 Short Term Outlook

- Economic activity in the remainder of Q1 will continue to be supported by the services and industrial sectors, specifically, communications, utilities and construction sub-sectors. Despite this, the business environment will remain challenging as weak oil and gold prices undermine prospects for the sectors; this is in addition to energy shortages (albeit improving), and tight market policies.
- Inflation is likely to remain elevated at around 16-19% through Q1 as second-round effects from petroleum price adjustments that took place in early January and exchange rate uncertainties continue to feed into local prices; with producer price inflation remaining high (10.5% y/y in December), this suggests that there are still significant upside risks to inflation. However, adverse effects of the petroleum price adjustments are likely to fade away by end-Q2, helping to ease inflation (although it will still remain high).
- At the same time, the government's effort to consolidate fiscal spending (under the IMF-supported reform programme), should translate into weaker demand that will ease price pressures.
  - This should help slow inflation, allowing for an interest rate cut by end-Q2.
- Nonetheless, the Monetary Policy Rate (MPR) will likely remain elevated at +/-26% to end Q1 due to high inflation expectations and BoG concerns over the exchange rate.
- The exchange rate is likely to hover between GHS3.97-4.10:USD1 over the next two months as long as progress is made with the IMF advised reforms.
- However, GHS pressures will remain acute due to robust import demand, lower than expected oil revenues, and falling gold receipts amid an environment of high, albeit falling, GHS liquidity.
  - Likelihood of further GHS weakening is high due to import dependency, high government spending, impact of fiscal and current account deficits, high banking sector liquidity, structural imbalance between USD supply and demand, and strengthening USD.
  - IMF reforms will also aim for a sustained moderate GHS weakening to

Concern	Alarm
59 - 40	>40
79 - 70	>70
>600	<600
>2,000	<2,000
21 - 25	>25
19 - 23	>23
50 - 75	<75
2.5 - 2.0	>2.0

Dec	Jan	Feb
38.9	32.6	32.8
108	105	105
1,071	1,096	1,150
3,289	2,924	2,810
25.3	25.3	25.4
22.9	23.8	22.6
2	-37	-8
3.0	3.1	3.1

maintain export sector competitiveness.

- Short term T-bill yields will remain elevated but the near 26% reached in January and September 2015 appears the peak as investor confidence improves following the implementation of the IMF advised reform programme.
- Bond yields are also likely to remain high through Q1 16 but could also start to fall sharply assuming there is significant progress

seen with the reform programme and if there is a cut to the MPR.

- What is certain is that the large fiscal deficit financing requirement, although falling, will require a continued tight monetary policy. Tight monetary policy should also help offset the impact of any further hike in US interest rates (which will draw investors into US Treasuries).

### 3 Key Risks to the Outlook and Triggers/Pressure Points

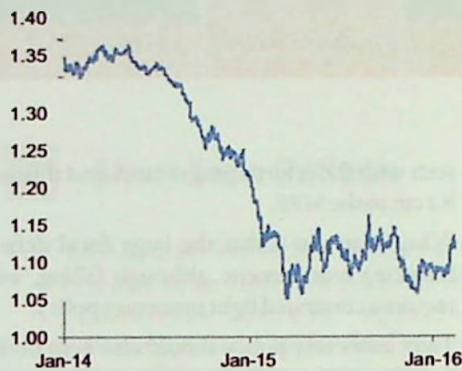
- A further fall in gold and oil prices (31% and 29% respectively of total export revenues) would add pressure to FX reserves (Table 2), weakening the GHS outlook.
- Poor progress with reforms will undermine stabilisation efforts, raising inflation and GHS concerns.
- If there is only limited progress made with implementing reforms/achieving results, the MPR would need to rise in order to counter inflation-inducing high government spending.
  - High government spending would raise M2 supply growth above target.
  - Rise in MPR would help moderate M2 supply growth but would push up the short end of the yield curve.
  - MPR rise would further crowd out private sector, depressing growth, leading to lower tax receipts.
- Domestic-driven exchange rate risk (linked to M2 supply growth) could be compounded by further rise in US interest rates.

- o Weaker-than-expected US economic data and China-induced market turmoil over the past couple of weeks have raised caution about the recovery. As a result, the Federal Reserve now appears less hawkish about raising rates in 2016; financial markets are pricing in no rate rise until 2017, against the Federal Reserve's forward guidance which envisages four rate hikes in 2016. However, given increasing headwinds, the likelihood of this happening is very low. The Federal Reserve Bank has not

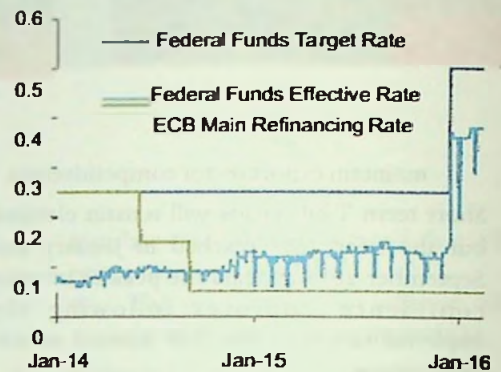
ruled out a rate hike this year, and continued strength in the labour market (unemployment fell to 4.9% in January 2016, down from 5.7% a year ago), points to at least one rate hike during the year. This would lead to increased capital flowing out of Ghana seeking less risky investments, and undermine the GHS.

- o A further rise in US interest rates would lead to a strengthening of the US dollar, which in turn will result in a weakening in global commodity prices and a depreciation of the GHS.

USD/EUR Exchange Rate



Federal Reserve and ECB Policy Rates (%)



- Extended eurozone depression, slowing activity in China, and higher oil prices all pose potential challenges.
  - o In the eurozone, many countries are still dealing with large fiscal deficits, high debt stocks and widespread unemployment. With investors expecting future growth to be weak, they have cut back on current investment and consumption, which is undermining policymakers' efforts to pull the region out of its weak growth cycle. The ECB has changed its view that deflation risks are manageable and is expected to expand its QE / asset buying programme to boost demand.
  - o China remains a major concern for Africa given that growth has continued to slow: the economy grew by 6.9% in 2015, compared with 7.3% in 2014, marking its

weakest growth in the past 25 years . Policy easing in China aims to stimulate domestic demand and boost growth. However, lower Chinese demand for Africa's resources is a worrying development, and the economic slowdown is likely to persist in 2016. A greater-than-expected slowdown in China's growth would undermine the outlook for many African economies that have come to rely on increased levels of capital / investment inflows along with greater levels of trade.

- o Specifically, another global commodity price shock, particularly a sharp and sustained rise in oil prices would widen the current account deficit, which in turn would need to be financed by FX reserve draw-downs, higher portfolio and FDI inflows and import demand suppression.

## 4 Economic and Financial Indicator Performance

Chart 1: Monetary Policy Rate & Inflation (%)

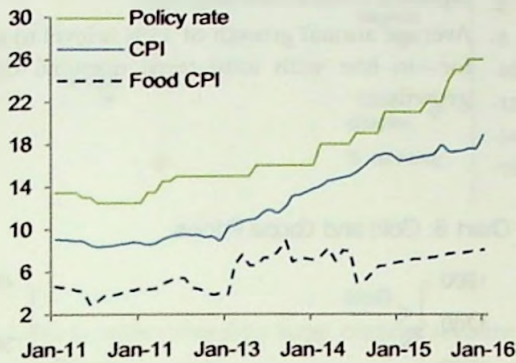
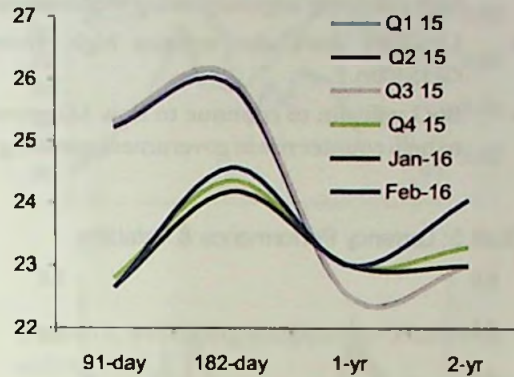


Chart 2: Sovereign Yield Curve (%)



- Headline inflation has accelerated from early 2013.
- Food inflation has risen reflecting impact of GHS depreciation on cost of imported goods & services.
- MPR will remain elevated to help stabilise the exchange rate and slow inflation.
- Yields on 182-day and 2-yr notes rose in Feb 16.
- Inversion around 182-day rate reflects expectations of policy loosening around 1-yr rate.
- If reforms make progress, expectation of moderate BoG policy loosening will help push yields down.

Chart 3: M2 Supply Growth

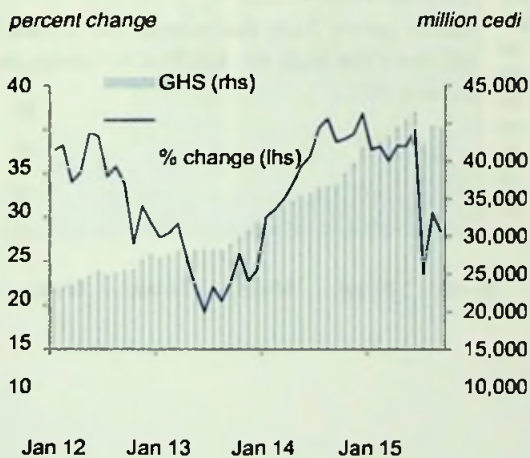
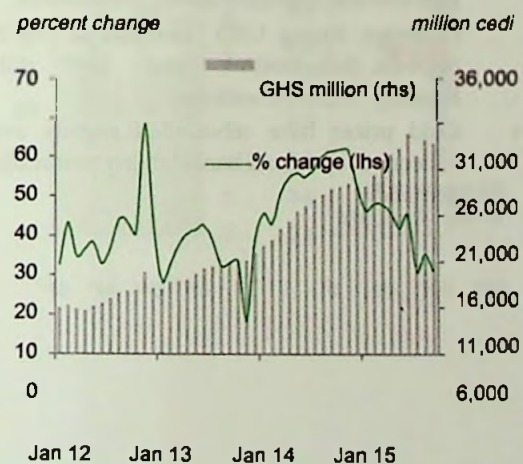
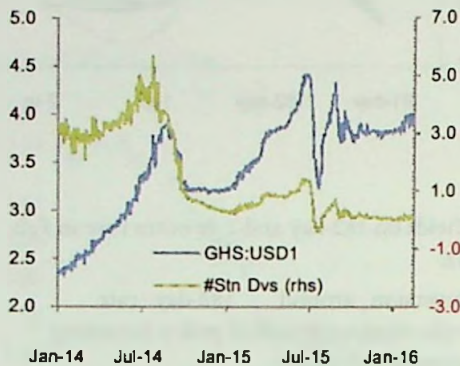


Chart 4: Private Sector Credit Growth



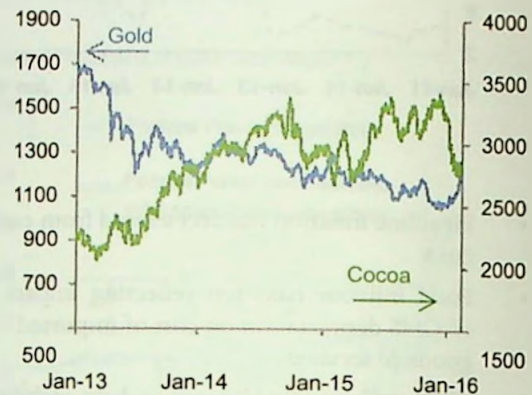
- M2 supply growth has slowed due to tight policy.
- But growth in credit to government remains high reflecting large borrowing requirement.
- Liquidity stock also remains high, around GHS40bn.
- BoG will aim to continue to slow M2 growth to help counter rise in government spending.
- Private sector credit growth has slowed sharply on the back of recent hikes in the MPR.
- In turn, this has tightened interbank liquidity, albeit remaining high.
- Average annual growth of 15% is level to aim for—in line with long term nominal GDP growth.

Chart 5: Currency Performance & Volatility



- The GHS has been broadly stable in recent months, compared with major weakening experienced since early 2015.
- Volatility has also reduced in line with recently attained GHS stability.
- GHS stability has been driven by prospects of IMF advised reforms resolving imbalances. However, strong USD demand to pay for imports, dollarization, and high GHS liquidity remain concerns.
- Gold prices have rebounded slightly amid concern over central banks' ability to stimulate demand.

Chart 6: Gold and Cocoa Prices



- However, gold prices remain below pre-crisis levels. This has seen Ghana's gold receipts drop 28% y/y in Q4 2015, weakening FX prospects.
- Allure of gold as a safe haven is undercut by end of QE III and possibility of further hikes in US interest rates.
- Cocoa prices have fluctuated but remain far off from the high of USD3,470/tonne seen in early 2011.



Chart 7: Current Account Vulnerability

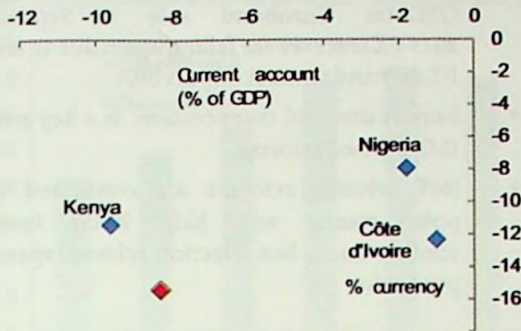
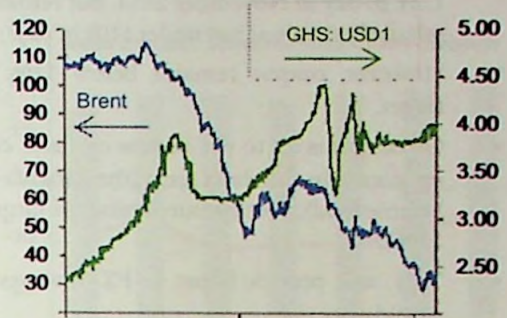


Chart 8: Key Commodity Price Performance



- GHS is undermined by large current account deficit.
- Deficit is driven by robust import demand despite recent addition of oil export revenues and modest portfolio capital inflows.
- Ghana's FX reserves are low compared to African peer group and "rule of thumb" benchmark.
- This increases the country's vulnerability to external shocks.
- Brent oil prices have dropped over 70% since

- mid-2014, weakening prospects for Ghana's oil sector.
- However, as a net oil importer, lower oil prices reduce pressure on the current account, thereby supporting the GHS.
- Given doubt that OPEC members would reach an agreement to freeze oil production, oil prices are likely to remain low for a while, supporting the external account.
- A sharp rise in oil prices would add pressure on the current account and undermine the GHS.

Chart 9: Oil Production and Prices

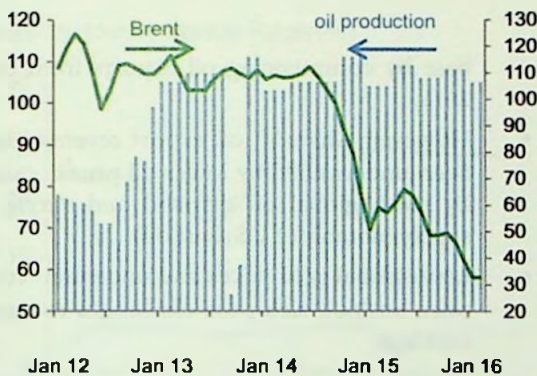
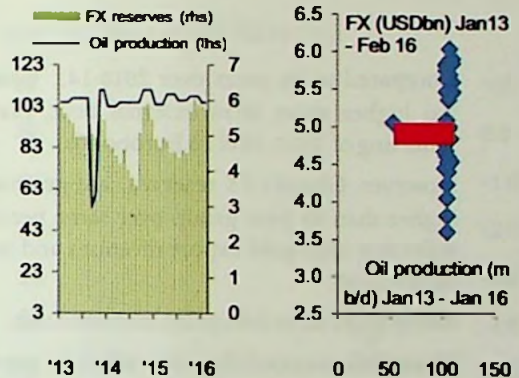


Chart 10a & 10b FX Reserves and Oil Production



- Oil production has dropped from its peak of 111k b/day in November 2014, but remaining relatively steady at just under 110k b/day.
- However, output remains below 120k b/d target.
- Oil output is set to rise as new oil fields come on stream in the short term (the Sankofa-Gye Nyame field), possibly surpassing the target of 120k b/d.
- This will provide boost to FX reserves (as would price rise).

- Despite steady oil production and successful USD1bn Eurobond sale in September 2015 FX reserves are falling again due to strong FX demand to meet import bills
- Import demand compression is a key part of IMF advised reforms.
- IMF advised reforms and continued tight policy stance will help build investor confidence, but election-related spending pose risks.

Chart 11: FX Reserve Coverage of Short Term Debt\*

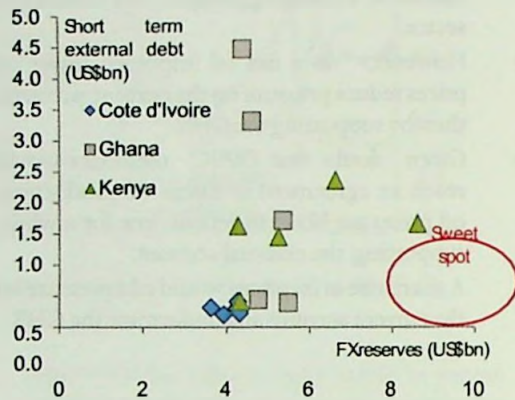
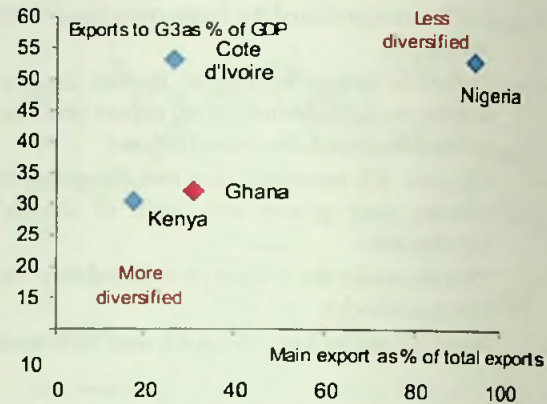


Chart 12: Developed Economy Demand Exposure\*



- Compared to its peers over 2010-14, Ghana has higher short term external debt, partly reflecting of 2017, 23 & 26 Eurobonds.
- However, Ghana's FX reserves are generally higher than its peer group over same period, reflecting high gold export revenues and new oil revenues.
- Rising short term debt poses increased risk.
- Ghana has successfully diversified its export

- base by commencing oil exports from early 2011.
- However, Ghana's oil export revenues have been undermined by lower oil prices caused by weak global oil demand and strong oil supply (notably of US shale oil).
- Low global gold prices and uncertain cocoa price outlook also pose challenges to export earnings.

\*2010-14e

\*2014e

Chart 13: Domestic & External Debt\* Stock(% GDP)

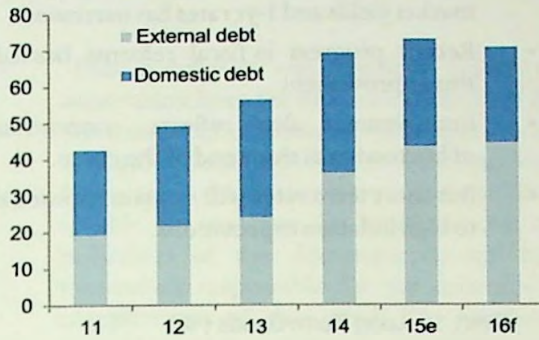


Chart 14: Fiscal Balance (% GDP)



\*Official creditors

- Ghana's domestic and external debt stock now exceeds pre-HIPC level, which is major concern.
- Majority of borrowing is now in foreign currency; rising US interest rates will strain ability to repay.
- Domestic debt stock is likely to fall in line with fiscal consolidation policy, but a significant fall is unlikely given that it is an election year; this will continue to crowd out the private sector.
- Fiscal strains persist although this eased somewhat since 2015 amid IMF-backed reforms.
- Fiscal strains reflect still high spending, narrow tax base, exemptions, and weak compliance.
- Sustained fiscal deficit partly explains why domestic debt stock remains high.
- Deficit financing requirement helps support high interest rate environment.

Chart 15: Money Market Rates (%)

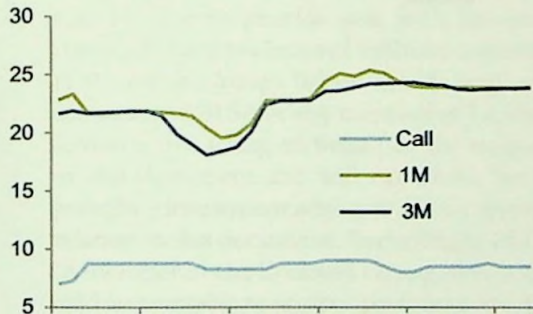
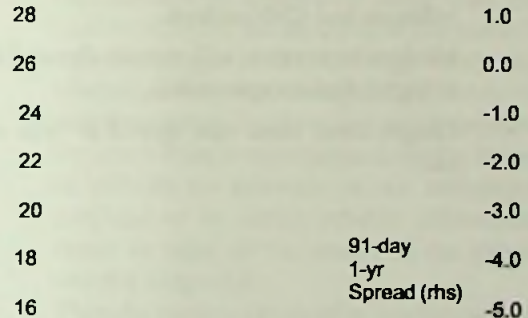


Chart 16: Treasury Bill Rates (%)



- Interbank money market rates (mainly 1M and 3M) have risen since January 2014 and remain high.
- High rates reflect tight monetary policy stance, high inflation expectations, and GHS weakness.
- Moreover, some banks' weak deposit base means they must raise funds from the interbank market.

- The spread between short end primary market yields and 1-yr rates has narrowed.
- Recent progress in fiscal reforms has led to this improvement.
- Improvement also reflects concentration of borrowing at short end of the curve.
- But short term rates will remain elevated due to high inflation expectations.

Chart 17: Medium Term Notes (%)

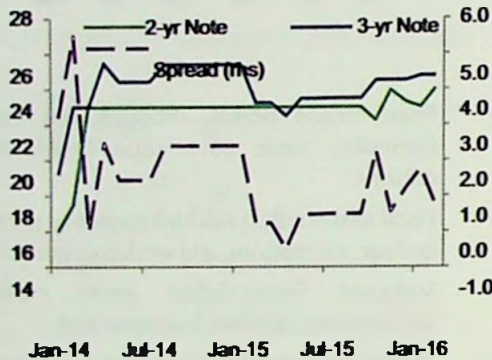
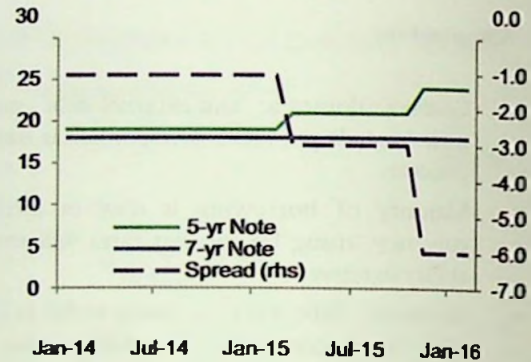


Chart 18: Long Term Bonds (%)



- Yields on the benchmark 2-yr Notes range between 23-24%.
- The 3-yr Notes have risen since May 2015, hovering around 24.5-24.8%.  
Such high premiums reflect foreign investor influence amid concern over inflation and GHS outlook.  
Medium term rates will remain elevated due to high inflation expectations.
- Longer term bond rate spread is "odd one out".

- Rising 5-yr yield partly reflects paucity of supply and market expectations of economic recovery taking several years to accomplish.
- Tightening global financing conditions will sustain high bond yields over the months ahead.

## DISCLAIMER

- This document was prepared under the supervision from the Research Division of EBI SA (a member of Ecobank Group), and is not necessarily definitive, current or authoritative. Data used in this document was gathered from reliable sources, but the analyst(s) and the publishers of this document do not hold themselves responsible for the accuracy or completeness of data used. The document provides the opinions, analyses and conclusions of the Research division only and is provided without any warranties of any kind. EBI SA and any member of Ecobank Group and its affiliates do not in any way endorse the findings, views and conclusions in this document. EBI SA, Ecobank Group and its affiliates' Directors, Employees or Agents do not accept any liability for any direct or remote loss or damage arising out of the use of all or any part of the information contained in this document.
- EBI SA is a credit institution authorized by the Autorité de contrôle prudentiel.

### USE OF THIS PUBLICATION FOR THE PURPOSE OF MAKING INVESTMENT DECISION EXPOSES YOU TO SIGNIFICANT RISK OF LOSS.

- Reception of this publication does not make you a client or provide you with the protections afforded to clients of EBI SA (A member of Ecobank Group). When distributing this document, EBI SA or any member of Ecobank Group is not acting on behalf of the recipient of this document and will not be liable for providing investment advice to any recipient in relation to this document. Accordingly, EBI SA (A member of the Ecobank Group) will not be held accountable to any recipient for providing the protections afforded to its clients.
- This document is published for information purposes only and is not an offer to solicit, buy or sell any security of any kind. This document does not provide customised investment advice. It has been prepared without regard to the individual financial circumstances and risk and return objectives of individuals who receive it. The appropriateness of a particular investment will depend on an investor's individual circumstances, risk tolerance and return objectives. The investments and shares referred to in this document may not be suitable for all or certain categories of investors.
- The Research Division and EBI SA have implemented Chinese walls procedures to prevent any conflict of interest. Additional information may be available to EBI SA or the Ecobank Group which is not discussed in this report. Further disclosure regarding Ecobank policy regarding potential conflicts of interest in the context of investment research and Ecobank policy on disclosure and conflicts in general are available on request.
- The opinions presented in this note may be changed without prior notice or cannot be depended upon if used in the place of the investor's independent judgment.
- The historical performance of a security is not representative of the security's future returns. Investment in securities can be highly risky as security prices may go down in value as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may adversely affect the value, price or income of that investment. In case of illiquid investments for which there is no organized market it may be difficult for investors to exit investment positions or to obtain reliable information about its value or the extent of the risk to which it is exposed.
- The information contained in this document is confidential and is solely for use of those persons to whom it is addressed and may not be reproduced, further distributed to any other person or published, in whole or in part, for any purpose.
- EBI SA Groupe Ecobank 2016. All Rights

Reserved. This note has been prepared by Edward George and the Ecobank Research Division. For any question, please contact:

Edward George, Head, Group Research, EBISA, 20 Old Broad Street, London, EC2N 1DP, United Kingdom.

## DISCLOSURES

**Research analyst certification:** The research analyst(s) primarily responsible for the preparation and content of all or any identified portion of this research report hereby certifies that all of the views expressed herein accurately reflect their personal views. Each research analyst(s) also certify that no part of their compensation was, is, or will be, directly or indirectly, related to the view(s) expressed by that research analyst in this research report.

### Important disclosures

- I. The analyst(s) responsible for the preparation and content of this report (as shown on the disclaimer page of this report) holds personal positions in a class of common equity securities of the company.
- II. The company beneficially owns more than 5% in EBI SA or Ecobank Group ("the Group").
- III. EBI SA or the Group is a market maker in the publicly traded equity securities of the company.
- IV. EBI SA or the Group beneficially owns 5% or more of the equity securities of the company.
- V. EBI SA or the Group beneficially holds a significant interest of the debt of the company.
- VI. EBI SA or the Group has been lead manager or co-lead manager over the previous 12 months of any publicly disclosed offer of securities of the company.
- VII. The company is a client of EBI SA or the Group.
- VIII. EBI SA or the Group has lead managed or co-lead managed a public offering of the securities of the company within the last 12 months.
- IX. EBI SA or the Group has received compensation for investment banking services from the company within the last 12 months.
- X. EBI SA or the Group expects to receive, or intends to seek, compensation for investment banking services from the company during the next 3 months.
- XI. EBI SA or the Group has any liquidity contract between EBI or related entity and the issuer.
- XII. EBI SA and the issuer have agreed that EBI will produce and disseminate investment recommendations on the said issuer as a service to the issuer.

# GUIDELINES TO CONTRIBUTORS

---

## 1 Introduction

PentVars Business Journal (PBJ) is the official journal of the Pentecost University College (PUC) and seeks to achieve the following:

- Open minds and change the perception of faculty members.
- Accord faculty members the opportunity to research, write and publish so as to enjoy academia and to:
  - Build the image and organisational value of the faculty.
  - Build the intellectual capital of Pentecost University College.
  - Build change and renew capability of members of faculty from a purely theological institution to a university.
  - Build the general human resource capabilities of members of faculty.
- Contribute to academic leadership and scholarship.
- Influence business

The PentVars Business Journal (PBJ) was the brain child of Prof. K. B. Omane-Antwi (Vice Rector and Dean of PUC Graduate School). It was conceived as part of his vision to ensure that PUC becomes a centre of academic excellence. It was also intended that the academic/professional refereed journal would encourage young faculty members, both within and outside PUC, to improve their writing and research skills.

## 2 Board Membership

The Editorial Board is made up of twenty (20) top professionals/ eminent academicians; five (5) from within the PUC, one (1) administrative staff and ten (10) members outside PUC, Who are expected to formulate editorial policy, review articles for twice a year publications, and take decisions relating to the journal. In addition to the sixteen (16) members of the Board here in Ghana, four (4) others are domiciled in Canada and the U.S.A.

## 3 Publications

PentVars Business Journal (PBJ) is published twice a year. PBJ invites quality business and academic articles for publication. The review process takes twelve (12) weeks before contributors are informed about the status of the articles submitted for publication.

## 4 Areas of Interest

It is the intention of the journal to publish papers in the following subject areas:

- " Business and Finance
- " Legal, Leadership and Corporate Governance
- " SME's and Entrepreneurship
- " International Business
- " Economics
- " Information, Communication and Technology
- " Social Sciences
- " There is also a section devoted to student needs

All the papers included in the journal will be subject to academic and professional blind peer review, and should be both academically and professionally sound. It must be written in a style which is readable and acceptable to academicians and professionals, the business community and the general reading public. The preferred length of paper is between 3,000 and 5,000 words, i.e. about 12 pages (including references, tables and figures). Interesting works (enlightened inquiry) of between 2,000 & 2,500 words will be considered.

Three copies of the manuscripts should be submitted to:

### THE EDITOR

PENTVARS BUSINESS JOURNAL  
PENTECOST UNIVERSITY COLLEGE  
GRADUATE SCHOOL  
P. O. BOX CT 8938

CANTONMENTS – ACCRA

Email: [pentvarsjournal@pentvars.edu.gh](mailto:pentvarsjournal@pentvars.edu.gh) or [pentvarsjournal@yahoo.com](mailto:pentvarsjournal@yahoo.com)

Website: [www.pentvarsjournal.com](http://www.pentvarsjournal.com)

Tel. No. Office Line: 0302 417 057-8/0302 730 495

Cell Phone: 024 3704 298 OR 020 9122 063

Manuscripts in soft and hard copies should include a short summary (abstract) of not more than 250 words, and a brief biography of the author(s) in not less than 100 words. Authors' names should not be included on the manuscript itself but on a separate title page, together with full contact details. The title page should identify the person to whom the manuscript was submitted to.

## 5 Typescript

The manuscript should be typed clearly on one side of A4 paper using double-line spacing and leaving wide margins. Manuscript should be in English, typed in a Times New Roman format with



font size twelve (12). All pages should be numbered. Contributors should ensure that the article title and all headings are as short and concise as possible. Where appropriate, major headings should be numbered using the Arabic 1, 2, 3. Subheadings should be numbered using English letters A, B, C. Sub to the subheadings could be numbered using the Roman numerals I, II, III, IV etc.

## **6** Style

British rather than American spelling is preferred. Avoid the use of unnecessary capital letters. Acronyms and abbreviations should only be used where they are instantly recognisable; for preference, use the words in full on first occurrence. Numbers under 10 should be spelt out in full except where attached to a unit of quantity or a percentage (except in tables and figures). Per cent should appear in full (except in tables and figures). Dates should appear in the form e.g. 4th December 2006. Contributors should avoid sexist language.

## **7** Figures and Tables

Remember, high quality reproduction can be obtained only from original artwork or photographs. Photocopies and negatives are not clear when reproduced.

When you use figures and tables, supply all artwork on separate sheets, number all figures in sequence, and make an appropriate reference within the text (for example, 'see Figure 1').

Tables should be numbered consecutively, provided with numbered captions and referred to by number within the text. They should supplement rather than duplicate text data. For copyright, see below.

## **8** Quotations

Short quotations should be indicated by single quotation marks within a paragraph of text. Longer quotations should be supplied as a separate paragraph and will appear indented, with no quotation marks. The source, including page numbers where appropriate, must be provided.

## **9** References and Notes

The American Psychological Association (APA) style of documentation is preferred. A list of all referenced sources should be provided at the end of the text, in alphabetical order by author's surname and year of publication.

Examples are as follows:

BOOK

Dale, R. (2002). *The State and Education Policy*, Milton Keynes: Open University Press.

---

JOURNAL ARTICLE:

Omane-Antwi, B. (2006). *The Power of Credit Data: Credit Management Today*. *Journal of Credit Management*, 45(7), 139-142.

Footnotes as such should be avoided. Numbered notes may be added as superscript numbers in the text, and listed at the end preceding the References in number order.

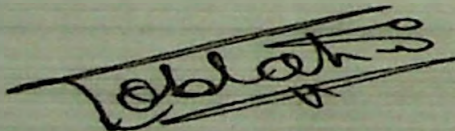
## 10 Copyright Material

It is the responsibility of the contributor to obtain permission for the use of copyright material where necessary. Please note that copyright applies to all unpublished work and to published works until the end of the seventieth (70th) year after the author's death or, if published posthumously, 70 years from the end of the year of publication. By convention, single prose extracts of up to 400 words do not need permission, but must be acknowledged. Illustrations, tables and displayed matter all require permission if not original, regardless of length.

## 11 Copyright Material

Contributors are strictly advised to observe academic and professional ethics on plagiarism.

Again, an article published in another journal/magazine will not be accepted for publication in the PentVars Business Journal.



**SIGNED BY THE CHAIRMAN – EDITORIAL BOARD  
PENTVARS BUSINESS JOURNAL (PBJ)**

