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INTEGRITY

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Evaluating and Improving the Internal Control in Organisations – The Role of the Accountant

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QUOTES ....

"Two things are infinite: the universe and human stupidity; and I'm not sure about the universe."

Albert Einstein

"Be who you are and say what you feel, because those who mind don't matter, and those who matter don't mind."

Bernard M. Baruch

A room without books is like a body without a soul."

Marcus Tullius Cicero

"You only live once, but if you do it right, once is enough."

Mae West

"Be the change that you wish to see in the world."

Mahatma Gandhi

EDITORIAL

One of the best defence against business failure, as well as an important driver of business performance, is having an effective internal control system, which manages risk and enables the creation and preservation of value. Successful organizations know how to take advantage of opportunities and counter threats, in many instances through effective application of controls, and therefore improve their performance. In the lead article, *Evaluating the Importance of Internal Control in Organisations*, the writer emphasises the importance of internal control as an integral part of an organization's governance system and ability to manage risk, take advantage of the opportunities, and counter the threats to achieving the organization's objectives.

In the next article, on integrated thinking, the writer stresses that integrated thinking and reporting provides a means and additional incentive for CFOs, and their finance teams, to focus on the information and decisions that matter to the organization and its potential success. The writer sets out a vision and framework for integrated thinking and explores what professional accountants working in the public and private sectors can do in practical terms to facilitate it in their organization, regardless of whether their organization is planning to publish an integrated report. The writer identifies five key elements, which, if implemented, can lead to more effective organizations and ultimately provide the basis for shifting from today's financially oriented reporting to integrated reporting.

While the accountancy profession regularly calls upon governments around the world to adopt accrual accounting and stronger public financial management, we must remember that accountants are on the same page as politicians in terms of having a vision for affordable public services that support economic growth and tackle poverty.

In the article *"Bridging the divide – politician and accountant"*, the writer stresses that every country and corner of the world, today and future generations deserve effective education, public health programs, and living conditions that require the effective prioritization and management of resources. These can be achieved if there is effective collaboration between the politician and the accountant in managing national resources. There is a strong believe that the accountancy profession across the public and not-for-profit sectors is at the heart of making lives better.

In the article on technology, the writer considers the important role that the accountant of tomorrow will play, just by being willing to embrace cloud accounting and value pricing with open arms. In this not-too-distant future, businesses will be able to afford powerful CFO advice without the cost of a full-time employee. All of those menial, time-consuming tasks that used to eat up hours of a day will be gone – a victim (or virtue, depending on your perspective) of the automation process. This doesn't eliminate the need for accountants, but rather empowers them. It frees up time in their day to work with clients in a more effective way. Think for a moment about how beneficial it would be to work off a single general ledger from anywhere, at any time and in real time. This is not science fiction; the technology is here, allowing accountants to deliver more value-added, business advisory services. Better technology creates better accountants, which enables better business owners to make better decisions.

These and many more are presented in this publication for your reading. Please send your comments and contributions on this publication to:

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Ofori Frimpong Henneh
(For the Editor)

1. IFAC NEWS

1.1 IAASB Revises ISA 250; Consideration of Laws and Regulations in an Audit of Financial Statements.

Non-Compliance with Laws and Regulations

This summary provides an overview of revisions to the IAASB's International Standards relating to noncompliance with laws and regulations (NOCLAR).

Project Objective: The International Ethics Standards Board for Accountants' Code of Ethics for Professional Accountants (the IESBA Code) has been revised to address the professional accountant's responsibility in relation to NOCLAR and becomes effective on July 15, 2017. The objective of the IAASB's project to address NOCLAR was to:

- Identify any actual or perceived inconsistencies of approach or scope between the NOCLAR provisions in the revised IESBA Code and the International Standards, in particular ISA 250, Consideration of Laws and Regulations in an Audit of Financial Statements.

- Develop amendments to the IAASB's International Standards to address such inconsistencies to the extent considered appropriate to enable the IAASB's International Standards to continue to be applied effectively together with the IESBA Code, or to clarify and emphasize key aspects of the revised IESBA Code in the IAASB's International Standards.

Effective Date: Audits of financial statements for periods beginning on or after December 15, 2017; similar date for standards for other services.

What changes were made to ISA 250 (Revised)?

The IAASB made limited amendments to ISA 250 (Revised) in order to address actual or perceived inconsistencies of the approach to identifying and dealing with instances of identified or suspected NOCLAR.

The IAASB has made limited amendments to ISA 250 (Revised), as the intention is not to duplicate all the specific requirements of the revised IESBA Code, in order to allow for flexibility when ethical codes other than the IESBA Code are applied. These limited amendments are intended to:

- Align aspects of ISA 250 (Revised) to the revised IESBA Code, particularly the definition of non-compliance and the examples of laws and regulations within the scope of ISA 250 (Revised).

- Clarify the requirement regarding the auditor's determination of whether to report identified or suspected NOCLAR to an appropriate authority outside the entity and the auditor's duty of confidentiality, in order to recognize the different provisions of laws, regulations, or relevant ethical requirements.

- Highlight that the auditor may have additional responsibilities under law, regulation or relevant ethical requirements, including possible documentation requirements and communicating to other auditors.

- Enhance the consideration of the implications of NOCLAR on the audit, for example, the reliability of management's representations, the implications for the auditor's report, and the consideration of whether to withdraw from the engagement.

Emphasize the fact that, in certain cases, communication with management or those charged with governance may be restricted or prohibited by law or regulation, for example tipping-off provisions that might prejudice an investigation by an appropriate authority into an actual, or suspected, illegal act.

The revised IESBA Code sets out a framework for professional accountants to respond to identified or suspected NOCLAR, and includes considerations and actions such as:

• Specific communications with management and those charged with governance, assessing the appropriateness of their response to non-compliance and determining whether further action is needed.

• Communicating identified or suspected noncompliance with laws and regulations to other auditors (e.g., in an audit of group financial statements).

• Determining whether further action is needed, which may include reporting to an appropriate authority outside the entity.

• Documenting in accordance with the requirements of the revised IESBA Code.

How is an auditor expected to address NOCLAR?

ISA 250 (Revised) sets out specific expectations for auditors in relation to NOCLAR. In addition, relevant ethical requirements, such as the IESBA Code, may set out additional or more specific requirements for professional accountants.

ISA 250 (Revised) differentiates between two types of laws and regulations as follows:

(a) Laws and regulations generally recognized to have a direct effect on the determination of material amounts and disclosures in the financial statements; and

(b) Other laws and regulations that do not have a direct effect on the determination of the amounts and disclosures in the financial statements, but compliance with which may be fundamental to the operating aspects of the business, to an entity's ability to continue its business, or to avoid material penalties; non-compliance with such laws and regulations may therefore have a material effect on the financial statements.

For category (a), the auditor is required to obtain sufficient appropriate audit evidence regarding compliance with the provisions of those laws and regulations.

For category (b), the auditor's responsibility is limited to undertaking specified audit procedures to help identify non-compliance with those laws and regulations. ISA 250 (Revised) explains the audit procedures that are required to be performed when NOCLAR is identified or suspected, which include:

• Obtaining an understanding of the nature of the act and the circumstances in which it has occurred and further information to evaluate the possible effect on the financial statements;

• Discussing the matter with management and those charged with governance and obtaining legal advice in certain circumstances;

• Evaluating the implications of NOCLAR in relation to other aspects of the audit;

• Evaluating the impact of NOCLAR on the audit opinion; and

• Determining whether to report NOCLAR to an appropriate authority outside the entity.

The work effort in ISA 250 (Revised) has not been amended. However, the revised standard now specifically highlights possible scenarios that may exist under law, regulation or relevant ethical requirements in relation to reporting to an appropriate authority, and addresses the confidentiality considerations.

Engagements Other than Audits of Financial Statements

Efforts in relation to NOCLAR are specific to the circumstances of the engagement. The changes to the IAASB's International Standards in respect of other engagements other than audits focus on highlighting what may be expected of the professional accountant under law, regulation or relevant ethical requirements when NOCLAR is identified or suspected.

For further reading please visit:
www.ifac.org/publications

1.2 IESBA Code of Ethics High Level Summary of Prohibitions Applicable to Audits of Public Interest Entities

The 2009 International Ethics Standards Board for Accountants (IESBA) Code of Ethics for Professional Accountants (IESBA Code) contains prohibitions, summarized below at a high level, that apply when a professional accountant audits a public interest entity. If a service, interest, or relationship is not covered by one of the prohibitions below, the professional accountant is required to apply the conceptual framework set out in the IESBA Code to evaluate it. The conceptual framework entails a rigorous analysis of the service, interest, or relationship from the perspective of a reasonable and informed third party to determine whether it is permissible or should not be entered into because there are no adequate safeguards.

Prohibited Non-Assurance Services

Prohibited Without Regard to Materiality

- Assuming a management responsibility.
- Serving as General Counsel.
- Accounting services*
- Bookkeeping services*
- Payroll services*
- Preparing the financial statements and related financial information.*
- Promoting, dealing in, or underwriting client shares.
- Negotiating for the client.
- Recruiting directors/officers, or senior management who will have significant influence over accounting records or financial statements.
- Evaluating or compensating a key audit partner based on that partner's success in selling non-assurance services to the partner's audit client.

**** Can be provided to divisions/related entities if routine/mechanical, or in an emergency, if specified conditions are met.***

Prohibited if material to the financial statements

- Valuation services
- Calculations of current/deferred taxes.
- Tax or corporate finance advice that depends on a particular accounting treatment/financial statement presentation with respect to which there is reasonable doubt as to its appropriateness.
- Acting as an advocate before a public tribunal or court to resolve a tax matter.
- Internal audit services relating to internal controls over financial reporting, financial accounting systems, or financial statement amounts/disclosures.
- Designing/implementing financial reporting IT systems.
- Estimating damages or other amounts as part of litigation support services.
- Acting as an advocate to resolve a dispute.

Prohibited Interests and Relationships

- Financial interests in the client.
- Financial interests in an entity in which the client has a material interest, and can significantly influence.
- Loans from a client lending institution that have not been made under normal lending procedures, terms, and conditions, or from a client that is not a lending institution and that are material.
- Material loans to a client.
- Deposits with a client not held under normal terms.
- Close business relationships with a client that are significant or entail a material financial interest.
- Audit team members whose immediate family member is a client director/officer, or an employee able to significantly influence the accounting records or financial statements.
- Former audit team members or a partner joining the client if significant connections with the firm remain.

- A key audit partner or senior/managing partner joining a client before a defined period of time.
- A key audit partner serving for more than 7 years.
- An individual being on the audit team if, during the period covered by the audit, the person was a client director/officer, or an employee able to significantly influence the accounting records or financial statements.
- Partners/employees serving as a client director or officer.
- Contingent fees for an audit or assurance engagement or, when material to the firm, for a non-assurance service to the audit client.
- Accepting gifts or hospitality from the client that are other than trivial and inconsequential.

Read more at www.ifac.org/publications

He said the critical role accountants play in national development required the members of ICAG to be guided by the ethics and principles that underline accountancy practice in the country, stressing that it is unethical to engage in any form of malfeasance that could drag the image of the Institute through the mud.

Mr. Sottie noted that members of ICAG are regulated by the five fundamental code of ethics, namely integrity, confidentiality, professional competence and due care, objectivity, and professional behaviour. Therefore any member who engages in financial malfeasance is disciplined by the Professional Standards and Ethics Committee (PSEC), which is a sub-committee of the Council. He further observed that accountability and stocktaking formed the basis of success in all spheres of human endeavour, for which reason he called on all professionals to protect their integrity by being firm and trustworthy in managing public finances.

The Guest Speaker, Justice VCRAC Crabbe delivering his speech at the induction

Some of the inductees at the ceremony listening attentively to the guest speaker.

The President of ICAG delivering his welcome address at the induction

One of the inductees asking question during questioning time

The President of ICAG and the Guest Speaker in a group photograph.

The President of ICAG, the Guest Speaker, and some Council members in a group photograph after the induction

2.2 ICAG Holds 27th Graduation and Admission Ceremony

The Institute of Chartered Accountants Ghana, has held the 27th Graduation and Admission Ceremony for the recently qualified students at a ceremony in the Accra International Conference Centre. The ceremony was done to admit 282 students who have fulfilled all the requirements of admission into membership, and also to graduate 259 students who have completed successfully the professional accountancy examinations.

Speaking at the ceremony, the President of ICAG, Mr. Christian Sottie stressed that the Institute has taken steps to regulate and monitor the audit practice in the country through the Quality Assurance Monitoring Unit of the Institute.

The President said this has become necessary because the World Bank – ROSC Report in 2004 and a review in 2014 has highlighted that accounting and auditing practice in the country suffer from institutional weakness in regulation.

As part of the initiative to regulate the accountancy practice, Mr. Sottie explained that the Quality Assurance Monitoring Unit of ICAG had registered over 200 accounting and auditing firms. He mentioned that the Unit has conducted initial assessments and monitoring on these firms, and has done full assessments on some few ones. This is to address the gaps in the firms' reporting with regard to auditing standards to enhance good financial reporting by the auditing firms.

Mr Sottie admonished the accountants to be transparent in all aspects of their work so as to promote the image of the accountancy profession, and also the development of the country by upholding their professional ethics. Such traits he said, would also prevent accountants from engaging in unlawful acts which would ruin their careers. He explained that integrity ought to be the hallmark of any accountant owing to the fact that public confidence in the profession was key to its development.

In a speech read on her behalf, the Minister of Education, Prof. Naana Jane Opoku-Agyemeng, stressed the need for accountants to acquire new skills to enable them solve the challenges of modern financial systems. She stressed that business and other organisations are engaging in ever more complex arrangements and transactions. She mentioned that apart from technical accounting knowledge, accountants need skills that will enable them to be, when appropriate, business advisors, financial analysts, communicators, negotiators, and managers.

Professor Goski Alabi from the University of Professional Studies Accra (UPSA), who was the guest speaker, advised the graduands to be humble in all their endeavours.

She stressed that they should remember that there are many things their qualification cannot do for them, but humility and good relationships can do for them.

3. FEATURES

3.1 Evaluating and Improving Internal Control in Organizations (Part 1)

Introduction

One of the best defence against business failure, as well as an important driver of business performance, is having an effective internal control system, which manages risk and enables the creation and preservation of value. Successful organizations know how to take advantage of opportunities and counter threats, in many instances through effective application of controls, and therefore improve their performance.

Internal control is an integral part of an organization's governance system and ability to manage risk, which is understood, effected, and actively monitored by the governing body, management, and other personnel to take advantage of the opportunities and to counter the threats to achieving the organization's objectives.

Professional accountants in business across the globe are involved in the design, implementation, operation, monitoring, evaluation, and improvement of their organization's internal control system. This International Good Practice Guidance (IGPG) covers the main issues that professional accountants in business can address to improve these internal control systems.

This IGPG identifies why internal control systems in organizations are not always effective, and contains principles that demonstrate how professional accountants in business can support their organization in evaluating and improving their internal control system. The guidance is not intended to be prescriptive, but rather considers the internal control areas an organization needs to continuously improve and the issues they need to address.

This guidance is directed at professional accountants in business working for all types of organizations, as all organizations—no matter their size or structure, or whether they are private or public—should have an appropriate internal control system in place.

Why Internal Control is Important

Internal control is a crucial aspect of an organization's governance system and ability to manage risk, and is fundamental to supporting the achievement of an organization's objectives and creating, enhancing, and protecting stakeholder value. High-profile organizational failures typically lead to the imposition of additional rules and requirements, as well as to subsequent time-consuming and costly compliance efforts. However, this obscures the fact that the right kind of internal controls— enabling an organization to capitalize on opportunities while offsetting the threats—can actually save time and money, and promote the creation and preservation of value. Effective internal control also creates a competitive advantage, as an organization with effective controls can take on additional risk.

According to IFAC's interviews with 25 key business leaders, summarized in the brochure Integrating the Business Reporting Supply Chain (2011), ensuring effective, integrated risk management and internal control should be a key part of governing body oversight. Various financial crises in recent years have demonstrated that in some organizations—especially in some financial institutions—risk-management and internal control practices were flawed or ineffective. According to the business leaders interviewed, these organizations did not fully comprehend the risks to which they were exposed. Before the latest string of financial crises, many organizations were overly focused on financial reporting controls.

These crises highlighted the fact that many, if not most, of the risks that affected organizations derived from areas other than financial reporting including operations and external circumstances. Moving forward, risk management and related internal control systems need to encompass a wider perspective, considering that organizations are impacted by many variables, often outside their direct control. Effective risk management and internal control should be a key part of good governance at every level of an organization and across all operations.

IFAC's Global Survey on Risk Management and Internal Control (2011), with more than 600 respondents from around the globe and from all types of organizations, revealed that: (a) more awareness of the benefits of implementing risk management and internal control systems should be created, and (b) risk management and internal control systems should be better integrated into organizations' overall governance, strategy, and operations. According to survey respondents, the drive to integrate risk management and internal control systems is gaining momentum, but the tools and guidance to develop and implement a genuinely integrated system do not really exist. Currently, risk management guidelines are often separate from internal control guidelines. The first step to strengthening guidance in this area, according to respondents, is to combine these separate guidelines into one integrated set. Bringing these guidelines together would help increase the general understanding that both risk management and internal control are integral parts of an effective governance system.

Despite the existence of sound internal control guidelines, it is often the application of such guidelines that fails or could be further improved in many organizations. With this publication, the Professional Accountants in Business (PAIB) Committee aims to provide a practical guide that focuses on how professional accountants in business can support their organization in evaluating and improving internal control as an integral part of its governance system and risk management.

This guidance is complementary to existing internal control guidelines and is based on those internal control matters that often cause difficulties in practice.

The Roles of Professional Accountants in Business

Worldwide, more than one million professional accountants work to support organizations in commerce, industry, financial services, education, and the public and not-for-profit sectors, making those organizations more successful and sustainable. They form a very diverse constituency, and can be found working as employees, consultants, and self-employed owner-managers or advisors.

As further explained in Competent and Versatile—How Professional Accountants in Business Drive Sustainable Organizational Success (2011), the roles professional accountants in business perform can broadly be described as creators, enablers, preservers, and reporters of sustainable value creation for organizations.

Within organizations, many professional accountants are in a position of strategic or functional leadership, or are otherwise well placed to partner with other disciplines in the planning, implementation, execution, evaluation, or improvement of internal control. In addition, many professional accountants in business have a responsibility to provide objective, accurate, and timely information and analyses to support all of these activities.

Key Principles of Evaluating and Improving Internal Control

The principles below represent good practice for evaluating and improving internal control systems.

These principles are not formulated to design and implement an internal control system, for which other existing guidelines are referenced, but to facilitate the evaluation and improvement of existing internal control systems by highlighting a number of areas where the practical application of such guidelines often fails in many organizations.

A. Supporting the Organization's Objectives

Internal control should be used to support the organization in achieving its objectives by managing its risks, while complying with rules, regulations, and organizational policies. The organization should therefore make internal control part of risk management and integrate both in its overall governance system.

B. Determining Roles and Responsibilities

The organization should determine the various roles and responsibilities with respect to internal control, including the governing body, management at all levels, employees, and internal and external assurance providers, as well as coordinate the collaboration among participants.

C. Fostering a Motivational Culture

The governing body and management should foster an organizational culture that motivates members of the organization to act in line with risk management strategy and policies on internal control set by the governing body to achieve the organization's objectives. The tone and action at the top are critical in this respect.

D. Linking to Individual Performance

The governing body and management should link achievement of the organization's internal control objectives to individual performance objectives. Each person within the organization should be held accountable for the achievement of assigned internal control objectives.

E. Ensuring Sufficient Competency

The governing body, management, and other participants in the organization's governance system should be sufficiently competent to fulfil the internal control responsibilities associated with their roles.

F. Responding to Risk

Controls should always be designed, implemented, and applied as a response to specific risks and their causes and consequences.

G. Communicating Regularly

Management should ensure that regular communication regarding the internal control system, as well as the outcomes, takes place at all levels within the organization to make sure that the internal control principles are fully understood and correctly applied by all.

H. Monitoring and Evaluating

Both individual controls as well as the internal control system as a whole should be regularly monitored and evaluated. Identification of unacceptably high levels of risk, control failures, or events that are outside the limits for risk taking could be a sign that an individual control or the internal control system is ineffective and needs to be improved.

I. Providing for Transparency and Accountability

The governing body, together with management, should periodically report to stakeholders the organization's risk profile as well as the structure and factual performance of the organization's internal control system.

3.2 A Vision for Integrated Thinking and the Role of Finance Professionals

By Stathis Gould, Head of Professional Accountants in Business and Integrated Reporting, IFAC

In the article, *—Corporate Governance and TransparencyThe Chicken or the Egg of Sustainable Development?, integrated thinking* was referred to as the critical foundation of integrated reporting. Without it, the ultimate objective of sustainable organizations, markets, and societies cannot be achieved. The chicken and egg analogy can be applied to integrated thinking and integrated reporting: while reporting can lead to a journey of greater transparency and, hopefully, behavior change within an organization, leadership on integrated thinking is the key to unlock a change of mindset and purpose.

IFAC recently published *Creating Value with Integrated Thinking: The Role of Professional Accountants* to highlight the important role accountants play in integrated thinking. Integrated thinking and reporting provide a means and additional incentive for CFOs, and their finance teams, to focus on the information and decisions that matter to the organization and its potential success. For finance teams that have begun to shift toward business partnership within their organization, the principles and concepts of integrated thinking and reporting are a natural progression on their journey.

The publication sets out a vision and framework for integrated thinking and explores what professional accountants working in the public and private sectors can do in practical terms to facilitate it in their organization, regardless of whether their organization is planning to publish an integrated report.

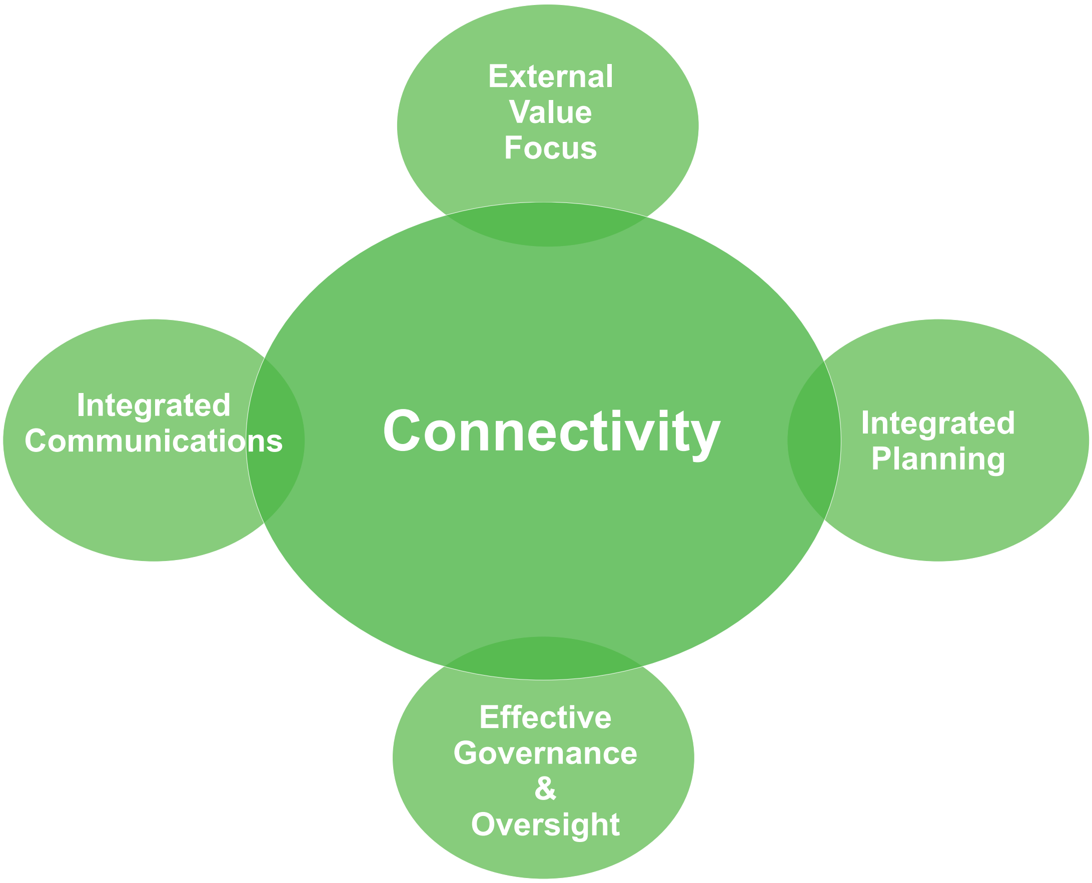
The report identifies five key elements, which, if implemented, can lead to more effective organizations and ultimately provide the basis for shifting from today's financially oriented reporting to integrated reporting.

The benefits of integrated thinking are already having an impact. *Realizing the Benefits: The Impact of Integrated Reporting*, published by International Integrated Reporting Council (IIRC) and Black Sun, provides evidence of the nature of the benefits of integrated thinking. The IIRC's Pilot Programme, which ran for three years, yielded a great deal of research from participating organizations. This research and first-hand experience shows that many organizations captured the benefits of integrated thinking, including a range of strategic and operational benefits. Results from the Programme include, for example:

- 71% of participants experienced strategic benefits, the most important being a change in conversations between the board and management;
- 79% reported improvements in management information and decision making; and
- 96% experienced a positive impact from connecting departments and broadening perspectives.

Integrated thinking is also addressed in Mervyn King and Leigh Robert's *Integrate: Doing Business in the 21st Century*, which usefully provides a clear purpose to integrated thinking.

- Financial and nonfinancial performance are no longer separated, and the entire organization accepts that one affects the other.
- The organization's strategy is shared by all functions and divisions.
- Decision making is carried out with a longer-term view on value creation.



In IFAC's thought paper, it was explained that integrated thinking is sparked by a connected approach. Connectivity supports the other four key areas of integrated thinking: an external value focus, integrated planning, effective governance and oversight, and integrated communications.

An **external focus** is a critical starting point for identifying and articulating how value is created and destroyed. Identifying and understanding relevant matters for decision making involves bringing together information and analysis from various sources, including trends in the business environment and market; understanding the impact their products and services have on society and on markets; understanding what impacts the organization's reputation and public perception; and the overall customer experience.

As a finance professional, it will be difficult to add value to this process without a broader connection to, and understanding of, the industry, business environment, and stakeholder perceptions. This awareness and understanding is the basis of facilitating an understanding and assessment of the relevant drivers of value.

Integrated planning—that is, the insights gained from an external value focus form the basis of integrated planning—should incorporate a comprehensive process of identifying and managing significant matters affecting value creation over the short, medium, and long term. Integrating relevant and material matters throughout the planning and management process involves an integrated approach to risk management, budgeting, and performance management.

The integrated planning process ensures that the necessary information and analysis is presented in a manner that allows managers at all levels to use it to make effective decisions. Furthermore, this level of integration encourages all parts of an organization to have a common view of what is important and the measures of success.

Effective governance and oversight leads to credibility among stakeholders in the data, information, and insights provided. Appropriate governance and oversight structures ensure effective processes and accountabilities for all organizational initiatives and, ultimately, lead to better performance. For example, the importance and credibility of nonfinancial data, or data that has not previously been subjected to the oversight of the board and its audit committee, can lack robustness and credibility. CFOs and their finance functions can begin to educate and train other parts of organizations about how to ensure their nonfinancial data achieves the same quality and credibility as financial data.

To achieve **integrated communications**, the organization needs to communicate effectively on the full range of issues impacting value creation across the six capitals underpinning the value creation model in the International <IR> Framework. This is a new perspective for many organizations, and the shift from a financial focus requires communication by leadership in ways that significantly influence the organization's behavior, and that flow naturally from an integrated planning approach.

Integrated thinking ultimately needs to change corporate behavior and lead to more resilient organizations and greater trust in business and government.

Professional accountants—as business partners involved in organizational leadership and decision support—should be considering how to operationalize integrated thinking as a means of engaging those beyond the finance and accounting departments.

Source:www.ifac.org/gateway-publications

3.3 Are International Standards helping Financial Reporting?

One of accounting's leading lights, Professor Ray Ball, revisits the question: have IFRS delivered on their promise as a global financial reporting framework?

It has been more than a decade since the International Financial Reporting Standards (IFRS) were adopted by many countries around the world for financial reporting purposes. Put simply, the IFRS attempted to create a common global language for business affairs, and to make company accounts readable and comparable no matter where companies were. The decision to make this significant change was driven in large part by the perceived need for a single global reporting language to serve the needs of increasingly globalized capital markets. IFRS-based financials were considered critical to attracting and securing foreign investment. In other words, the standards in the IFRS were a mechanism to facilitate the flow of equity and debt capital both within and across global economies. IFRS adoption was not just supposed to make transactions more efficient. It was also assumed that the new standards would bring benefits such as increased transparency, greater comparability and lower cost of capital.

Have the IFRS delivered on their promise? It is still too early to tell, according to distinguished accounting academic and global accounting hall-of-fame inductee Professor Ray Ball FCPA, from the University of Chicago's Booth School of Business.

No verdict yet

When the IFRS was first established, Ball was cautious about the standards, arguing in a famous 2006 paper that the differences between nations' peoples and cultures, their companies and laws, would mean that accounting standards would need to differ too. In his April 2016 paper, IFRS – Ten Years Later, Professor Ball revisits the issue. His latest verdict: it's still hard to tell whether international standards are doing much good. "After a decade of hindsight," he writes, "IFRS adoption is an innovation of historical proportions whose worldwide effects remain somewhat uncertain." The global spread of IFRS has been significant. According to the International Accounting Standards Board (IASB), the organisation responsible for the development of IFRS, at last count 119 jurisdictions "require IFRS for all or most domestic publicly accountable entities".

One of the concerns at the outset was that IFRS adoption would not be uniform. Professor Ball points out that this has not transpired to a significant degree; instead, formal adoption has been remarkably uniform. However, uniform implementation of IFRS remains a concern. For many of the claimed benefits of IFRS adoption to be realised, consistent implementation would have to occur, but just as Ball suggested in 2006, largely local economic and political forces have given rise to differences in IFRS implementation.

The problem with principles

IFRS has been developed as a principles-based framework of financial reporting, requiring a considerable degree of estimation and judgement. The principles-based approach provides greater discretion in accounting policy choice, Ball notes in his 2016 paper, while the estimation of future outcomes could give rise to differences depending on the variables and techniques used.

Professional judgement plays a significant part in many short-term estimates, including deferred revenues, bad debt provisions, and income tax and inventory valuations. Equally, professional judgement is required for long-term estimates such as asset impairments, retirement benefit costs and liabilities, and deferred tax. Discretion in accounting policy choice and the role of estimation can both result in differences in reported numbers that undermine comparability. Fair value accounting is another dominant feature of IFRS that can be subjective. Establishing reliable fair value measures can be challenging in some emerging economies where the necessary information may not be readily available.

The right regulatory environment?

The regulatory environment of a jurisdiction can also have an impact on the implementation of IFRS, according to Ball. Many countries that have adopted IFRS may not have the infrastructure necessary to enforce the actual implementation, and in some cases the local economic and political factors may act as a deterrent to enforcing implementation. For example, substandard application of IFRS may arise in a jurisdiction with less developed regulatory oversight of financial reporting.

In a 2001 paper, Ball highlighted some of the interlocking infrastructures needed for an efficient public financial reporting system:

- a well-trained and competent audit profession.
- separation between the systems of public financial reporting and corporate taxation.
- structures of corporate ownership and governance that foster a genuine demand for reliable public information.
- a system for setting and maintaining high quality independent accounting standards.
- an independent legal system for detecting and penalising fraud, manipulation and failure to comply with accounting and other disclosures.

Ball's paper highlights a distinction between the information usefulness of IFRS-based financial reports and their value relevance for debt contracting. He observes that the considerable use of fair value measures and the associated subjectivity in estimating fair values undermines the usefulness of IFRS-based financial reports for borrowing purposes, in particular when calculating accounting-based debt covenants.

Let down by implementation

The inconsistent implementation across jurisdictions that have already adopted IFRS is undermining the primary goals of IFRS, according to Ball. There is also the fact that some of the world's major economies – including the US, China, India and Japan – have not adopted IFRS. Although China, India and Japan have committed to a move towards IFRS in the future, US commitment to IFRS adoption remains elusive.

Evidence from other independent research initiatives supports some of Ball's assertions around the implementation of IFRS. A translation-related issue has been identified in a recent research report published by the Australian Accounting Standards Board. The key findings indicate that there are differences in the interpretation by accounting professionals of the terms of likelihood (terms such as “probable”, “possible” and “virtually certain”) between Korean and English IFRS versions.

Another issue highlighted is the marked increase in non-accounting based covenants in the years since IFRS adoption. Notably, independent research funded by CPA Australia has identified an increase in the use of non-GAAP (generally accepted accounting principles) measures since the introduction of IFRS-based financial reporting in New Zealand. While we continue to gather evidence in determining the worldwide effects of IFRS, a bigger question remains to be answered: whether periodic financial reporting, under IFRS or another framework, effectively serves user needs.

Source: www.ifac.org/gateway-publications

3.4 Bridging the Divide—Accountants and Politicians

By Rob Whiteman, Chief Executive, Chartered Institute of Public Finance and Accountancy

While the accountancy profession regularly calls upon governments around the world to adopt accrual accounting and stronger public financial management, we must remember that accountants are on the same page as politicians in terms of having a vision for affordable public services that support economic growth and tackle poverty.

In every country and corner of the world, today and future generations deserve effective education, public health programs, and living conditions that require the effective prioritization and management of resources. I strongly believe that the accountancy profession across the public and not-for-profit sectors is at the heart of making lives better. And the rewards of feeling you have made a difference vastly outweigh the extra complexities of delivering political mandates that must be assessed for social impact as much as fiscal rate of return.

The Chartered Institute of Public Finance and Accountancy (CIPFA)'s *Financial Management Model* has for many years set out a maturity model where we first ensure strong stewardship and good governance, secondly improve performance, and thirdly develop enhanced cross-cutting and soft skills that underpin transformation. We are all on this journey, and with governments generally representing 25%-75% of GDP, the stakes are high. As demonstrated by CIPFA's *Whole Systems Approach* many—including financial managers, auditors, regulators, standard setters, and decision makers—have a vital role to play, and no single player on its own can ensure strong public financial management. We have to build systems with the right roles and competencies.

Public expectations, of course, about the quality of public services are growing, and long lasting improvements are often being sought in accountability and transparency of the spending of public funds. Because of the scale, size, and complexity of the public sector, it can be hard for politicians to know where to begin, even though we often look to them to initiate reform.

Although the sovereign debt crisis and its aftermath provided a wake-up call, financial reform still isn't seen as a priority by some governments, where reporting is patchy and can lead to a lack of public trust and confidence from citizens and the business sector. At its worst, where systemic fraud and corruption goes unchecked, governments have difficulty attracting inward investment from the capital markets and donors.

But while the accountancy profession has a pivotal role to play in promoting and delivering strong public financial management in the public interest, we must get better at explaining how this benefits society. If we simply make it sound like a better process it will not win hearts and minds. Nor will we succeed if we simply lecture politicians or suggest that all the answers can be imported from elsewhere. We must respect local differences as well as build strong local institutions and solutions.

Most of all, the profession can at times slip into the mistake of assuming that public services and governments are second best to the corporate sector and simply need to adopt its approaches. Elected politicians can easily interpret this as self-serving and it's not the right formula to gain influence. What most sets political hearts fluttering is not better process but effective policy making. Policy decisions supported by robust financial information and analysis are more likely to succeed. The “golden thread” that links policy with resource deployment and public service outcomes is the most effective means to bring politicians on board because it is meeting their needs for the short, medium, and long-term. A good government finance profession really can add value.

The *Whole Systems Approach* also sets out that the financial literacy of parliamentarians is vital to facilitate the effective scrutiny of financial statements and programs. Legislatures often need to do more—for example, introduce development for new members to ensure oversight and challenge. If decisions become harder to agree on and are challenged and changed along the way by insights from citizens and politicians (both ministerial and scrutiny roles), then usually it means better decisions are made.

Finally, good public finances rely on effective tax systems. Competent tax authorities rely on a range of taxes to avoid the risks of over-reliance on any one source of revenue. Resilience is an important facet of an effective *Whole Systems Approach*. I hope that a positive outcome of the Panama Papers scandal is that the accountancy profession is seen as stepping forward with constructive solutions.

Politicians need our advice to curb offshore tax avoidance schemes and profit shifting tactics that, if left unchecked, will cause increasing public outrage as well as undermine public finance resilience.

Accountants in public service are never just there to make the numbers fit the policy aspiration. Speaking truth to power and never being afraid to do the right thing is as vital a part of our training scheme as it has always been. But, accountants need new skills too—not least data analytics, cyber, and value for money—and they should be passionate about developing these new skills into the profession to complement the traditional ones. A collaborative process, where accountants share skills and approaches, is the best way forward.

4. TECHNOLOGY CORNER

4.1 Will Artificial Intelligence and Cloud Accounting Replace the Accountants of Tomorrow?

Over the years, a number of science fiction films, television shows and novels have depicted a future where portions of our lives are replaced with robots and artificial intelligence. Everything from the factories to the storefronts is populated not by humans, but by cold, calculated examples of the finest that “modern technology” has to offer. According to one recent report from Forrester, however, this may not be too far from the truth: It is predicted that robots and Artificial Intelligence (AI) will replace up to 7% of all jobs in the U.S. by as soon as 2025.

Though we probably don't have to worry too much about a robot uprising (yet), to say that technology is already impacting nearly all areas of our lives is something of an understatement. In the accounting industry, we're already experiencing incredible leaps in tech; bots and cloud accounting solutions make it easier than ever for small business owners to manage their accounting and bookkeeping tasks with the efficiency that only their larger counterparts formerly enjoyed.

With these changes, there is a shift in the role accountants play in working with their business clients. This shift will accelerate as more businesses jump to the cloud. Many accountants are riding this wave and will thrive, but many others may suffer the same fate as the dinosaurs.

The Technology Learning Curve

This is predicated on the idea that entrepreneurs know how to use these new gadgets and tools in the first place. Anyone can blindly enter numbers into a software program; understanding what they mean is the key. Not everyone can be like one of the eccentric tech wizards from the HBO comedy “Silicon Valley.” Just because you know what the cloud is, does not mean you know how to leverage it to your full advantage.

At the end of the day, what the cloud accounting revolution really enables isn't a future where accountants are out of a job, but a very real and valuable opportunity for accountants to help their business clients in ways that were not available even five years ago.

Building the Accountant of Tomorrow, Today

Consider the important role that the accountant of tomorrow will play, just by being willing to embrace cloud accounting and value pricing with open arms. In this not-too-distant future, businesses will be able to afford powerful CFO advice *without* the cost of a full-time employee. All of those menial, time-consuming tasks that used to eat up hours of a day will be gone – a victim (or virtue, depending on your perspective) of the automation process. This doesn't eliminate the need for accountants, but rather empowers them. It frees up time in their day to work with clients in a more effective way. Think for a moment about how beneficial it would be to work off a single general ledger from anywhere, at any time and in real time. This is not science fiction; the technology is here, allowing accountants to deliver more value-added, business advisory services. Accountants are no longer just bookkeepers; they can now tackle tasks like business planning, controls, succession and more. Better technology creates better accountants, which enables better business owners to make better decisions.

Disruption Is What You Make Of It

When people hear the word "disruption," they tend to assume it has a negative connotation. However, this doesn't have to be the case –technological disruption is more about creating an opportunity than creating a threat. For accountants working with small business owners, disruption is less about, "What I do can now be automated, putting me out of a job," and more about, "Now that I can automate X, Y and Z, I can change my job for the better and for the future."

Rather than cloud-based software systems that supersede the role of accountants, there is more than enough evidence to suggest that businesses actually have a lot to gain when a symbiotic relationship exists between the two. Technology empowers accountants and in turn, accountants wield technology as the powerful, meaningful weapon that it really is.

"The more accountants and small business owners can start collaborating as partners, businesses will start seeing better outcomes," said Jeff Donohoe, a CPA who works with businesses on multi-state tax issues.

For all the major benefits that technology brings to the table, however, there is one quality that current accountants have that will never be replaceable: humanity.

Artificial intelligence may be able to quickly identify the "smart" move, but how good is it at identifying the "right" move for the right client at the right time? The humanity of accountants is something that you can never automate, never replace and never take for granted.

The Future Is Only The Beginning

The most important thing to take away from all this is that the aforementioned opportunities won't just be for millennials. In fact, established accountants and CPAs with years of experience working with many different companies may be the best qualified to take on this new role. What might be a unique problem for your business is something a truly savvy accountant has already addressed with other clients many times over. By empowering them to assist in bigger decisions beyond the numbers, you will have know-how not available just years ago.

Those who predict the future forget that humans still like to connect with other humans. Just as a hammer is ultimately worthless if it doesn't have a worker to wield it, advancements in technology alone are nothing without the emotion that only an experienced, passionate and driven (and human) accountant can bring along with it.

www.forbes.com

5. YOU AND YOUR HEALTH

5.1 Know the Main Advantages and Disadvantages of Being a Vegetarian

These days, many people prefer a vegetarian diet. But do you know the advantages and disadvantages of being a vegetarian? This write-up will clear all your doubts.

Today, vegetarian diets have gained extreme popularity all over the globe. These are preferred by a number of people throughout the world, and has been claimed to be a key to healthy life. Also, some organizations working for animal rights are strictly against eating meat, fish, or poultry. A vegetarian diet typically consists of whole grains, vegetables, and fruits. They are, no doubt, good for health, but have you ever thought whether vegetarian meals were complete? Can they fulfill all the nutritional requirements of the body? Well, there are certain advantages and disadvantages of being vegetarian. What are they? Let's find out!

Advantages

Vegetarian diet mainly includes grains, nuts, cereals, seeds, beans, vegetables, and fruits. Hence, it is rich in fiber, folate, and vitamin C. Vegetables and fruits provide vitamins and minerals, that are essential for a healthy body. Beans, tofu, and seeds are some good sources of proteins. Vegetables consist of phytochemicals, which prevent some chronic diseases. Green leafy vegetables are a rich source of antioxidants. Vegetables and fruits also provide natural sugars, beneficial enzymes, and trace elements.

It contains low amount of fats, cholesterol, and saturated fats. As a result, it minimizes the risk of weight gain. This, in turn, reducing the possibilities of developing the health problems caused by obesity. Vegetarian diet is also helpful for healthy weight loss. A vegetarian diet lowers the blood cholesterol levels and decreases the risk of various disorders such as high blood pressure, stroke, heart diseases, diabetes, rheumatoid arthritis, osteoporosis, kidney diseases, gallstones, and cancer. Due to intake of high fiber diet, digestive health is improved. Vegetarianism protects you from certain meat related food-borne diseases such as bird flu, mad cow disease, intestinal parasites, etc

Disadvantages

Although vegetarian diet provides all the essential nutrients, there are certain factors that we can get in more amounts from meat or fish. Vegetarian diet is found to be low in proteins, calcium, vitamin B12, iron, and zinc. Vitamin B12 is found in soy products, fortified cereals, and animal products in abundant amount. Soymilk, milk, and other dairy products are the rich sources of vitamin D. Meat, chicken, fish, and poultry contain more quantities of iron and zinc. Milk, cheese, and yogurt are excellent sources of calcium. These nutrients are not found in large quantities in the vegetarian diet. Meat is a rich source of proteins and contains all the essential amino acids required by the body. Phosphorus present in the meat is easily absorbed than that present in legumes and cereals.

Vegetarian diet is not recommended for bodybuilders, as they require a protein-rich diet, for the purpose of increasing muscle mass. A diet lacking in sufficient carbohydrates and proteins can lead to anemia. Bowel irregularities can be commonly seen among the vegetarians. If your diet is totally free from fats, then it's not good, because certain amounts of cholesterol and fat is necessary for the development of the nervous system and for normal body functioning.

Although there are certain disadvantages of a vegetarian diet, it definitely offers a number of health benefits. If you properly plan your diet, you can overcome the problem of nutrient deficiencies, and improve your physical fitness and overall health. After all, healthy eating is the key to healthy living.

Source:
www.buzzle.com/articles/advantages-and-disadvantages-of-being-vegetarian.html

6. TECHNICAL MATTERS

6.1 Developments in the Ghanaian Payment Systems Landscape

By Dr. Settor Amediku

Executive Summary

This is the maiden edition of Ghana's Payment Systems Annual Report. The report aims at highlighting developments and identifying vulnerabilities in the payment systems space that may pose risk to price and financial stability. This report also aims at supporting policy to deepen the payment systems and also help to foster financial and social inclusion.

The year 2015 witnessed significant changes in the Ghanaian Payment Systems. Most prominent was the introduction of the Guidelines for Electronic Money Issuers and Agent Guidelines in July. These Guidelines were issued as part of the Bank's broader strategy to create an enabling regulatory environment for convenient, efficient and safe non-cash retail payment and funds transfer. In addition, the Payment Systems Office of the Bank developed a series of prudential returns to collect and monitor developments in the electronic money business and also in the payment system landscape. A web based portal to enable reporting institutions to submit these returns online was developed. This portal is hosted at the Bank's website.

The year also witnessed the release of several new innovative electronic payment services, including GhIPSS Instant Pay (GIP) and gh-link eCommerce services to promote fast, reliable and efficient online retail payments, and Ecobank Capital Advisors TBILL4ALL, which allows customers to remotely register, apply, purchase, rediscount and redeem treasury bills through their mobile phone. Also, mobile Point of Sale (mPos) device, which provides affordable means for merchant to accept card payments, and the Airtel-Bank of Africa Cross-Border Money Transfer Service, which allows customers to send cross-border inward remittances from one AirTel money wallet to another were launched. The year under review also witnessed Vodafone Ghana joining the other major mobile network operators in the mobile money business.

Cash as a payment instrument continued to play a significant role in Ghana's economy; however its role is gradually decreasing on account of non-cash alternatives that have emerged. This is largely due to various policies put in place by the Bank and other stakeholders to move Ghana towards a “cash-light” economy. All the major non-cash payment streams experienced considerable growth in volumes, values and clearing of transactions in 2015 compared with 2014. Cheques continued to be the major non-cash retail payment instrument, accounting for 71.7% of total value of non-cash retail payments, while volume of mobile money transactions represented approximately 94% of total volume of non-cash retail payments. Cheques saw modest growth in transaction value and volume of 2.64% and 15.38%, respectively, while other non-cash payment instruments witnessed exponential growth in transaction value and volume. E-zwich increased in transaction value and volume by 260.08% and 238.47%, respectively. Mobile Money recorded 150.16% and 205.77% growth in volume and value of transactions in 2015. Registered mobile money customers of 13,120,367 as at end 2015 showed an increase of 83.05% over the 2014 position of 7,167,542.

One of the key priorities of the Bank is to contribute to the development of modern, resilient and efficient market infrastructures to serve the needs of the economy and also facilitate the development of a safe and efficient financial market. The Payment Systems Office conforms to the *Principles for Financial Market Infrastructures* issued by the Committee on Payment and Settlement Systems (CPSS) of the Bank for International Settlements (BIS) and the Technical Committee of the International Organisation of Securities Commission (IOSCO) in carrying out its oversight activities. The key principles that guide the office in its oversight work are as follows:

- **Transparency:** The Bank publicly declares its oversight policies and standards for the various payment system streams.

- **International Standards:** Relevant internationally recognized standards are suitably adopted for the payment and settlement systems oversight activities.

- **Exercise of Statutory Authority:** The Bank uses its authority under the applicable laws to engage stakeholders to comply with relevant standards and also to conduct their businesses to foster sound, effective and efficient national payment and settlement system as well as financial stability.

- **Consistency:** Oversight standards are consistently applied to comparable payment and settlement systems.

- **Cooperation in Oversight:** The Bank collaborates with other relevant central banks and other supervisory authorities including the National Communications Authority (NCA) to promote safety and efficiency of the payment and settlement systems.

  A draft Memorandum of Understanding between the Bank and the NCA was prepared after various consultations.

The Office conducted on-site inspections of all security cheque printers and analysed off-site the monthly returns of payment systems providers. As part of its oversight responsibility, systems operators and participants (GIS, GhIPSS, Bank of Ghana as a participant, universal banks and mobile network operators who issue e-money) submitted monthly returns to the Bank. The returns broadly covered access and usage and provided information on transactions volumes and values, service fees and tariffs of the various payment distribution channels, branch and agent network. Information on incident, fraud and defalcation; customer complaint; service interruption; suspicious transactions and concentration levels among the largest e-money holders were also submitted by Electronic Money Issuers. Submission of the prudential returns commenced in June 2015. The Bank also made some commitments in the Alliance for Financial Inclusion Maya Declaration. The Maya Declaration is a set of common principles regarding the development of financial inclusion policy made by a group of developing nation regulatory institutions during the Alliance for Financial Inclusion's (AFI) 2011 Global Policy Forum held in Mexico. One of the major commitments made by Ghana in this declaration was to review the regulatory framework of branchless banking to create an enabling environment and promote innovation towards the achievement of 70% financial inclusiveness in Ghana by the year 2017.

The significant growth in various payments streams, especially electronic money showed that the payment systems landscape is changing fast on account of interest shown by financial institutions, non-financial institutions and the non-bank public.

Developments in the Payment Systems Landscape

1.0 *Evolution of the Ghanaian Payments System in 2015*

The Payment System landscape witnessed significant developments in 2015 and key among these developments were:

- Significant changes in Regulatory Environment
    - o Launching of E-Money and Agent Guidelines
    - o Development of Payment System Reporting Framework
- Product/Service Development
- Growth in Non-Cash Payment Streams
- Continuous growth in mobile money float balances

1.1 Significant Changes in Regulatory Framework

1.1.1 Launching of E-Money and Agent Guidelines

In July 2015, the Bank published two payment systems guidelines, namely Guidelines for E-Money Issuers in Ghana and the Agent Guidelines. These Guidelines form part of the Bank's broad strategy of creating an enabling regulatory environment for scaling up adoption and usage of convenient, efficient and safe electronic retail payments and funds transfer systems. The Agent Guidelines were issued to promote the use of agents as channels for the delivery of financial services and also specify the necessary safeguards and controls to mitigate risks and also protect consumers.

The publication of these Guidelines has engendered the interest of financial and non-financial institutions service providers in the mobile money subsector.

New institutions emerged in the payment ecosystem space and new products as well as services were delivered through market-driven collaboration between financial and non-financial institutions. An example of this collaboration is the opportunity for e-money holders to withdraw money from Automated Teller Machines (ATMs) of some selected financial institutions without using a payment card. Other products arising from these collaborations included savings, credit, insurance and inward remittances.

1.1.2 Payment Systems Reporting Framework

In 2015 the Payments System Office of the Bank developed various reporting formats and guides to collect and monitor developments in the payment system landscape. The following reporting guides and formats were introduced:

- Guide for Reporting Institutions (E-Money Issuers)
- Guide for Reporting Institutions (Deposit Money Banks)
- E-Money Transaction Return
- E-Money Regional Distribution Return
- Incident, Fraud and Defalcation Return
- Customer Complaints Return
- Service Interruption Return
- Suspicious Transactions Return
- Hundred Largest e-money Holders Return
- E-Money Issuers Fees/Tariffs and Charges Return

1.2 *Product/Service Development*

1.2.1 GhIPSS Instant Pay (GIP) and gh-link eCommerce

In August 2015, GhIPSS launched two services, namely, the gh-link™ Internet Payment Gateway and GhIPSS Instant Payment Services, to promote fast, reliable and efficient online retail payments.

The Instant Pay service provides real time funds transfer while the gh-link™ e-Commerce gateway enables merchants and service providers to accept payments online.

1.2.2 Ecobank Capital Advisors TBILL4ALL

Ecobank Capital Advisors (ECA), a wholly-owned subsidiary company of Ecobank Ghana Limited, in collaboration with MTN obtained approval from the Bank to sell Treasury bills on MTN mobile money platform with the view to facilitating mobilization of funds from the informal sector. The platform serves as channel to transmit customers' Treasury bill requests from their phones to the TBill4All database application system. It also enables transfers between customers' mobile money wallets and ECA mobile money wallets for Treasury bills purchases and rediscounts. The instruments that are available on the mobile money platform are:

- 91-day Treasury bills
- 182-day Treasury bills

The service allows customers to remotely register, apply, purchase, rediscount and redeem treasury bills.

1.2.3 mPOS

GCB Bank Limited (GCB) was granted approval to deploy mobile Point of Sales (mPOS) across the country. The mPOS is a smartphone, tablet or dedicated wireless device that enables POS transactions. The mPOS is connected to a merchant's phone through the Bluetooth technology to enable the processing of a payment transaction.

1.2.4 Airtel-BOA Cross-Border Money Transfer Service

Airtel Ghana Limited in collaboration with the Bank of Africa obtained approval to engage in cross-border inward money transfer operations under the name 'Airtel-BOA Cross-Border Money Transfer Service".

The scheme allows a sender to either send money from his Airtel Money (AM) wallet to the recipient's AM wallet; or walk to an Airtel Money agent and deposit the cash meant for transfer.

1.2.3 Vodafone Mobile cash product

Vodafone Ghana Ltd. was authorised in September 2015 to operate as Dedicated Electronic Money Issuer (DEMI).

1.3 Growth in Non-Cash Payment Streams

All the major payment streams (see Table 1) experienced growth in both volumes and values of payment and clearing transactions processed in 2015 compared to 2014. Cheques continued to be the major non-cash retail payment instrument in terms of value of transactions whilst mobile money financial services accounted for significant amount of volume of retail payment transactions. Value of cheques cleared on CCC platform accounted for 71.7% of total value of non-cash retail payments while volume of mobile money transactions represented approximately 94% of total volume of non-cash retail payments (Table 1 and Charts 1 & 2). The growth in payments, clearing and settlement transactions may be attributed to the recent interest shown by the public, financial institutions and non-financial institutions in the current regulatory environment.

The data below represented the annual aggregate of volumes and values of payment, clearing and settlement transactions processed through respective payment systems in 2014 and 2015 (Table 1 and Chart 1 & 2).

Table 1: Total Transactions of non-cash payment systems under review

Payment System	2014		2015		Change 2015		% Change 2015	
	Volume	GH¢ million	Volume	GH¢ million	Volume	GH¢ million	Volume	GH¢ million
GIS	699,956	758,312.16	794,282	1,032,544.00	94,326	274,232	13.48	36.16
CCC	6,962,297	113,698.39	7,146,259	131,189.70	183,962	17,491	2.64	15.38
GACH Direct Credit	3,963,802	10,815.21	4,668,636	15,075.07	704,834	4,260	17.78	39.39
GACH Direct Debit	341,875	31.48	692,615	70.91	350,740	39	102.59	125.25
E-zwich	625,167	272.67	2,251,101	922.9	1,625,934	650	260.08	238.47
gh-link	1,346,963	183.32	1,899,645	305.14	552,682	122	41.03	66.45
Mobile Money	106,431,007	11,592.00	266,246,537	35,444.38	159,815,530	23,852	150.16	205.77

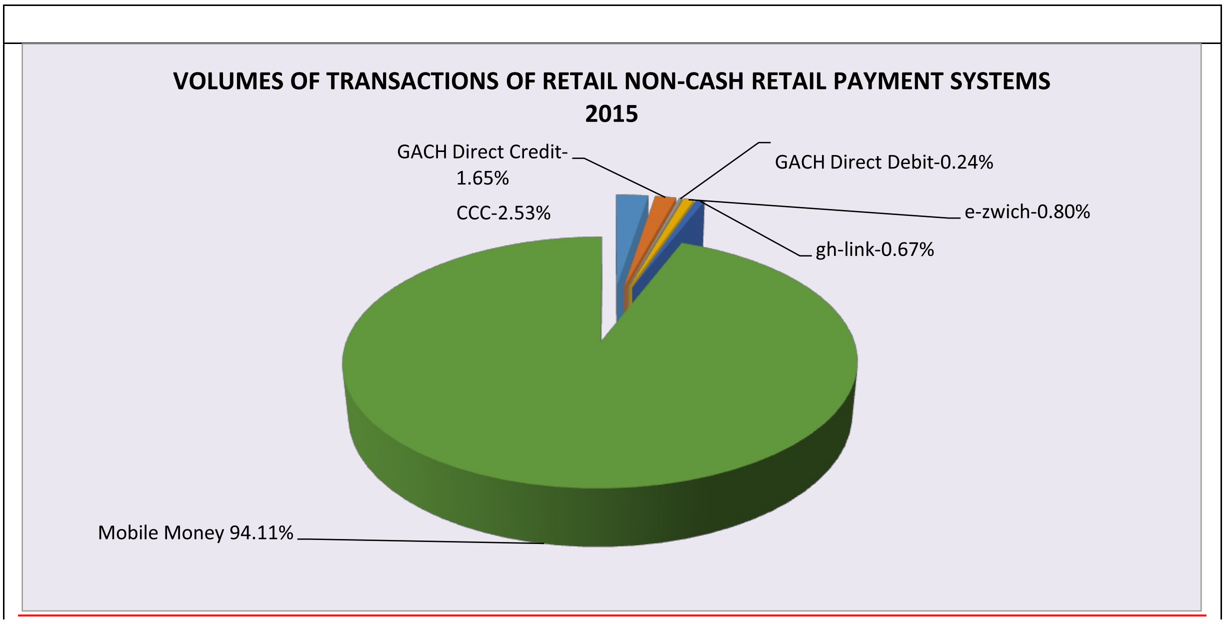


Chart 1: Volumes of Transactions of Respective Non-Cash Retail Payment System –2015

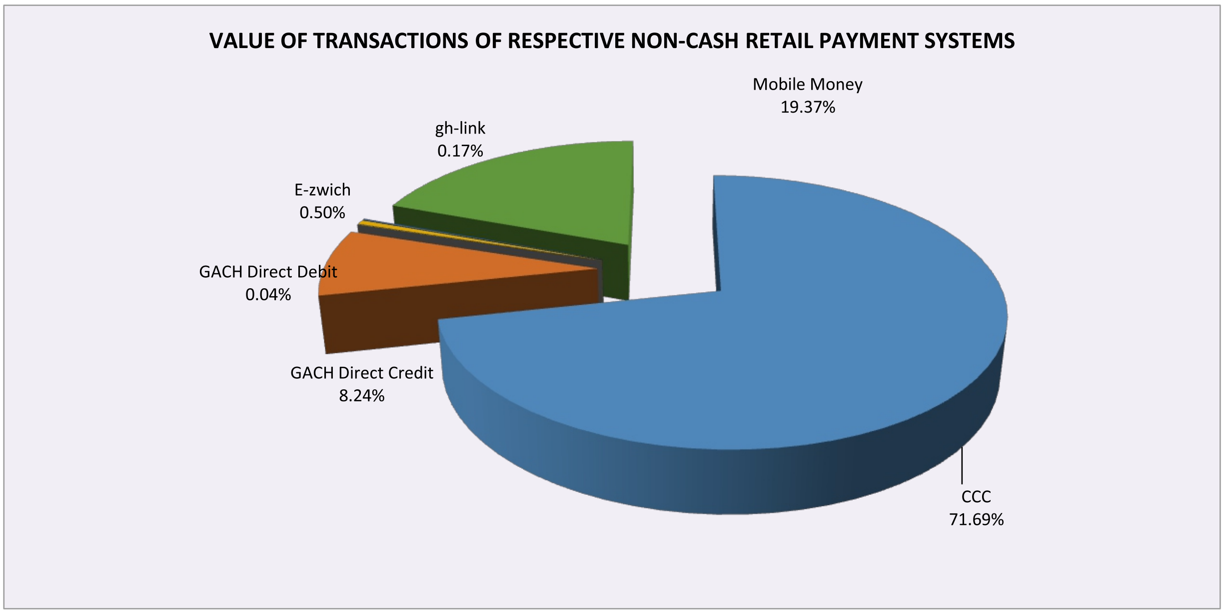


Chart 2: Values of Transactions of Respective Non-Cash Retail Payment Streams –2015

Developments in Payment Systems Statistics

2.1 Key Payment Systems Statistics 2014-2015

The major Financial Markets Infrastructures (FMIs) under the supervision of the Bank included the following:

- Ghana Interbank Settlement (GIS) which is Ghana's Real Time Gross Settlement (RTGS) system.
- Cheque Codeline Clearing (CCC) system
- Ghana Automated Clearing House (GACH) system
- National Biometric SmartCard Payment System – e-zwich™
- National Switching and Processing System – gh-link™
- Ghana's Paper Payment Instrument Accreditation Scheme

The GIS system handles large-value and high-priority payments and is operated by the Bank. The Ghana Interbank Payment and Settlement System (GhIPSS), a wholly owned subsidiary of the Bank handles retail payments and clearing systems. These systems process large volumes of relatively low value payments.

The large value transactions are processed directly through the GIS whilst low value payments transactions are cleared and netted through GhIPSS's platform and posted into GIS for settlement. Three (3) local security printers were accredited by the Bank to print paper payment instruments operating under the Paper Payment Instrument Accreditation Scheme. The purpose of the Scheme is to ensure high integrity of paper payment instruments. Accredited printers are subjected to annual inspection for re-accreditation.

Table 2 provides some of the key comparative economic and payments statistics for 2014 and 2015.

Table 2: Basic Economic Data and Payment Streams Statistics – 2014 & 2015

Category	Indicators	2014	2015	Annual Change 2015 (%)
Basic Statistical data	Total Population Estimate (Million)	27.04	27.67	2.33
	Exchange Rate (GHS/USD$)-End of Year	3.2	3.8	18.69
	Nominal Gross Domestic Product (GDP) GH¢'Million	113,343	133,297	17.60
Institutions offering payment services				
	Licensed Banks (DMBs)	28	29	3.57
	Bank Branches	967	1,173	21.30
	Rural and Community Banks	138	139	0.72
	NBFI	60	62	3.33
	Micro Finance Institution (MFI)	503	546	8.55
	Mobile Money Operators	3	4	33.33
	Active mobile money agents	20,722	56,270	171.55
Large Value Payments (RTGS): Ghana Interbank Settlement (GIS) system				
	Volume	699,956	794,282	13.48
	Value (GH¢'million)	758,312.16	1,032,544.00	36.16
	Average Value per Transacti on (GH¢)	1,083,371.18	1,299,971.55	19.99
	Volume of transactions per day	2,777.60	3,164.47	13.93
Cheque Codeline Clearing (CCC)				
	Volume	6,962,297	7,146,259	2.64
	Value (GH¢million)	113,698.39	131,189.70	15.38
	Average Value per Transaction (GH¢)	16,330.59	18,357.81	12.41
	Average Volume of transactions per day	27,628.16	28,471.15	3.05
ACH Direct Credit				
	Volume	3,963,802	4,668,636	17.78
	Value (GH¢'million)	10,815.21	15,075.07	39.39
	Average Value per Transaction (GH¢)	2,728.49	3,229.01	18.34
	Average Volume of transactions per day	15,729.37	18,600.14	18.25
ACH Direct Debit				

Category	Indicators	2014	2015	Annual Change 2015 (%)
	Volume	341,875	692,615	102.59
	Value (GH¢'million)	31.48	70.91	125.25
	Average Value per Transaction (GH¢)	92.08	102.38	11.19
	Average Volume of transactions per day	1,356.65	2,759.42	103.40
E-Zwich				
	Total Number of Cards Issued	1,084,121	1,369,369	26.31
	Volume of Transactions	625,167	2,251,101	260.08
	Value of Transactions (GH¢million)	272.67	922.9	238.47
	Average Volume of transactions per day	1,712.79	6,167.40	260.08
Gh_Link (National Switch)				
	Volume	1,346,963	1,899,645	41.03
	Value (GH¢'million)	183.32	305.14	66.45
	Average Value per Transaction (GH¢)	136.1	160.63	18.02
	Average Volume of transactions per day	3,690.31	5,204.51	41.03
Mobile Money				
	Total number of mobile phone subscribers (Cumulative)	30,360,771	35,008,387	15.31
	Registered mobile money customers (Cumulative)	7,167,542	13,120,367	83.05
	Active mobile money customers	2,526,588	4,868,569	92.69
	Registered Agents (Cumulative)	26,889	79,747	196.58
	Active Agents	20,722	56,270	171.55
	Total volume of mobile money transactions	113,179,738	266,246,537	135.24
	Total value of mobile money transactions (GH¢'Million)	12,123.89	35,444.38	192.35
	Balance on Float (GH¢'Million)	223.33	547.96	145.36
	Average Volume of transactions per day	310,081.47	729,442.57	135.24

Table 3: Data on Payment Channels and Instruments reported by the Banks* – Half Year Ending 2015

Item	Indicators	Half Year Ending Dec 2015
ATMs	Number of ATMs (cumulative)	912
	Volume of transaction s	28,367,033
	Value of transactions (GH¢)	5,876,478,243
POS Terminals	Number of Terminals (cumulative)	4,841
	Volume of transaction	1,007,180
	Value of transaction (GH¢)	403,263,712
Internet Banking	Number of Customers registered	840,532
	Volume of transactions	999,439
	Value of transactions (GH¢)	2,286,702,322
Mobile Banking	Number of Customers registered	1,449,374
	Volume of transactions	5,440,387
	Value of transactions (GH¢)	178,588,021
Debit Cards	Number of cards issued (cumulative):	4,304,097
	International Scheme Cards (EMV cards)	2,094,329
	Bank's own propriety cards issued	2,209,768
	Volume of transaction	22,852,411
	Value of transaction (GH¢)	5,213,724,329
Credit Cards	Number of cards issued (cumulative):	5,438
	International Scheme Cards (EMV cards)	5,438
	Bank's own propriety cards issued	0
	Volume of transaction	57,801
	Value of transaction (GH¢)	33,728,201
Prepaid cards	Number of cards issued (cumulative)	44,250
	Volume of transactions	143,531
	Value of transactions (GH¢)	51,855,244

* Payment data reported by twenty-nine (29) commercial banks and ARB Apex bank

2.2 Large value payments

Developments in large value payments in 2015 are discussed below:

2.2.1 Ghana Interbank Settlement (GIS) System

The Ghana Inter-bank Settlement (GIS) system which is Ghana's Real Time Gross Settlement (RTGS) system, continued to provide the platform for making high value payments for banks and their customers.

The total volume of GIS transactions of 794,282 in 2015 showed an increase of 13.48% over the 2014 position of 699,956. Total value of transactions also went up by GH¢274.23 billion (36.16 %) to GH¢1,032.54 billion in 2015 compared to GH¢758.31 billion in 2014. The average value per transaction was GH¢1.30 million in 2015 compared with GH¢1.08 million in 2014 (See Table 4 and Chart 3).

Indicators	**2011**	**2012**	**2013**	**2014**	**2015**	**Change volume/ value 2014 (%)**	**Change volume/ value 2015 (%)**
Volume	6,509,594	6,710,475	6,796,712	6,962,297	7,146,259	2.44	2.64
Value (GH¢million)	53,160.92	69,222.07	81,144.33	113,698.39	131,189.70	40.12	15.38
Average Value per Transaction (GH¢)	8,166.55	10,315.52	11,938.76	16,330.59	18,357.81	36.79	12.41

Table 5: Cheques Cleared

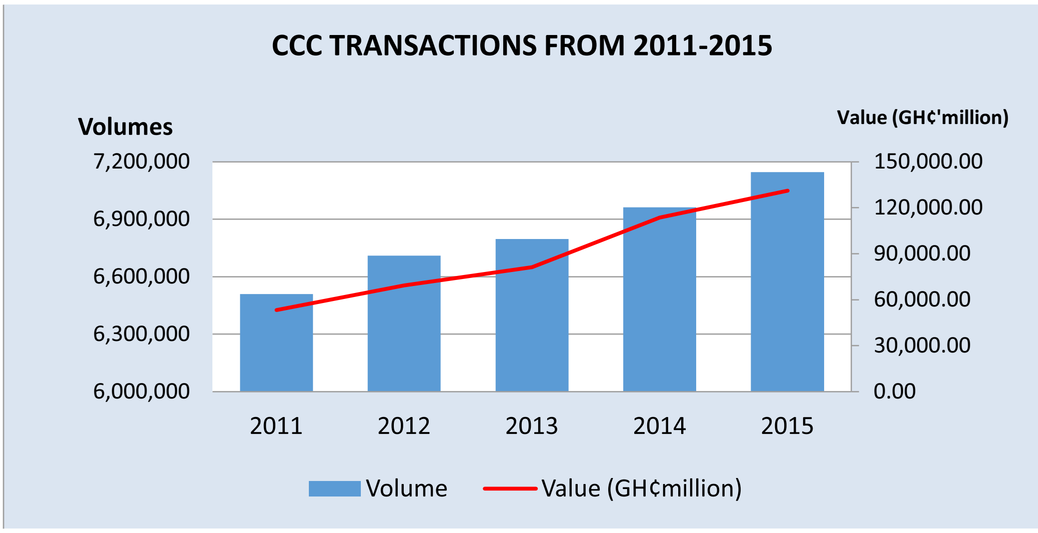


Chart 4: Cheque Clearing 2011-2015

2.3.2 Ghana Automated Clearing House (GACH)

GACH, which is an electronic payment system receives, processes and clears Direct Credit and Direct Debit payments on behalf of banks. The direct credit enables individuals and corporate bodies to make payments by electronic transfer directly into a bank account of the beneficiary. Direct credit may be used for payment of salaries, pensions, welfare benefits, commissions, supplier payments, dividend, refunds, interest payments and government payments.

Direct debit makes it possible for a customer to enter into an agreement with a service provider under a mandate authorizing the bank to accept future payment requests from the service provider and debit his account and transfer the funds to the service provider.

Direct Debits are debit pull instruments used for recurring payments such as mortgages, utility bills, insurance premiums, loan re-payments, rent and subscription based service payments.

2.3.4 Direct Credit

In 2015, total volume of transactions cleared through the direct credit system was 4,668,636, and showed an increase of 17.78% over the 2014 position of 3,963,802 with a growth of 66.62%. Total value of direct credit transfers was GH¢15.08 billion compared with GH¢10.82 billion for 2014. The average value per transaction of GH¢3,229.01 in 2015 was an increase of 18.34% over the 2014 position of GH¢2,728.49. Payment of SSNIT pensions by Bank of Ghana on behalf of Government continued to be the major contributor to the growth in the direct credit transactions. (See Table 6 and Chart 5)

Indicators	**2011**	**2012**	**2013**	**2014**	**2015**	**Change volume/ value 2014 (%)**	**Change volume/ value 2015 (%)**
Volume	420,478	1,325,533	2,378,997	3,963,802	4,668,636	66.62	17.78
Value (GH¢'million)	1,302.60	3,690.04	6,332.71	10,815.21	15,075.07	70.78	39.39
Average Value per Transaction (GH¢)	3,097.90	2,783.82	2,661.92	2,728.49	3,229.01	2.50	18.34

Table 6: ACH Direct Credit Transactions

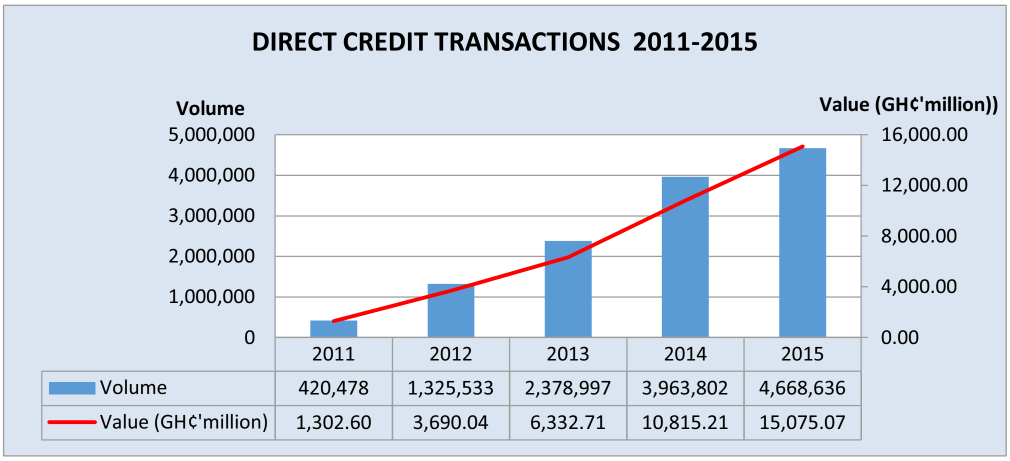


Chart 5: ACH Direct Credit Transactions From 2011-2015

2.3.5 Direct Debit

Total volume of direct debit transactions was 692,615 in 2015 and valued at GH¢70.91million. The average value per transaction in 2015 was GH¢102.38 compared with GH¢92.08 in 2014. Returned unpaid direct debit formed 69.82% to the total volume of transactions in 2015 compared with 63.12% in 2014 (See Table 7 and Charts 6 & 7).

The main reasons accounting for returned direct debits were insufficient funds, invalid account, mandate not received, wrong presentation, stopped payment and customer account blocked. The Bank is working with GhIPSS to find a solution to these irregularities.

Indicators	**2013**	**2014**	**2015**	**Change volume/ value 2014 (%)**	**Change volume/ value 2015 (%)**
Volume	172,908	341,875	692,615	97.72	102.59
Value (GH¢'million)	22.81	31.48	70.91	38.01	125.25
Average Value per Transaction (GH¢)	131.92	92.08	102.38	(30.20)	11.19
Returned Transactions(Volume)	60,766	215,777	483,585	255.09	124.11
Returned Transactions(Value GH¢'million)	7.51	16.78	42.25	123.44	151.79
Returned (Volume) as % of total	35.14	63.12	69.82	79.62	10.61
Returned (Value) as % of total	32.92	53.29	59.58	61.88	11.81

Table 7: ACH Direct Debit Transfers

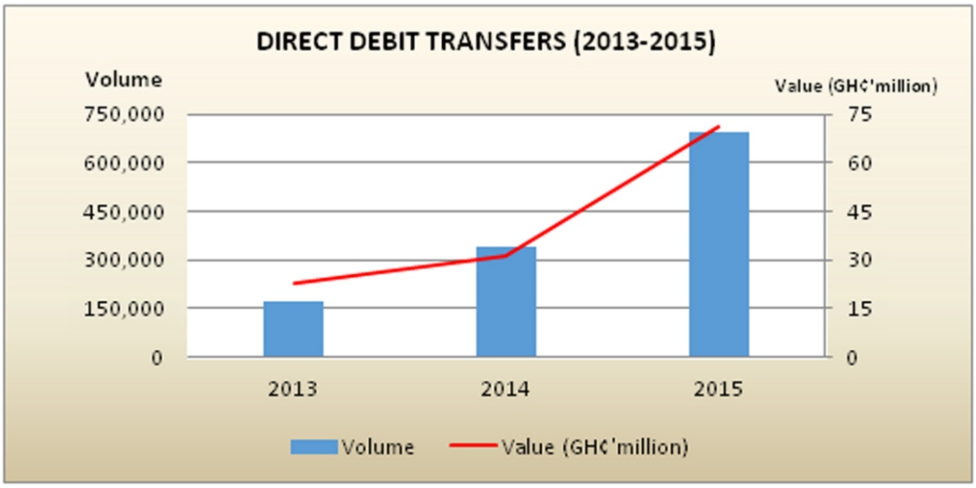


Chart 6: Ach Direct Debit Transfers 2013-2015

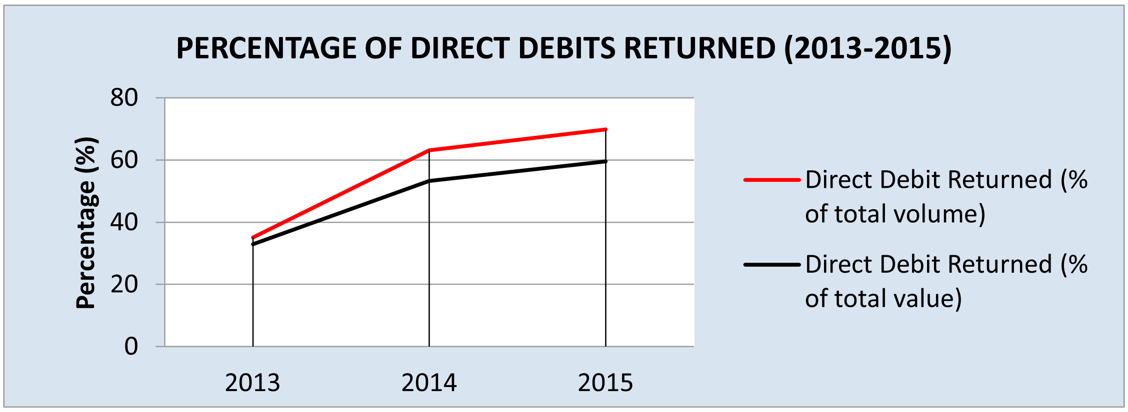


Chart 7: Percentage of Direct Debit Transfers That Were Returned

2.3.6 E-Zwich Transactions

E-zwich is an interoperable biometric smart card payment system which offers a suite of electronic payment and banking services accessible from a Point of Sales (POS) terminals or ATM. These services include payments at merchants' point of sale, withdrawal of cash, deposit onto the card and transfer of funds. The e-zwich system also facilitates the distribution of payments such as loans, salaries, wages and pensions.

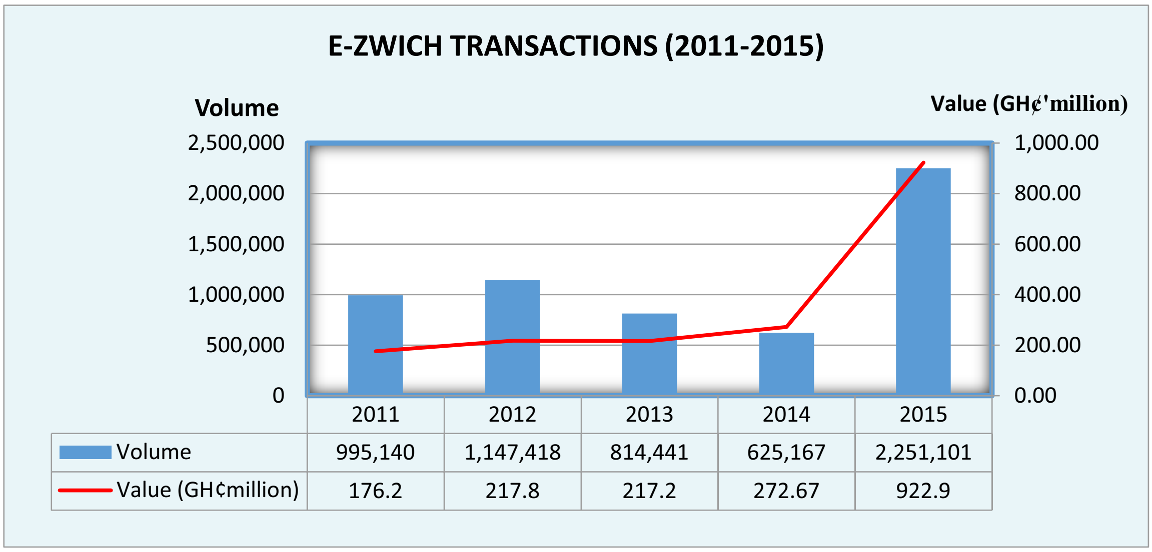
The number of e-zwich card holders of 1,369,369 in 2015 showed an increase of 26.38% over 2014 position of 1,084,121.Total volume of e-zwich transactions increased by 260.08%; from 625,167 in 2014 to 2,251,101 in 2015.

Similarly, total value of transactions in 2015 grew by 238.47% or GH¢650.23 million to GH¢922.9 million compared to GH¢272.67 million in 2014. (See Table 8 and Charts 8 & 9)

The significant increase in e-zwich transactions may be attributed to Government's use of the system to pay caterers of national school feeding programme, beneficiaries of the Livelihood Empowerment Against Poverty (LEAP) and personnel of the National Service Scheme as means of ensuring efficiency in payments and eliminate waste in its expenditure.

Indicators	**2011**	**2012**	**2013**	**2014**	**2015**	**Change volume/ value 2014 (%)**	**Change volume/ value 2015 (%)**
Total Number of Cards Issued	676,779	792,966	903,724	1,084,121	1,369,369	19.96	26.31
Value on Cards (GH¢)	6,170,553	8,120,680	8,141,135	8,764,310	29,016,267	7.65	231.07
Number of Cards with Value	272,387	343,918	388,418	419,807	613,403	8.08	46.12
Cards with Value (% of total)	40.2	43.4	43.0	38.72	44.8	(9.95)	15.70
Average Value Per Card (GH¢)	22.7	23.6	21.0	20.88	47.3	(0.57)	126.53
Volume of Transactions	995,140	1,147,418	814,441	625,167	2,251,101	(23.24)	260.08
Value of Transactions (GH¢million)	176.2	217.8	217.2	272.67	922.9	25.54	238.47

Table 8: Selected Indicators of E-Zwich Usage



	2011	2012	2013	2014	2015
Volume	995,140	1,147,418	814,441	625,167	2,251,101
Value (GH¢million)	176.2	217.8	217.2	272.67	922.9

Chart 8: E-Zwich Volume and Value of Transactions 2011-2015

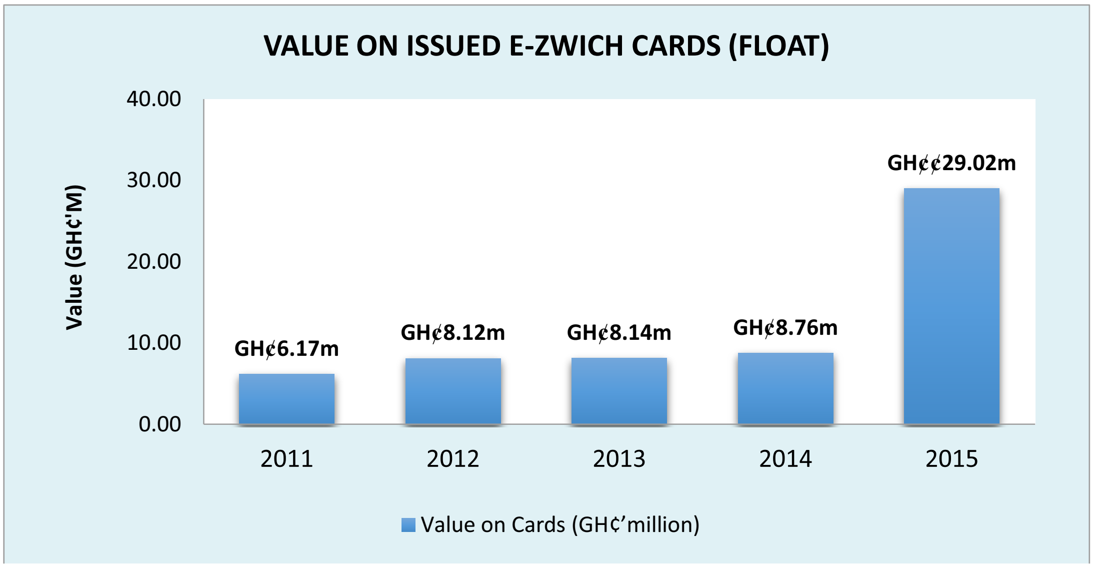


Chart 9: Value on E-Zwich Cards as at end of year

2.3.7 gh-link™(NATIONAL SWITCH)

A total of thirty-three (33) member institutions were connected to the gh-link™, the national switch as at the end of 2015. The composition of the institutions connected to the switch was twenty-seven (27) banks, five (5) savings and loans companies and one (1) switch operator compared with twenty-five (25) banks and four (4) NBFIs in 2014.

The total number of gh-link™ transactions recorded in 2015 was 1,899,645 with a value of GH¢305.14 million compared with 1,346,963 with a value of GH¢183.32 million in 2014 **(See Table 9 and Chart 10)**.

Indicators	2012	2013	2014	2015	Change volume/ value 2014 (%)	Change volume/ value 2015 (%)
Volume	10,295	549,456	1,346,963	1,899,645	145.14	41.03
Value (GH¢'million)	1.1	67.5	183.32	305.14	171.59	66.45
Average Value per Transaction (GH¢)	106.85	122.85	136.10	160.63	10.79	18.02

Table 9: gh-link[tm] Transactions

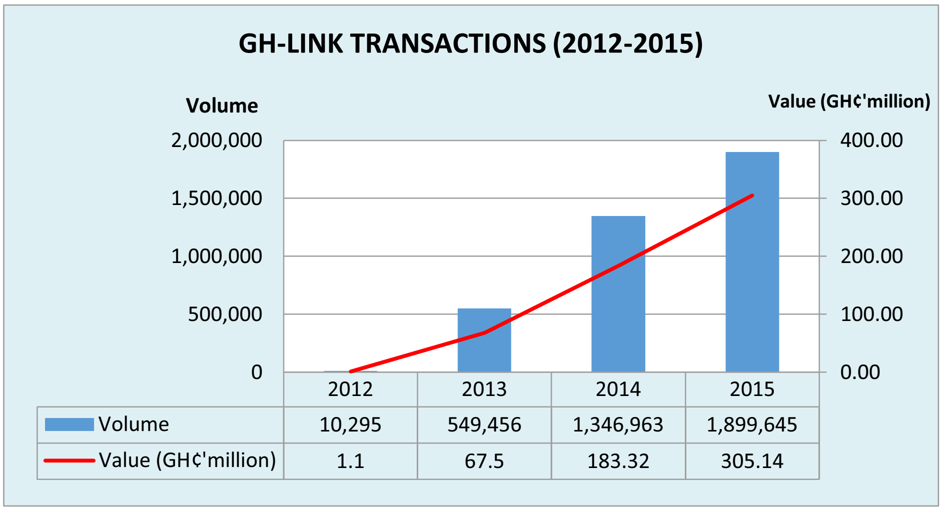


Chart 10.10: gh-link (National Switch) Transactions 2012-2015

2.3.8 Mobile Money Services

The mobile money space had a boost with the passage of the Electronic-money Issuers and Agents Guidelines in July 2015 to replace the Branchless Banking Guidelines (2008). There were four (4) Mobile Network Operators (MTN, TIGO, AIRTEL and VODAFONE) which offered mobile money services as at end of 2015.

Registered mobile money customers of 13,120,367 as at end 2015 showed a growth of 83.05% over the 2014 position of 7,167,542 compared with 63.13% growth in 2014. Similarly, the number of active mobile money customers' increased by 92.69% from 2,526,588 in 2014 to 4,868,569 in 2015 compared with 154.75% growth in 2014.

The cumulative active registered agents two of the four mobile money operators (MMOs) in 2015 stood at 56,270 and represented a growth of 171.55% over the previous year's position of 20,772. Total value of mobile money transactions of GH¢35.44 billion in 2015 showed a 192.35% growth over the 2014 position of GH¢12.12 billion compared with a growth of 357.08%. (See Table 10 and Chart 11 & 12)

The total float balance of GH¢547.96 million as at December 2015 showed a growth of 145.36% over 2014 float balance of GH¢223.33 million, whilst the 2014 position was a growth of 255.51% over the 2013 position of GH¢62.82 million. Key financial highlights in the mobile money ecosystem is summarised below:

1. The number of customers who transacted at least once in the 90 days prior to reporting

2. The number of agents who transacted at least once in the 30 days prior to reporting

Indicators	2012	2013	2014	2015	Annual Growth 2014 (%)	Annual Growth 2015 (%)
Total number of mobile phone subscribers (Cumulative)*	25,618,427	28,026,482	30,360,771	35,008,387	8.33	15.31
Registered mobile money customers (Cumulative)	3,778,374	4,393,721	7,167,542	13,120,367	63.13	83.05
Active mobile money customers	345,434	991,780	2,526,588	4,868,569	154.75	92.69
Registered Agents (Cumulative)	8,660	17,492	26,889	79,747	53.72	196.58
Active Agents	5,900	10,404	20,722	56,270	99.17	171.55
Total volume of mobile money transactions	18,042,241	40,853,559	113,179,738	266,246,537	177.04	135.24
Total value of mobile money transactions (GH¢'Million)	594.12	2,652.47	12,123.89	35,444.38	357.08	192.35
Balance on Float (GH¢'Million)	19.59	62.82	223.33	547.96	255.51	145.36

Table 10: Mobile Money Service 2012-2015

* Source: National Communications Authority (NCA)

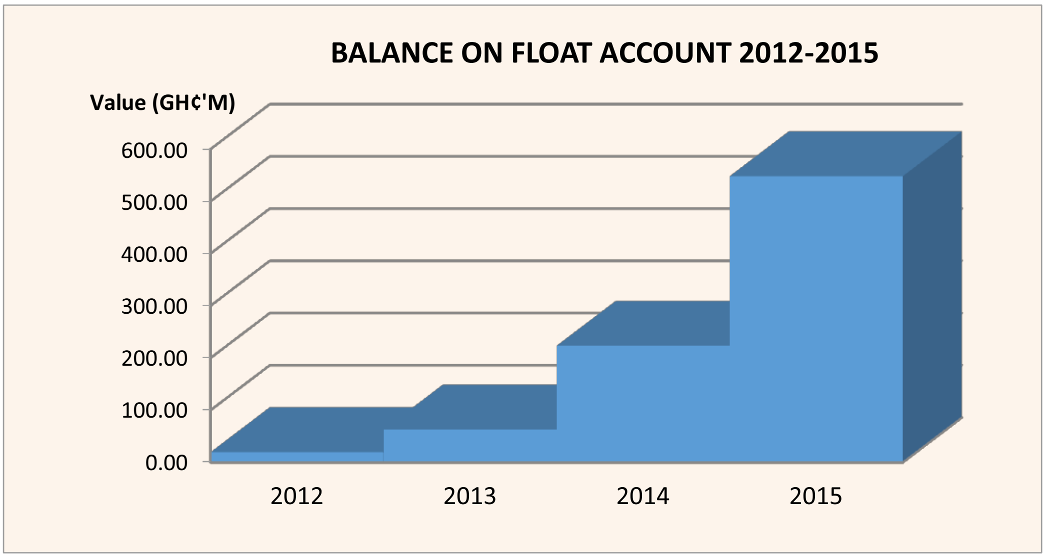


Chart 11 Float Accounts Balance

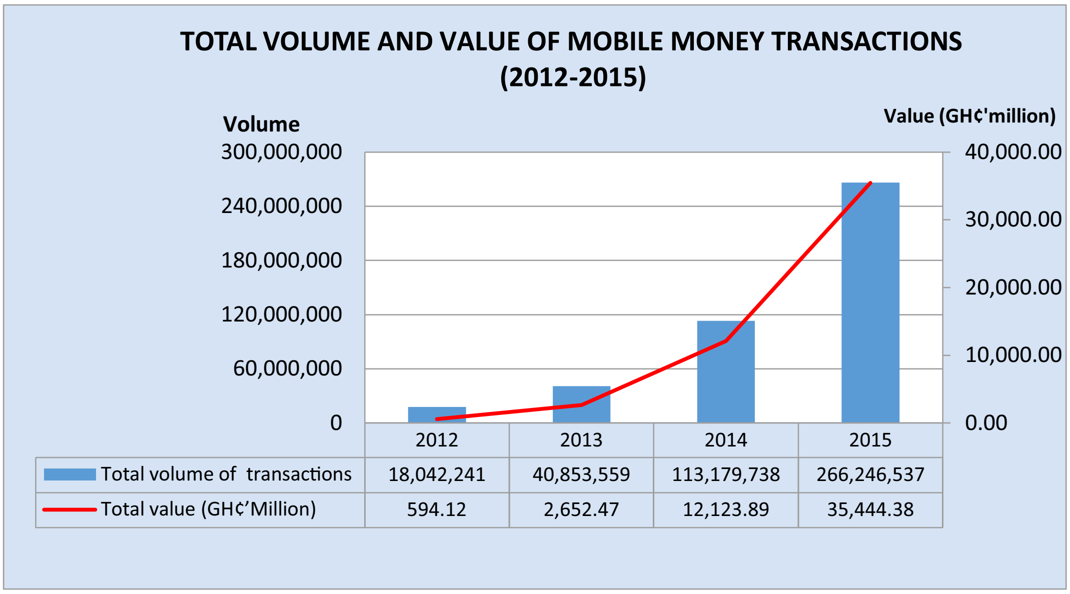


Chart 12: Total Mobile Money Transactions

The Financial Sector

3.1. Deposit Money Banks and Other Financial Institutions

The number of licensed Deposit Money Banks (DMBs) was twenty-nine (29) with 1,173 branches in 2015 compared with twenty-eight (28) DMBs with 967 branches in 2014.

ARB Apex Bank (Apex body of Rural and Community Banks) had 139 licensed Rural and Community Banks compared with 138 in 2014. Total number of Non-Bank Financial Institutions (NBFIs) and Micro-Finance Institutions in 2015 were 62 and 546 compared with 60 and 503 in 2014 respectively. (See Table 11)

Regulated Financial Institutions	2014	2015
Deposit Money Banks (DMBs)	28	29
Bank Branches	967	1,173
Rural and Community Banks	138	139
Non-Bank Financial Institution (NBFI)	60	62
Micro Finance Institution (MFI)	503	546

Table 11: Regulated Financial Institutions

3.2 Internet and Mobile Banking

Ghana's universal banks offer a range of electronic payment schemes such as internet banking and mobile banking to provide customers variety of payment options. Electronic payment schemes witnessed significant increase in number of registered customers, volume and value of transactions as at December, 2015.

Twenty-nine (29) universal banks offered both internet and mobile banking services. The total number of registered customers of Internet Banking increased by 22.86% from 684,120 as at end-June 2015 to 840,532 at end-December 2015. Mobile banking service customers were 1,198,291 as at end-June 2015, and showed a growth of 20.95% to 1,449,374 at end 2015.

The volume and value of internet banking transactions for the half-year ending December 2015 were 999,439 and GH¢2,286.70 million respectively. Similarly, the volume and value of mobile banking transactions for the half-year ending December 2015 were 5,440,387 and GH¢178.59 million respectively.

Meanwhile, average volume of transactions per day was 5,461 for internet banking and 29,729 for mobile banking. (See Table 12)

Internet Banking	Number of Customers registered (Cumulative)	840,532
	Volume of transactions	999,439
	Value of transactions (GH¢'Millon)	2,286.70
	Average volume of transactions per day	5,461
Mobile Banking	Number of Customers registered (Cumulative)	1,449,374
	Volume of transactions	5,440,387
	Value of transactions (GH¢'Million)	178.59
	Average volume of transactions per day	29,729

Table 12: Internet and Mobile Banking (Half Year Ending Dec 2015)

3.2 Automated Teller Machines (ATMs) and Point of Sales (POS)

The banks deployed 912 Automated Teller Machines (ATMs) and 4,841 Point of Sales (POS) terminals as at end December 2015. These financial services access points serve as a major payment channel for electronic card holders.

3.4 Electronic Payment Cards (Debit and Credit Cards)

The number of debit cards issued by the banks as at end of December 2015 was 4,304,097 and comprised 2,094,329 International Scheme Cards and 2,209,768 banks own propriety cards. The total volume and value of transactions for the half year ending 2015 were 22,852,411 and GH¢5,213.72 million respectively.

Out of the twenty-nine (29) universal banks in Ghana only three (3) issued credit cards as at December 2015. The total number of credit cards issued by the three banks as at end December 2015 was 5,438.

All the credit cards were International Scheme Cards (EMV cards). The total volume and value of transactions for the half year ending 2015 were 57,801 and GH¢33.73 million respectively.

3.5 Retail Payments instruments

The main payment instruments for retail payments were Cash, Cheque, Direct Credit Transfer, Direct Debit Transfer and Payment cards – debit, credit and prepaid cards

3.5.1 Use of cash

Comparative ratio of currency outside banks to money supply of some selected developed and developing countries provided evidence of cash dominance in the Ghanaian economy. However, no precise statistics are currently available to determine the volume and value of transactions made with cash (See Table 13).

(%)	**2010**	**2011**	**2012**	**2013**	**2014**
Ghana	45.72	43.18	44.08	42.63	39.96
Nigeria	19.43	18.39	17.53	20.57	20.77
Gambia	34.28	35.64	38.11	34.2	33.46
United Kingdom	4.69	4.93	4.86	4.6	4.52
Sweden	6.08	5.76	5.2	4.47	3.93
Romania	32.84	35.66	35.36	34.68	33.64
Bulgaria	40.01	37.06	36.93	33.56	32.68

Table 13: Comparative ratios of some selected countries currency outside banks to money supply (M1) ratio.
Source: Central Banks Annual Reports, 2010 -2014

Ghana as at end 2014 had the highest currency with the public to narrow money supply ratio of 39.96% compared with Nigeria (20.77%), Gambia (33.46%), Bulgaria (32.68%) and Romania (33.64). The ratio however decreased to 38.33% in 2015.

It is significant to note that the ratio has consistently been falling since 2010 on account of policies pursued by the central bank and other stakeholders to move Ghana towards a "cash-light" economy.

3.5.2 Use of non-cash payment instruments

Cheques continued to be a major non-cash retail payment instrument in terms of values of transactions. Meanwhile, direct credit transfers continued to gain consumers acceptance, while almost 70% of direct debit transfers of the total volume of transactions in 2015 were returned unpaid. (See Table 14 and Chart 13)

Type of instrument	**Volume of transaction**	**Value of transaction (GH¢'million)**	**Average volume of transactions per day**
Cheques (Cleared cheques)	7,146,259	131,189.70	28,471
Direct credit	4,668,636	15,075.07	18,600
Direct debit	692,615	70.91	2,759

Table 14: Major Paper-Based Payment Instruments - 2015

A range of payment cards were available in the market; notable among them were debit cards, credit cards, e-zwich cards and prepaid cards (See Table 15 and Chart 13).

Card type	**Number of cards issued as at end December 2015**	**Average volume of transactions per day**
Debit cards	4,304,097	124,877
Credit cards	5,438	316
E-Zwich cards	1,369,369	6,167
Prepaid cards	44,250	784

Table 15: Number of major payment cards issued and average daily transactions

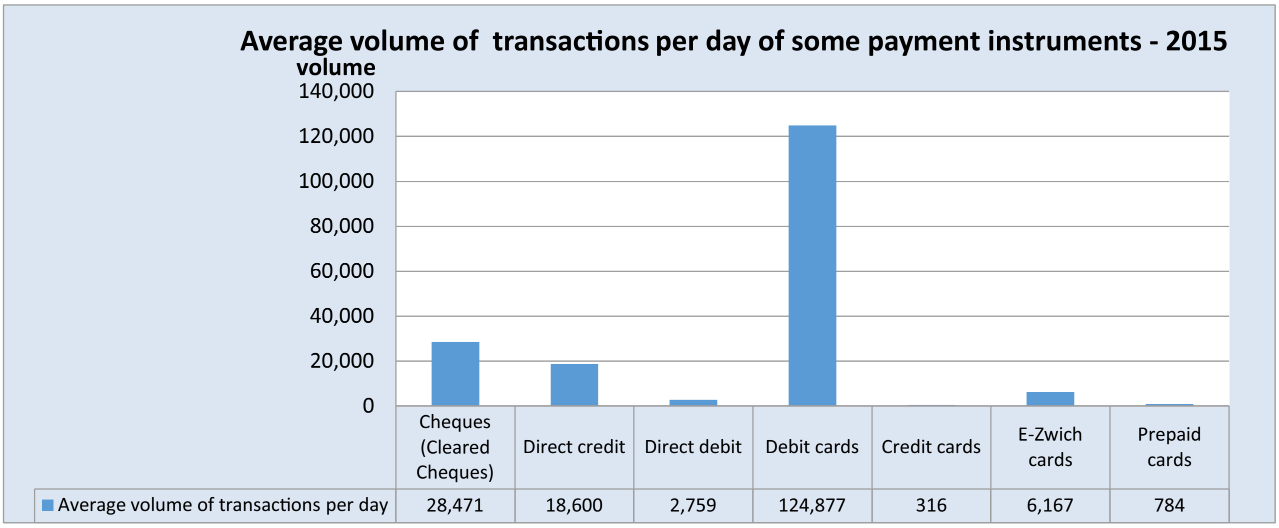


Chart 13: Average volume of transactions per day of some major payment instruments-2015

Payment Delivery channels

4.1 Summary of Key payment Delivery Channels

Payment delivery channels are mechanisms and devices allowing the use of payment instruments, and also processing of banking transactions such as withdrawals, deposits, payments and credit transfers. The main payment delivery channels were bank branches, ATMs, POS terminals, and remote delivery channels such as internet and other digital finance devices. (See Table 6 for payment statistics on major payment channels)

Bank branches and banking agencies were the main payment distribution channels for cheques and credit transfers. However, few ATMs performed the function of accepting cheques deposit. ATM networks and POS terminals were mostly used for payment cards transactions. However, some ATMs were configured to accept cardless transactions such as electronic-money for example mobile money cash out transactions. (See Table 16)

	Main payment delivery channels	Number of channels as at December 2015
1	ATMs	912
2	POS	4,841
3	Deposit Money Banks (DMBs)	29
5	Bank Branches	1,173
7	Rural and Community Banks	139
8	Non-Bank Financial Institutions (NBFI)	62
9	Micro Finance Institution (MFI)	546
10	Active mobile money agents	56,270

Table 16: Main payment delivery channels -2015

5.1 Regulatory Environment

5.1.1 The roles and scope of Payments System Oversight

The Bank has a statutory responsibility for the payment and settlement systems under the Bank of Ghana Act, 2002 (Act 612) and the Payment Systems Act 2003 (Act 662). This responsibility requires it to promote, regulate, and supervise these systems to ensure that they are safe, reliable and efficient. The Bank's task is therefore to ensure that the public and businesses make payments in a safe and efficient manner.

Ghana's national payment system comprises the following:

1. Banks (including Bank of Ghana) and non-bank financial institutions that hold accounts and provide payment services
2. Payment infrastructures and service providers
3. Payment processing companies
4. Payment instruments
5. Laws, standards, rules and procedures governing payments and settlements
6. Market conventions and arrangements

A key priority for the Bank is to contribute to the development of a modern, resilient and efficient market infrastructure which would serve the needs of the economy and facilitate the development of a safe and efficient financial market. The Bank has an interest in the design and management of payment and settlement systems as part of its responsibilities for monetary and financial stability.

The table below represents the financial market infrastructure (FMI) under the Bank's oversight.

TYPE	MARKET INFRASTRUCTURE	FEATURES
Clearing systems	Cheque Codeline Clearing with Cheque Truncation (CCC)	Provides clearing and settlement of cheques
	Automated Clearing House (ACH)	Enables direct debit and credit funds transfer from one bank to another
	gh-link™	Provides clearing and settlement for all domestic cards
	e-zwich biometric smartcard system	Provides clearing and settlement of e-zwich card transactions
Settlement systems	Ghana Interbank Settlement (GIS) system	It is the real time gross settlement (RTGS) for high value funds transfers. It is managed and operated by the Bank.
	Central Securities Depository	The central depository and settlement system that provides clearing and settlement for securities issued by the Bank, Government of Ghana and Cocoa Board and other corporate securities
Critical service providers	Security Instrument Printers	Print payment instruments such as payment vouchers, cheques

Table 17: The Financial Market Infrastructure in Ghana

The Bank's oversight of the payment and settlement systems has the following objectives:

1. Containment of systemic and other payment risks in order to maintain stability in the financial system.
2. Monitoring and evaluation of payment systems performance.
3. Preventing possible market failures in payment and settlement systems
4. Oversight of market infrastructures of the financial system in line with the following laws:

a. Bank of Ghana Act, 2002 Act 612.
b. The Payment Systems Act, 2003, Act 662.
c. The Bills of Exchange Act, 1961, Act 55.
d. Foreign Exchange Act 2006, Act 723
e. Credit Reporting Act 2007, Act 726
f. Central Securities Depository Act 2007, Act 733
g. Anti-Money Laundering Act 2008, Act 749
h. Electronic Transactions Act 2008, Act 772

In addition to the above laws, there are rules for specific systems such as:

- The Ghana Interbank Settlement (GIS) system User Guidelines
- Electronic Money Issuers and Agent Guidelines
- Cheque Codeline Clearing with Cheque Truncation Guidelines and Operational Procedures
- Ghana Automated Clearing House Direct Credits and Direct Debits Guidelines and Operational Procedures
- Ghana Bankers Clearing House Rules
- Paper Instrument Accreditation Scheme

The Bank in 2013 made public its oversight function of payment and settlement systems with a Notice number BG/GOV/SEC/2013/09. The notice further informed the public about the establishment of an office to perform the oversight function. The Bank further developed an oversight framework that same year to enable it execute these functions.

5.2 Principles for Financial Market Infrastructures

The Bank applies the *Principles for Financial Market Infrastructures* issued by the Committee on Payment and Settlement Systems of the Bank for International Settlements(BIS) and the Technical Committee of the International Organisation of Securities Commission (IOSCO) in the performance of its oversight functions

Prospective participants in the financial market infrastructure require prior approval from the Bank in the form of authorization with respect to licensed banks and licence with respect to dedicated electronic money issuers. Security printers require valid licences and accredited security printers are subjected to regular annual inspections or condition for the renewal of their operating licences.

5.3 Participation in Settlement Systems

Participation in the GIS, cheque clearing and settlement operations and automated clearing house operations is limited to licensed universal banks. These banks are admitted into the clearing house after obtaining a banking licence and fulfilling all the entry requirements for a participating bank. As at December 31, 2015 the total number of banks on the GIS and in the clearing house was thirty-one (31) including the central bank. The clearing house is owned and managed by a wholly owned subsidiary of the Bank.

5.4 Submission of Returns by Systems Operators

As part of its oversight responsibility for payment and settlement systems, payment systems operators and payment service providers are required to submit monthly returns to the Bank. These returns cover access and usage and also provide information on transactions volumes and values, service fees and tariffs of the various payment distribution channels, branch and agent network. For electronic money issuers, apart from access and usage data, they are also required to submit information on incident, fraud and defalcation; customer complaint; service interruption; suspicious transactions and concentration levels.

5.5 On-site Supervision of Dedicated Electronic Money Issuers

Onsite examination is conducted at least once a year to evaluate the operations of the Dedicated Electronic Money Issuers.

5.6 Collaboration with National Communications Authority

The Bank has initiated a process to collaborate with the National Communications Authority (NCA), the primary regulator of mobile network operators, in order to ensure effective oversight of e-money issuers to minimise regulatory arbitrage, protect consumers and promote effective recourse mechanism. A Memorandum of Understanding was put in place to guide the two institutions.

5.7 Regulatory policies

Ghana's payment system is supported by various laws in line with the Principles for Financial Market Infrastructures (April 2012) issued jointly by the BIS Committee on Payment and Settlement Systems (CPSS) and the Technical Committee of the International Organization of Securities Commissions (IOSCO).

5.8. E-Money and Agent Guidelines

In July 2015, the Bank of Ghana issued two guidelines, namely the Guidelines for E-Money Issuers in Ghana and the Agents Guidelines. These Guidelines form part of the Bank's strategy of creating a congenial regulatory environment for scaling up adoption and usage of convenient, efficient and safe electronic retail payments and funds transfer. The Agent Guidelines were issued to promote the use of agents as a channel for delivery of financial services, specify necessary safeguards and controls to mitigate the associated risks and also ensure consumer protection safeguards.

5.9 Payment schemes

5.9.1 Payment service as means of financial inclusion

The Bank was involved in promoting financial inclusion in line with the commitments made in the Maya Declaration. The Maya Declaration is a set of common principles regarding the development of financial inclusion policy made by a group of developing nation regulatory institutions during the Alliance for Financial Inclusion's (AFI) 2011 Global Policy Forum held in Mexico.

One of the major commitments made by Ghana in this declaration was to review the regulatory framework of branchless banking in order to create an enabling environment and promote innovation towards the achievement of 70% financial inclusiveness by the year 2017. This commitment culminated in the passage of the EMI Guidelines and Agent Guidelines in July, 2015 to regulate the issuance and use of digital money in Ghana. New innovations in digital payments and digital financial services fostered financial inclusiveness.

5.9.2 Use of mobile payment services

The passage of the Electronic-Money and Agent Guidelines has engendered financial and non-financial service providers' interest in innovating products and services to promote financial inclusion. For instance, the Bank granted an approval for Ecobank Capital Advisors in August 2015 to introduce an innovative service known as Tbill4All. Ecobank Tbill4All is a mobile-money-based service designed to allow the unbanked to purchase and manage Treasury Bills directly from their mobile phones. Airtel Ghana in collaboration with Bank of Africa was also granted authorisation in October 2015 to introduce cross-border inward mobile money transfer.

Under the new Guidelines, Mobile Network Operators are required to set up subsidiaries to enable them obtain a license to engage in electronic money business. The Guideline also provides for payment of interest on e-money float held by the universal banks. Under this new arrangement, 80% of accrued interest on float is paid to customers while the remaining 20% is retained by the electronic money issuers.

The EMI Guidelines also provides for consumer protection, complaints procedures, recourse mechanisms and Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT) Policies. The Agent Guidelines provides for the management and recruitment of agents. An Agents' Registry is being put in place to help in the management of Agents.

5.9.3 ATM and POS Interoperability

The National Switch, gh-link™, provides interoperability for ATM and POS devices. Gh-link™, by virtue of being an interoperable platform provides the switching, clearing and settlement of POS transactions of all member financial institutions. This allows member institutions cards to be accepted at the terminals of acquirer member institutions.

5.9.4 Ghana Interbank Settlement (GIS) System

Ghana Interbank Settlement (GIS) System, (Ghana's Real Time Gross Settlement System) became operational on October 11, 2002. Designated as a systematically important payment system, the GIS is a large value domestic interbank funds transfer system that is highly secure and complies with BIS relevant principles for financial market infrastructures. The system operates every working day between 08.30 and 17.00 GMT and offers a mechanism for the settlement of large value interbank real time transactions on gross basis.

Transactions that are settled in the GIS are irrevocable and unconditional and thus eliminate settlement and systemic risks inherent in the settlement process. Participation in the GIS system is limited to licensed clearing banks. The participants of the GIS platform comprised

- twenty-six (26) universal banks,
- the ARB Apex Bank
- Social Security and National Insurance Trust (SSNIT), the national pension funds manager, and the Central Securities Depository (CSD).

The Bank of Ghana is also a participant on the GIS platform. Participants holding accounts in the GIS are able to operate their accounts on real time basis from their own premises through a computerized network.

5.9.5 Settlement of Funds in the Ghana Interbank Payment Systems

Net settlement of batches of multilateral retail payments (cheque clearing, ACH, ATM, e-zwich, and mobile money) emanating from the Ghana Interbank Payment and Settlement System (GhIPSS) are effected in the GIS. The system also allows the settlement of the cash leg of securities from the CSD through an interface to achieve Delivery versus Payment (DvP).

When a bank faces temporary shortage of funds during the day, the system temporarily keeps the transactions in a queue pending availability of funds. Transactions are released for settlement when funds are available on the basis of 'First In First Out' (FIFO). Payments that do not settle by the close of the business day on account of insufficient fund are automatically cancelled. The Bank is responsible for the management of queues while the system participants are responsible for determination of priority of transactions.

5.10 Oversight Activities

The Bank's payment system oversight covers both systemic importance and non-systemic important payment systems infrastructures. Payment system infrastructures are assessed against the relevant principles of financial market infrastructure (PFMI) taking into consideration their potential contribution to systemic risk. Initial assessment is carried out by comparing the operations of a payment system to its system's own rules and procedures. The Bank adopts both off-site and on-site supervision methodologies

5.11 Systemic risks

The core objective of the Bank's payment system oversight is to prevent systemic risk in the national payment system and promote financial stability.

The Bank uses the following criteria to determine systemically important payment systems:

- A system's potential of creating significant credit and liquidity disruption in the economy should it fail to perform as expected
- A system's potential of creating huge credit or liquidity exposures relative to counterparties' financial capacity
- A system's ability to provide settlement for other systems
- The system's ability to settle time-critical and high amount of large-value transactions

The Ghana Interbank Settlement (GIS) system and the Cheque Codeline Clearing (CCC)) with truncation are considered to be systemically important.

5.12 Operational risk indicators

Payment System availability of 99.85% or above is required of systemically important infrastructures. With regard to non-systemically important payment system, no benchmark is currently defined however; the same level of system availability is expected, particularly in the mobile financial services space.

All interbank payment systems during the year under review recorded availability level of 99.9% with the exception of the gh-link which suffered two (2) downtimes stemming from power fluctuations, and pre-announced interruptions in mobile money services for system upgrades. Interbank payment systems capacity to handle large volumes of transactions during peak times and seasons were found to be adequate. All interbank payment system infrastructures operated 80% below their existing capacity. The risk of inadequate capacity to handle higher transaction volumes was therefore remote for all payment systems.

5.13 Monitoring financial risks in central counter-parties

Ghana Bankers Clearing House (CH), owned and operated by GhIPSS, is responsible for the clearing of cheques, credit and debit transfers through an automated clearing house. The CH does not play the role of a central counterparty hence is not exposed to any financial risks. Its role is to facilitate the exchange of value among participants.

The CH determines the net settlement positions of participants, communicates to participants their settlement position, and transmits the settlement report to the GIS for settlement to be effected in the settlement account of participants.

Participants in the CH guarantee settlement of their obligations by maintaining adequate funds in their settlement accounts. Participants make up for shortfall in their settlement accounts by borrowing from the interbank market.

5.14 Financial Market Infrastructure On-site inspections

The Bank conducted on-site inspection visits of Payment Service Providers (PSP). The visits complemented off-site reports submitted by PSPs. On-site inspections covered issues relating to security and premises, information technology infrastructure, internal processes, corporate governance and business continuity. Issues with regard to capacity utilisation, fraud, and activity levels were also assessed based on reports submitted by the PSPs. In the year 2015, on-site visits were undertaken to the premises of GhIPSS with regard to CCC, ACH, and gh-Link. These systems were found to have strong physical and logical security, auditable internal processes, controls as well as good business continuity plan underpinned by an ISO 27001 certification.

With regard to the GIS, preliminary assessments were made against the relevant principles of the PFMI infrastructure through engagement with system operators. The level of compliance was observed to be satisfactory. The Bank operates a cheque printer accreditation scheme aimed at promoting the integrity of cheque production and delivery to financial institutions. Cheque printers are accredited annually based on satisfactory performance in an annual accreditation inspection.

Three (3) cheque printers were inspected with regard to materials sourcing, external and internal security, production processes, internal controls, quality control, compliance with approved cheque standards and contingency measures. The assessment indicated that the printers had the capability to produce quality cheques in line with the approved cheque standards.

However, recommendations were made for enhancement in cheque printing environment through adoption of ISO27001 certification. No imminent threats to the stability of the payment system infrastructure were identified in 2015.

5.15 Retail Payments System Oversight

Retail payment systems are important to the daily economic life of individuals, corporate entities and government. They facilitate economic activity and also enhance fiscal activities of government. The efficiency and safety of the retail payment systems impact on confidence in the local currency.

The Bank's oversight functions aim at efficiency, security, reliability, competition, cooperation, innovation, product development, consumer protection and dispute resolution. Data is collected on usage of payment instruments and channels. Information is also collected on incidence of fraud, system downtime and complaints.

Summary and Conclusion

The year 2015 witnessed significant changes in the Ghanaian Payment Systems landscape. Publication of the Guidelines for Electronic Money Issuers and Agent Guidelines culminated in increased interest from both financial and non-financial institutions in the payment systems. These Guidelines were issued as part of the Bank's broader strategy to create an enabling regulatory environment for convenient, efficient and safe non-cash retail payment and funds transfer. In addition, the Payment Systems Office of the Bank developed series of prudential returns to collect and monitor developments in the electronic money space.

Innovative electronic payment services, such as GhIPSS Instant Pay (GIP) and gh-link eCommerce were introduced to provide fast, reliable and efficient online payments. Ecobank Capital Advisors TBILL4ALL, which allows customers to remotely register, apply, purchase, rediscount and redeem treasury bills through their mobile phone; mPOS, or mobile Point of Sale devices. Airtel-BOA Cross-Border Money Transfer Service, which allows customers to send cross-border inward remittances from one Airtel money wallet to another were also approved. Vodafone Ghana also submitted an application for licence to operate the business of e-money as a Dedicated E-Money Issuer.

.... UNQUOTES

"If you want to know what a man's like, take a good look at how he treats his inferiors, not his equals."

J.K. Rowling,

"No one can make you feel inferior without your consent."

Eleanor Roosevelt, This is My Story

"If you tell the truth, you don't have to remember anything."

Mark Twain

"I've learned that people will forget what you said, people will forget what you did, but people will never forget how you made them feel."

Maya Angelou

"Live as if you were to die tomorrow. Learn as if you were to live forever."

Mahatma Gandhi

"Darkness cannot drive out darkness: only light can do that. Hate cannot drive out hate: only love can do that."

Martin Luther King Jr.,

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