



Journal of Economics and Business

Sam Quarm, Richmond, Sam-Quarm, Rosemond, and Sam-Quarm, Richmond. (2020), The Ramifications of the Treasury Single Account, the Ifmis Platform, and Government Cash Management in Developing Economies in the Wake of the Covid-19 Pandemic: Ghana's Empirical Example. In: *Journal of Economics and Business*, Vol.3, No.4, 1654-1672.

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.04.311

The online version of this article can be found at:
<https://www.asianinstituteofresearch.org/>

Published by:
The Asian Institute of Research

The *Journal of Economics and Business* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.



ASIAN INSTITUTE OF RESEARCH
Connecting Scholars Worldwide



The Ramifications of the Treasury Single Account, the Ifmis Platform, and Government Cash Management in Developing Economies in the Wake of the Covid-19 Pandemic: Ghana's Empirical Example

Richmond Sam Quarm¹, Rosemond Sam-Quarm², Richmond Sam-Quarm³

¹ Department of Accounting, School of Business, University of Education, Winneba, Ghana. Former MP, and Member of its Finance Committee, and a former Staff of the Controller and Accountant-General's Department

² Ghana Audit Service, Accra, Ghana

³ mPharma Ghana Ltd, Accra, Ghana

Correspondence: Richmond Sam Quarm. Email: samquarm1964@gmail.com

Abstract

In recent years, the combined effects of inflation, recession, high-interest rates, new investment media and technological advances in information processing have made "Cash Management" an increasingly important and complex subject (IMF, 2001; Ter-Minassian and Parente, 1995). At times, the desire and effort to squeeze out the most from every dollar and to minimise idle cash balances has become an obsession with many organisations and countries. Therefore, effective and efficient Cash Management has become a "sine qua non" for the success of any business organisation (Horcher, 2006a; White, 2006). And Countries, "as Corporate Entities", are no exceptions to this basic fundamental business principle (Wood & Sangster, 2012). The Theoretical Framework of this study was underpinned by the Stakeholder Theory (Freeman, 1984), the Financial Management Theory (Hayes and Nolan, 1974; Kingston, 1973), and the Modern Money Theory (Friedman, 1964; Keynes, 1930; Mitchell-Innes, 1914). We conducted a cross-sectional research through non-probability and purposive sampling with 200 respondents. Our face-to-face interviews, structured closed-ended and open-ended Questionnaires which were administered online through email application via Google Forms (as a result of the novel, dreaded, and disruptive Covid-19 pandemic), coupled with PETS (Khan and Pessoa, 2010; Reinikka and Svensson, 2006) resulted in startling revelations. Our major finding was that a government lacking an efficient and effective control over its cash resources will definitely pay for its institutional deficiencies in multiple ways (Ahmed, 2016).

Keywords: Treasury Single Account (TSA), Public Financial Management (PFM) System, Modern Money Theory, Ministry, Department, and Agencies (MDAs), Metropolitan, Municipal, and District Assemblies (MMDAs), Covered Entities, Appropriation Act, Consolidated Fund, Zero-Balance Accounts (ZBAs), Integrated Financial Management Information System (IFMIS), Ghana Integrated Financial Management System (GIFMIS), Bank of Ghana (BoG)

1. INTRODUCTION

Governments all over the world continue to face intense pressure on their cash flows in the face of dwindling revenues, and the need to meet ever-increasing statutory and social responsibilities (Fitzsimons, 2009; White, 2006). Several developing and low-income countries have fragmented systems for handling government cash receipts and payments. In these countries, the ministry of finance/treasury lacks a unified view and centralised control over government's cash resources. As a result, this cash lies idle for extended periods of time in numerous bank accounts held by "revenue collecting agencies", while the government continues to borrow to execute its budget (Central Bank of Nigeria, 2014; Horcher, 2006b).

Government banking arrangements are an essential factor for an effective and efficient management for the control of government's cash resources. According to Ter-Minassian and Parente (1995), such banking arrangements should be designed to minimise the cost of government borrowing, and maximise the opportunity cost of cash resources. This requires ensuring that all cash received is available for carrying out government's expenditure programmes, and making payments in a timely manner (Akande, 2015; CBN, 2015).

As already indicated earlier, a government lacking effective and efficient control over its cash resources can pay for its institutional deficiencies in multiple ways (Pattanayak and Fainboim, 2010). This is because firstly, idle cash balances in bank accounts often fail to earn the requisite market-related interest. Second, the government, not being aware of these idle cash resources or balances, incurs unnecessary borrowing costs in raising funds to cover a "perceived cash shortage". Thirdly, idle government cash balances in the commercial banking sector "are not idle for the banks themselves", but are often used by them to extend credit to potential borrowers. Draining this unknown government cash balances through open-market operations by the commercial banks, also imposes costs on the central bank (Oguntodu et al, 2015).

Establishing a unified structure of government bank accounts via a "Treasury Single Account (TSA)", should minimise all these problems and improve government cash management and control. The Treasury Single Account initiative is the operation of a unified structure of Government Bank Accounts, in a single bank account or a set of linked bank accounts for ALL Government receipts and payments (Ekubiat and Ime, 2016; Lienert, 2009).

In 2007, the establishment of the Treasury Single Account could not be successful by the Government of Ghana due to the lack of the required legal framework in the Financial Administration Act, 2003 (Act 654). For the next nine years, the government of the day did not find it necessary to pursue that agenda. It was not until the passage of the Public Financial Management Act, 2016 (Act 921) that gave impetus to the establishment of the operation of the Treasury Single Account in Ghana. Section 46 of the PFM Act, 2016 (Act 921), established the Treasury Single Account (TSA) as a unified structure of Government of Ghana (GoG) bank account that enables the consolidation of government cash resources, and into which all government cash receipts, and from which all government cash payments shall be made to Covered Entities (MDAs/MMDAs).

The covered entities as stated in the PFM Act, 2016 (Act 921) includes the Executive, Legislature and Judiciary, MDAs/MMDAs, and constitutional bodies. Launching the TSA in Accra (Graphic Online, 2017), the Minister of Finance, Ken Ofori-Atta said there was an estimated GHC5 billion government money (US\$1 billion) which was literally locked up with the various commercial banks strewn across the length and breadth of the country. The Minister retorted rhetorically that "I keep my money with you, and I get a return of 5% bank interest; but you turn round to use my own money with you to buy my own Treasury Bills, and I pay you 20% treasury bill interest; something has got to change (Graphic Online, 2017)".

The novel, dreaded, disruptive, and disastrous Covid-19 Pandemic took the world by storm in January, 2020. The Covid-19 pandemic in Ghana is part of the worldwide pandemic of coronavirus disease 2019 caused by "severe acute respiratory syndrome (SARS-CoV-2)". On 12th January, 2020 the World Health Organisation (WHO) confirmed that the novel coronavirus was the cause of a respiratory illness that affected a cluster of people in Wuhan City, Hubei Province, China. This was reported to the WHO on 31st December, 2019. On 11th March, 2020 the World Health Organisation (WHO) declared the novel Covid-19 a global pandemic (Graphic Online, 2020).

This research was conducted to fill the academic gap by examining the ramifications of the Treasury Single Account (TSA) vis-à-vis the Integrated Financial Management System (IFMIS) and the GIFMIS Platforms, and Government Cash Management in the wake of the novel, dreaded, and disruptive Covid-19 Pandemic. The primary objectives of the study were:

- To examine the relevance of the IFMIS and GIFMIS Platforms
- To assess the effectiveness and efficiency of the TSA.
- To compare and contrast the government daily cash position pre and post TSA regimes.
- To make recommendations for the successful and continuous operation of the TSA in the face of the novel, dreaded, and disruptive Covid-19 Pandemic.

The rest of the paper is presented sequentially according to literature review, with particular reference to the conceptual and theoretical framework, empirical studies, methodology, discussion of result and major findings, conclusion and recommendations.

2. LITERATURE REVIEW: CONCEPTUAL FRAMEWORK

2.1. The Concept of Treasury Single Account (TSA)

Ter-Minassian and Parente (1995), define Treasury Single Account (TSA) as a public accounting system under which all government revenue, receipts, and income are collected into one single account, usually maintained by the country's Central Bank, with all payments executed through the same single account as well. The purpose, according to Schmitz and Wood (2006), is primarily to ensure the accountability of government revenue, enhance transparency, and avoid the misapplication of public funds. The maintenance of a Treasury Single Account (TSA) will help to ensure proper cash management by eliminating idle funds usually left with commercial banks, and in a way enhance monitoring and control over government revenue collection and payment.

Garbade et al (2004), also define Treasury Single Account (TSA) as a unified structure of government bank accounts that gives a consolidated view of government cash resources. Based upon the principle of unity of cash and the unity of treasury, a Treasury Single Account is a set of linked bank accounts through which the government transacts all its receipts and payments. The principle of unity follows from the fusion of all cash, irrespective of its end-use. While it is necessary to distinguish individual cash transactions for control and reporting purposes (Pattanayak and Fainboim, 2010), this purpose is achieved through the accounting system, and not by holding or depositing cash in "transaction-specific bank accounts". This enables the treasury to delink the management of cash from control at the transaction level (Pattanayak and Cooper, 2011).

The International Monetary Fund, through a working paper dated 2010, said TSAs should be part of the public finance management reform agenda of countries that prioritise prudent management and use of public funds. According to Iroegbu (2015), establishing a unified structure of government bank accounts ensures that no other government agency operates bank accounts outside the oversight of the Treasury. According to the IMF (2007), at least four key issues need to be addressed in designing a TSA system: (i) coverage of the TSA; (ii) government bank accounts structure; (iii) transaction processing arrangements and associated cash flows; and, (iv) roles of the central and commercial banks in managing the TSA, and provision of banking services.

The TSA coverage should be comprehensive by including all government-funded entities, including the autonomous and statutory government bodies as well as extra-budgetary funds (EBFs) and special accounts (Ibietan, 2013). This is to ensure that the TSA covers, as far as possible, all relevant cash resources of the government. All cash flows related to government revenue, expenditure, donor financing, debt issuance and amortization (including those associated with external debt) should be fully integrated into the TSA system. Including EBFs within the TSA may be difficult to achieve in some cases where it has a separate legal status or has a public standing (e.g., education and health funds). However, a balance needs to be struck between such EBF's legitimate claim to operational autonomy on the one hand and the potential costs risks arising from fragmented management of public funds on the other (Yusuf and Chiejina, 2015). The donors should be

encouraged to integrate their funds with the TSA or, as a minimum, to route final payments through the TSA. The latter arrangement enables the government to account for and report on donor-funded transactions passing through the TSA before payments are made to suppliers/beneficiaries from the donor bank accounts (Williams, 2010).

Inclusion of social security funds and other trust funds in the TSA could be considered, provided that the accounting system is well developed and adequate safeguards exist to prevent the abuse of trust fund resources. It has become international good practice to include as many government-managed trust funds within the TSA as legally possible. To achieve this, the government accounting system should be fully reliable and capable of accurately distinguishing trust assets in the ledger accounts (Hendriks, 2013). As the resources of these trust funds are managed by the government only as a trustee, it is also necessary that the government does not use their cash reserves to finance its budget deficits by overlooking the respective trust funds' short-term liquidity needs, long-term liabilities, and statutory obligations (e.g., to make pension payments). In practice, the trusts should notify the treasury of their future cash outflows.

Unless a public corporation is discharging a government function, it should not be included in the TSA (Onwuka et al, 2007). Public corporations usually provide market-based goods and services and including them in the TSA could hamper their autonomy to implement commercially oriented strategies. However, if a public corporation is discharging a government function, it should be designated as a government unit (in line with the definition in the *GFSM 2001*) and its activities and resources should be integrated with the budget and TSA, respectively.

The government bank accounts structure under a TSA system could be either "Centralized" or "Distributed", or it could have features of both (Central Bank of Nigeria, 2015).

- In a fully "Centralized" structure, the TSA is composed of a single bank account—with or without sub-accounts—usually at the central bank. This is operated either by a centralized authority (e. g., a centralized treasury with or without regional units), or by individual line agencies/spending units (see the discussion below on transaction processing arrangements). In either case, all transactions passing through this single account are tracked, accounted for, and managed through a well-developed accounting system.
- Under a "Distributed" bank accounts structure (e.g., Sweden), there are several independent bank accounts (generally ZBAs opened with commercial banks) operated by line agencies/spending units for their own transactions, with positive and negative balances in these accounts netted into the TSA main account. Money is transferred (usually at the beginning or end of the day) to these accounts as approved payments are made, and the central bank, which manages the TSA, provides the consolidated cash balance position at the end of each day.
- While the "fully centralized" and "fully distributed" structures are the two ends of the possible continuum of bank account structures, there could be several combinations of the two. In all these arrangements, it is important that any balances left with the banking system are swept overnight back into the TSA.

According to Horcher (2006b), there are different options as to how a TSA interacts with government transaction processing systems for revenue collection and payment disbursement. A transaction processing system, *inter alia*, is based on the distribution of responsibilities for budget execution, accounting control, and administration of the revenue collection and payment systems. In some countries, all expenditure transactions are approved centrally in the ministry of finance/treasury and paid from the TSA.

Alternatively, individual spending units/agencies may be responsible for payments and they may have transaction accounts in the banking system for this purpose (Economist Intelligence Unit, 2005). Several countries operate a hybrid system under which major receipts and payments flow directly through the TSA, but smaller transactions rely entirely on the commercial banking system. In these arrangements, however, the use of cash is minimized if any balances left with the banking system are swept overnight back into the TSA. It is then for the government cash managers to decide how to manage any net balance, including, for example, investing any temporary surplus with the banking system.

In some countries the treasury pays to the central bank a fixed monthly fee for all of its services independently of the number of transactions delivered, a practice that should be avoided (Williams, 2010).

2.2. THEORETICAL FRAMEWORK

A number of different theories of socio-economic accounting were borrowed to form a sound foundation to substantiate the adoption and implementation of the Treasury Single Account. These theories include the Stakeholder Theory, Financial Management Theory, and the Modern Monetary (Money) Theory (MMT).

2.2.1. The Stakeholder Theory

The first person to define stakeholder theory was organizational theorist Ian Mitroff in his book *Stakeholders of the Organizational Mind*, which came out in 1983. Shortly thereafter, an article about stakeholder theory was released in 1983 in the *California Management Review* by philosopher and professor of business administration R. Edward Freeman. Freeman did not cite Mitroff as a source; rather he attributed his stakeholder theory to discussions at the Stanford Research Institute. He went on to publish his book, *Strategic Management: A Stakeholder Approach*, shortly after the article. In Freeman's book, he identified and modelled stakeholder groups within a corporation, describing and recommending ways to manage their interests and determine who really counts from the perspective of the company.

The Stakeholder Theory, is a theory of organizational management and business ethics that accounts for multiple constituencies impacted by business entities such as employees, suppliers, customers, local communities, and others. The theory addresses morals and values in managing an organization, such as those related to corporate social responsibility, market economy, and social contract theory (Hill and Jones, 2012; Howlet and Ramesh, 2003).

Stakeholder theory is a view of capitalism that stresses the interconnected relationships between an organization and its customers, suppliers, employees, investors, communities and others who have a stake in the organization. The theory argues that a firm should create value for "all stakeholders", not just its "shareholders (Freeman, 1984)"

The theory of the Stakeholder has fundamentally become a basis of knowledge for businesses (and by extension, countries), to secure their relationship with their stakeholders through a corporate social responsibility, and a social contract. Free, fair, and transparent multi-party democratic elections at periodic intervals is considered as a strategic approach by which countries denote stakeholders' participation and reduces information asymmetry (Hobbes, 1985; Quentin, 1978). It has been recognized that organizations taking into account stakeholders' requirements tend to show better performance than those that do not.

The "Stakeholder Theory" was assumed to be a bulwark against the unbridled corruption-craze by public officials against the state. But the stakeholder theory notes that there are several interested parties that must be included under the umbrella of stakeholder, such as the company's employees, customers, suppliers, financiers, communities, governmental bodies, political groups, trade associations, trade unions and even competitors, as they too can impact the company. The list of who the stakeholders are is not universally agreed upon, and even the definition of a stakeholder remains contested by some (Suchman, 1995). Even the academic literature is in conflict. There are many books and articles on the subject and most cite Freeman as its father (Lindblom and Woodhouse, 1993).

Freeman says he stood on the shoulders of giants, such as building from research in strategic management, corporate planning, systems theory, organization theory and corporate social responsibility (Hill and Jones, 2012). More recently, in 1995, ethicist Thomas Donaldson has argued that stakeholder theory has descriptive, instrumental and normative aspects that are mutually supportive. Stakeholder theory posits that a company is only successful when it delivers value to its stakeholders, and those values can come in many forms beyond financial benefits. One of the values produced by stakeholder theory includes greater productivity across the organization. Stakeholder theory drives more than profits and productivity. There are ethical benefits of practicing it as well.

Some critics say the stakeholder theory is problematic because the interests of various stakeholders cannot be balanced against each other. This is because stakeholders represent such a large and diverse group. According to

Quentin (1978), you cannot please every stakeholder. One or more stakeholders will have to take a backseat to other, more dominant ones, which is likely to create discord. This will disrupt the benefits associated with stakeholder theory. Also, who will wield the most influence? Some stakeholders might find that they are not impacting decisions as much as another group. The different power levels and spheres of influence can be a problem. Even those with seemingly more influence might not feel that they are getting what they want.

2.2.2. Financial Management Theory

Following Anthony's Five (5) typology of managerial decision processes, this study is concerned with financial decisions which are strategic, rather than operational, in their content. The antecedents of a financial management theory are found in the classical economic theory of the firm. A managerial theory of finance which is emerging in the literature can be briefly stated as follows: Management requires a framework which facilitates the modelling of three principal components of the problem, namely the demand for funds, the supply of funds, and the criterion by which demand and supply of funds are to be brought into consistent relationship (Krugman and Wells, 2018). The Financial Management Theory assumes that all aspects of financial resources (its mobilisation and expenditure), should be well managed by the government for the benefits of the citizenry (Bower, 1970). This includes resource mobilisation, the prioritisation of programmes, the budgetary process, the effective, economic, and efficient management of the scarce resources, and the exercise of rigorous control mechanisms to guard against the threats of embezzlement, misappropriation, and misapplication of public funds.

According to Carleton (1970), there are five overall principles for managing the financial transactions of corporate, social or community funds. The five principles are consistency, timeliness, justification, documentation, and certification.

With regards to consistency, the overriding principle is that all transactions must be handled in a consistent manner. With regard to timeliness, all transactions must be handled within a reasonable period of time, consistent with programmed time frames. In the case of justification, there must be a reason for the transaction that supports the projects or programmes' goals and objectives in tandem with the vision of the central government. Sufficient documentation to support the transaction must exist. The documentation must be retained, organised, and complete enough to stand up to an audit. Certification simply implies that all transactions must be authorised and authenticated.

2.2.3. Modern Monetary (Money) Theory

Modern Monetary (Money) Theory (MMT) is a heterodox macroeconomic theory (Mitchell-Innes, 1914) that describes currency as a public monopoly and unemployment as evidence that a currency monopolist is overly restricting the supply of the financial asset needed to pay taxes and satisfy savings desires. In his "General Theory of Employment, Interest, and Income, Keynes (1936), drew attention to the causes of the "Great Depression" of the 1930s. The position of the Keynesian school of thought was later amplified by Samuelson (1992). Thus, MMT became one of the mainstream macroeconomic theory. But the Keynesian macroeconomic view was soon to be contested and criticised by the leading monetarist, Friedman and Schwartz (1964). Friedman won the Nobel Peace Prize in Economics in 1976.

The Modern Monetary (Money) Theory (MMT) argues that governments "create new money" by using fiscal policy (Edwards, 2019; Keynes, 1930). According to its advocates, the primary risk once the economy reaches full employment is inflation, which can be addressed by gathering taxes to reduce the spending capacity of the private sector. MMT's main tenets are that a government that issues its own fiat money:

1. Can pay for goods, services, and financial assets without a need to collect money in the form of taxes or debt issuance in advance of such purchases;
2. Cannot be forced to default on debt denominated in its own currency;
3. Is only limited in its money creation and purchases by inflation, which accelerates once the real resources (labour, capital, and natural resources) of the economy are utilised at full employment;

4. Can control demand-pull inflation by taxation which removes excess money from circulation (although the political will to do so might not always exist);
5. Does not compete with the private sector for scarce savings by issuing bonds.

These five tenets challenge the mainstream economic view that government spending is funded by taxes and debt issuance (Chohan, 2020). The first four MMT tenets do not conflict with mainstream economic understanding of how money creation and inflation works. For example, as former Chair of the Federal Reserve, Alan Greenspan said, “The United States can pay any debt it has because we can always print money to do that; so there is always a zero probability of default (Edwards, 2019)”. However, MMT economists disagree with mainstream economics about the fifth tenet, on the impact of government deficits on interest rates (Larson, 2007).

The “Modern Money Theory (MMT)” examines how monetarily sovereign governments operate, and their impact on the economy (Mansfield, 1997). It shows that it is relevant to amalgamate the central bank and the treasury into a government sector that finances itself through monetary creation such that the financial position of the treasury and the central bank are so intertwined that both of them are constantly in contact, in order to make fiscal and monetary policy coexist and run smoothly (Chohan, 2020; Krugman, 2007).

2.3. How the Treasury Single Account (TSA) Works

For the Treasury Single Account (TSA) to work effectively and efficiently, there must be daily clearing and consolidation of all cash balances into a “Single Central Account”, even where an MDA’s/MMDA’s accounts are already held at the “Central Bank (Deloitte, 2012; Dener, 2007)”. The various bank accounts held by MDAs/MMDAs must operate as “Zero-Balance Accounts” where any closing cash balances are swept to the TSA at the Bank of Ghana on a daily basis “to give the government one consolidated cash position”. Two main types of TSA were identified, namely a “Centralised” and a “Distributed” systems. Both systems have their individual architectures, advantages and disadvantages (Ahmed, 2016).

With regards to the coverage of “Donor Funds” within a TSA, it is still quite common, especially in low-income countries, for donors and external loan providers to require the government to manage their funds through separate commercial bank accounts, and not through a TSA (Akande, 2015). Although this practice has contributed to a fragmentation in the management of government cash resources, this concern has been addressed by the “Paris Declaration of 2005 to use country-specific Public Financial Management (PFM) systems”. Therefore, Donor Funds and external loans or borrowings are always converted, denominated in the local Ghanaian currency on transfer into the TSA main account.

According to Oguntodu et al (2015), the main purpose of TSA implementation is to maximise the use of cash resources through the concentration and reduction in float cost. The ability to accurately forecast cash inflows and outflows, and the resultant balances on the TSA is very essential in improving cash management. This is where the Ghana Integrated Financial Management System (GIFMIS) comes into play (PFM, 2016).

2.4. What is IFMIS?

The Integrated Financial Management Information System (IFMIS) are computer-based systems that automate and store key financial information in large organizations like governments, multinational corporations, and large non-profit organisations (Hendriks, 2013). The goal of these systems is to increase access to information, while decreasing long-term costs. The initial investment of time and money to implement IFMIS is high, but the improved financial transparency and information access usually offsets its initial expense. An IFMIS can be off-the-shelf software or a custom-made system, depending on the size and needs of the organization using the system (Hendriks, 2013; Khan and Pessoa, 2010).

2.4.1. IFMIS Modules

IFMIS consists of a number of modules which support the different functional processes associated with Government Fiscal Management (GFM). These include modules for:

- ✓ Macroeconomic forecasting;
- ✓ Budget preparation;
- ✓ Budget execution (including cash management, accounting and fiscal reporting);
- ✓ Managing the size of the public service establishment (HR) and its payroll and pensions;
- ✓ Assets management;
- ✓ Debt management;
- ✓ Tax administration, and
- ✓ Auditing.

2.4.2. How different is IFMIS from other Computer-Based Systems?

The primary features that distinguish IFMIS from other computer-based systems include:

- ❖ IFMIS can integrate accounting-related information, or larger organizational data management systems;
- ❖ The standardization of data classifications for financial events;
- ❖ The reduction in duplicate data entry;
- ❖ Implementation of internal controls for transactions; and the generation of a
- ❖ Multitude of Reports

The antecedent of IFMIS in Ghana was evidenced by (a) weak budget formulation, preparation and lack of ownership; (b) weak expenditure monitoring and budgetary control; (c) lack of proper accounting and monitoring system; (d) lack of quality and timely data on Government resources; and (e) an outmoded regulatory framework.

2.4.3. The Advantages of IFMIS

There are several advantages of IFMIS which includes:

- ❖ IFMIS allow a central authority to regulate security access that increases overall data integrity and security;
- ❖ With all information in a single location, financial fraud is harder to perpetrate and easier to catch;
- ❖ It enhances the management of cash, debt and liabilities;
- ❖ It has the ability to use historical information to provide better budget modeling processes and increased decision-making efficiency; and
- ❖ It results in reduced cost for financial transactions

The two major disadvantages of IFMIS is that it requires continuous support and maintenance to ensure integrity and functional use of the system, and it is laden with high switching cost

2.4.4. The Advantages of IFMIS

There are several advantages of IFMIS which includes:

- ❖ IFMIS allow a central authority to regulate security access that increases overall data integrity and security;
- ❖ With all information in a single location, financial fraud is harder to perpetrate and easier to catch;
- ❖ It enhances the management of cash, debt and liabilities;
- ❖ It has the ability to use historical information to provide better budget modeling processes and increased decision-making efficiency; and
- ❖ It results in reduced cost for financial transactions

The two major disadvantages of IFMIS is that it requires continuous support and maintenance to ensure integrity and functional use of the system, and it is laden with high switching cost

2.4.5. The PFM Cycle in Ghana and IFMIS



KEY

1. M&E: Monitoring and Evaluation
2. IA: Internal Audit
3. GAS: Ghana Audit Service
4. PAC: Public Accounts Committee

2.5. GIFMIS

GIFMIS stands for Ghana Integrated Financial Management Information System. It is an integrated computerized financial management Platform of Government of Ghana for:

- Budget Preparation;
- Budget Execution;
- Revenue Management;
- Expenditure Management;
- Cash Management;
- Human Resource and Payroll Management;
- Assets Management;
- Public Debt and Investment Management; and
- Accounting and Financial Reporting

The aim of GIFMIS is to establish an Integrated ICT-based PFM Information Systems in Ghana at the MDAs located at National, Regional, and District levels and MMDAs to improve efficiency and effectiveness in public financial management. The specific PFM Problems addressed by GIFMIS include:

- ❖ Lack of interface/integration between various PFM Systems;
- ❖ Inadequate budgetary controls over public expenditure;
- ❖ Lack of transparency in budget execution;
- ❖ Poor record-keeping on public financial transactions;
- ❖ Undue delays in processing transactions due to cumbersome manual processes;

- ❖ Lack of reliable data for effective fiscal planning due to weak accounting and fiscal reporting systems; and
- ❖ Delays in financial reporting, especially at the National level

2.5.1. GIFMIS Financial Modules

The GIFMIS Financial Modules consist of:

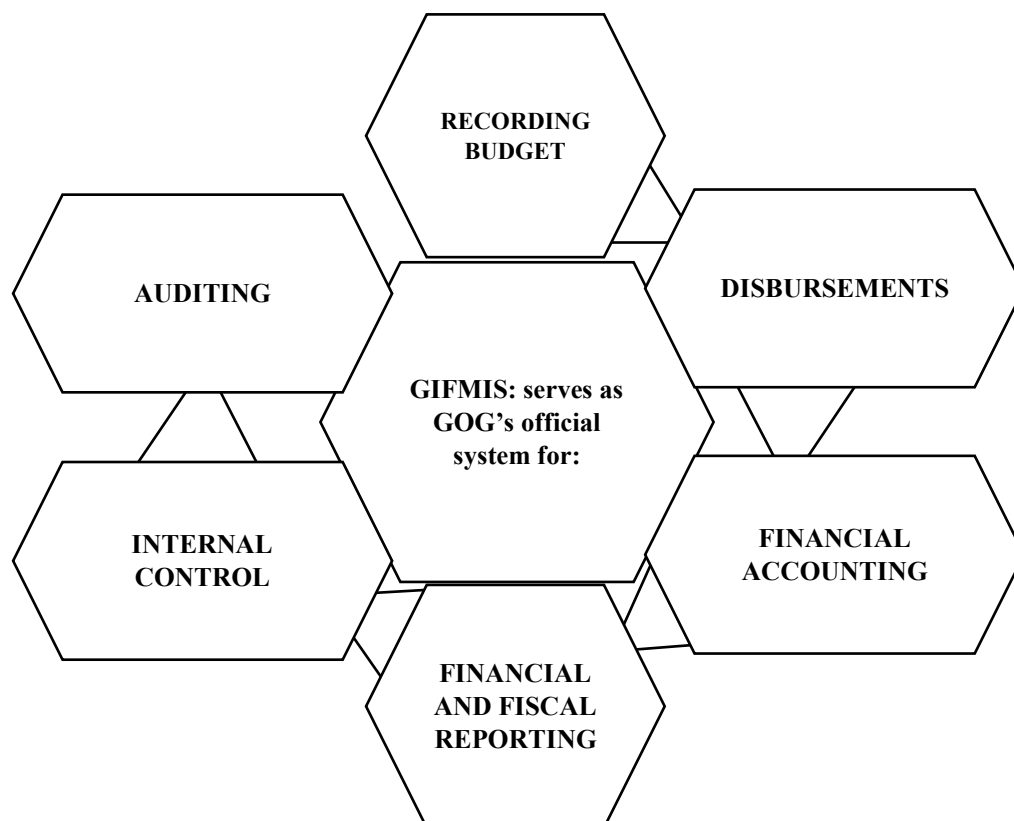
- ❖ Purchasing: For Purchase Requisition, Purchase Order, Store Receive Advice;
- ❖ Accounts Payable: For preparing PVs, creating accounts (i.e. Debits and Credits), and tracking liabilities;
- ❖ Cash Management: For making Payments, Bank Reconciliation, and Cash Forecasting;
- ❖ Accounts Receivable: For recording and tracking of revenue and income;
- ❖ Fixed Assets Module: For managing fixed assets register through recording, tracking and accounting for fixed assets;
- ❖ General Ledger: The repository of all accounts which holds the budget, and facilitates financial reporting

2.5.2. GIFMIS HRMIS Modules

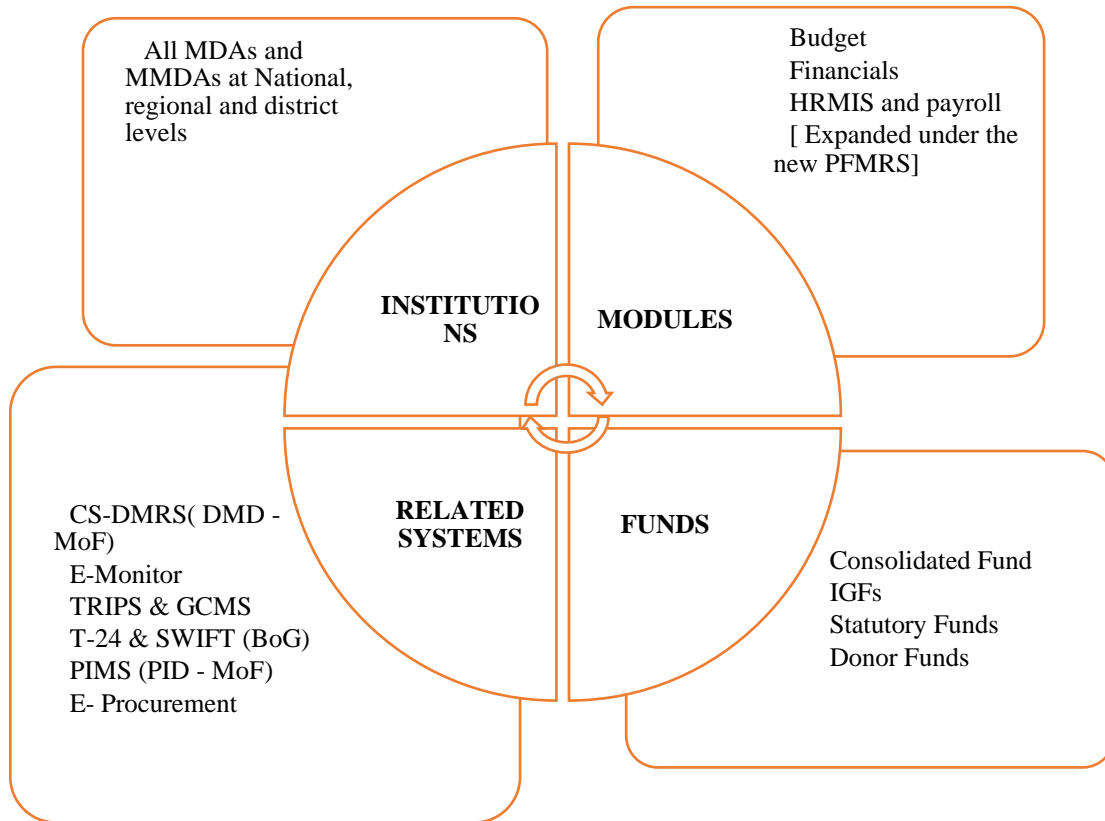
The GIFMIS HRMIS consist of:

- Employee Profile Management;
- For maintenance of the main biodata of employees from appointment to attrition in the areas of Employee Appointment, Employee record maintenance and Employee promotion;
- Establishment Management
- For the management of Organizations, Locations, organizational hierarchies, Grades, Jobs, Positions and position hierarchies. This facilitates position control at the Public Services Commission level where no MDA/MMDA on the HRMIS will exceed the established/approved staffing levels without approval from their appointing authorities and the Public Services commission
- Employee Cost Management
- For managing compensation of employees at all MDAs/MMDAs to ensure budgetary control over payroll cost

2.5.3. GIFMIS as a Flagship System



2.5.4. The Scope of GIFMIS



2.5.5. Key Users of GIFMIS

The Key Users of GIFMIS includes:

- ❖ Budget Officers
- ❖ Accountants
- ❖ Procurement Officers
- ❖ Store Officers
- ❖ Internal Auditors (Internal Audit Agency)
- ❖ Treasury Officers
- ❖ Administrators and HR Managers
- ❖ Spending Officers (Coordinating Directors, Heads of Departments, etc.)
- ❖ Vote Controller (Political Heads of MDAs/MMDAs)
- ❖ External auditors (Ghana Audit Service)

Once the Appropriation Act is passed by Parliament and assented to by the President, the Vote Allocations of all MDAs/MMDAs and other Covered Entities (as indicated in the PFM Act, 2016 (Act 921), are uploaded into the GIFMIS Platform for all future processing of claims and payments

2.5.6. Areas for Improvement by GIFMIS

The new Public Financial Management Reform Strategy of Ghana offers a lot of business opportunities for consultants and service providers. The reform areas include:

- Accounting and Financial reforms at Controller and Accountant General's Department;
- Budget reforms at Ministry of Finance;
- HR Management reforms at Public Services Commission and Head of Civil Service;
- Payroll reforms at Controller and Accountant General's Department;
- Procurement reforms at Public Procurement Authority;
- Revenue reforms at Ghana Revenue Authority;
- Financial Sector reforms within the Banking Sector
- Internal Audit reforms at Internal Audit Agency;
- External Audit reforms at Ghana Audit Service; and
- Parliamentary Oversight reforms at Parliament

2.6. EMPIRICAL EVIDENCE

2.6.1. From the Manual to the Online Electronic TSA Receipt and Payment Platform

Since the establishment of the Gold Coast Treasury in 1896 by the Colonial British Government, the receipts into, and payments from the Consolidated Fund had been done through a "manual system" at the "local management unit levels". What happened in practice was that after the passage of the Appropriation Act, the Votes of all MDAs/MMDAs and other Covered Entities were released to the various Vote Controllers/Spending Officers at the Headquarters in Accra. The Votes were broken down into "Recurrent Expenditure (Items 1-5)", and "Capital Expenditure (Items 6-8)".

Vote Controllers/Spending Officers of the various MDAs/MMDAs and other Covered Entities at the Headquarters in Accra would then prepare "Financial Encumbrances/Financial Encumbrance Adjustments (FEs/FEAs) to the respective Regional/District Heads of Department. This meant that not a single pesewa of Recurrent Expenditure, including the 'Votes for Wages and Salaries' were kept at the Headquarters. Only the 'Votes for Capital Expenditure' were kept at the Headquarters in Accra. As a result, the Chief/Regional/District Treasury Offices of CAGD were responsible for all payments for Recurrent Expenditure, including Wages and Salaries at the Regional/District level.

Thereafter, all payments at the Headquarters/Regional/District level were done via the "manual type-written Payment Vouchers" prepared by the Management Unit, and submitted to the Chief/Regional/District Treasury Offices of the CAGD (as the case might be). New employees were recruited and paid by the Management Units through "Establishment Warrants", while old employees on transfer were paid using their "Last Pay Certificates" from their previous Management Units. Thus, there was no "Payroll Processing Unit at the CAGD Headquarters in Accra". Budget implementation/execution was done through the releases of General and Specific Warrants, plus Expenditure Authorisations, all issued by the Ministry of Finance.

2.6.2. Determining the Government Cash Position through the Pre-TSA System.

The Executive Summary to: "The Status Report on Bank Reconciliation Statement for the Government of Ghana Consolidated Fund as at 31st December, 2002", clearly revealed that this was the "first time in the history of the CAGD that such an exercise had ever been done. The statement went on to say that: "The Status Report followed weeks of analytical thinking, several rounds of Adjusted Cash Book and Bank Reconciliation Statement Format Redesigning (deep into the night and on weekends), all spearheaded by no less personalities than the Controller and Accountant General himself (in the person of Mr John Prempeh), and the Deputy Controller & Accountant General in charge of Treasuries, Audit & Investigations (in the person of Mr Eugene A. Ofosuhenne).

The Reconciliation Section of the CAGD compiled on a monthly basis, "A Consolidated Bank Reconciliation Statement on All Uncommitted Government Drawings Account at the Bank of Ghana". These GoG Drawings

Balances were compiled by the Bank of Ghana on a daily basis, and was known as the "Government Cash Position". The data for the compilation of these Monthly Bank Reconciliation Bank Statements came from the Ghana Revenue Authority, the Ministry of Finance, and the CAGD itself. At the time of the Status Report in 2002, the CAGD had 19 Treasuries in Accra, 10 Regional Treasuries (at the 10 regional capitals), and 120 District Finance Offices (corresponding with the 120 MMDAs at the time). As at 31st December, 2002 the Cumulative Balance on the Uncommitted GoG Drawings Account stood at ₵11,808,859,390,863.08. Out of this amount, the Reconciliation Section was able to "reconcile ₵11,425,935,290,241.10, representing about 93.95%. The outstanding 6.05% consisted of the Cashiering Unit of the Treasury Headquarters in Accra, and the 10 Regional and 120 MMDA Finance Offices across the country.

2.6.3. Operation of TSA in Other Countries.

Ekubiat and Ime (2016), studied the Adoption and Implementation of the Treasury Single Account (TSA) by the State Governments of Nigeria: Benefits, Challenges, and Prospects. According to the study, Nigeria's Public Funds at all levels have been wrongfully accounted for by previous administrations. But in order to avert this continuous threat, coupled with the country's dwindling economy, the Federal Government of Nigeria adopted and implemented the TSA. Ahmed (2016), studied the Treasury Single Account (TSA) as an "Instrument of Financial Prudence and Management Prospects and Problems". According to the study, the Treasury Single Account was implemented in order to ensure prudence and probity in the management of Nigeria's dwindling financial resources, in the face of rising unemployment, abject poverty, and the escalating crime wave.

Oguntodu et al (2015) carried out "An Assessment of the Treasury Single Account and Nigeria's Economy between 1999 and 2015. The Central Bank of Nigeria (CBN) Statistical Bulletin (1999 – 2015) was analysed using the OLS Estimator. To this end, an empirical analysis of the Treasury Single Account (TSA) and economic performance of Nigeria was carried out. The result showed that the TSA has a significant impact on the country's economic growth. The East African Community partner states have agreed to close down multiple bank accounts operated by their ministries, departments and agencies and keep their revenues in a single account each as part of efforts to increase transparency and accountability in the use of public funds. The partner states agreed on the Treasury Single Account (TSA) to ensure proper oversight of government cash flows and to reduce the cost of keeping public money in several commercial banks. Tanzania set the pace, when Finance Minister Dr Phillip Mpango was tabling the 2018/2019 budget.

In Kenya, the Public Finance Management Bill 2017 set the stage for the creation of the single government account. All public funds will be deposited into the single account and all payments will be executed from the same account, enabling the government to monitor its finances. The creation of the TSA is part of the Public Finance (Administration and Management) Regulations 2013, which were formulated to boost the effectiveness of the Public Finance Management Act (2012). But the project had to be deferred for two years to pave the way for the implementation of other forms of electronic payments such as the Integrated Financial Management Information System (IFMIS) and Internet banking.

It is not clear whether the proposed single account will be operated by the central banks of the various countries or a commercial bank on behalf of the central bank, but in many Latin American countries, large publicly owned banks operate the TSA. In Malawi, Finance Minister Felix Mlusu has said the Tonse Alliance administration has resolved to consolidate multiple bank accounts operated by their ministries, departments and agencies and keep their revenues in Treasury Single Account each as part of efforts to curb abuse of public funds.

Delivering a budget statement for 2020/21 in Parliament on Friday, 20th September, 2020 the "Treasury Czar" said, "A Treasury Single Account would provide a consolidated cash position with a clear overview of all cash flows in and out of the accounts." The minister said if a country has a fragmented system for handling government receipts and payments through the banking system, it is a critical Public Finance Management weakness that needs to be addressed. Mlusu also reported to Parliament that as part of strengthening Public Finance Management (PFM) Systems, the government through the Department of Accountant General rolled out the new Integrated Financial

Management and Information System (IFMIS) on 1st July, 2020. "Its full rollout is expected to be done by 1st July, 2021."

3. METHODOLOGY

The study was cross-sectional, and we adopted the non-probability quota sampling method to select the management units for the survey (Denzin, 2017). The study also used the Public Expenditure Tracking Survey (PETS) as developed by Reinikka and Svensson (2006), in conjunction with the Appropriation Acts for the data collection. This was because after the first successful implementation of PETS in Uganda in 1999 (Olken and Pande, 2012), it has now become a standard practice for financial data measurement analysis in the public services. A total of 200 respondents were sampled by the researchers. From the virtual interviews and structured questionnaires, some data (inadequate, though) were obtained on the following:

- Budgetary Allocations of the various MDAs/MMDAs were obtained through the Appropriation Acts for the relevant years.
- Data on the Treasury Single Account (Main), and the Sub Accounts at the Bank of Ghana and some commercial banks were also obtained.
- Data on Tax Revenues from the Ghana Revenue Authority (GRA) and Non-Tax Revenue from MDAs/MMDAs were also obtained.
- Data on Donor Funds, and External Loans and Borrowings were obtained from the CAGD (Public Debt & Investment), and the Ministry of Finance.
- Data on payment processes and some audit reports on MDAs/MMDAs were obtained and reviewed.

From thence, data collection instruments were used to capture both primary and secondary data relevant to the objectives of the research. The information collected were analysed and discussed both qualitatively and quantitatively.

4. RESULTS AND DISCUSSION OF FINDINGS

Since COVID 19 sprung a surprise on the world after lingering on in China for the last quarter of 2019, nations have reacted differently in their response to this menace. It was observed how the government, political parties, citizens, scientists and academia, corporate entities, faith based organisations, traditional rulers, etc. have risen up to the occasion to be counted with varied forms of interventions to combat the scourge. It is worth mentioning that, some of the public etiquette that Ghanaians acquired during the outbreak of Ebola between 2014 and 2016 has lingered on though Ghana never registered a case during that epidemic.

The President of the Republic, Nana Addo Dankwa Akufo-Addo, on Sunday, 29th March, 2020, inaugurated the Board of Trustees of the COVID-19 National Trust Fund, at a brief ceremony at Jubilee House, the seat of the nation's Presidency. The Board of Trustees, which is chaired by former Chief Justice, Sophia Akuffo, will receive contributions and donations from the public to assist in the welfare of the needy and the vulnerable. The other members of the Board are Archbishop Justice Ofei Akrofi, Mr. Jude Kofi Bucknor, Gifty Afenyi-Dadzie, Mrs Elsie Addo-Awadzie, Dr. Ernest Ofori-Sarpong, Dr Tanko. Mr. Collins Asare will act as Secretary to the Board. Inaugurating the Board, President Akufo-Addo noted that, since the outbreak of the virus in Ghana, organisations and individuals have made donations, with others wanting to find out how they can also contribute to the cause. "I felt that the best way was to establish a "Public Trust Fund", so that the monies that come do not get intermingled with Government money and all of those problems. A Public Trust Fund that is to be managed by an independent body of Trustees, so that people will see that these monies are being properly accounted for and properly deployed," he said.

The President added that the work of the Board will complement the efforts being made by the State in catering for the poor and vulnerable, stressing that "whatever money we raise, that is the target". Not being a "financial expert", the President did not know that ALL PUBLIC MONIES WILL END UP IN THE TREASURY SINGLE ACCOUNT. Pledging the full support of the Government for the work to be undertaken by the Board, the President

said “I have full confidence in the integrity of all the people around this table, and of your dedication to the public welfare of our country. That is why I have chosen you to stay on this committee.”

It was observed that although there are several variants of the TSA structure, they can be broadly grouped into two categories, namely a “Centralised”, and a “Distributed” TSA architecture (Schmitz and Wood, 2006). The TSA systems established in most countries fall somewhere in between these two models, and involve various types of bank accounts (Central Bank of Nigeria, 2014). It is worthy to mention that the Government of Ghana has chosen and implemented the “Distributed” (and invariably, the best) Option. A “Distributed TSA” arrangement is one in which all revenue and expenditure of government pass through a single TSA Main Account, which is maintained at the Bank of Ghana (with an interface on the GIFMIS Platform), and TSA Sub Accounts for all the MDAs/MMDAs or Covered Entities.

Under the “Distributed” TSA architecture, line agencies down to the lowest level in the hierarchy are allowed to retain separate transaction accounts in the banking system. However, balances in all transaction accounts are swept into the TSA Main account at the Central Bank at the end of each working day. It was noted that the degree of decentralisation of a TSA structure is linked to the authority of various covered entities to access and operate their respective bank accounts. Although there were two transaction processing models, each of which could be associated either with the Centralised or the Distributed TSA architecture, the Government of Ghana adopted the latter. Under this structure, requests for payments are prepared by individual covered entities at their respective levels on the GIFMIS Platform for processing, control and payment. Thereafter, the GIFMIS Platform then processes and records all inflows and outflows and cash balances to the appropriate ledger account.

Technological advancement have played an important role in changing governments’ banking practices over recent decades (Horcher, 2006a; Williams, 2010). It was observed that in most countries, commercial banks are used for revenue collection purposes on a remuneration basis. A computerised TSA system such as an IFMIS (GIFMIS in Ghana), and an advanced communication infrastructure allow “Electronic Fund Transfers (EFTs) from the TSA to the recipients’ account, eliminating payment delays and idle cash balances, and thereby reducing operational risks.

With the abolition and closure of over 20,000 MDAs/MMDAs bank accounts held at the Bank of Ghana and various commercial banks (Bank of Ghana Bulletin, 2016), the operationalisation of the Treasury Single Account has resulted in the following:

4.1. TSA Main Account

This is the Consolidated Fund (PFM, 2016; FAA, 2003) bank account at the Bank of Ghana which consolidates the government’s cash position. It is the Main TSA Account into which all cash balances of linked accounts of MDAs/MMDAs are swept into on a daily basis. It is the central pool or watershed into which all government cash receipts flows, and from which all government disbursement are made from.

4.2. TSA Subsidiary Accounts (Sub-Accounts)

These are not separate bank accounts per se (in the sense of holding individual cash balances), but are special sub-accounts within the Main TSA Account. This is basically an accounting arrangement to group together a set of transactions, and allows the government to maintain the distinct accounting identity or ledgers of the various MDAs/MMDAs. A cash disbursement ceiling for each covered entity is then entered and enforced against these ledgers. Balances in these accounts are netted off with the TSA Main Account for cash management purposes.

4.3. TSA Transit/Collection Accounts

The TSA Transit or Collection Accounts are not meant for day-to-day transaction banking operations of government entities. A Transit/Collection Account simply serves as a “transit” for the eventual flow of cash into the TSA Main Account. Transit/Collection Accounts are operated by the three (3) main Revenue Agencies which

are supervised by the Ghana Revenue Authority (GRA), namely: the Customs, Excise and Preventive Service (CEPS); the Internal Revenue Service (IRS); and the Value Added Tax (VAT).

4.4. TSA Transaction Accounts

TSA Transaction Accounts are satellite accounts that are opened for covered entities that need transaction banking services, but do not have a direct access to the TSA main account or a subsidiary account. Such a transaction account could be for a “special fund (such as the Covid-19 Trust Fund)”, and could take the form of a zero-balance account, or an imprest account.

4.5. TSA Zero-Balance Accounts (ZBAs)

Where transactional accounts are necessary, they are generally opened on a zero-balance basis. Which implies that on a daily basis, cash balances in these accounts are swept into the TSA main account. These accounts which are opened by covered entities in the commercial banks are used mainly for a “one-off disbursement”, or for the collection of government revenue (particularly, non-tax revenue).

4.6. TSA Imprest Accounts

TSA Imprest Accounts are transaction accounts that can hold cash up to a maximum authorised amount, and are recouped from time to time as, and when, necessary. These imprest accounts are necessary for some petty office expenses, fuel, travelling and transport expenses, and vehicle maintenance.

4.7. TSA Correspondent Accounts

With regards to TSA Correspondent Accounts, a separate ledger account is opened for each correspondent bank. As a result, each correspondent entity has real-time information on the balances it maintains in the TSA.

4.8. The Benefits of Treasury Single Account

Several benefits were identified with the operationalisation and implementation of the Treasury Single Account (TSA) in Ghana and these included:

4.8.1 It allows complete and timely information about government cash resources. As a result of the Ghana Interbank Payment and Settlement System (GhIPSS) and GIFMIS, and an interface with the banking system, an updated balances of the government cash position is available on daily basis, and within real-time

4.8.2 The TSA has improved Appropriation control because when separate bank accounts were maintained pre-TSA, the result was a fragmented budgetary control system.

4.8.3 The TSA has improved operational control during budget implementation in an efficient, effective, transparent and reliable manner.

4.8.4 The TSA has enabled an efficient, reliable, and regular monitoring of government cash balances, facilitating variance analysis by distinguishing causal factors from random variations in cash balances.

4.8.5 The TSA has reduced bank charges, transaction and reconciliation costs considerably.

4.8.6 The TSA has facilitated an efficient revenue collection and payment mechanism by ensuring that there is no ambiguity regarding the volume or location of government funds, leading to a precise measurement of government cash position in real-time on daily basis.

4.8.7 The TSA has improved real-time bank reconciliation through the government accounting system, and the timeliness and quality of cash flow statement and fiscal data.

4.8.8 The TSA has improved the volatility of cash flows through the Consolidated Fund, thereby allowing it to maintain a lower cash reserve/buffer to meet unexpected fiscal volatilities and contingencies.

5. CONCLUSION AND RECOMMENDATIONS

Many developing and low-income countries have fragmented government banking arrangements that hinder effective cash management and control over cash balances (Horcher, 2006). It is common to find multiple bank accounts in commercial banks belonging to MDAs/MMDAs, with idle cash sitting in there. The primary objective of a TSA is to ensure an efficient and effective aggregate control over government cash balances. The consolidation of cash resources through a TSA arrangement is meant to optimise government cash management, avoid the menace of unnecessary and excessive government borrowing, and paying exorbitant interest charges to finance public expenditure (Obinna, 2015).

One major concern about the TSA (by uninformed public servants and other critics), was the question about the regular and effective preparation of bank reconciliation statements in a TSA architecture (Oguntodu et al 2015). However, it was noted that the TSA has rather facilitated a full and real-time bank reconciliation between the government accounting systems and cash flow statements from the central bank, and the commercial banks, usually through automated mechanisms on a daily basis.

One of our major recommendations is that a TSA regime must be supplemented by a proactive cash management system (Ekubiat and Ime, 2016). Government should try to minimise the level of cash balances in the TSA by actively targeting a minimum cash balance. Once a TSA has been established and its target cash balance has been set, a strategy needs to be developed for investing the available surplus cash, and funding temporary cash shortfalls (Lindblom and Woodhouse, 1993).

The implementation of the TSA in Ghana has facilitated a better fiscal and monetary policy coordination, as well as a better reconciliation of fiscal and banking data, which in turn has improved the quality of fiscal information (Bank of Ghana Bulletin, 2020). The establishment of an effective and efficient TSA infrastructure has significantly improved the country's primary cash balance for the first time in a decade, resulting in a Budget Surplus (Tax Revenues exceeding government expenditure) for 3 consecutive years (2017, 0.5%; 2018, 1.4%; and 2019, 0.9%). Due to an increase in liquidity, it has also reduced the Lending Rate of the commercial banks from a high of 32% of pre-TSA in 2016, to a low of 24% in 2019 post-TSA (Government Budget Statement, 2020).

Moreover, the operation of the TSA has resulted in a decrease in the rate of the debt stock increases from GHS9.5 billion in 2009 to GHC122 billion in 2016; and to GHC225 billion in 2019. This is evidenced by the country's debt stock increases as follows: 2009 to 2012, 267%; 2012 to 2016, 243%; and from 2017 to 2019, 76%. Finally, the debt to GDP ratio has also decreased as a direct consequence of pre and post TSA implementation as follows: 2009 to 2012, 49%; 2013 to 2016, 19%; and from 2017 to 2019, 3.9%. The fiscal deficit has also been 6.8% in 2016; 3.8% in 2018; and 4.8% in 2019 (Government Budget Statement, 2020).

Due to the unbridled spending on the part of ALL governments, the Fiscal Responsibility Act to cap the budget deficit not to exceed 5% for any fiscal year was passed in 2018. However, the Act's applicability remains to be seen in fiscal year 2020 as the International Monetary Fund (IMF) in its October, 2020 Fiscal Monitor Publication, has predicted that Ghana's fiscal deficit will reach 16.4 percent of GDP this year (up from the initial government projection of 4.7 percent of GDP), the largest in the country's history. This projection is not only the highest in Ghana's history, but will also become the biggest deficit in sub-Saharan Africa.

There is also the need to constantly and regularly engage the users and managers of the TSA in their capacity training and development in this era of electronic information and the high levels of well-organised and coordinated computerised crime and corruption (Trumpeter et al, 2012; Onwuka et al, 2009). Finally, it is recommended that a government lacking an efficient and effective control over its cash resources will pay for its institutional deficiencies in multiple ways. Therefore, the establishment of the TSA in Ghana must be jealously protected and enhanced (Zhang, 2012) through the digitisation programme and paperless systems, in order to constantly and consistently improve the government's cash management system, budgetary and liquidity controls in this era of the novel, dreaded, and disruptive Covid-19 Pandemic.

As at the time of submitting this research for publication on 30th November 2020, Ghana had 51,667 positive cases, with 50,547 recoveries, 323 deaths, and 797 active cases. The global figure was 63,691,642 positive cases, 1,476,277 deaths, and 44,079,695 recoveries. The three leading Countries on the infamous Covid-19

Pandemic Table were the USA, India, and Brazil. Indeed, the USA had clocked 13, 920,038 positive cases, with 274,332 deaths (<http://corona.tuply.co.za/>).

References

- Ahmed, A. I., (2016). Treasury Single Account (TSA) as an Instrument of Financial Prudence and Management: Prospects and Problems. *Research Journal of Finance and Accounting*: [http:// www.iiste.org](http://www.iiste.org). ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online). Vol.7, No.4, 2016
- Akande, I. (2015). Buhari orders Federal Ministries, Departments, and Agencies to open Treasury Single Account. Press Release, August 9
- Bank of Ghana. (2016). *Bank of Ghana Bulletin*, 3(2), 2016. Accra.
- Bower, J. L. (1970). Managing the Resource Allocation Process: A Study of Corporate Planning and Investment. Division of Research, Harvard Graduate School of Business Administration, Boston, Mass.
- Carleton, W. T. (1970). An Analytical Model for Long Range Financial Planning. *Journal of Finance*, 25 (2), pp 291-315
- Central Bank of Nigeria. (2015). Revised Guidelines for compliance with Treasury Single Account by Banks in Nigeria.
- Central Bank of Nigeria. (2014). Communiqué No. 94 of the Monetary Policy Committee. March, 24-25, p 1-37.
- Chohan, U. W. (2020). Modern Monetary Theory (MMT). A General Introduction. *CASS Working Papers on Economics & National Affairs. Social Science Research*. Network SSRN
- Deloitte. (2012). Integrated reporting: The new big picture. Deloitte Insights.
- Dener, C. (2007). Treasury Single Account Practices in ECA, mimeo
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. New York, NY. Routledge.
- Economist Intelligence Unit (EIU). (2005). Assessing Payments Systems in Latin America. Economist
- Edwards, S. (2019). Modern Monetary Theory: Cautionary Tales from Latin America. *Cato Journal* 39 (3), 529. doi: 10.36009/CJ:39:3:3
- Ekubiat, J. U., and Ime, F. E. (2016). The Adoption of Treasury Single Account (TSA) by State Governments of Nigeria: Benefits, Challenges, and Prospects. *Journal of Finance and Accounting* 4(3), p. 126-130 <http://www.sciencepublishinggroup.com/j/j>
- Financial Administration Act. (2003). Act 654, Assembly Press, Accra.
- Fiscal Responsibility Act. (2018). Assembly Press, Accra
- Fitzsimons, V., G. (2009). A troubled relationship: corruption and reform of the public sector in development. *Journal of Management Development*, 28(6), 513-521. DOI: 10.1108/02621710910959675
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.
- Friedman, M., & Schwartz, A. J. (1964). Has the government any role in money? *Journal of Monetary Economics*, 17(1), 37-62
- Garbade, K., Partlan, J. C., and Santoro, P. J. (2004). Recent Innovations in Treasury Cash Management, *Current Issues in Economics and Finance*. 10(11)
- Hayes, R. H., and Nolan, R. I., (1974). What Kind of Corporate Modelling Functions Best? *Harvard Business Review*, 5(6), pp 102-112
- Hendriks, C., J. (2013). Integrated Financial Management Information Systems: guidelines for effective implementation by the public sector of South Africa: original research, *South African Journal of Information Management*, 15(1), 1-9. doi: 10.4102/sajim.v14i1.529
- Hill, C. W., and Jones, G. R. (2012). *Strategic management theory: An integrated approach*. 10 Ed.). South-Western: Cengage Learning.
- Hobbes, T. (1985). *Leviathan*. London. Penguin.
- Horcher, K. A. (2006a). *Essentials of Managing Cash*. John Wiley & Sons, Inc.
- Horcher, K. A. (2006b). *Essentials of Managing Treasury*. John Wiley & Sons, Inc.
- Howlett, M., and Ramesh, M. (2003). *Studying public policy: Policy cycles and policy subsystems*. Ontario, Oxford University Press.
- Ibietan, J. (2013). Corruption and Public Accountability in the Nigerian Public Sector: Interrogating the Omission. *European Journal of Business and Management*, 5(15), 1-48. Retrieved from: <http://www.iiste.org/Journals/index.php/EJBM/article/view/6201>
- IMF. (2020). International Monetary Fund, Fiscal Monitor Publication, Washington, DC.
- IMF. (2007). *Manual on Fiscal Transparency* (Washington).

- IMF. (2001). Government Finance Statistics Manual (Washington).
- Iroegbu, C. (2015). Treasury Single Account will block leakages. *Vanguard*, August, 24. P 38
- Khan, A., and Pessoa, M. (2010). Conceptual Design: A Critical Element of Government Financial Management Information System Project Technical Notes and Manuals (Washington: International Monetary Fund).
- Kinston, D. L. (1973). Concepts of Financial Models. *IBM Systems Journal*, 12 (2) pp 113-125
- Keynes, J. M. (1936). General Theory of Employment, Interest, and Income. New York.
- Keynes, J. M. (1930). Treatise on Money. p 4, 6. New York.
- Krugman, P. R., and Wells, R. (2018). Economics (5 Ed). ISBN-1-319-0-660-7
- Krugman, P. R. (2007). The Conscience of a Liberal. ISBN-0-393-06069-1
- Larson, M. C. (2007). Local Government Cash Management, Chapter 2 in *Local Public Financial Management*, ed. by Anwar Shah, World Bank
- Lekubu, B., K. (2013). *Issues of Corruption in South Africa's Municipalities*. Conference Proceedings, South African Association of Public Administration and Management (SAAPAM). Cape Town, South Africa.
- Lienert, I. (2009). *Modernizing Cash Management*, Technical Notes and Manuals, Fiscal Affairs Department, Washington, International Monetary Fund.
- Lindblom, C. E., and Woodhouse, E. J. (1993). The policy-making process. Upper Saddle River. NJ: Prentice Hall.
- Mansfield, E. (1997). Microeconomics: theories and applications (9 Ed). New York
- Mitchell-Innes, A. (1914). The Credit Theory of Money. *The Banking Law Journal*, 31
- Obinna, C. (2015). Banks Face Liquidity Strain as FG Fully Endorses Treasury Single Account. *Thisday Monday*, 11(8), pp 52.
- Oguntodu, J. A., Alalade, Y. S. A., Adekunle, Y. A., and Adagbie, F. F. (2015). Assessment of Treasury Single Account and Nigeria's Economy Between 1999 and 2015. *Journal of Accounting and Financial Mismanagement*. ISSN 2504-8856. Vol. 2, No. 6, 2016 www.iiardpub.org
- Olken, B., A., and Pande, R. ((2012). Corruption in Developing Countries. *Annual Review of Economics*, 4(1), 479-509. DOI: 10.1146/annurev-economics-080511-110917
- Onwuka, C., C., Okoh, C., I., and Eme, O., I. (2009). Corruption in Nigeria: Nature, Forms, and Challenges before Anti-Corruption Agencies. *Interdisciplinary Journal of Contemporary Research in Business*, 1(8), 114-132.
- Paris Declaration. (2005). Public Financial Management Reforms. Paris.
- Pattanayak, S. and Cooper, J. (2011). Chart of Accounts: A Critical Element of the Public Financial Management Framework Technical Notes and Manuals (Washington: International Monetary Fund).
- Pattanayak, S., and Fainboim, I. (2010). Treasury Single Account: Concept, Design and Implementation Issues IMF working paper 10/143 (Washington: International Monetary Fund). (<http://www.imf.org/external/pubs/cat/longres.cfm?sk=23927.0>).
- Public Financial Management Act (2016). Act 921, Assembly Press, Accra.
- Quentin, S. (1978). The Foundations of Modern Political Thought: The Age of the Reformation Cenbridge.
- Reinikka, R., and Svensson, J. (2006). Using micro-surveys to measure and explain corruption. *World Development*, 34(2), 359-370. doi:10.1016/j.worlddev.2005.03.009
- Reinikka, R., and Svensson, J. (2001). Explaining leakage of public funds. WIDER Discussion Papers/World Institute for Development Economics (UNU-WIDER) (No. 2001/147). Washington, DC: The World Bank.
- Samuelson, P. (1992). Economics (11 Ed). McGraw Hill, New York.
- Schmitz, S. W., and Wood, G. E. (2006). Institutional Change in the Payments Systems and Monetary Policy—An Introduction in Institutional Change in the Payment System and Monetary Policy ed. by Stefan W. Schmitz and Geoffrey E. Wood (Routledge).
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610
- Ter-Minassian, T., and Parente, P. (1995). Setting Up a Treasury in Economies in Transition IMF Working Paper 95/16, International Monetary Fund.
- Trumpeter, G., M., Carpenter, T., D., Desai, N., Jones, K., L., and Riley Jr, R., A. (2012). A synthesis of fraud-related research. *Auditing: A Journal of Practice & Theory*, 32(1), 287-321. doi: <http://dx.doi.org/10.2308/ajpt-50360>
- White, L. H. (2006). Payments System Innovations in the United States since 1945 and their Implications for Monetary Policy Chapter 1 in Institutional Change in the Payment System and Monetary Policy ed. by Stefan W. Schmitz and Geoffrey E. Wood (Routledge).
- Williams, M. (2010). Government Cash Management: Its Interaction with Other Financial Policies. Technical Notes and Manuals (Washington: International Monetary Fund).
- Wood, F., and Sangster, A. (2012). Business Accounting 1 (12 Ed). Pearson Education Limited.
- Yusuf, I. A., and Chiejina, N. (2015). Anti-Graft War: One Economy, One Account. *Sunday Nation*. 8 (16), pp 9-10 & 71.

Zhang, K. (2012). Increasing Citizen Demand for Good Government in Kenya. Retrieved from:
http://cega.berkeley.edu/assets/cega_events/4/Zhang-