

Towards Accrual Basis in Government Sector in the Kingdom of Saudi Arabia

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Abstract

This study examines the transition from cash to accrual accounting in government accounting, focusing on its impact, significance, and implementation. It explores the concept of return on public spending, measurement methodologies, and optimal allocation. The research analyzes the link between accrual accounting adoption and objective measurement of public spending returns. A proposed accounting strategy addresses expenditure allocation issues using an accrual basis. A practical field study, including experts from inside and outside Saudi Arabia, confirms a direct relationship between accrual accounting and improved spending measurement. The findings support the proposed approach, highlighting accounting's role in economic development and reform.

Keywords: Accounting Measurement, Accrual Basis, Cash Basis, Government Sector, Return on Public Spending, Public Spending Allocation.

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1. INTRODUCTION

The last two decades have been dominated by an international trend that continues to accelerate the introduction of reforms and radical changes to traditional government accounting practices that have demonstrated their inability and failure to serve societies (Ferry *et al.*, 2017), and even reflected a distorted image of the accounting profession in some of their outdated rules and principles, making it one of the bureaucratic tools impeding development and providing an easy outlet for corruption (Hall and Millo, 2018). The cash basis abandonment and the accrual basis adoption is the most visible face of these reforms, and as a result, these reforms came as an urgent necessity imposed by rapid developments in various fields of human knowledge, which required those concerned with government accounting to catch up with these developments, leading to the demonstration that the government accounting profession plays a critical role in the service of the public interest cannot be bypassed or avoided (Krucien *et al.*, 2019; Saul, 2013).

The accounting standards have supported the accrual basis. IAS standard No. 1 concerning the

presentation of financial statements indicated that an entity must prepare financial statements on accrual basis (Pernica and Hanusova, 2015), with the exception of cash flow information. And IAS standard No. 2 related to inventory, indicated that any reduction in the value of the inventory resulting from the decrease in the net selling value of the inventory below its book value, as well as all losses in the inventory, should be charged as an expense in the same period in which these losses were realized (Oulasvirta, 2012). IAS standard No. 9,18 and IFRS No. 15 on revenue indicated that in the event that there is a degree of uncertainty about the possibility of collecting an amount actually included in revenue, the value whose collection is highly doubtful must be included in the expenses and its value is not excluded from the previously recognized revenue (Pernica and Hanusova, 2015).

The accrual basis uses the adjustment process to recognize revenues and expenses as they are earned, regardless of when they are collected or paid. The accrual basis allows for more accurate measurement of business results and comparison of financial statements from different companies, however, the cash basis is not

in accordance with generally accepted accounting principles (GAAAP) because the cash flow statement can be used instead (Hepworth, 2002). For some Arab countries, the project of converting all government agencies from cash to accrual accounting is a strategic project that aims to achieve a number of important outcomes, including giving an accurate perception of the financial obligations arising from the operations of government agencies, preserving the state's assets, counting them and recording them in the accounting records, and creating devices Appropriate governance to preserve public money, raise the efficiency of preparing the state's general budget, provide a clear future financial vision (Connolly and Hyndman, 2006), take decisions based on accurate and clear grounds, create consistency and financial control among all financial practices followed in the state, as well as rationalizing government expenditures.

The system of shifting from the cash basis to the accrual basic is one of the latest accounting applications. The accrual accounting system is based on recording revenues, expenses, assets, liabilities, and owner's equity (net assets) in the general ledger when the relevant economic activity occurs and when cash is received or paid (Brusca *et al.*, 2016; Lapsley *et al.*, 2009). The transition from the cash to accrual basis has several benefits, the most important of which is that it provides the government with more accurate data in the form of a statement of financially assessed assets and liabilities as of the end of the fiscal year, an accrual statement of expenses and revenues, and a statement of payments and cash receipts. The system is also notable for giving components of financial management over assets as well as data that aids in a more accurate evaluation of government agency performance.

For a long time, it was believed that the cash basis was the best and most appropriate for the government sector; however, in recent times, and in light of current developments in accounting systems and methods of preparing general budgets of countries, as well as the increase in public spending and the increase in the responsibilities of government units, this basis is no longer sufficient, as it once was. It does not provide information about assets and liabilities, nor about the various cost elements, and it does not reflect the true financial position or provide a short-term view of government finances in financial reports (Hyndman and Connolly, 2011; Maimunah, 2016). Furthermore, its role in oversight is limited to financial control only, with no oversight over performance, which ensures that laws and regulations are followed and that public funds are spent in accordance with what was allocated to them while failing to demonstrate the efficiency and effectiveness of the government unit is utilizing its resources and the extent to which it achieves its goals.

Many discussions were held about the significance of shifting from the cash to accrual basis,

which is considered part of the principles of new public management (NPM) adoption, whose philosophy focused on changing administrative practices in the public sector to make them as close to private sector practices as possible (Paunescu, 2019). The idea of switching to an accrual basis in the government sector was widely accepted throughout the world, and calls for comprehensive reforms in government accounting practices increased.

As a result, the accrual basis first appeared in the government sector, specifically at the end of the 1980s, and it is now dominant in accounting systems, particularly in developed countries like New Zealand, which was the first to adopt it, followed by Australia and the rest of the countries. It has demonstrated its effectiveness in achieving the highest level of transparency and accountability and providing better information for decision-making and performance measurement and evaluation (Adhikari and Nesbakk, 2016; Guthrie, 1998). Countries usually resort to using it by implementing international accounting standards in the government sector that are prepared in accordance with it or other similar standards, which improves the quality of financial reports and provides high-quality accounting information, whereas accounting information of high quality is extremely beneficial in the process of making financial decisions (Kober *et al.*, 2010).

The significance and motivation of this study are to answer the following questions: Does using the accrual basis give basic information for planning, designing programs, and evaluating performance? What is the impact of the transition to the accrual basis of accounting on government units in the Kingdom of Saudi Arabia? what is the definition of the concept of return on public spending, measurement methodology, and public expenditure allocation? and is there a statistically significant relationship between the accrual accounting basis adoption in the government sector and the objective accounting measurement achievement of the return on public spending?.

2. Background and Hypothesis Development

Accounting has long been based on the cash basis in the public sector, until the early 1990s, when he began to draw the attention of researchers, professional organizations, and scientific societies to the transition to an accrual basis, in an attempt to bring financial accounting into the public sector, and it was as a result of this interest that accounting standards were issued. IPSAS is an international public sector basis based on the entitlement that has been adopted by many countries (Brusca *et al.*, 2016). New Zealand leads the way in this category, followed by Australia, the United Kingdom, Sweden, and other countries. Due to its importance and criteria, some Arab countries, such as Kuwait, Qatar, Morocco, and Jordan, have recently begun to shift to the accrual accounting basis in the public sector and

IPSAS (Brusca *et al.*, 2013; Christiaens *et al.*, 2010). It aims to issue the budget and calculate the results, and allows the calculation of the full costs of government actions. The traditional cash basis, on the other hand, is only concerned with cash inflows and outflows and thus does not record transactions until the cash is received or paid, and considers all amounts received or received as receivables (Ilie and Miose, 2012).

Based on the preceding difference between the cash and accrual accounting basis in the public sector is that the cash accounting basis records expenditures and revenues in the period in which payments are made or received; an accrual accounting basis records revenue in the period in which it is earned (whether it is received or not), and expenditure in the period in which it is incurred (whether paid or not). The deeper distinction between the two accounting systems is in how time transactions are recorded. For example, in the cash accounting system, revenue is not recorded until it is received (Guthrie, 1998), whereas, in the accrual accounting system, revenue is recorded when it is earned, even if it has not yet been received. Similarly, in the cash system, expenditures are not recorded until they are paid. An accrual system, on the other hand, records expenditures when they are incurred, even if they are not paid. Of course, when applied to the public sector, both systems have advantages and disadvantages.

Based on the scientific and practical reality that we observe as accounting researchers, and in accordance with the vision of the Kingdom of Saudi Arabia 2030, and an implementation of the basic axis of effective governance through which real information with high transparency can be accessed, we see that the basis used in government units (cash basis) does not achieve the full goal, particularly in the areas of planning, program preparation, performance evaluation, and adequacy (SOCPA, 2021). And when government ministries switch to using the accrual basis, they will overcome the disadvantages of using the cash basis and will succeed in optimal planning to contribute to the realization of the Kingdom's Vision 2030, and they will be able to easily evaluate their performance and show their results with greater transparency and clarity, and the stage may need to shed light on what government agencies require.

On December 15, 2016, the Royal Decree No. 13059 was issued, approving a project for the transformation of all government agencies from using the cash to accrual accounting basis, and for the Royal Court Finance Committee and the Executive Committee headed by the Minister of Finance to supervise the project's implementation. The project of transitioning to the accrual accounting basis in accordance with international accounting standards in the public sector and strengthening the state's financial position aims to achieve one of the pillars of the Kingdom's Vision

2030, which is concerned with improving the financial accounts quality and enhancing transparency within the program to improve the government accounting system and auditing standards (SOCPA, 2021).

The Technical Committee studied and recommended the adoption of the draught framework of general-purpose financial reporting concepts, draught accounting standards for the public sector, and guidelines for recommended practices in the Kingdom of Saudi Arabia. Through the full application of government accounting standards, a transformation strategy and methodology were adopted, and government agencies gradually shifted the state budget to the accrual basis of accounting (SOCPA, 2021). Furthermore, government agencies bear responsibility for the transformation, with the Ministry of Finance's role being to support and supervise.

The project's stages are as follows: study the current situation, evaluate the extent of readiness for transformation in government agencies, prepare outputs (the elements of transformation), prepare a plan for the transition from the current system, identify the main features of the complete transformation program (SOCPA, 2021), leading to the issuance of the state's consolidated financial statements, start implementing the accounting transformation plan for each entity and align Accounts guides and accounting systems to apply the accrual basis and work accounting policies and procedures, and finally to ensure that the accounting systems within each government agency and employees are ready to work on a daily and comprehensive basis according to the accrual basis, and the actual launch of the accounting system according to the accrual basis.

2.1 Accounting Measurement Basics in Government Accounting

The methods that indicate when revenues, expenses, assets, and liabilities are realized and when they are recorded in journals and shown in financial reports are defined as the basis of accounting measurement, and they are used to determine the point in time through which assets, liabilities, revenues, and expenses can be measured and recorded in the accounts of the government unit (Millar and Hall, 2013). These accounting measurement basics have emerged as a result of the accounting period rule, which is the period during which the accounting system determines the income and expenditures for the year under measurement so that the process of proving financial operations, measuring results, and determining financial position is not carried out at random. Given the significance of the basics of accounting measurement in determining the structure of the government accounting system, it is critical to discuss the generally accepted basics of accounting measurement and to evaluate the appropriate basis that can be relied on in the government accounting system and its ability to achieve

the system's objectives (Mason, 2018; Thomas *et al.*, 2015; Tikk, 2010).

Accounting bases differ from country to country in recording public revenues and expenditures, each country uses a basis that is appropriate for the nature of its activities. This difference is due to several factors, the most important of which are: the governmental authority's operational objectives, the economic, social, and legal environment in which it operates, the degree and type of accountability, the objectives of financial reporting, and the needs of users of financial statements and reports (Brusca *et al.*, 2016). Accounting researchers disagree on the division of accounting foundations. Some believe there are two main accounting bases, namely the cash basis and the accrual basis, while others add the basis of commitment to them. However, the Public Sector Committee (PSC), which was affiliated with the International Federation of Accountants and later transformed into the International Public Sector Accounting Standards Board (IPSASB), added two new foundations to the previous two, which are the modified cash and accrual basis. There has recently been much debate about which of these foundations is more valuable and useful in the government sector, as follows:

2.1.1 Cash Basis

The cash basis is regarded as one of the oldest basics utilized in operating data and monitoring outcomes in government activities. It is applied in many countries of the world until it has become an inherited and historical tradition due to the ease of its application and the simplicity of its methods. In spite of this, this basis achieves the advantages that are represented in the ease of its application and its distance from the risks of personal judgment in measuring results and the speed of completion of the final account and financial statements, and the absence of the need for a large number of employees and its results can be relied upon in preparing, implementing and controlling the budget (Comprix and Muller, 2006; Tiron-Tudor and Mutiu, 1990). However, these benefits did not preclude the existence of numerous problems and flaws that accompany the use of this basis and have an impact on the accounting system's efficiency in achieving its goals, including the following:

- Failure to provide the necessary data to accurately portray the financial situation.
- Failure to distinguish between capital and current expenditures, which has an impact on the final account and the statement of financial position.
- The final financial statements overlapping from one year to the next makes comparison difficult.
- It leads to overspending due to the fear of reducing provisions in future years.
- This basis does not allow for the completion of projects, particularly at the fiscal year end.

- Expenditure is not linked to budget approval, which takes a long time and has an impact on government activity.
- The lack of data required to conduct comprehensive monitoring work, measure the efficiency and effectiveness of long-term government programs and evaluate the performance of government administrative units.
- It does not assist in determining the actual cost of activities and programs, resulting in an inability to rationalize decisions and compare the cost of performing services performed by other administrative units.
- It is difficult to track the costs of projects whose implementation period spans several years.

We can conclude from the foregoing that the cash basis is characterized by the criterion of ease, while the criteria of users of financial reports and comprehensive control are not achieved by this basis, as its outputs are inappropriate to achieve the objectives of the various categories of performance evaluation, policy formulation, future foresight, and financial position determination, and this basis is incapable of providing the necessary data for the purposes of the application of comprehensive control, such as activity-related costs, revenues, accrued and advanced expenses, and fixed assets (Venter *et al.*, 2018). As a result, it is clear that the cash basis has become incapable of meeting the needs of accounting measurement and proper disclosure of data in financial statements, as well as the service of advanced and diverse management functions, prompting some countries that revealed this shortcoming to abandon it and adopt another measurement basis that meets their needs.

2.1.2 Commitment Basis

The modified basis is so named because it combines the characteristics of the cash basis and the accrual basis. This basis has been accepted by non-profit organizations, particularly governments that have adopted the cash basis for revenue Processing and the accrual basis for expenditure treatment. As a result, this basis addresses the problem of realizing expenditures, because the fiscal year bears the expenses that pertain to it in full (De Sousa *et al.*, 2013), whether they are paid during the year or have been linked to it and not paid, except that it is a deficit, as is the cash basis by him in Processing the revenues due and provided, and thus the application of this basis achieves many benefits, which can be summarized as follows:

- Display third-party rights in order to secure the funds required to cover them when performing services and supplying goods and services.
- Display the final account and financial statements in a more realistic manner than on a cash basis.

- Making the process of analysis and comparison easier in order to achieve better control over expenditures.
- It allows those in charge of project execution to continue project implementation with the allocations reserved for them during the contracting process.

Despite the aforementioned benefits, the use of this basis was not without its drawbacks, which are as follows (De Sousa *et al.*, 2013):

- Charging the fiscal year with amounts that do not belong to it because they are related to the supply of supplies or the implementation of future service.
- These obligations may not be implemented, and they are not known specifically and completely because they are estimated and recorded in the records.
- The administrative unit may use it to increase its spending capacity in the coming year by utilizing unused allocations.
- Freezing funds until the service or supplies are delivered.
- Lack of liquidity control as a result of not processing revenues and expenditures on a single basis.
- Non-discrimination between current and capital expenditures, thus negatively affecting the final account and financial position.

Based on the foregoing, it is clear that using the compliance basis will cause the reports and financial statements to reflect most of the necessary facts, but not all of them, and thus they will meet the needs of some financial statement users. Although its application is considered more difficult than the cash basis, it is simple to apply, with simple documents and accounting records, and it achieves good control over expenditures and enables the evaluation of performance within available capabilities, but it is unable to achieve complete control over revenues (Lassou and Hopper, 2015). As a result, while this basis is considered better than the cash basis, it does not aid in the government accounting system development, particularly from where providing all information that assists the administration in evaluating performance and measuring efficiency and effectiveness, and thus this basis is viewed as the first step toward the application of the accrual basis, implying that it is an interim basis that is used for a specific period of time.

2.1.3 The Modified Cash Basis

Recognizes revenues and expenses upon cash receipt or payment until a specified period after the end of the fiscal year (Comprix and Muller, 2006; Tiron-Tudor and Mutiu, 1990). It is a hybrid method that combines cash and accrual bases. The cash basis, on the other hand, is used in a greater proportion, and it also

takes into account unpaid accounts and/or accounts receivable at the end of the year.

2.1.4 The Modified Accrual Basis

Employs accrual accounting but does not recognize certain assets (such as fixed assets) and liabilities (Comprix and Muller, 2006; Venter *et al.*, 2018). As a result, it is a method that tends to account for the entire accrual basis, but with some differences, such as not accounting for certain categories of assets or liabilities.

2.1.5 Accrual Basis

The accrual basis is based on charging the fiscal year's final account with the expenses and revenues that were realized regardless of when they were received or paid, which necessitates inventory adjustments at the end of each financial period to determine what is related to the fiscal year of revenues, expenses, receivables, and prepaid, and thus this basis gives the fiscal year (Ahmed, 2016). A legal person who has his own financial liability, so that he is obligated to collect or disburse all that belongs to him, regardless of the expected date of collection or disbursement. As a result, the accrual basis is important because it produces accurate data and information that reflects the true cost of the activities and programs implemented by government units, as well as the extent to which they achieve the specified goals and the level of efficiency with which they are implemented, this is what prompted many to demand its use in government accounting and to regard it as an introduction to the use of cost systems in government administrative units. Based on the foregoing, it is possible to state that this foundation achieves a set of benefits that can be summarized as follows (Becker *et al.*, 2013; Bunea-Bontas and Petre, 2009; Christensen and Parker, 2010):

- Providing the necessary, accurate, and objective accounting information to demonstrate business results and financial position in a realistic and sound manner, as it is dependent on charging the fiscal year with its fair share of expenses and revenues, which leads to effective and comprehensive control.
- Consistently providing comparable information across years.
- It increases the ability of those in charge of project execution to continue carrying out their work and differentiates between capital and revenue expenditures, which has a positive impact on business results and the fairness of the financial position.
- Aid in the preparation of estimates for the resources and uses required for the coming year, as well as in calculating the cost of an activity or service, particularly in light of the use of the program and performance budget.
- Reflects the efforts and accomplishments associated with the accounting period and achieves financial year independence.

- It complies with the economic analysis requirements for the establishment of national accounting systems.
- It aids in the formulation of realistic fiscal policies by allowing fiscal policymakers to look beyond the current fiscal year.
- Providing relevant and sufficient information on the costs of government activities to aid decision-making.

Based on the foregoing, it is clear that the accrual basis ensures that financial statements fairly reflect the necessary facts for those interested in these lists via the large database that can be accessed when necessary to identify the level of achievement, address deviations, forecast the future, and formulate policies. The use of this basis benefits all groups interested in financial statements because it provides the necessary data for comprehensive control, which cannot be carried out without reliable financial data, which can only be obtained through an accounting system that uses the accrual basis (Salleh *et al.*, 2014). Accordingly, it is clear by study and analysis that the accrual basis is the only basis on which all the aforementioned criteria are available, according to which the appropriate accounting basis is selected, and this makes it the best basis that can be relied upon at the present time, because it provides sound and reliable data and information on the real costs of government projects, activities, and services through which effective control over government activities can be achieved to identify the extent to which they achieve their objectives by the best means and lowest costs, especially in light of the multiplicity and complexity of government jobs and activities.

2.2 Reasons for Converting to an Accrual Basis

Before we begin discussing the switching from the cash to accrual basis in the government sector, there must be motives and reasons that truly require the success of this switching, so we will review the most important reasons that prompted countries to adopt the accrual basis and abandon the cash basis.

The global financial crisis and the debt crises that followed revealed that the absence of transparency and lack of clarity in public finances, in addition to weak rules of good financial management, may endanger the state's ability to meet its financial obligations on the one hand, and implement its main task of providing public services on the other (Pollanen and Lapointe, 2012). As a result of these crises, the state is forced to review its financial, accounting, and economic systems to make them more transparent. Since then, the need to provide comprehensive, relevant, and reliable financial information for the effective allocation of public funds has increased. In this context, the transition to the accrual basis is considered the first stage of these reforms, because the financial statements prepared according to this accounting basis were able to provide information that

helps in taking appropriate decisions, and allows for accountability and increased transparency (Pin *et al.*, 2009). Many factors have contributed to the recent spread of accrual accounting in the government sector, including the following (Maimunah, 2016; Nesbakk, 2011):

- A growing awareness of the finite cash basis.
- It is consistent with the trend of international bodies and institutions such as the International Federation of Accountants and the World Bank toward accrual-based financial reporting standards, which are similar to government finance statistics management (GFSM) and international public sector accounting standards (IPSAS).
- Professionalization of government accounting frameworks and introduction of private-sector techniques into the public sector.
- Corresponds to national accounts economic statistics.
- Instead of paying in cash, recognize transactions as they occur.
- It distinguishes between current and government spending.
- Providing accurate and integrated records, as well as better information on policy sustainability.
- It identifies payment arrears and discloses liabilities such as public sector pensions.
- Provides basic information required for program planning, preparation, and evaluation.
- Acquires precise control over revenues and expenses.
- Adequately discloses accurate financial reports and results.
- Assisting in the evaluation of government sector bodies' financial position and cash flows, as well as the performance of the government evaluation in terms of the cost, effectiveness, and achievements of the services provided.
- Assisting in determining the total cost of government services, information that is required to assess the efficiency of government service performance, and allowing comparison with the cost of the same services in the private sector.

The benefits of the accrual basis are divided into two categories (Lapsley *et al.*, 2009): The first level refers to the increased ability to provide accurate, complete, and meaningful information about resources, debts, and revenues in order to improve communication with stakeholders. The ability to obtain the full cost of information is considered a critical component for improving organizational planning, control, and accountability at the second level.

2.3 Accrual vs Cash Basis Benefits

The benefits and advantages of the accrual basis versus the cash basis are clear, and are even considered as remedies for the cash basis's defects, and the following highlight the most important of them (Tiron-Tudor and Mutiu, 1990):

- Follow-up and control of expenditures: The role assigned to public accounting according to the cash basis was to measure the performance of the unit, whether it had adhered to the application of laws and instructions when collecting revenues and spending them for expenses. The aim was to find out if it was done in accordance with the method specified for it and the goals set. With accrual accounting, the goal is to balance the resources accrued (not just those spent) with results that should ultimately help measure the effectiveness and efficiency of management after its compliance with the budget.
- Follow up and measure the costs of goods and services, it is not possible to imagine the implementation of analytical accounting without matching expenses with revenues for the same accounting period and estimating expenses such as depreciation.
- Combating corruption as a result of accurate budget evaluation and implementation, as well as the development of mechanisms to enable accountability and transparency in financial management. The monetary foundation contains numerous loopholes that may encourage the commission of numerous administrative and financial abuses.

2.4 Countries That Have Adopted the Accrual Basis in the Government Sector

Accounting practices vary greatly across countries. Some use the modified cash or cash basis, while others have begun to shift to the accrual basis due to benefits like increased transparency, accountability, and decision-making assistance (Pina *et al.*, 2009). All governments must produce high-quality, transparent, credible, and internationally recognized financial statements in accordance with International Public Sector Accounting Standards (IPSAS) or equivalent standards. This is regarded as a critical component of democratic accountability and fairness for future generations. It also enables the generation of better management information to improve decision-making, thereby contributing to improved service performance and sustainable public finances.

After being almost monopolized by the countries of the Economic Cooperation Organization, the trend toward accrual accounting is now spreading across all continents (Nesbakk, 2011). Today, it is clear that the greatest expected increases are for non-member countries of the Economic Cooperation Organization, and international accounting standards (IPSAS) serve as

a global reference framework for accrual accounting reforms in this context.

In this context, we point out that the shift to the basis of entitlement has begun to affect all public sector bodies in the world, whether at the central level or at the local level, such as municipalities. As municipalities in Europe gradually began to adopt accounting on the basis of accrual and to issue financial statements according to it (Maimunah, 2016). For example, in Portugal, government accounting reforms began at the beginning of the nineties, where the accrual basis was adopted in 1997 at the central level, to be adopted by municipalities two years later in 1999, so local government accounting has developed in order to manage the activities of local communities in an economical (Monteiro and Gomes, 2013), efficient and more efficient manner, which requires accurate information And complete about the composition of the assets of each body (identification of assets and liabilities, as well as their value). Furthermore, it is critical to understand how these assets can contribute to the development of local communities. As is the case in Belgium and Italy, where municipalities began to shift to a basis of entitlement in 1995.

2.5 Getting Ready to Transition to Accrual Accounting

Many researchers noted the obstacles that prevent the modernization of the accounting system in light of the lessons learned and extracted from the implementation of the accrual accounting basis in many countries, which are: a lack of sufficient resources for training in addition to a lack of skills and experience, a lack of motives and incentives to move to the accrual basis, and a lack of employees and the appropriate automated media programs to implement the accrual basis, and make use of the information generated in a useful and timely manner, Aside from a lack of support from professional accounting and auditing institutions, and the inability to communicate high-quality information derived from accrual-based financial statements (Lapsley *et al.*, 2009; Maimunah, 2016). The following are the fundamental requirements for a successful transition to the accrual basis, based on country experiences and lessons learned:

- Advocating for legislation and regulations.
- The Public Sector Accounting Standards Committee's role.
- Activating the role of regional vision realization offices.
- In the Ministry of Finance, establishing a support and communication centre for the accounting transformation.
- Successful implementation of the change management plan in collaboration with government agencies.
- The Unified Government Resources System (UGRS) and Data Quality.

- Accountants and non-accountants can benefit from training and capacity building.
- Collaboration with the General Auditing Bureau and other regulatory bodies.
- Providing a unit for data compilation and financial statement consolidation.
- Adopting and adhering to accounting standards, policies, and guidelines.
- Create a standard and consistent chart of accounts.

The following preliminary tasks should be completed as part of the transition to the accrual basis (Guthrie, 1998; Hepworth, 2002; Flynn *et al.*, 2016):

- Defining Reform Objectives:

To shape the transition and obtain commitment and ownership, clear goals about what the accrual basis transition is projected to achieve, such as achieving more external transparency, managing internal information in a more reliable manner, and others, must be established as a first step.

- Create a Reform Team Comprised of Representatives:

That includes all key stakeholders, such as the Ministry of Finance, public accountants, ministries, local governments, public institutions, statisticians, parliament, supreme financial audit institutions, and accounting standard-setters. This team can be divided into a steering committee and working groups as long as they have good control over the accounting, which is required to advance the reform process and address technical issues as they arise.

- Existing Accounting Policies, Systems, Skills, and Practices Questionnaire:

This questionnaire should assess the current level of compliance with accrual accounting requirements in the entire public sector, including central government ministries, extra budgetary funds and funds, local governments, and public institutions. As a result of the results of this questionnaire and evaluation, the costs of repair and the timing of the transition will be determined.

- After Completing the Gap Analysis:

The government must evaluate the costs of the reform to determine whether the potential benefits outweigh the costs and acquire financial resources to implement the reform, which may be phased or include partial adoption. Recent experience demonstrates that the financial and other costs of financial management reforms can vary substantially depending on the status of accounting standards, the level of ambition, and their link to other financial management reforms.

- Creating a Mechanism for Establishing Accounting Standards:

Accounting standards are typically set by the Ministry of Finance in many countries, which contradicts the need for objectivity, independence, and integrity in the government's financial statements, and many countries have seized the opportunity when introducing the accrual basis in accordance with accounting standards. International outsourcing for the development of government accounting standards via (Flynn *et al.*, 2016):

- Creating independent counsels to advise the government on the adoption or modification of international accounting standards (such as what happened in France and America),
- Delegating responsibility for establishing accounting standards in the public sector to an independent body (New Zealand, Australia, Canada, and South Africa);
- Adopting standards developed by international standard setters (Chile); and
- Consultation with higher audit institutions prior to enacting new accounting standards in the public sector (Austria).

- Training and Change Management:

Implementing the accrual basis in government accounting requires considerable training for financial statement preparers on new concepts, systems, and accounting processes. This training should be extended to financial statement users such as ministers, senior Ministry of Justice personnel, MPs, civil society, and the ultimate audit authority.

- Create a Plan of Action for the Transitional Period:

The shift to accrual accounting is rarely accomplished in a single step. In most cases, a transition plan must be defined, which includes defining the main stages of reform, as well as the responsibilities and timing of preparatory tasks, reform of related systems and processes, and the financial statements form and content at each stage.

2.6 Program and Performance Balancing

Countries typically use a program and performance budget, which is a budget that focuses on the work done by the government rather than general expenditures and revenues, it is designed to focus on the work done or to be accomplished rather than the means of doing the work. The program and performance budgets must be accrual-based, which allows for the following (Millar and Hall, 2013):

- Developing standard accounting policies and, as a result, measuring performance over successive years in accordance with unified accounting principles.
- The accrual basis establishes a link between the achieved performance and the costs associated with it.

2.7 International Public Sector Accounting Standards (IPSAS)

The International Public Sector Accounting Standards Board (IPSASB) is a specialized body affiliated with the International Federation of Accountants (IFAC) whose mission is to serve the public interest by strengthening the accounting profession and contributing to the development of strong international economies by endorsing compliance with international accounting standards in the public sector (Oulasvirta, 2012). The (IPSAS) are a set of accounting standards used in the public sector around the world to prepare financial statements. Many countries and organizations have committed to implementing international accounting standards in the public sector (Brusca *et al.*, 2016). For example, beginning in 2005, all European governments were required to rely on them in the preparation of their reports. The International Public Sector Accounting Standards have been used in the preparation of financial reports for United Nations programs and other organizations, as well as for United Nations programs and other organizations. The League of Arab States also declared 2017 to be the year of compliance with these standards. These standards have been adopted by 107 countries around the world so far. The transition to the basis of eligibility necessitates the use of international accounting standards in the public sector as a prerequisite for establishing the appropriateness, dependability, and comparability of accounting information (Christiaens *et al.*, 2010).

2.8 The State's General Budget

The accrual-based budget is distinguished by improved cost information for decision-making and improved discipline for budget execution. It also necessitates bias in recording capital investments, which improves their management, and it clarifies the extent of the long-term sustainability of public finances, all while ensuring consistency with accrual-based reports, all of this creates an incentive for other administrations to implement public-sector reforms (Monteiro and Gomes, 2013). The use of the accrual basis in accounting for the operations of government units helps to increase the efficiency of the government accounting system by providing a comprehensive picture of the government unit's obligations, which aids in the formulation of realistic policies and facilitates cash management due to the clear picture it provides of the government unit's obligations, and its benefits for countries are as follows (Becker *et al.*, 2013; Ben-David and Tavor, 2011):

- The government's true financial position is revealed, taking into account financial dues and obligations, as well as the actual value of assets.
- Displays government expenditures in a realistic manner based on the cost of depreciation of resources rather than the cost of procurement.

- It is possible to calculate the costs of activities and the outputs produced by departments in order to assess their effectiveness.
- Allows for more effective management of financial forecasts, financial flows, and budget preparation.
- Maintaining awareness of ongoing changes in international accounting standards (IPSASS) and cost accounting in government units.
- The accrual basis assists in determining the costs of services provided, including the contribution of fixed assets to the production and provision of the service.
- The accrual system is used from budget preparation to financial statement preparation for the unit.

According to Ahmed (2016), the early twenty-first century saw reforms to the public sector's accounting systems, shifting away from traditional cash and accrual accounting basis. Ferry *et al.*, (2017); Lapsley *et al.*, (2009) also stated that the cash basis contributes to the presentation of shady results that differ from the true financial situation and that any country that wants to implement accounting reforms in the public sector should learn from the practices and lessons learned from leading authorities in order to switch to the accrual basis. Flynn *et al.*, (2016); Guthrie (1998) discussed the reality of public accounting by analyzing the accounting processing procedures for the state's financial transactions according to a specific system, in addition to outlining the potential for overhauling the public accounting system and analyzing the weaknesses and strengths of the project for the state's accrual basis transformation, it also became clear that the use of the accrual accounting system represents a quantum leap forward in terms of improving the quality of government financial reporting.

The study of Monteiro and Gomes (2013) reviewed the most prominent problems of adopting cash-basis financial statements in government units, as it addressed the importance of the government accounting system's financial statements in light of modern accounting, as well as the fact that the cash basis in use in government units does not achieve the goal of providing useful information in the areas of planning and control, and the researcher's vision is important. Preparing government financial statements in a manner similar to the preparation of financial statements in accordance with financial accounting. Hepworth (2002); Maimunah (2016) also discussed the increase in government duties, which leads to an increase in their need for financial statements in order to establish sound scientific foundations, because of the detailed financial data provided by the investigation, the report advise using the accrual basis in government accounting.

Becker *et al.*, (2013); Pollanen and Lapointe (2012) presented a proposed model for switching to the accrual basis, as his study discussed government units' reliance on the cash basis, which does not provide accounting information represented in planning, decision-making, and achieving effective control over expenditures and revenue collection due to its close connection with the general budget, and the necessity of switching to the accrual basis because it provides adequate disclosure of economic results. The accrual basis was recommended by the study because it provides a clear picture of financial information in government units. Nesbakk (2011) concluded in his applied study on accounting for fixed assets in government service units in both Australia and New Zealand that these two countries were among the first to achieve their goals as a result of their adoption of the accrual basis for recording financial operations in government units, and its indicated that government-based accounting is on the rise. It does not achieve its objectives on a cash basis, so the study suggested using the accrual basis in recording the financial operations of government units and re-evaluating the assets.

Salleh *et al.*, (2014) shed light on the changes that can occur when adopting one of the accounting basics, particularly with regard to the elements of government financial statements and how they are recognised, measured, and disclosed in financial statements, in order to identify and study these changes and make appropriate decisions in choosing any of these basics that can provide useful information to users rather than qualitative choice or fear of switching from one basis to another, the study's findings indicate that an accrual-based accounting system will result in the disclosure of all financial and non-financial assets, allowing for the evaluation of the efficiency of government administrative units in their use of various assets.

The study of Falkmana and Tagessonb (2008); Pina *et al.*, (2009) concluded that there are differences in the accounting policies and principles used by different countries, and the study recommended the need for standardisation in the use of the applied bases, as well as the presence of information that can be used as a reference for governments that want to change their policy. While the study of Bunea-Bontas and Petre (2009); Christensen and Parker (2010) aimed to analyse the role of financial reports in the process of financial disclosure in local governments and the most important issues that should be focused on to improve the disclosure process in the public or private sector, the study recommended the need for financial reports to include information on the cost of services provided as well as the achieved results, goals, and indicators that indicate the level of efficiency and effectiveness of the government.

The International Federation of Accountants, which publishes IPSAS, the World Bank, the Organization for Economic Cooperation and Development, the International Monetary Fund, and the European Union Committee are all supporters of the accrual accounting basis (Christiaens *et al.*, 2010). The benefits of accrual accounting have been mentioned on numerous occasions and in various reports and studies by the International Federation of Accountants and the International Standards Board, explicit recognition of the limited cash basis was issued by the International Monetary Fund and supported the application of accrual accounting, the credit for spreading accrual accounting is due to the development of international accounting standards (IPSAS) based on the accrual basis.

At the European level, the Statistical Office of the European Communities confirmed that the accrual basis is an acceptable basis for providing an accurate picture of the financial and economic situation of the government's performance. In accordance with this, the Foundation for Economic Education (FEE) promotes the transition from cash to accrual accounting by issuing accrual accounting statements and accounting for The accrual basis in support of the best financial policy for assets and liabilities by measuring them with the overall position of the financial policy and financial sustainability (De Sousa *et al.*, 2013). The CEO of the International Federation of Accountants stated that what revealed the shortcomings in the reporting practices followed by many governments is the current debt crisis and that the goal shared by the International Federation of Accountants and the International Monetary Fund is to strengthen the financial sector, reporting, and financial management, as they believe that governments around the world It should implement the institutional reform necessary to strengthen government financial management to protect investors and the public in government bonds because this allows governments to anticipate and manage financial shocks better and helps reduce debt risks.

It also clarified (Deaconu *et al.*, 2011; Tiron-Tudor and Mutiu, 1990) that the goal of converting financial reports to acquisitions is to increase the transparency of the true cost. For example, rather than incurring unrelated expenses once they retire, state employees' pension costs are allocated to the time they work, and rather than having higher expenditures on implementing individual capital projects, they are included in annual operating expenses through a provision for depreciation. Furthermore, treating guarantee programs and loans on an accrual basis requires grantees to pay more attention to default risk, especially if these hypothetical risks must be financed in advance, and unpaid government debts can be designed in such a way that all interest expenses are paid in a lump sum at the end of the loan rather than distributing it over the years the loan was due. All of these examples are just meant to show how focusing

entirely on cash can distort the true cost of government, and so the bottom line and main benefit of accrual accounting is to accurately allocate income and expenditures to the government over time.

2.9 Research Hypothesis and Theoretical Framework

The study is based on the assumption that the current cash basis does not provide an adequate picture of the actual reality of government financial operations and does not achieve an ambition in Vision 2030, and that the cash basis may produce misleading results that differ from the actual situation. The use of the accrual basis in government units, on the other hand, achieves

the goals of government accounting, planning and programming, accurate performance evaluation, continuous monitoring, and then effective disclosure. The following hypotheses will be tested:

H1: There is a statistically significant association between the adoption of the accrual basis of accounting in the public sector and the achievement of objective accounting measurement of the return on public spending.

H2: It is possible to assess the efficacy of the suggested definition of the notion of return on public spending, as well as the entrance and methodology for evaluating it and the recommended methodology for distributing public expenditures.

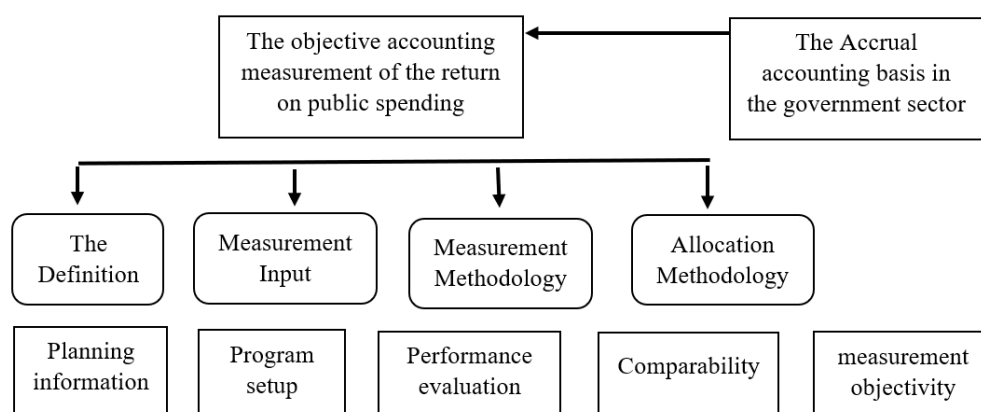


Figure 1: Theoretical framework

3 RESEARCH METHODOLOGY

3.1 Sample Selection and Data Collection

The original population for the study included all 183 International Monetary Fund member countries, including the Kingdom of Saudi Arabia. We relied on survey lists that were sent to the sample items, which numbered 750 items from the study population's various fields of work and scientific specializations, to obtain the data for the study. Participants in the study came from governmental, non-governmental, and international organizations. The number of responses reached 502 lists, which represents 67%, and we excluded 25 lists due to their scientific and practical specialization in the field of the research subject of the study. Thus, the number of lists on which the statistical analysis was conducted in 477 lists, 64%, with 368 lists inside the Kingdom of Saudi Arabia and 109 lists outside the Kingdom of Saudi Arabia. The tiny number of target groups with scientific and practical expertise in the subject of the research, as indicated by the neutral responses to many of the survey items, posed a variety of obstacles in getting this number of responses.

The total number of respondents in the sample is 477, with 350 men (73.4%) and 127 women (26.6%). According to the respondents' scientific fields, 309 of them have a scientific field of accounting with a percentage of 64.8 percent, 97 respondents have a

scientific field of economics with a percentage of 20.3 percent, 30 respondents have a scientific field of public finance with a rate of 6.3 percent, and 41 respondents have other scientific fields with a rate of 8.6 percent. According to the respondents' scientific level, 234 have a doctoral degree (49.1%), 129 have a master's degree (27%), 18 have a postgraduate diploma (3.8%), and 96 have a bachelor's degree (30.1%). According to the respondents' employment status, 336 work for the government (70.4%), 25 work for an international organization (5.2%), 85 work in other countries (17.8%), and 31 do not work (6.5%). According to the respondents' job experience, 194 of them have less than 10 years of experience, or 40.7 percent, 112 have 10 to 15 years of experience, or 23.5 percent, and 171 have more than 15 years of experience, or 35.8 percent. According to the workplace, 368 people are from the Kingdom of Saudi Arabia, accounting for 71.1 percent of the total, and 109 people are from other countries, accounting for 28.9%. According to the respondents' employers, 147 work in universities (30.8%), 109 work in the Ministry of Finance (22.9%), and the remaining 221 work in various sectors and destinations (46.3%). According to the nature of the respondents' jobs, 79 of them are university professors (16.6%), 67 lecturers and assistant lecturers (14%), 56 researchers (11.7%), 47 accountants (9.9%), 36 auditors (7.5%), 31.5% do not

work, and the remainder 161 work in various other specializations (33.8%).

3.2 Research Method

The field study entails polling the opinions of those who are interested in the study's subject matter on the issues addressed in the theoretical framework, and then using the survey list to test the validity of the research hypotheses developed. Where the survey was distributed inside and outside the Kingdom of Saudi Arabia, and academics and professionals working in governmental and non-governmental agencies interested in the subject of the study were invited, and the extent of compatibility or difference between inside

and outside with regard to the results of the hypothesis test.

The study tool is included in the survey list in order to implement the accrual basis of accounting in the public sector and to achieve accounting assessment of the return on public spending. The survey list was prepared from several axes based on the five-point Likert scale, representing (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree, except for questions related to personal information about Inquired of it. The classification of arithmetic averages using the five-point Likert scale was used to judge the opinions of the participants, as indicated in the table below:

Table 1: Averages using the five-point Likert scale

Response	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Average	1-1.79	1.80-2.59	2.60-3.39	3.40-4.19	4.20-5

3.3 Validity and Reliability of the Study Tool

3.3.1 Validity Test

This is to test the tool's validity for gathering information and data, as well as its ability to measure because the test is considered valid if it measures the job designated for measurement without measuring another job.

3.3.1.1 Face Validity

The survey was presented to a panel of arbitrators to ensure its validity and the integrity of its vocabulary, as well as the judgment on the clarity of the phrase, the appropriateness of the phrases for the purpose for which they were formulated, and the accuracy of the linguistic formulation. In light of the arbitrators' amendments and instructions, the survey was used, data were loaded onto the (SPSS) program,

and discriminatory validity and reliability tests were performed on a study sample of 477 people.

3.3.1.2 Discriminate Validation

The survey included discriminate validation (discrimination coefficient), which is a concept that expresses the degree of sensitivity and the extent of the phrase's ability to distinguish or differentiate between individuals in that aspect or appearance of the trait that is addressed to be measured. There is no doubt that the discriminatory ability of the expressions is directly related to their truthfulness and success in measuring what they were intended to measure by comparing the extreme categories on the same scale. As a result, the discrimination coefficient between the lower and upper thirds of the sample items' responses was calculated using the coefficient (Mann-Whitney) nonparametric to signify the differences between the upper and lower thirds, and the results were as follows:

Table 2: The distinction between the upper and lower classes of the study tool

Ranks					
	Discrimination	Number	Average Ranks	Total Ranks	Mann-Whitney
Adopting the application of the accrual basis of accounting in the government sector	1	159	122.02	19523.5	M-W=6643.5
	3	159	194.36	29931.5	Z=-7.087
	Total	318			Sig=0.000
Developing an objective accounting measurement of the return on public spending	1	159	124.53	19924.5	M-W=7044.5
	3	159	191.76	29530.5	Z=-6.621
	Total	318			Sig=0.000
The Definition	1	159	128.98	20637.5	M-W=7757.5
	3	159	187.13	28817.50	Z=-5.787
	Total	318			Sig=0.000
Measurement Input	1	159	128.56	20569	M-W=7689
	3	159	187.57	28886	Z=-5.860
	Total	318			Sig=0.000
Measurement Methodology	1	159	132.92	21266.5	M-W=8386.5
	3	159	183.04	28188.5	Z=-4.945
	Total	318			Sig=0.000
Allocation Methodology	1	159	130.56	20889	M-W=8009

Total	3	159	185.49	28566	Z=-5.492
	Total	318			Sig=0.000
	1	159	118.93	19029.5	M-W=6149.5
	3	159	197.57	30425.5	Z=-7.674
	Total	318			Sig=0.000

According to the table, the level of statistical significance corresponding to the Mann-Whitney statistic is 0.00, which is less than the level of significance 0.05, indicating that the survey has high discriminatory validity.

3.3.1.3 Internal Validity

The Pearson correlation coefficient was used to test the validity of the internal consistency between the paragraphs of each axis and the total score for that axis, and the results are shown in the table below:

Table 3: Pearson's correlation coefficient between each axis's phrase and the overall score for that axis

Adopting the implementation of the accrual basis of accounting in the government sector		Developing an objective accounting measurement of the return on public spending		The Definition	
Phrase	Pearson correlation coefficient	Phrase	Pearson correlation coefficient	Phrase	Pearson correlation coefficient
1	0.797	10	0.754	20	0.755
2	0.808	11	0.827	21	0.730
3	0.836	12	0.811	22	0.807
4	0.779	13	0.774	23	0.822
5	0.710	14	0.694	24	0.804
6	0.718	15	0.742		
7	0.665	16	0.831		
8	0.703	17	0.843		
9	0.687	18	0.839		
		19	0.799		
Measurement Input		Measurement Methodology		Allocation Methodology	
Phrase	Pearson correlation coefficient	Phrase	Pearson correlation coefficient	Phrase	Pearson correlation coefficient
25	0.785	30	0.759	35	0.808
26	0.769	31	0.677	36	0.832
27	0.783	32	0.788	37	0.841
28	0.764	33	0.789	38	0.837
29	0.773	34	0.662	39	0.861

*The correlation is statistically significant at the 1% significance level.

The results show that the correlations between the paragraphs of each axis and the total score for that axis are good and statistically significant at the 1 percent level of significance, indicating the presence of

internal consistency between the paragraphs. The structural validity was also calculated by calculating the Pearson correlation coefficient between each axis and the total score of the scale, with the following results:

Table 4: The Pearson correlation coefficient results between each axis and the scale as a whole

Pearson correlation coefficient	Full Scale
Adopting the implementation of the accrual accounting basis in the government sector	0.718
Developing an objective accounting measurement of the return on public spending	0.730
The Definition	0.732
Measurement Input	0.778
Measurement Methodology	0.706
Allocation Methodology	0.783

*The correlation is statistically significant at the 1% significance level.

The results show that the correlations between each axis and the entire scale are good and statistically significant at the 1% level of significance, indicating the presence of structural validity and the survey's homogeneous measurement.

3.3.2 Reliability

Cronbach's alpha was used to calculate the minimum value of the survey stability coefficient, which means that applying the search tool to the same

unit of analysis multiple times yields the same result,

and the results were as follows:

Table 5: Cronbach's alpha stability coefficient for the study axes

Axles	Phrases Number	Cronbach's alpha coefficient
Adopting the accrual accounting basis application in the government sector	9	0.899
Developing an objective accounting measurement of the return on public spending	10	0.931
The Definition	5	0.842
Measurement Input	5	0.831
Measurement Methodology	5	0.812
Allocation Methodology	5	0.888
Full Scale	39	0.966

The table shows that the reliability was calculated for each axis of the scale as well as at the overall level. The total reliability coefficient (0.966), which is a very high value, was discovered through the results, confirming the high reliability of the scale and its validity for application and confidence in its results.

3.4 Normal Distribution Test

The normal distribution was tested to determine whether or not the sample is parametric using the Kolmogorov-Smirnov and Shapiro-Wilk tests, as shown in the table below:

Table 6: Tests of Normality

	Kolmogorov-Smirnov**			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total	0.092	477	0.200*	0.980	477	0.334
* This is a lower bound of the true significance						
** Lilliefors Significance Correction						

The statistical analysis findings for both tests show that the level of significance is larger than 0.05, indicating that the sample data is obtained from a population whose data follows the normal distribution, and hence the sample is parametric.

4. RESULTS

4.1 The Effect of Using the Accrual Basis in Achieving the Objectivity of the Accounting Measurement for the Return on Public Spending

We believe in which the impact of the accrual accounting basis on obtaining objectivity in measuring the return on public spending is one of the key factors influencing countries' adoption of the accrual basis in the government sector. We will not be able to conduct an analysis and practical test of the impact of the accrual basis in achieving the objectivity of measuring the return on public spending in the government sector because the Kingdom of Saudi Arabia is one of the countries that still use the cash basis in its government sector. As a result, we examined the database of 183 nations that provide financial information to the International Monetary Fund in order to discover and select one of these countries that meets this requirement. In addition to releasing its financial accounts on an accrual basis, it will continue to do so on a cash basis. And the requirement for this transparency to continue for an adequate period of time so that we can compare the value of public spending measured on the cash basis to that measured on the accrual basis. The value of the return results from the enforcement of a full

transfer of the impact of spending to citizens in the form of goods and services.

It has been shown that a number of countries (registered in the International Monetary Fund database) have shifted from the cash basis to the accrual basis in preparing and presenting their financial statements, and the small number of countries that disclose their financial information according to both the cash basis and the accrual basis, with the beginning of a number of countries that were continuing. In disclosing both of these principles, they tend to be satisfied with disclosing their financial information according to the accrual basis only, and this may be an indication of the complete accounting transformation of these countries in their government sector towards the application of the accrual basis.

The state of Australia was chosen, and it is one of the countries that adopted the accrual basis in its government sector for a long time and still uses both the cash basis and the accrual basis in the accounting measurement and discloses its financial information with the International Monetary Fund according to cash and accrual basis, with the continuity and modernity of this disclosure. Over an appropriate time series during which we can evaluate the impact of the difference in the accounting basis in achieving the objectivity of measurement, and the following table shows the public expenditure data for the State of Australia according to its measurement on cash and accrual basis for the period from 2005 to 2019.

Table 7: Public spending in the State of Australia according to both the cash basis and the accrual basis during the period from 2005 to 2019 (The value in billions and the monetary unit is the Australian dollar)

Year	Public spending in Australia according to the cash basis	Public spending in Australia according to the accrual basis	Difference between the cash and accrual basis	Difference ratio
2005	310.9	321.58	10.68	3.44%
2006	337	344.11	7.11	2.11%
2007	371.8	373.63	1.83	0.49%
2008	392.6	402.52	9.92	2.53%
2009	448.2	462.28	14.08	3.14%
2010	484.6	491.32	6.72	1.39%
2011	498.8	515.88	17.08	3.42%
2012	543.2	548.49	5.29	0.97%
2013	541.7	557.73	16.03	2.96%
2014	576	585.16	9.16	1.59%
2015	590.8	603	12.20	2.06%
2016	612.1	621.17	9.07	1.48%
2017	635.3	647.60	12.30	1.94%
2018	666.5	680.14	13.64	2.05%
2019	703.3	719.44	16.14	2.29%
Total	7712.8	7874.04	161.4	2.09%

The statistics in the previous table show that the value of public spending measured on an accrual basis increased more than the value measured on a cash basis over the course of the study, with an average rise of more than 2%. This increase shows the value of commodities and services gained by the government sector in the State of Australia, according to the cash and accrual basis philosophies. Given that government spending, both consumption and investment, is one of the components of GDP, if this spending is measured on a cash basis, it results in a decrease in the value of the domestic product from its real value of the equivalent of 161.24 billion Australian dollars, or 2.09 percent of the total value added from goods and services produced from 2005 to 2019.

If the GDP indicator represents the main indicator for assessing the state of economic growth and the efficiency of the national economy for countries, and at a time when countries are making a lot of effort to raise this rate through real transactions worth billions of monetary units (Castro, 2018; Konig and Schuknecht, 2018), the accounting measurement for

these transactions comes according to the cash basis and is wasted a large part of it does not objectively reflect the reality of the goods and services that were produced as a result of the lack of accounting recognition of the value of some of the goods and services obtained, the acquisition of which did not entail cash flows, and then it becomes clear the essential impact of using the accrual basis of accounting in the government sector where the objectivity of measurement for public spending Properly disclose the reality of what has been spent and, accordingly, the objectivity of measurement and disclosure of the return on this Expenditure.

4.2 Hypothesis Tests

The First Hypothesis is That:

There is a significant relationship with statistical significance between the accrual basis of accounting adoption in the government sector, and the developing an objective accounting measurement of the return on public spending. Table No. (8) shows the sample's responses to the two axes of the investigation related to the first research hypothesis according to the Five-Year Likert Scale:

Table 8: The sample's responses to the statements related to the axes of the first hypothesis

Axes		Strongly Disagree	Not Agree	Neutral	Agree	Strongly Agree
Adopting the accrual basis of accounting implementation in the government sector	Number		8	69	240	160
	Ratio		1.7%	14.5%	50.3%	33.5%
Developing an objective accounting measurement of the return on public spending	Number		10	47	262	158
	Ratio		2.1%	9.9%	54.9%	33.1%

We note from the table that the sample members agreed with the statements of the two axes of the first hypothesis with a rate very close to 86%, and the remaining percentage was distributed between 2% of those who disagreed and 12% of the neutrals.

The Pearson test was conducted to determine the relationship between the adoption of the accrual basis of accounting in the government sector, and the objective accounting measurement development of the return on public spending, and the results were as shown in Table No. (9).

Table 9: Pearson's correlation coefficient for the first hypothesis

Axes	Number	Medium	Pearson Correlation	Sig. (2-tailed)
Adopting the implementation of the accrual basis of accounting in the government sector	477	4.0025	0.839**	0.000
Developing an objective accounting measurement of the return on public spending	477	4.009		
** Correlation is significant at the 0.01 level (2-tailed)				

We note from Table No. (9) the following:

- The average of the first axis of the first hypothesis (Adopting the implementation of the accrual accounting basis in the governmental sector) is equal to 4, and according to the Likert five-scale scale, it is equivalent to agree, meaning that the opinions of most of the sample members on the paragraphs of the first axis were in agreement.
- The average of the second axis for the first hypothesis (Developing an objective accounting measurement of the return on public spending) equals 4.009, and according to the Likert pentagonal scale, it is also equivalent to agree, meaning that the opinions of most of the sample members on the items of the second axis were in agreement.
- We also note that the relationship between the adoption of the accrual accounting basis in the government sector, and the developing an objective accounting measurement of the return on public spending is positive and highly statistically significant. Where the value of the Pearson correlation coefficient was 84%, with a statistical significance level of 0.000, which is smaller than the level of significance

0.05, meaning we are 95% confident that the adoption of the accrual basis of accounting in the government sector will lead to the development of an objective accounting measurement of the return on public spending, and vice versa. Thus, we can accept the first hypothesis which says that there is a significant relationship with statistical significance between the adoption of the application of the accrual basis of accounting in the governmental sector and the development of an objective accounting measurement of the return on public spending.

To determine the impact of the adoption of the accrual basis of accounting in the government sector on the development of an objective accounting measurement of the return on public spending, we derive the linear regression model of the independent variable represented by the adoption of the implementation of the accrual basis of accounting in the government sector on the dependent variable represented by achieving the objective accounting measurement of the return on public spending as in the following table No. (10):

Table 10: Regression model for the first hypothesis

Coefficients*					
	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	0.746	0.098		7.605	0.000
Adopting the Implementation of the accrual accounting basis in the government sector	0.816	0.024	0.839	33.647	0.000
*Dependent Variable: Developing an objective accounting measurement of the return on public spending					
R	R Square	Adjusted R Square	F	Sig.	
0.839*	0.704	0.704	1132.008	0.000*	
*Predictors: (Constant), Adopting the application of the accrual accounting basis in the government sector					

We note from the previous table that the significance level corresponding to Fisher's statistic (F) is smaller than the level of statistical significance 5%, and therefore the significance of the model as a whole can be judged. Since R Square = 70%, meaning that adopting the accrual accounting basis variable can explain 70% of the achievement of the objective accounting measurement of the return on public spending, and the remaining 30% belong to other variables not included in the regression model. It is also

noted that the significance level corresponding to the t-statistic for variable (Adopting the accrual accounting basis application in the government sector) is smaller than the level of significance 0.05, and therefore we accept the alternative hypothesis that says the significance of the coefficient of the independent variable. We estimate that 100 percent adoption of the accrual basis of accounting in the government sector will result in an 82 percent achievement of the objective

accounting measurement of the return on public spending.

The Second Hypothesis That:

It is possible to assess the efficacy of the suggested definition of the notion of return on public

spending, as well as the entrance and methodology for evaluating it and the recommended methodology for distributing public expenditures. One Sample T-test was performed to assess the efficacy of the suggested definition of return on public spending, and the findings were as follows:

Table 11: One Sample T-test to evaluate the proposed definition of return on public spending

Test Value = 3						
The Definition	Number	Medium	Standard Deviation	T	Df	Sig. (2-tailed)
	477	3.8205	0.59578	30.080	476	0.000

According to the previous table, the midium of the definition axis equals 3.82, and on the Likert pentagonal scale, it is equivalent to agree, indicating that the majority of the sample agreed on the claims regarding the definition of the return on public spending. The standard deviation of the sample's opinions about the evaluation of the proposed definition of the concept of return on public spending equals 0.59, which is not a particularly high value, indicating the existence of a discrepancy in the sample's opinions about the evaluation of the proposed definition. We also

note that the statistical significance level for the T-test is 0.000, which is less than the significance level 0.005, and that the medium opinion of the sample is 3.82, which is greater than the neutral mean of the Likert pentagonal scale, which is equal to 3, indicating that the sample's opinions tend to agree on the proposed definition of the concept of return on public spending.

To assess the efficacy of the measurement input of return on public spending the One Sample T-test was run, and the findings were as follows:

Table 12: One Sample T-test to evaluate the measurement input of return on public spending

Test Value = 3						
Measurement Input	Number	Medium	Standard Deviation	T	Df	Sig. (2-tailed)
	477	3.8172	0.58104	30.717	476	0.000

We can see from the previous table that the medium axis of the return on expenditure measurement input is 3.82, which is equivalent to agree on the Likert pentagonal scale, indicating that the majority of the sample's opinions on the axis paragraphs were in agreement. The standard deviation of the sample's thoughts on the assessment of the measurement input of the idea of return on public spending is 0.58, which is not a particularly high value, indicating the presence of a difference in the sample's beliefs about the measurement input. We also mention that the statistical

significance level for the T-test is 0.000, which is less than the level of significance 0.005, and that the medium opinion of the sample is 3.82, which is greater than the neutral mean of the Likert pentagonal scale, which is equal to 3, indicating that the sample's opinions tend to agree on measurement input for the concept of return on public spending.

One Sample T-test was carried out to assess the efficacy of the measurement methodology of return on public spending, and the findings were as follows:

Table 13: One Sample T-test to evaluate the measurement methodology of return on public spending

Test Value = 3						
Measurement Methodology	Number	Medium	Standard Deviation	T	Df	Sig. (2-tailed)
	477	3.6990	0.59812	25.522	476	0.000

According to the previous table, the midium axis of the return on expenditure measurement methodology is 3.69, which is equivalent to agree on the Likert pentagonal scale, indicating that the majority of the sample's opinions on the axis paragraphs were in agreement. The standard deviation of the sample's thoughts on the assessment of the measurement methodology of the idea of return on public spending is 0.59, which is not a particularly high value, indicating the presence of a difference in the sample's beliefs about the measurement methodology. We also observe that the T-test has a level of statistical significance of

0.000, which is less than the threshold of significance of 0.005, and that the sample's medium opinion is 3.7, which is greater than the neutral mean of the Likert pentagonal scale, which is equal to 3, indicating that the sample's opinions tend to agree on measurement methodology for the concept of return on public spending.

One Sample T-test was performed to assess the efficacy of the allocation methodology of return on public spending, and the findings were as follows:

Table 14: One Sample T-test to evaluate the allocation methodology of return on public spending

Test Value = 3						
Allocation Methodology	Number	Medium	Standard Deviation	T	Df	Sig. (2-tailed)
	477	3.7925	0.60940	28.401	476	0.000

According to the previous table, the midium axis of the return on expenditure allocation methodology is 3.79, which is equivalent to agree on the Likert pentagonal scale, indicating that the majority of the sample's opinions on the axis paragraphs were in agreement. The standard deviation of the sample's thoughts on the assessment of the allocation methodology of the idea of return on public spending is 0.6, which is not a particularly high value, indicating the presence of a difference in the sample's beliefs about the allocation methodology. We also note that the level of statistical significance for the T-test is 0.000, which is less than the level of significance 0.005, and that the medium opinion of the sample is 3.79, which is greater than the neutral mean of the Likert pentagonal scale, which is equal to 3, indicating that the sample's opinions tend to agree on allocation methodology for the concept of return on public spending.

5. CONCLUSIONS

The need to increase transparency and accountability in government sector management led to the conclusion that information derived from cash accounting does not meet these requirements. As a result, many countries have sought to develop and modernize their public financial management by reforming public accounting systems and incorporating a strategic transformation plan for the accrual accounting basis, in accordance with the recommendations of international organizations, particularly the World Bank and the International Monetary Fund, to adopt this basis as an alternative system that would provide better information for making decisions and evaluating the performance of the government. The purpose of this study is to highlight the relevance of the government sector's move from cash accounting to accrual accounting, as well as to reveal future challenges in terms of philosophy and performance. This goal is to communicate with the new reality that has resulted from the New Public Management (NPM) reforms, which have resulted in radical changes to global and local accounting systems. Adoption of accrual accounting basis in the public sector became a critical requirement for the accounting practices development, resulting in increased performance, transparency, and accountability.

We used the entrance to the demand for public goods and services to achieve the accounting measurement of the return on public spending, because the goal of public spending is to satisfy citizens' demand for goods and services, and what citizens obtain from goods and services provided by the government represents an increase in their level of well-being, which can be considered an objective measurement of the return on public spending,

especially in light of the inability of quantifying this return through the notion of social welfare because the method of assessing this concept is fraught with difficulties that make achieving a measurement of the true improvement in people' welfare levels difficult. The validity tests demonstrated the survey tool's validity and that it measures what the study actually seeks to measure, while the reliability test demonstrated that repeating the application of the research tool on the same unit of analysis yielded the same results. At a level of significance of 0.05, testing the study's hypotheses and questions revealed an 84 percent direct relationship with statistical significance between the adoption of the accrual accounting basis in the government sector and the achievement of the objective accounting measurement of the return on public spending. The sample's opinions on the proposed definition of the concept of return on public spending, the proposed measurement input of return on public spending, the proposed measurement methodology for the concept of return on public spending, and the proposed allocation methodology for public expenditures are mostly in agreement.

Our findings indicate that the cash basis struggles to achieve objectivity in calculating the return on public spending for each fiscal period separately, owing to the cash basis's shortcomings in attaining an objective evaluation of both income and expenditures in the government sector. Improving the quality of financial performance in the government sector necessitates a shift to the accrual basis rather than the cash basis, as the adoption of the accrual basis in the government sector is one of the steps in reforming the country's public financial management, and it necessitates the efforts of international institutions to raise awareness of its benefits, as well as more support from international institutions. The transition from cash to accrual accounting in the government sector improves the accounting information system quality because the accrual basis can provide a comprehensive picture of both the financial position and the financial performance of government sector units, and it helps provide decision makers and decision makers with information that is more important in making decisions. The use of the accrual basis in the government sector results in the activation of the cost centers methodology and the achievement of an adequate measurement of the costs of public goods and services. It also results in the achievement of objectivity in evaluating financial performance and the achievement of the principle of matching between the spent financial resources and the return obtained as a result of this spending. In the government sector, the use of the accrual basis results in the billing of time periods with their income and expenses.

The return on public spending is an accounting concept that expresses the increase in citizens' income or the savings achieved for them in spending as a result of the government's provision of public goods and services and cash transfers, and reflects the financial value of the social benefits achieved for citizens as a result of public spending. The true value of the return on public spending is the actual cost of providing the commodities and services gained by citizens that have resulted in their survival and an increase in their degree of well-being. The demand for public goods and services can be used to calculate the return on public spending. Measuring the satiated share of demand for public goods and services is accomplished by calculating the return on government spending. The methodology for measuring the return on public spending necessitates determining the service and public good in demand and accurately measuring the cost of its production under a standard cost of a certain quality level, where the value of the return on public spending equals cash transfers and the actual cost of producing public goods and services obtained by citizens. The optimal allocation of public expenditures is accomplished by relying on accounting measurement of the achieved and targeted public spending return, where the allocation methodology is represented by the relative weight of the target public spending return for each aspect of justice spending in distributing income and maximizing the public benefit of citizens.

The accrual basis of accounting works to achieve a more objective measurement of each public expenditure and the return on these expenditures than if the cash basis was used in the measurement process, resulting in the objectivity of disclosing the reality of the government sector's financial and social performance. In light of the available resources, the proposed methodology for allocating public expenditures - represented in the allocation according to the relative weights of the target public expenditure return - achieved the optimum mix of aspects of public spending that resulted in the maximization of public benefits for citizens. Accounting measurement of the return on various parts of public spending also yielded information that would contribute to more objectively allocating public expenditures than previously. As a result, we can highlight the Saudi economy's - and other nations' - suffering from the problem of misallocation of public expenditures, which is one of the most important issues addressed in economic literature. The main reason for this is the lack of feedback on the privatization process, which can be achieved through accounting measurement of the return on public spending in light of the use of the accrual accounting basis in the government sector, of the developments addressed in the accounting literature. Therefore, the specialized social sciences must be integrated more than before and work together and not individually.

We developed an accounting concept for the accounting recognition and disclosure of the concept of return on public spending that did not previously exist in the accounting literature pertaining to the government sector, this idea is based on the philosophy of disclosing social performance through accounting recognition of this return as social revenue in the list of social performance and capitalization under the name of human capital, which has become an international trend supported by a number of organizations, particularly the World Bank. However, the field of research did not allow a more extensive discussion of the accounting for human capital in the government sector, and we believe that this may be an area for further research and discussion in the future, in addition to discussing and examining the extent of achieving a measurement of the return on public spending that includes both the accounting return and the economic return. So that the return on public spending at this moment expresses all dimensions of the return on public expenditures, whether direct or indirect, in addition to the possibility of repeating this same study on a larger scale for foreign countries and demonstrating the impact of the move from cash to accrual accounting in the government sector, and the relationship between Adopting the accrual accounting basis in the government sector and achieving objective accounting measurement of the return on public spending, and the extent of the possibility of generalizing the proposed definition of the return on public spending and the approaches to its measurement and the proposed methodology for allocating expenditures in light of the variables specific to each country separately.

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