

## **Application of the Accrual Basis of Accounting and its Role in achieving the Effectiveness of Human Resources Management: An applied study at the Middle Technical University**

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### **Abstract:**

The research aims to explain and clarify the role of human resources management in applying the accrual basis of accounting in order to reach the preparation of the general budget of states according to this basis in order to recognize the financial expenditures incurred by government units for the year for which the budget was prepared and the disbursement of these expenditures is carried out on the budget of the fiscal year without rolling over the expenditures to subsequent years. In order to complete this goal, the research was applied at the Middle Technical University. The research concluded the possibility of applying the accrual basis of accounting if there was cooperation between the Human Resources Department and the parties responsible for disbursement, but there are some obstacles, the most important of which is that administrative work still depends on traditional administrative systems in exchanging information related to employees' entitlement to bonuses, promotions and other financial entitlements as well as the ignorance of some employees of using modern programs in human resources management.

**Keywords:** Accrual basis of accounting, human resources management, government accounting.

### **Problem of the Research**

The Iraqi state has been and still is heavily dependent on the application of the principle of (cash basis) in preparing the State's general budgets, but the application of this basis does not give the true picture of the expenditures and resources of the public sector, as in some years the level of spending is high compared to previous years due to the administrations of some State institutions. Therefore, the problem of the research revolves around the possibility of applying the accrual basis in State departments under human resources management.

### **Objectives of the Research:**

Generally, the research aims to:

- 1- Improve human resources management according to modern systems.
- 2- Explain the role of human resources management in applying the accrual basis of accounting.
- 3- Explain how to prepare the general budgets of the State scientifically.

### **Importance of the Research:**

The importance of the research is based on the application of the accrual basis of accounting in government units, as the application of this basis leads to stopping the State's expenditures accurately. This leads to preparing budgets for the coming years and also helps in making appropriate decisions that serve the public interest.

### **Methods used in the Research:**

The research relied on the following methods

- Scientific method: Descriptive analytical.
- Inductive method: The Middle Technical University was chosen to apply the practical aspect of the research to be the research community, financial statements (financial position statement, employee compensation statement) a sample for the research.

### **Limitations of the Research:**

They were divided into spatial and temporal limitations.

- **Spatial Limitations:** They are represented in the Middle Technical University, which is one of the government departments funded by the Federal Ministry of Finance.
- **Temporal Limitations:** They were represented in the final accounts for the year 2019 (financial position statement, employee compensation statement) and the statement of amounts for employee compensation disbursed in 2020 that pertain to the year 2019.

### **Hypothesis of the Research:**

The research is based on a main hypothesis which states (the possibility of applying the basis of accrual accounting in government units under effective management of human resources).

### **Model of the Research:**



### **Introduction:**

Government accounting is one of the branches of financial accounting that is used in government units and is concerned with classifying, measuring and analyzing the State's financial operations. This type of accounting is used in preparing the general budget of the Iraqi state, which is prepared according to the cash basis, modified cash basis and part of the accrual basis. Adopting the accrual basis of accounting is considered one of the important necessities in the modern era, which in turn will help government units to work according to international standards in the public sector, as many states in the world have transferred from the cash basis or the modified cash basis to the accrual basis, but the Iraqi state is still working according to these principles, which in turn leads to shading the financial statements and reports due to the failure to fully meet the resources with annual expenditures. As the human resources management is important in financial and administrative work and the organizations have great interest in this management in the modern era for the support it provides in completing work and displaying the financial statements in a clear and transparent manner, the research discussed the modern human resources management in order to apply the principle of accrual

accounting. Based on the above, the research was divided into two aspects: a theoretical aspect that focused on stating a brief part about government accounting and accounting principles, as well as explaining human resources management, and the practical aspect: In this aspect, the expense schedule of one of the government departments applying the government accounting system was analyzed to show the extent of the impact of human resources management on the application of accounting principles.

### **First: Government accounting:**

Two types of accounting systems are used: The unified accounting system that is used in public companies that operate on self-financing, and the second accounting type is the government accounting system that is used in non-profit service government units that are financed by the Iraqi Federal Ministry of Finance. This type is divided into two types: the first is the central accounting system and the second is the decentralized accounting system. Accounting bases are used in these two types, including the accrual basis, but not completely (Jassim 2014, 224).

### **Second: Accounting bases applied in Iraq (Public Sector)**

The name of the public sector in Iraq is given to government departments funded by the Iraqi Federal Ministry of Finance, and this sector is a service sector, as this sector is governed by the amount allocated within the State's general budget, and is applied in all departments and main government units (Financial and Accounting Guide in Iraq 2013, 17). The Public Sector Committee (PSC) affiliated with the International Federation of Accountants (IFAC) in 2000 indicated that there is a difference or diversity in accounting uses between governments. There are many justifications that led to this type of accounting uses according to the cash basis and on the accrual basis. Accordingly, successive Iraqi governments follow four accounting bases, which are (cash basis, modified cash basis, accrual basis, and modified accrual basis (Al-Mashhadani, 2016:5).

### **Third: Importance of Accounting Bases**

The choice of the accounting basis is made by the parties concerned in preparing the State's general budget, as well as what serves their interests and the method of implementing the budget, which ultimately leads to the possibility of preparing financial statements that help in

preparing financial reports and making appropriate decisions, the accounting bases are the basic rule for the government accounting system and the appropriate rule in the work of ideal accounting systems, and the importance of the foundations revolves around the fact that they are the ruler in the accounting treatment mechanisms, as they are the guide to developing the appropriate accounting guide for each state and are the primary reference for classification, recording, measurement and full reliance on them in the future financial operations and events that the economic unit will carry out (Al-Lutiyah 2016:18).

#### **Fourth: Accounting bases applied in government units**

Many researchers classify that there are two accounting bases, which are (accrual basis and cash basis), but according to what came from the International Federation of Accountants – Public Sector Committee, it set four bases, which are:

- 1- **Accrual basis:** According to this basis, the fiscal year bears all resources and expenses due for this year regardless of the payment or collection process, and this basis gives the economic unit a legal personality. According to this basis, at the end of each fiscal year, inventory adjustments are made for the purpose of determining what is related to the current year of resources or expenses, and this basis is fully applied in companies that rely on financial accounting in recording their accounting processes, and this basis has an important advantage, which is that it depicts the accounts in an accurate and clear manner, and this basis is used in applying the principle of matching resources with expenses regardless of the collection or payment process, and it is criticized for needing a more complex and expensive accounting system, and its application depends on personal judgment in some cases and delays the process of preparing the final accounts because it depends on inventory adjustments, which makes the book group open for a longer period (Jassim, 2014:228).
- 2- **Cash basis:** According to this basis, revenues are recognized upon receipt of cash amounts and expenses are recognized upon actual cash payment. This basis is described as easy to apply and understand, and it is criticized for affecting the financial position of government units due to its failure to recognize financial dues to or on the government unit, as it distinguishes between capital and revenue expenses (Mohamed, Kamel, 2017:559).
- 3- **Modified accrual basis:** This basis is based on recognizing transactions upon their occurrence, regardless of their connection to payment or receipt. The recognized element according to this

basis is financial assets and financial liabilities. This basis is based on conditions, including that the expected revenue is objectively measurable. It is also necessary to provide a condition that the revenue is available (existing) and can finance the expenses of the current period, i.e. it can be obtained within a short period. According to this basis, (expense) is the generally accepted element in accounting (Al-Lutiah 2016:28).

- 4- **Modified cash basis:** This basis was defined by IFAC as the accounting basis that is primarily relied upon in transactions or events when receiving or disbursing cash and the accounting records should remain open for a period after the end of the fiscal year, and this period is from one to two months. Payments or receipts during this (prepared) period that pertain to a previous period are recognized for that period, and this basis is primarily relied upon on the cash flow statement (Al-Sabaari 2007:5).

#### **Fifth: The approved bases in the public sector (International Accounting Standards)**

The International Public Sector Accounting Standards Board (IPSASB) aims to issue and develop international accounting standards concerned with the public sector, as it divided these standards into two main groups, namely, standards according to the accrual basis of accounting, which are standards concerned with financial statements and the information presented therein at the end of the accounting period, including standards (presentation of financial statements and cash flow standards), as well as standards concerned with the treatment of assets, whether fixed, current or intangible. It also issued standards concerned with recording and compiling financial statements prepared in branches with the original units. It also issued standards related to the disclosure of financial statements that are concerned with the disclosure of information, and the presentation of budget information, as well as recognition and measurement, and others concerned with disclosures and presentation. It also issued standards related to changes in accounting policies and changes in foreign currency prices. It issued one standard that regulates the work of the public sector with regard to the cash basis and regulates the work of the sector according to receipts, payments and cash balances. With the issuance of these standards, the Board did not oblige governments to implement these standards, but rather left the right for governments to choose what they deem appropriate according to the accounting systems followed in each state (Al-Ashi, 2021:32).

## **Second: Human Resources Management**

There are many definitions and concepts of human resources management, as Armstrong (2006:4), Armstrong & Taylor (2014:1) and Simons (2011:8) see that human resources management is an integrated and coherent strategic approach to employing and developing employees, as it can be considered a philosophy through which they are managed, as it contributes to improving organizational effectiveness through employees who in turn contribute to achieving its goals individually or collectively, and at the same time it must be concerned with the ethical dimension (i.e. people must be treated according to a set of ethical values).

While Mahapatro (2010:3) defines it as a part of management concerned with all decisions, principles, factors, strategies, functions, practices, processes, methods and activities related to the management of people as employees in any type of organization, and it also relates to all dimensions related to people in their work relationships, and adds value to the rapid delivery of goods and services and the quality of employees' work life, which leads to ensuring continuous organizational success in transformational environments. Batarlienè et. al.(2017:111) define it as applied work with people whose tasks include analyzing employee performance, directing, training and educating them, selecting and hiring candidates, planning workforce needs, managing wages and salaries, and creating a fair and safe environment. Ruandzy (2020: 90) sees that human resource management is a set of directive, organizational and planning processes used to control all aspects related to people to develop, maintain, educate and compensate them without the need for any specialized management. Torrington et al.(2020:5) defines it as an approach used to skillfully manage individuals who are used to perform a range of different activities to achieve the organization's goals.

While (Dessler, 2017:3) defines it as the process of acquiring, training, evaluating and compensating people in the organization and managing their business relationships, health and safety as well as treating them fairly in their jobs.

## **Second: Human Resources Management Functions:**

Human resources are of great importance in the organization's work and arranging its priorities, as (Dessler, 2017:3) sees that there are five basic functions performed by managers, which are as follows:

1. **Planning:** This function is concerned with determining goals, standards, formulating plans and predicting future events and setting rules and procedures to ensure their implementation safely.
2. **Organization:** This function is concerned with the responsibility of assigning each subordinate a specific task in addition to establishing departments, sections, communication channels, and stating the flow of lines of authority, as well as coordinating the work of subordinates to ensure the implementation of the plans set.
3. **Recruitment:** This function is concerned with identifying the type of people required to be recruited in the organization, attracting competencies and comparing them to choose the most suitable for the specific job in addition to setting standards, evaluating employee performance and developing them, and paying attention to development and training activities.
4. **Leadership:** This function aims to motivate and encourage people within the organization to perform their job duties and develop their morale and maintain it at high levels in the functional work environment.
5. **Control:** This function is concerned with identifying and setting control standards such as quality standards, production levels, market share, and identifying the extent to which the actual conforms to the established standards by conducting the evaluation, and taking corrective measures when there are deviations between the actual performance and the established standards.

### **Third: Human Resources Management Practices:**

Human resources management practices are represented by a set of activities, jobs, tasks and decisions, which in turn affect the performance of workers in economic units effectively in order to achieve a balance between what the unit aims for and the working individuals. Therefore, the focus was on two basic types of human resources management practices, namely administrative jobs and specialized jobs (Kazem 2019:46).

### **Practical Aspect**

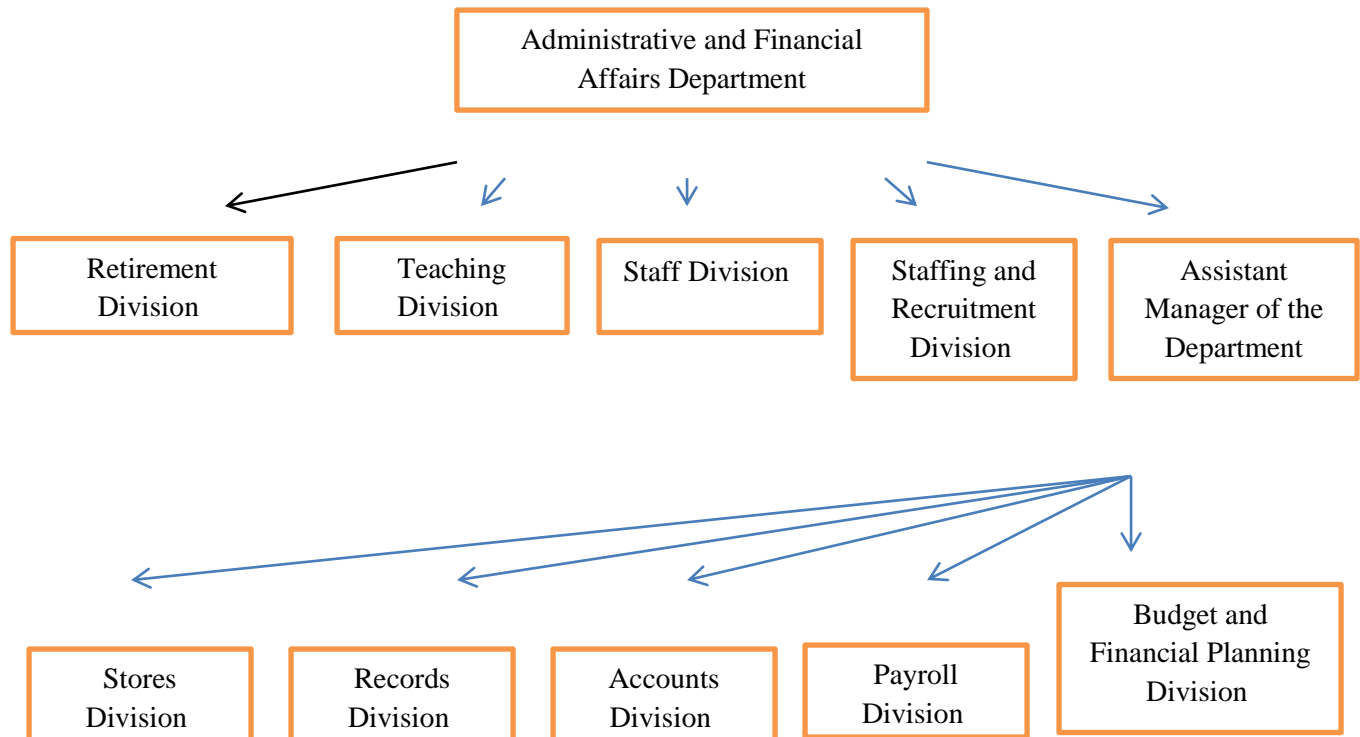
The research was applied at the Middle Technical University (Administrative and Financial Affairs Department), and the focus was on the Staffing and Recruitment Division as it is the entity responsible for issuing university orders related to employees, as well as the Budget and



Financial Planning Division, which is the entity responsible for implementing those orders for the purpose of disbursing employee compensation. This section included the following:

- Describing the research population.
- Nature of the work of the research sample, Administrative and Financial Affairs Department.
- Practical aspect.

**Description of the research population:** The government unit, the research population, is represented by the Middle Technical University, one of the formations of the Ministry of Higher Education and Scientific Research, operating according to the government accounting system, funded by the Federal Ministry of Finance under the budget allocated to the university. The university was established in 2014 and is one of the four universities that were previously part of the Technical Education Authority. The university consists of seventeen colleges and institutes distributed in five governorates. Each college or institute has an administrative division and a financial division that is technically connected to the Administrative and Financial Affairs Department in the university presidency, which in turn consists of a number of divisions:



**Nature of the Department's Work:** From the above diagram, it is clear that the department consists of a group of divisions. We will focus in the research on the divisions that have a direct relationship with employee compensation (Staffing and Recruitment Division, Budget Division, Payroll Division, Accounts Division), as the Staffing and Employment Division is responsible for issuing all university orders that have a direct relationship with employee compensation, and then these orders are transferred to the Salaries Division in order to calculate the amounts required to be disbursed, then to the Budget Division to indicate the provision of financial allocations, and then to the Accounts Division to complete the disbursement process.

### **Practical Aspect**

For the purpose of applying the accrual basis of accounting and since the research sample was limited to employee compensation only, we noticed that the rest of the disbursement of commodity and service requirements and fixed assets were covered during the fiscal year and the disbursement was not delayed on these items, and the researchers will amend some tables related to employee compensation and the financial position statement, but before entering into amending those lists and statements, we show in the statement below the amounts of employee compensation disbursed in 2020, but they pertain to 2019, they were obtained from expenses of previous years prepared by the Payroll Division and the Ministry's approval was obtained for their disbursement in the 2020 budget:

**Table No.(1)**

**Amounts disbursed in 2020, which dates back to 2019**

<b>Details</b>	<b>Amount</b>
Payroll	261,503,072
Lectures' wages	169,158,333
Academically qualified	40,110,677
Risk allowances	9,091,083

Position allowances	30,782,629
University service allowances	252,162,796
Geographic location allowances	2,626,462
Certificate allowances	216,499,573
Maintenance allowances	4,601,333
Children allowances	1,602,665
Professional allowances	393,260
Engineering allowances	29,950,990
Academic title allowances	35,606,477
Retirement contribution	34,524,644
<b><u>Total</u></b>	<b><u>1,088,613,994</u></b>

**The table was prepared by the researchers based on information of the Payroll Division**

The table above shows the amounts disbursed in 2020, which are for 2019, which led to an increase in 2020 expenses, amounts that do not go back to that year.

**Table No.(2)**

**2019 Expenses Schedule for Remaining Amounts of Employee Compensation**

<b>Details</b>	<b>Amount</b>
Payroll	16,534,161
Contractors' wages	23,171,356
Lectures' wages	6,819,725
Committees' wages	104,614,219

Academically qualified	179,682,665
Risk allowances	45,249,914
Additional works' wages	73,201,653
University service allowances	15,500,913
Geographic location allowances	11,531,567
Certificate allowances	3,993,380
Craft allowances	21,163,456
Maintenance allowances	258,037,665
Children allowances	13,463,169
Professional allowances	85,210,900
Engineering allowances	311,530,840
Academic title allowances	28,611,270
Retirement contribution	21,926,490
<b><u>Total</u></b>	<b><u>1,220,243,343</u></b>

**The table was prepared by researchers with the approval of the Budget and Financial Planning Division**

The above table shows the remaining amounts of the expenses schedule until 31/12/2019 that have not been used for the purpose of disbursing employee compensation due to the lack of university orders issued by the Staffing and Recruitment Division to complete the calculation and disbursement process.

**Table No.(3)**

**Financial position statement as of 31/12/2019 based on the final accounts tables and the rate after applying the accrual basis**

<b>Details</b>	<b>Cash basis</b>	<b>Accrual basis</b>
Cash in banks	3,443,598,517	3,443,598,517
Advances	4,488,000	4,488,000
Debtors	(94,804,042)	(94,804,042)
Regular accounts receivable (Fixed assets)	7,921,112,162	7,921,112,162
Trusts	127,332,210	127,332,210
Creditors	(158,292,955)	(158,292,955)
Balance on 01/01/2019	3,256,962,225	3,256,962,225
Add: Funding of the Ministry of Finance	101,470,779,005	100,382,165,011
Add: Revenue	2,021,387,138	2,021,387,138
Less: Expenses	(103,364,885,148)	(102,276,271,154)
Balance on 31/12/2019	3,384,243,220	3,384,243,220
Regular mutual creditor accounts (fixed assets)	7,921,112,162	7,921,112,162

**The table was prepared by researchers based on the Budget Division**

We note from the table above that the amount of funding received from the Ministry of Finance increased by the amount of employee compensation when applying the accrual basis, and that part of the amount is available within the university budget for 2019, and the remaining allocation is obtained by contacting the Ministry of Finance for the purpose of adding allocations to the employee compensation section, as stipulated in the State's general budget for 2019.

**Table No.(4)**

**Employee compensation statement as of 31/12/2019 based on the final accounts tables and  
the rate after applying the accrual basis**

<b>Details</b>	<b>Accrual basis</b>	<b>Cash basis</b>
Payroll	34,525,689,704	34,264,186,632
Contractors' wages	305,983,767	305,983,767
Lectures' wages	1,172,882,333	1,003,724,000
Committees' wages	104,614,219	104,614,219
Academically qualified	210,038,004	250,148,681
Risk allowances	217,449,276	208,358,193
Position allowances	950,083,557	919,300,928
University service allowances	31,593,056,394	31,340,893,598
Geographic location allowances	1,021,506,039	1,018,879,577
Certificate allowances	19,259,795,937	19,043,296,364
Craft allowances	67,735,634	67,735,634
Maintenance allowances	1,904,578,901	1,899,977,568
Children allowances	779,990,117	778,387,452
Professional allowances	15,472,340	15,079,080
Engineering allowances	277,343,269	247,392,279
Academic title allowances	3,678,112,374	3,642,505,897
Retirement contribution	5,037,426,684	5,002,902,040

<b><u>Total</u></b>	<b><u>101,161,869,226</u></b>	<b><u>99,968,641,013</u></b>
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**The table was prepared by researchers based on the Budget Division**

We note from the table above that the difference between applying the accrual basis and the cash basis followed by the university, research population, can be covered by transferring between the sections in which there is a surplus to the sections that need additional spending and obtaining the remaining allocation by contacting the Ministry of Finance for the purpose of adding an allocation to the remaining sections, as stated in the instructions of the federal general budget for 2019.

### **Proof of the Hypothesis**

From the above tables, we note that the university can apply the principle of accrual accounting from the financial aspect, but there are obstacles from the administrative side for several reasons, as the first step for the purpose of issuing university orders begins through the administrative division in the university formations (college or institute) by preparing a report that includes the employees entitled to the bonus and promotion, prepared by a subcommittee consisting of six employees, and then the reports are submitted to the university presidency to be unified in one report that includes all the university formations (colleges and institutes). This report is prepared by a committee formed in the university presidency, and after the committee completes its report, it is submitted in writing to the central committee formed at the headquarters of the Ministry of Higher Education and Scientific Research to ensure that the degree, stage and job title that were submitted by the university are identical, then it is submitted to the Federal Ministry of Finance, Budget Department, for the purpose of completing the procedures for deletion, creation and changing job titles. After completing these procedures, the reports return from the Ministry of Finance to the Ministry of Higher Education and Scientific Research, where they are approved and transferred to the university to issue university orders that include the employees' entitlement. After this series of complex procedures, it is difficult for the administrative divisions to issue university orders during the year of entitlement for employees. Based on the above, the research hypothesis can be proven if modern methods are used in human resources work.

## **Conclusions and Recommendations:**

### **Conclusions**

- 1- The university still relies on traditional systems for human resources management, and this in turn leads to a delay in completing employee transactions, such as promotions, academic promotions, or any orders related to financial matters.
- 2- The Ministry of Higher Education and Scientific Research still does not rely on the planning budget prepared by the competent authority, which takes into account the changes that occur to the university's budget, including bonuses, promotions, promotions, and any other dues.
- 3- The application of the principle of accrual accounting urgently needs to prepare the estimated budgets for the purpose of adding the required allocations to the budget for the next year.
- 4- There is a clear lack of desire among human resources employees to apply modern systems in human resources management.

### **Recommendations**

- 1- Through the results reached by the research, human resources employees must be introduced to training courses on the use of modern programs in human resources management.
- 2- If the university relies on the accrual basis of accounting in recording employee compensation, the statement will reflect the amounts due, and this in turn leads to the preparation of more clear speculative budgets for the coming years.
- 3- The university should find alternative ways to eliminate the old (traditional) ways of sending lists of employees eligible for promotion and there should be independence in work between departments of the State and the Budget Department in the Ministry of Finance.
- 4- Applying the accrual basis of accounting will give a fair picture of the university's financial position, which will facilitate obtaining the necessary funding from the Federal Ministry of Finance.

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