# Evaluating The Banking Performance Via Using The Performance Focused Activity-Based Costing System (PFABC): An Applied Study On Al-Rasheed Bank / Electricity Department Branch

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#### **Abstract**

Banking is the basic steering of the economy of any country, for its role in economic development by attracting investments and diversifying resources, which necessitates the adoption of the cutting-edge technologies and cost systems in measuring and evaluating performance to keep pace with developments and compete with international banks. The research aims to demonstrate the role of the performance-focused activity-based costing system (PFABC) in evaluating banking performance and giving a comprehensive review of the performance activities, by clarifying what this system provides of integrated information on the actual and standard costs that are distributed according to the consumption of resources. Al-Rasheed Bank / Electricity Department branch was chosen as the subject of research. The researcher adopted the deductive approach in the theoretical aspect and the inductive approach in the practical aspect. The research has come up with several conclusions. The application of the (PFABC) system leads to a fairer calculation of costs on activities than the standard accounting system currently adopted in the bank. This in turn leads to raising the efficiency and efficacy of the bank performance.

### Introduction

The banking sector is the steering of the economic development of any country due to its contribution to mobilizing the savings of society and directing them towards various investment opportunities, in addition to its role in attracting foreign investments and diversifying economic resources. In view of the rapid developments in the business environment, including economic and technical improvements, as well as exposure to global markets, the Iraqi banking industry faces significant problems. All of these factors contributed to increasing bank rivalry and a push to deliver distinguished banking services in order to stay in business in the market and establish a distinguished banking reputation among rivals.

The function of evaluating the performance of any economic unit in general and for banks in particular is one of the most important administrative functions that should be performed to know the extent to which the economic unit achieves its objectives by comparing the actual performance with the planned performance to diagnose weaknesses and take corrective measures to address them as well as identifying and enhancing the strong points.

The existing process of traditional performance evaluation, which is based primarily on financial metrics, is insufficient for judging performance. It is vital to adopt tools that allow for the integration of financial and non-financial measurements using contemporary systems and

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technology that assist the administration in producing better performance data and increasing competitiveness. The Performance Focused Activity Based Costing (PFABC) system is one of the modern systems. It represents the third generation after Activity-Based Costing (ABC) and Time-Directed Activity-Based Costing (TDABC). It is a system that takes into account the advantages of (ABC) and (TDABC), which represents a link point because it combines allocating indirect costs on products and services with measuring the performance of activities. Therefore, it constitutes a mainstay in monitoring and evaluating the performance of the activities of the economic unit by identifying the strengths and weaknesses in the performance of each activity. Thus, providing information to the unit management to take the necessary decisions to correct the course and achieve the maximum level of efficiency and efficacy. It is more responsive to competition requirements due to its advantages.

## The first axis: Research methodology and previous studies

### First: Research problem

Iraqi banks face great challenges in light of developments in the business environment. Adoption of traditional systems in measuring and evaluating performance is one of the most prominent challenges, which necessitates the adoption of modern techniques and cost-effective systems in measuring and evaluating its performance in a way that contributes to raising the efficiency and efficacy of performance.

### **Secondly: Research objectives**

- 1. Stating the knowledge bases of the performance-focused activity-based costing system (PFABC), features and steps for its application.
- 2. Stating the role of the (PFABC) system in evaluating banking performance and giving a comprehensive picture of the performance of activities.

### Fourth: Research hypothesis

Using the costing system on the basis of activitybased performance in evaluating the banking performance contributes to providing clear and comprehensive information on the performance of activities and reflects the actual performance of banks.

### Fifthly: Research methodology

The researcher relied on the deductive approach in the theoretical aspect and the inductive approach in the practical aspect.

### Sixth: Previous studies

- 1. Al-Shibli's study (2017): The study aimed to identify the knowledge bases of the costing system based on performance-focused activity. The basic result was a significant decrease in production costs for the main and auxiliary activities. This confirms that the application of the PFABC system helps in controlling production costs.
- 2. Al-Mayali's Study (2020): The study aimed at the role of the (PFABC) system in evaluating the performance of the advanced civilian shoe factory No. (7). The most important results were that the emergence of the ((PFABC)) system contributed significantly to addressing the shortcomings in the systems and cost techniques that preceded its appearance, especially their shortcomings in addressing the problem of distributing and allocating indirect costs on the final cost objectives (products, services).
- 3. Larbi's Study (2021): It aims to review the key features, characteristics and shortcomings of three approaches or tributaries of the activity-based costing system which are ABC, TDABC and PFABC. The key results were (The three generations of ABC were born, bred, continued and declined as a result of the requirements of the contemporary business environment. The extensive use of technology contributed to the emergence of the three generations of the ABC system.

## The second axis: The theoretical framework

## First: - Defining the performance evaluation

The performance evaluation process is one of the basic administrative topics carried out by economic units to measure the efficiency and efficacy of operational processes according to the objective set, through which strengths are discovered to enhance them, diagnose weaknesses and suggest ways to fix and evaluate them. There are many definitions of performance evaluation by the number of writers and researchers in this field. Scholars of management have not been able to reach a unified definition, as each of them has its own point of view. Elsharawy defined it as the periodic verification or review of the activities and operations of the economic unit in order to ensure the achievement of the objectives set for it in advance. The economic unit performance evaluation system is an important part of the unit financial control system. (Elsharawy, 2006:32). Al-Sharbali defined it as aiming to diagnose strengths and weaknesses in work, thus supporting and enriching strengths, avoiding weaknesses or shortcomings, and developing a plan to address them. (Al-Shahrabali, 2008: 87).

## **Second: The importance of performance evaluation**

The performance evaluation process is of great and prominent significance because of the benefits it brings to the economic unit. It can be summarized as follows: (Bedawi, 2018: 54) (Al Bakri, 2020: 49) (Mahmoud, 2014: 29) (Al Nuaimi, 2007: 18)

- 1- Diagnosing the responsibility of each center in the economic unit for the shortcomings and weaknesses and identifying the deviations that occur in the activity by measuring the productivity of each department separately and determining these results, positive or negative, which would create competition between the departments towards raising the level of performance of the economic unit.
- 2- The performance evaluation process shows the ability of the economic unit to achieve its planned goals efficiently, economically and effectively.

- 3- The performance evaluation process shows the extent of the economic unit success in continuing its activity and ability to adapt to its surrounding environment.
- 4- The performance evaluation process contributes to showing the untapped energies and capabilities in economic units. Dividing the work and the distributing the levels, powers and functions can be done in a way that enables the benefit of these untapped human energies and capabilities.
- 5- Demonstrating the adequacy of using the available resources in a rational manner that achieves a greater return at lower costs.

### Third: Stages of performance evaluation

1. The initial survey stage 2. The stage of collecting facts and data 3. The stage of defining and selecting performance criteria 4. The stage of measuring actual performance. 5. The stage of conducting the evaluation process 6. The stage of defining responsibilities and following up the corrective processes for deviations 7. The stage of feedback.

## Fourth: Performance evaluation indicators

### I. Efficiency

Efficiency is defined as: "the ratio of outputs to inputs or the number of outputs from units of inputs". Of this definition, we see that efficiency is the amount of output that can be obtained from units of input or the amount of input required to produce one unit of output. It is specified as follows: - (Hashem, 2015: 24)

Efficiency = output / input.

### 2. Efficacy

It is defined as: the achievement in which the use of the resources owned by the unit such as human resources, technology and funds is maximized to obtain maximum results and minimize losses from each existing unit. (Sodiq and Mawardi,2020:681). It is calculated by the following equation: Efficiency = (outputs / objectives) \* 100%. (Hashem, 2015: 23)

### Fifth: The emergence and justification of the emergence of the performancefocused activity-based costing system (PFABC).

After implementing the first-generation ABC system, it was criticized primarily due to the high cost of its application, as well as other criticisms. This prompted owners to quickly revive it by releasing a revised version known as TDABC. This system was also criticized for focusing on (one cost director, which is the time required for each activity, in addition to the difficulty of measuring time from one activity to another, and sometimes calling for personal judgment). Based on the criticisms leveled at both of the previous systems, the PFABC system was introduced by (Mohammed Namazi), a professor at Shiraz University in Iran in 2009. This system is considered the third generation of the ABC system. This system also depends on the concept of (activity). It also focuses on the concept of performance in its two dimensions (efficiency and efficacy), and thus calculating the deviations (differences) of the activity. (Larbi,2021:91)

## Sixth: Defining costs based on performance-focused activity (PFABC).

There are many definitions of the performancefocused activity-based costing system (PFABC), with many writers and researchers in this field. Namazi defined it as an integrated information system based on activity through which performance can be monitored, as well as solving some problems of the TDABC system, and expanding the scope of the previous two generations (ABC) and (TDABC). (Namazi, 2009: 47). Kowsari defined this activity as a tool for measuring costs and also for planning and evaluating performance. When the economic unit adopts it, the cost deviations will be recognized as the deviation of the rate, efficiency and volume of production. It will also save the cost of acquiring two separate systems, the first for determining product costs, and the other for evaluating monitoring and performance. (Kowsari, 2014:2505). Tuong also identified him as the third generation of ABC. It is a hybrid system that attempts to overcome some of the weaknesses associated with ABC and TDABC. The PFABC system attempts to extend the value of a cost management system as a means of examining organizational performance. It is also an intensive costing process that requires several steps to properly allocate indirect costs. (Tuong,2020:729)

## Seventh: Steps to implement the performance-focused activity-based costing system (PFABC):

## The first step is to identify the key and supporting activities

Step 2/ Determine the actual resources used for each activity

Through the employees who perform the activities or through the accounting information system

## Step 3/ Determine the actual rate of the resource of each activity

By dividing the actual costs on the cost drivers for each activity by the cost drivers (directors) in each activity. (Kuhait and Megabal, 2020: 4093)

## Step 4 / Determine the cost of each activity

Based on the behavior of resource costs, flexible resources with a variable cost behavior do not need to be distributed to activities, but mandatory costs are distributed to activities. (Namazi, 2009: 37)

Relying on several means, including work measurement technique, market mechanism, internal and external indicators, or through the use of statistical methods such as regression analysis and time series models. (Sarokolaei et al., 2013:348)

## Step 6/ Calculate the activity cost deviation

By calculating the actual acquired resources of the activity (the fourth step) and multiplying it by the standard price of the consumed resources (the fifth step) and subtracting the result from the actual costs of the activity in order to obtain the price deviation of the flexible resources. By

comparing the actual costs (AC) with the flexible budget (FB) the price skew for the flexible resources is determined. If the actual costs are greater than what is stated in the flexible budget, the deviation is not appropriate in it and vice versa. If it is less than what is stated in the flexible budget, the deviation is considered appropriate. (Al-Shibli, 2017: 53)

## Step 7/ Calculate the costs of the implemented activities at the standard price

This step is somewhat similar in its application to the TDABC system. But the PFABC system distinguishes between two types of resources: flexible and imperative or mandatory resources. The cost of the implemented flexible resources is calculated (Al-Mayali, 2020: 34)

## Step8/ Calculate the deviation of the quantity.

It is also one of the basic elements of the PFABC method, since it assesses the manager's performance by determining whether he used more, less, or the same number of available resources in the actual production of a product or service. The deviation is calculated by comparing the actual and standard values using the following equation: - (Nouri and Hassoun, 2020: 64)

(Actual quantity of resources consumed \* standard rate) – (standard amount allowed for actual production \* standard rate)

## Step9/ Calculate the productivity of each activity

One of the most important information in evaluating the administrative process is that which is related to the processes of measuring productivity in relation to activities, as it is an important part of the PFABC system. Productivity = Efficiency + Efficacy.

### Seventh: Advantages of a performancefocused activity-based costing system (PFABC).

(Namazi, 2009: 36) (Al-Shibli, 2017: 57) (Ahmed, 2019: 126) (TUONG, 2020: 729) (Al-Tammi and Al-Obaidi, 2020: 70)

1. It attempts to address some problems associated with the TDABC system. For instance, it depends on more than one cost steering.

- 2. It shows the exploited and untapped energy from the available resources, as the exploited energy depends on the flexible, inevitable or obligatory costs consumed in the production process. The unutilized energy is determined by the difference between the consumer and the planned from the available mandatory resources.
- 3. The PFABC system focuses on budget deviations and helps managers to identify unutilized energy. The PFABC system provides managers with more information than other accounting methods.
- 4. It contributes to providing the necessary information for the preparation of performance reports for each activity.
- 5. It subjects all the activities of the economic unit to the comparison process and provides information on the level of resource pools, thus contributing to the shift from the overall view to the detailed view in controlling costs and analyzing deviations.

### The third axis: The practical side

#### First: An introduction

Al-Rasheed Bank is the second largest government bank in Iraq after Al-Rafidain Bank. It was established in 1988 under Law No. (52). It became a public company under Public Companies Law No. (22) of 1997. The bank is subject to the supervision of the Central Bank of Iraq and the Board of Financial Supervision. It has (138) branches inside Iraq. The branch of the Electricity Department was selected as a subject for the application.

## Second: The reality of performance evaluation in Al-Rasheed Bank in question

The bank conducts its business within the framework of the rules and regulations in force in Iraq. Its business and accounts are subject to the audit of the Federal Board of Financial Supervision, the supervision of the Central Bank of Iraq, and the control of the Internal Control Department in the General Administration of the

Bank. Performance evaluation is limited to financial indicators only, while performance evaluation represents financial and non-financial indicators. Therefore, the need to adopt the (PFABC) system appears due to its importance in

Third: - Applying the steps of the (PFABC) system in the bank in question

The first step divides the activities of Al-Rasheed Bank/ Electricity Department branch into key and dependent activities.

evaluating performance, both financial and nonfinancial. It also represents the evaluation of the current performance of the bank as a whole and not for each activity separately, which does not give a clear picture of the shortcomings.

Table (1) The division of the bank into main and supporting activities

Supporting activities		Key activities				
Management	Accounting	Funding	Crediting	Deposits	Current Accounts	

The table was prepared by the researcher through cohabitation in the bank.

The second step is to determine the actual resources used (needed) for each activity.

Table (2) The costs of the key and supporting activities for the year 2021

Source	Supporting activities		Key activities				
Source	Management	Accounting	Funding	Credit	Deposits	Current	
direct costs	66232046	48697260	70976876	92244842	213499736	63415153	
Indirect costs	36558725	25847876	30108081	34446710	14978714	32687845	
the total	102790771	74545136	101084957	126691552	228478450	96102998	

The table is prepared by the researcher by depending on the review balance for the year 2021.

The third step is to determine the actual rate of the resource of each activity.

Table (3) Determining the actual rate of each activity

Key activities	Actual average	Actual hours	Actual costs	Cost motivator	Cost elements
Current account	2/1	2	1		
	6863.11	9240	63415153	Hours	Direct cost
Deposit	3537.65	9240	32687845	Hours	Service costs
	9588.19	3696	35437955	Hours	Direct costs
Credit	4052.68	3696	14978714	Hours	Indirect costs
	9983.20	9240	92244842	Hours	direct costs
Funding	3728	9240	34446710	Hours	Indirect costs
	6357.61	9240	58744376	Hours	Direct costs
Accounting	3258.45	9240	30108081	Hours	Indirect costs
	6587.83	7392	48697260	Hours	Direct costs

Management	3496.74	7392	25847876	Hours	Indirect costs
Key activities	7167.97	9240	66232046	Hours	Direct costs
	3956.57	9240	36558725	Hours	Indirect costs

Table prepared by the researcher based on table (2) for the actual costs, the bank accountant and the manager for the actual hours.

The fourth step is to determine the cost of each activity.

Table (4) Determining the actual cost of the actual performed activities

Activities	Actual costs for each performed activity	Actual loading rate per hour	Actual hours actually executed	Source
	2*1	2	1	
Current account	54355831	6863.11	7920	direct costs
	28018188	3537.65	7920	indirect costs
Deposit	30375386	9588.19	3168	direct costs
	12838890	4052.68	3168	indirect costs
Credit	79066944	9983.20	7920	direct costs
	29525760	3728	7920	indirect costs
Funding	50352271	6357.61	7920	direct costs
	25806924	3258.45	7920	indirect costs
Accounting	41740491	6587.83	6336	direct costs
	22155345	3496.74	6336	indirect costs
Administration	56770322	7167.97	7920	direct costs
	31336034	3956.57	7920	indirect costs

The table was prepared by the researcher and depending on the bank accountant and the manager, and table (3) for the loading rate

The fifth step is to calculate the standard rate of activity.

Table (5) Calculation of the standard rate for each activity

Activities	Standard average 2/1 3	2 Standard hours	Standard costs 1	Cost motivator	Cost element
Current	6544.91	11088	72570000	Hours	direct costs
	4508.59	11088	49991250	Hours	Indirect cost
Deposit	8131.31	5544	45080000	Hours	direct costs
	4079.63	5544	22617500	Hours	Indirect costs
Credit	7495.67	9240	69260000	Hours	direct costs

	5566.93	9240	51438500	Hours	Indirect costs
Funding	9070.61	7392	67050000	Hours	direct costs
	6044.23	7392	44679000	Hours	Indirect costs
Accounting	10281.38	5544	57000000	Hours	direct costs
	6940.83	5544	38480000	Hours	Indirect costs
Management	6803.75	11088	75440000	Hours	direct costs
	5009.35	11088	55543750	Hours	Indirect costs

The table was prepared by the researcher based on the planning budget for the year 2021 and the assistance of the accountant and the manager.

The sixth step is to calculate the activity cost deviation.

**Table (6)** 

Activities	Amount of Deviation	Deviation Calculation Equation	Source	Nature of deviation
Current	(5169701)	(11053.5 * 7920) - 82374019	Hours	positive
Deposits	4530019	(12210.94 * 3168) - 43214276	Hours	negative
Credit	5136912	(13062.6 * 7920) - 108592704	Hours	negative
Funding	(43550338)	(15114.84 * 7920) - 76159195	Hours	positive
Accounting	(45224087)	(17222.21*6336) - 63895836	Hours	positive
Management	(5453396)	(11813.1 * 7920) - 88106356	Hours	positive

The table is prepared by the researcher by depending on Table (4) and Table (5)

The seventh step is to calculate the costs of the activities carried out at the standard rate.

**Table (7)** 

Activities	The cost of the activities performed	Standard hours of work actually performed	Standard Load Rate
Current account	105052464	9504	11053.5
Deposit	58026387	4752	12210.94
Credit	103455792	7920	13062.6
Funding	95767626	6336	15114.84
Accounting	81839942	4752	17222.21
Management	93559752	7920	11813.1

The table was prepared by the researcher depending on table (5), an accountant and the bank manager.

The eighth step is to calculate the deviation of the quantity.

### **Table (8)**

Activities	Deviations	Standard price The form	Standard materials nula for calcula quar	. •	Actual resources used	Nature of deviation
current account	(17508744)	(105052464 - 87543720)				appropriate
deposit	(19342129)		(58026387 - 38684258)			
credit	Nil	(103455792 - 103455792)				No deviation
Funding	23941907	(95767626 – 119709533)				Inappropriate
Accounting	27279981	(81839942 – 109119923)			Inappropriate	
Management	Nil		(93559752 -	- 93559752	·	No deviation

The table was prepared by the researcher depending on the two tables (4) for the actual resources used and Table (7) for the standard resources.

The ninth step is to calculate the productivity of each activity.

Table (9): Calculation of the efficiency deviation

Activities	Level of	Deviation of quantity	Deviation of price	Nature of deviation
	deviation	Formula of effi		
Current account	(22678445)	(17508744-5169701-)		Appropriate
Deposit	(14205217)	(19342129-4530019)		Appropriate
Credit	5136912	(nil +5	136912)	Inappropriate
Funding	(19608431)	(23941907+43550338-)		Appropriate
Accounting	(17944106)	(27279981+45224087-)		Appropriate
Management	(5453396)	(nil +5453396-)		Appropriate

The table was prepared by the researcher depending on the two tables (6) price deviation and (8) quantity deviation.

Table (10) Calculating the deviation of the efficacy of the activities

Activities	Level of deviation	Planned costs	Performed costs	
Activities	Level of deviation			Nature of deviation
		Formula of eff	ficiency deviation	Tracare of deviation
current account	(17508786)	(122561250-105052464)		Inappropriate
deposit	(9671113)	(6769750	0-58026387)	Inappropriate
credit	(17242708)	(12069850	0-103455792)	Inappropriate
Funding	(15961374)	(111729000-95767626)		Inappropriate
Accounting	(13640058)	(95480000-81839942)		Inappropriate
Management	(37423998)	(130983750-93559752)		Inappropriate

Management

Table prepared by the researcher depending on the two tables (5) planned costs (7) executed costs at the standard price.

Activities	Level of deviation	Deviation of Efficacy	Deviation of Efficiency	Nature of deviation
		The formula of calculating the		
		production		
Current account	(40187231)	(17508786-22678445-)		Inappropriate
Deposit	(23876330)	(9671113-14205217-)		Inappropriate
Credit	(12105796)	(17242708-5136912)		Inappropriate
Funding	(35569805)	(15961374- 19608431-)		Inappropriate
Accounting	(31584164)	(13640058- 17944106-)		Inappropriate

(37423998-5453396-)

Table (11): Calculating the productivity of each activity

(42877394)

The table was prepared by the researcher depending on the two tables (9) the efficiency deviation (10) the efficacy deviation.

We note in the above table that the deviations of the activities were not. Therefore, the causes of all deviations, whether appropriate or inappropriate, should be known and studied to take the correct decisions regarding them.

## Fourth: The role of the (PFABC) system in evaluating banking performance

- 1- Classifying the bank into key and supporting activities. Key activities are current, deposits, credit and fund activities, whereas supporting activities are the management and accounting activities. This division does not exist in the traditional system currently applied in the bank
- 2- It provides the appropriate information regarding the actual resources consumed for each activity, as well as the actual rate of the resource of each activity. This system showed the actual costs of each activity in the bank. This helps the evaluator to know the facts and measure the actual performance of each activity, independently of the other, in a more accurate and objective manner.
- 3- It provides appropriate information on the actual and standard costs for each activity independently. This is not provided by the unified accounting system currently applied in the bank.

4- The PFABC system provides a greater level of detail about the actual and standard costs as well as the behavior of these costs. This is not available in the traditional system currently in place.

Inappropriate

In conclusion, it is obvious that the adoption of the performance-focused activity-based costing system (PFABC) allows for a more fair and objective measurement and evaluation of activity performance than the traditional technique utilized in the past. Because of its amount of information, this aids the evaluator in charge of the evaluation process. It separates the bank into primary and secondary functions. It provides an overview of cost behavior, for example direct and indirect costs, as well as the information it provides on actual, planned costs, and reports in the sixth, eighth and ninth steps on deviations that appear between actual and planned performance.

These deviations are very important for the evaluator to study them, know their causes and treat them. Thus, it is possible to prove the hypothesis of the research, "The use of the cost system on the basis of activity-based performance in evaluating banking performance contributes to providing clear and comprehensive information about the performance of activities and reflects the actual performance of banks."

### **Conclusions**

1- The Performance-focused Activity-Based Costing System (PFABC) provides

economic units with the essential information regarding their exploited and unutilized capacity, as well as for each of the unit activities separately.

- 2- The performance-focused activity-based costing system (PFABC) is both a costly and a controlling system. As a result, instead of using two distinct cost and control systems, the economic units use a single system (PFABC).
- 3- The performance-focused activity-based costing system (PFABC) helped in addressing the shortcomings of the first generation (ABC) and (TDABC) second generation systems.
- 4- Al-Rasheed Bank/ Electricity Department does not independently evaluate the performance of each branch activity, but rather evaluates the performance of the branch as a whole. This does not lead to identifying the points of strengths and defects of each activity.
- 5- It was found when applying the performance-focused activity-based costing system (PFABC) for the purpose of evaluating the performance of the bank activities. One of the indicators of the performance evaluation process is the efficiency indicator. All the key activities had an appropriate efficiency deviation, except for the credit activity, which had an unsuitable deviation and reached to (5136912). As for the indicator of efficacy, all the key and supporting activities have an inappropriate deviation.
- 6- The application of the PFABC system showed productivity of activities (efficiency + efficacy) for all the key and supporting activities, all of which had inappropriate deviations.
- 7- The application of the (PFABC) system led to the calculation of costs in a fairer manner than the standard accounting system adopted in the bank. This in turn leads to raising the efficiency and efficacy of the performance of the bank.

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