

# EVALUATION OF MEASUREMENT AND DISCLOSURE METHODS OF HUMAN RESOURCES ACCOUNTING IN PUBLIC SHAREHOLDING COMPANIES IN JORDAN

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## ABSTRACT

*This study aimed at evaluating methods of measurement and disclosure of human resources accounting in Jordanian public shareholding companies. It attempted to uncover the extent to which public shareholding companies in Jordan recognize the importance human resources measurement and disclosure. The purpose of this study was also to identify the level to which these companies apply the principles human resources accounting, to recognize the important constraints that hinder the process of human resources accounting and finally determine the extent to which these companies depend on human resources accounting data in decisions making. To provide answers for the research questions, a questionnaire was designed and distributed among a random sample (80 respondents) of general, financial and human resources managers working at the shareholding companies involved in the current study. The results of the questionnaire were analyzed by SPSS software. The results of the study showed the Jordanian public shareholding companies do recognize the importance of measurement and disclosure of human resources accounting although they do not tend to apply its principles. The study also proved that there are some constraints on applying the process of human resources accounting among which the high expenses and refusal of updating and renewing the companies' human resources system.*

**Keywords:** Human Resources Accounting, Decision Making, Methods Of Measurement And Disclosure, Public Shareholding Companies in Jordan.

## INTRODUCTION

Institutions' success to meet their objectives basically depends on the qualifications and effectiveness of its human resources. This is due to the fact that humans are the most genuine resource for any business. For, humans are bestowed with experience and skills and most importantly intelligence and determination to work. Therefore, humans are the key element to achieve the productivity efficiency. The importance of human resources is displayed in the economical corporations and enterprises in controlling their market value through their contribution in the economic projects the enterprises have. Human resources are also important because of the ability to make decisions in several fields (Jaber, 2007).

Most corporations and enterprises depend on the services offered by humans in their work. Therefore, these institutions spend a good deal of money on attracting, bringing, hiring and training their employees. These expenses which are considered as investment on humans are far more than the expenses invested on equipment, machines and others (A-Qadim and Hamdan, 2001)

Human resources are one of the oldest topics in economics. Economists consider human resources as one of the elements of productivity that can be measured. Accountants, on the other hand, give importance to human resources in the 1960's and claim that they are one of the

essential resources for any institutions and that its measurement is required and must be presented to finance analysts, investors and administrators (Al-Fadil et al., 2002)

The study emerged from how important the measurement and disclosure of the human resources are and the necessity to effectively use humans resources in increasing productivity. The current study sheds light on the importance of accounting human resources, methods of measuring them and their disclosure in the Jordanian public shareholding companies from the point of view of their administrations

### **Objectives of the Study**

This study aims at the following:

1. Defining human resources accounting and identifying its importance, duties, disclosure and measurement.
2. Identifying the extent to which the public shareholding companies realize the importance of measuring the human resources and their disclosure.
3. Identifying how principles of human resources accounting are applied by the shareholding companies.
4. Defining the difficulties and constraints that the Jordanian public shareholding companies face in accounting human resources.
5. Displaying how the public shareholding companies depend on accounting data in making financial decisions.

### **The Significance of the Study**

This study draws its significance from the fact that it deals with an important topic in accounting. Business organization depend more on human resources in achieving in their objectives and succeeding in attaining their goals. Moreover, increasing the efficiency and effectiveness of human resources enhances the efficiency of using the other tangible investments which makes it essential to draw the administrations' attention towards considering the importance of the principles of accounting human resources and methods of their measurement and disclosure. The importance of this study also displays in tackling the important economic sector which includes huge amounts of money like the public shareholding companies in Jordan. It is hoped that this study leads to important results that can help convince the companies of applying human resources accounting.

### **Problem of the Study**

The term "*Human resources accounting; has been recently used due to many factors among which the one that states that humans are the key determiner to all work performance, its efficiency and success*". A human being plans for the organization, sets its objectives and determines the accessibility to the objectives. He also can evaluate the work performance and identifies its degree of success or failure (Al-Haiyali, 2004).

The problem of the study is to answer the following questions:

How are measurement methods and disclosure of human resources accounting being applied in the Jordanian public shareholding companies?

The answer to abovementioned question is based on answers for the sub-questions below:

1. To what extent do the public shareholding companies realize the importance of measuring the human resources and their disclosure?
2. To what extent are principles of human resources accounting applied by the public shareholding companies?

3. What are the important difficulties and constraints that the Jordanian public shareholding companies face in accounting human resources?
4. To what extent do the public shareholding companies depend on accounting data in making financial decisions?

## **Hypotheses of the Study**

This study centers on null hypotheses.

*Hypothesis 1: Jordanian public shareholding companies do not recognize the importance of measuring the human resources and their disclosure.*

*Hypothesis 2: Jordanian public shareholding companies do not apply the principles of human resources accounting.*

*Hypothesis 3: Jordanian public shareholding companies do not face any difficulties or constraints in accounting human resources.*

*Hypothesis 4: Jordanian public companies do not depend on accounting data in making financial decisions.*

## **LITERATURE REVIEW**

### **Human Resources Accounting and Its Benefits**

The Institute of Certified Public Accountants defines human resources accounting as a process of identifying, measuring and sending specific information to the categories of beneficiaries and decision makers. An information system that presents to the administrators the changes that the human resources pass by through time. Flamholtz (1992) on the other hand, certifies that accounting the human resources is crucial due to their being the most important resource in companies. He also adds that it aims at measuring the cost and value of the resource in them (Flamholtz, 1992). Alexander defines the process of the human resources accounting as an expansion of the applying accounting principles of costs against revenues and organization of human resources data to send it to the stakeholders (Ali, 1997). Moreover, Human resources accounting is also known as one of the tools and methods of accounting measurement that provide all historical, current and future information and data, financial and non-financial. It is also used as a measurement and measuring evaluation tool of the results of the human resource and helps guarantee the required income against the cost (Al-Shanty, 2016). Consequently, the abovementioned definitions were mainly about measuring the economic value of the human resources through several accounting processes as Flamholtz (1992) claimed or setting a relation between accounting principles and human resources accountings as appeared in Alexander's definition.

Applying human resources accounting in public shareholding companies provides a set of benefits most importantly like loading the income list with the actual expenses related the human resources and displaying the actual results of the company business. Developing new human assets in the statement of financial position of the company supports the financial position. This development help the company obtain long-term loans and encourage investors to invest their money in these companies. Likewise, applying human resources accounting assist the company to hold its social responsibilities through planning objectives, besides those of productivity, related to its human resources. Applying human resources accounting enhances also the proper

utilization of its labor force and taking the appropriate decisions about their recruitment and direction of their efforts (Al-Boali, 2011).

### **Human Resources Accounting Assumptions**

Human resources assumptions can be explained as the fact that employees working in any institution represent the most eminent resource in it given that they provide different kinds of valuable economic services to that institution and that the value of these resource depend on its management pattern. This means that this pattern can focus on increasing the human resources value by increasing their efficiency through constant training and professional development as well as providing incentive system and bonuses. It is also necessary to allow the interior administrators of the facility to access the information about the human resources in order to be able to take the right decisions about training and qualifying them. This is supposed to, first, increase the human resources economic value and increase the level of productivity and creativity, later. It is also assumed that the economic cost that the facility endure as a result of recruiting and training the employees should appear in the financial statements and that these costs should be paid by the facility in return of different economic services that should be provided later in the future (Al-Hayiti, 2003).

### **Human Resources Accounting Disclosure**

The process of disclosure is defined as presenting the financial statements with the basic information that the administrators use in taking the appropriate decisions. Hendrickson defines disclosure as providing investors, loaners and other benefiteres with the information that allow them to foresee to extent of profit-making and securing obligations payment (Hanan, 2001). The different methods of disclosure are represented as follows:

1. Human resources disclosure is provided through the report of the board of directors in which the scale of investment the facility made in developing the qualifications of the employees in that facility is presented. This report allows the financial analysts and investors to what extent the administrators are concerned with developing the human resources and they consider it as one of the factors that affect the level of profitability in that facility.
2. Preparing the list of intangible investments which is basically a disclosure list of the investment on human resources. This method fits the facilities business that spends great amounts of money like patent and goodwill and other investments on human resources. This list includes a detailed tabulation of income statements. One of advantages of this method is that it helps avoid exhaustion of investment if they were considered as fixed assets. One of the disadvantages, on the other hand, is that it includes unrealistic financial statements especially statement of financial position that does not cover all the items of the assets and income lists that present some assets as current expenditures about the current financial period.
3. Disclosure of human resources investment in separate financial statements that are not subjected to the auditor's revision and are included in the audited fundamental financial statements.
4. The disclosure of human resources investments in the fundamental financial statements of the facility which are subjected to the auditor's revision. Through this method, the capitalization of the human resources and assets takes place and is included in the statement of financial position for many years.

### **Measuring Human Resources Accounting**

Accounting measurement is one of the core elements of accounting because of the valuable information added to the beneficiary categories. Accounting measurement is known as the quantification that includes processes of registration, tabulation and deportation and finally providing a summary of these processes in their final versions. This means that measurement

covers all the accounting steps starting from recording and ending with the final calculations (Ali, 1997).

Likewise, accounting measurement is known as the process of evaluation the economic events resulting from a specific activity to which they are connected in the accounting unit and it presents the changes that accompanied those events and their effect on the income statements and the statement of financial position as well (Salem, 2008). Below are the steps of accounting measurement:

1. Collecting the economic events data that are related to the business processes.
2. Recording the previous processes through double-counting.
3. Tabulating the calculations and events in interrelated groups in order to obtain useful information.
4. Summarizing the previous data in forms of reports or statements (Salem, 2008).

### **Methods of Human Resources Measurement**

1. Methods based on the cost and are known as the money that the facility affords to recruit humans or exchange them.
2. Methods based on the value which are also considered more realistic than those based on the cost given that they depend on the expected services from the part of the human assets as a crucial factor in the evaluation of these assets (Hanan, 2001).

Methods based on the behavioral measurement of human resources in which non-monitory measures of human resources are given weigh and taken into consideration in decisions making about incentives and allowances. They are also taken into account in predicting process through monitory measures in the organization (Salama, 1999)

### **Previous Studies**

In his study entitled “*The Role of Human Resources Accounting in Raising the Efficiency of Financial Performance*”, (Al-Shanty, 2016) aimed at shedding light on the role of human resources accounting in enhancing the efficiency of financial performance in the Palestinian public shareholding companies in Palestine stock market. His study was based on the traditional financial indicators (liquidity, activity and profitability) and modern financial indicators most importantly like (market value added and economic value added). This study resulted in the correlation between the percentage of average change in the increasing of human resources value and the improvement of financial performance efficiency. This study also stressed taking into consideration human resources accounting for its importance in both individual and national economies.

(Zuwailf, 2014) aimed at studying the effect of some important factors like size, age, activity type, nationality and profitability on the level of disclosure in the annual financial reports in Jordanian banks. His study, entitled “*Factors effecting human resources accounting disclosure in the annual financial reports in banks*”, showed that the level of human resources accounting and disclosure in the banks studied is average. It also proved that there was a moral and mental effect on the human resources there with regard to some bank features like size, age, activity type, nationality and profitability on the level of disclosure. However, there was no statistical evidence about the effect of the activity type feature on the level of human resources disclosure in those reports.

1. (Al-Boaly, 2011) investigated the possibility of applying human resources accounting in Iraqi commercial banks especially the “*Tigris-Euphrates Commercial Bank*”. This study pointed at the importance of human resources accounting and presented the important problems that hinder the process of human resources

accounting in Tigris-Euphrates Bank. This study arrived at the fact that using qualified and trained employees required an accounting system for human resources. It also required presenting the investing expenses in the annual financial reports at the end of the year in banks.

- (Salem, 2008) investigated the importance of measuring and disclosure accounting of the cost of human resources and its effect on taking financial decisions in some of the biggest companies in Gaza. One of the most important results of this study is that the capitalizing the human assets and its disclosure grants more objectivity and credibility to the financial reports and that providing information about the economic value of the assets increases the efficiency of management in censoring and taking advantage of the information.

### Q. Why Is This Study Different?

Most of the abovementioned studies tackled the importance of human resources accounting in terms financial assets, its effect on some important actions like taking financial decisions and improving work efficiency. These studies were applied in some Arab countries like Palestine, Kuwait and Iraq. Likewise, some studies that were conducted in Jordan like (Zuwaitf, 2014)) which looked for the factors affecting the level of human resources disclosure in some commercial banks. However, the researcher believes that her study is the first of its kind in Jordan. The current study is intended to investigate the extent, to which the shareholding companies in Jordan recognize the importance of human resources accounting.

## METHODOLOGY OF THE STUDY

For achieving the objectives of the study, the descriptive analytical method was used. In addition, the suitable statistical procedures, SPSS were used for testing the hypotheses and for presenting and analysis of the data.

### Methods of Collecting Data

The researcher depended on two kinds of data during collecting it:

- Secondary data: from different references, journals, books, thesis, periodicals, etc.
- Primary data: the researcher made a comprehensive field survey for the population of the study by using a questionnaire to collect data and test the hypotheses of the study.

### The Population and the Sample of Study

The population of the study represented all the shareholding companies listed in Amman Financial Market. While the sample of the study which is selected randomly, consisted of 80 respondents of general manager's, human resources managers, and managers of accounting departments working in those companies. 90 questionnaires were distributed and 80 ones were retrieved with a percent 89%. The sample of the study can be described as follows Table 1.

<b>Description</b>		<b>N</b>	<b>Portion</b>
<b>Gender</b>	Male	71	88.80%
	Female	9	11.20%
<b>Qualification</b>	BA	61	76.30%
	Master	14	17.50%
	Ph.D	2	2.50%
	Professional Certificate +	3	3.80%

<b>Job Title</b>			
<b>Job Title</b>	General Manager	9	11.30%
	Financial Manager	41	51.20%
	Human Resources Manager	30	37.50%
<b>Years of experience</b>	Less than 5 years	7	8.80%
	5-10 years	41	51.20%
	11-15 years	28	35%
	More than 15 years	4	5%

## DATA ANALYSIS AND PRESENTATION

### Statistical Procedures

The following statically methods were used to analyze data and test the hypothesis according to SPSS:

1. Testing the reliability of the tool of the study: Cronbach's Alpha was used to measure the internal reliability of the questionnaires. It was 73.3% and this value is acceptable as it is higher than 60% so the results could be generalized.
2. Testing the normality of the distribution: Kolmogrov-Smirnov test was used to test the normality of the distribution of data. And the results showed that the data was distributed normally. It is illustrated from the Table 2 that the significance level 5% for all the hypotheses of the study which was bigger than the level of significance Z, was distributed normally.
3. Testing the hypotheses: One Sample T-Test at the level of significance 5% was used to test the hypotheses of the study and according to the rule of the acceptance of the hypotheses if the calculated T was less than the tabulated one.

<b>Hypothesis</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>
Sig. Z	1.1	1.32	1.57	2.27

The descriptive analysis, which includes frequencies means and the standard deviations of accepting or rejecting the hypothesis, was used.

### Hypotheses Testing

*H1: Jordanian public shareholding companies do not recognize the importance of measuring the human resources and their disclosure.*

<b>Calculated T</b>	<b>Tabulated T</b>	<b>Sig T</b>	<b>Null Hypothesis Result</b>	<b>Mean</b>	<b>SD</b>
3.05	1.96	0	Rejection	3.2	0.607

Since the value of the calculated T is bigger than the value of the tabulated T, this means the rejection of the null hypothesis and the acceptance of the alternative hypothesis (Table 3). And because the mean is more than 3, it means that it is acceptable according to Lickert Scale. So this means that: Jordanian public shareholding companies recognizes the importance of measuring the human resources and their disclosure. Table 4 illustrated the mean and the standard deviation of the items of the first hypothesis.

<b>N</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>
1	The company's disclosure of human resources cost increases the reliability of the financial statements.	4.2	0.7
2	Human resources disclosure in financial statements supports the competitive position of the company in the market.	4.09	0.91
3	Human resources disclosure assists in evaluating the company with regard to the proper use of its human resources.	3.82	0.83
4	Human resources disclosure in the financial statements helps estimating the overall value of the company.	1.93	0.86
5	Human resources disclosure encourages investors buy more shares of the company.	1.99	0.84

*H2: Jordanian public shareholding companies do not apply the principles of human resources accounting.*

<b>Calculated T</b>	<b>Tabulated T</b>	<b>Sig T</b>	<b>Null Hypothesis Result</b>	<b>Mean</b>	<b>SD</b>
1.6	1.96	0	acceptance	2.7	1.3

Since the value of the calculated T is bigger than the value of the tabulated T, this means the rejection of the null hypothesis and the acceptance of the alternative hypothesis (Table 5). And because the mean is less than 3, it means that it is acceptable according to Lickert Scale. So this means that Jordanian public shareholding companies do not apply the principles of human resources accounting. And the Table 6 illustrates the mean and the standard deviation of the items of the second hypothesis.

<b>N</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>
1	The company uses the historical cost in measuring the cost of human resources.	3.05	1.06
2	The company uses the method of the replacement cost in measuring the human resources cost.	2.54	1.6
3	The company uses the method of opportunity cost in measuring the cost of human resources.	2.35	1.4
4	The company capitalizes the expenditures paid in return of training the employees.	3.3	1.6
5	The disclosure of human resources cost takes place within the assets of the statement of financial position.	2.48	1.5

*H3: Jordanian public shareholding companies do not face any difficulties or constraints in accounting human resources.*

<b>Calculated T</b>	<b>Tabulated T</b>	<b>Sig T</b>	<b>Null Hypothesis Result</b>	<b>Mean</b>	<b>SD</b>
7.07	1.96	0	Rejection	3.36	0.45

Since the value of the calculated T is bigger than the value of the tabulated T, this means the rejection of the null hypothesis and the acceptance of the alternative hypothesis (Table 7). And because the mean is more than 3, it means that it is acceptable according to Lickert Scale.

So this means that Jordanian public shareholding companies face some difficulties or constraints in accounting human resources. And the Table 8 illustrates the mean and the standard deviation of the items of the third hypothesis:

<b>N</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>
1	The high cost of gathering and measuring the information about the human resources	4.1	0.68
2	The difficulty of estimating the future returns of human resources.	3.5	0.78
3	External auditors' refusal of taking into account the reports that includes human resources disclosure.	1.8	0.67
4	The company's refusal of systems updating and depending more on the traditional ones.	3.8	1.04
5	Keeping confidential information	3.5	0.8

*H4: Jordanian public companies do not depend on accounting data in making financial decisions.*

<b>Calculated T</b>	<b>Tabulated T</b>	<b>Sig T</b>	<b>Null Hypothesis Result</b>	<b>Mean</b>	<b>SD</b>
4.8	1.96	0	Rejection	3.29	0.53

Since the value of the calculated T is bigger than the value of the tabulated T, this means the rejection of the null hypothesis and the acceptance of the alternative hypothesis (Table 9). And because the mean is more than 3, it means that it is acceptable according to Lickert Scale. So this means that Jordanian public companies depend on accounting data in making financial decisions. And Table 10 showed the means and the standard deviation of the items of the fourth hypothesis.

<b>N</b>	<b>Item</b>	<b>Mean</b>	<b>SD</b>
1	The company takes into consideration the information about human resources in decisions making like recruiting and appointing. 5.	3.53	0.84
2	Human resources data contribute in planning human resources policies.	3.6	0.8
3	Human resources data can be used in assessing work in department and sections of the company.	3.56	0.88
4	Human resources data help estimate the future needs and required investments for the company.	2.18	0.83
5	Human resources data help censor the expenses related to the employees and the expenditures of their training programs.	3.59	0.8

## **CONCLUSIONS AND RECOMMENDATION**

### **Conclusions**

Conducting the statistical analysis of the results of the questionnaire culminated in the following points:

1. Jordanian public shareholding companies recognize the importance of human resources accounting and disclosure for its role in increasing the reliability of the financial statements of the company. They also realize that measurement and disclosure support their competitive position in industry, help estimating the company's overall value and encourage investors to buy more of the company share. This point meets with

Salem's (2008) study in which he pointed that banks also give more weight to human resources accounting for it increases the credibility.

2. The Jordanian public shareholding companies do not apply the principles of human resources accounting measurement and disclosure. However, they use the historical cost in measuring the cost of human resources. This point meets with the results of (Al-Madhoun, 2008) which showed that Banks usually do not apply the principles of accounting measurement and disclosure of human resources.
3. The Jordanian public shareholding companies face some problems that hinder the process of applying human resources accounting like the high cost of gathering and measuring the data related to the human resources, difficulties in estimating the future outcomes and resisting any attempt of updating the company's human resources system and rather keeping the traditional one. This is basically what (Al-Shanty, 2016) arrived at.
4. The company takes into consideration the information about human resources in decisions making like recruiting and appointing, planning human resources policies, assessing work in department and sections of the company, estimating the future needs and required investments for the company and censoring the expenses related to the employees and the expenditures of their training programs. As far as this point is concerned, the present study agrees with what (Salem, 2008) found in his investigation.

## Recommendations

Based on the results of this study, the researcher recommends the following:

1. Jordan Securities Commission should organize training workshops through which it can explain the importance, benefits, and methods of measurement and disclosure of human resources accounting in all the different sectors of public shareholding companies on Jordan.
2. Adopting and initiating Jordanian Certified Public Accountants to encourage the public shareholding companies to apply human resources disclosure in their annual financial reports based on the external auditor's review through taking into account the disclosure requirements in initiating his final review report.
3. Human resources accounting and accounting processors should be taught in Jordanian universities in business department.
4. The researcher recommends making future studies about the human resources accounting in the different sectors of the companies like banks. Industrial companies to achieve more accurate results.

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