

The Impact of Accounting Information Systems Used In the Income Tax Department on the Effectiveness of Tax Audit and Collection in Jordan

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Abstract

This study aims at identifying the impact of accounting information systems used in the income tax department in Jordan on the effectiveness of tax audit and collection by evaluating: The effect of human resources on the effectiveness of tax audit and collection in Jordan. The effect of computer systems on the effectiveness of tax audit and collection in Jordan. The effect of control systems provided by the system on the effectiveness of tax audit and collection in Jordan. This study found that the accounting information system used in the Income Tax Department in Jordan is operated by qualified human resources and an advanced computer system, and meets the requirements of good control systems that help and contribute to improving the efficiency of tax audit and collection. The researcher recommends , To work on activating the accounting information system, in a way that will be contributed in increasing the effectiveness of tax audit and collection to a higher level than it is today.

Keywords: accounting information systems, tax audit , tax collection, income tax department , jordan.

INTRODUCTION

Information systems have become among the most recent technologies increasingly needed by all working institutions to promote and assist in solving a lot of obstacles and problems that faced or will face them in the information field.

The researcher argues that the efficiency of tax work is so important that nations should support it for its critical role in guiding national economies and improving economic developmental projects, particularly during global financial crises, and economic depressions that grip the world in general and Jordan in particular.

The Income Tax Department in Jordan is one of the governmental departments that desperately needs a contemporary accounting system to meet the challenges in the field of information, provide information of critical importance, and improve the performance level of tax work.

This study will assess the impact of accounting information systems used in the Income Tax Department on the effectiveness of tax audit and collection in Jordan.

PROBLEM STATEMENT

Taxation Performance (tax audit and collection) is considered one of the important means, which nations should make use of and draw policies for because of its important role in achieving their financial, economic, social and political objectives. Thus, the

Income Tax Department is in a dire need to apply an effective accounting system that may represent a significant turning point in improving the efficiency of tax audit and collection in Jordan.

OBJECTIVES OF THE STUDY

The main objective of this study stems from the tasks to be performed by accounting information systems in the Income Tax Department to improve the effectiveness of tax audit and collection. The objectives of this study revolve around the following points:

- ❖ To know whether the accounting information system that the Income Tax Department applies for the purpose of improving the efficiency of tax audit and collection is operated by qualified human resources.
- ❖ To know whether the accounting information system that the Income Tax Department applies for the purpose of improving the efficiency of tax audit and collection is operated by a modern computer system.
- ❖ To know whether the accounting information system the Income Tax Department applies for the purpose of improving the efficiency of tax audit and collection meets the requirements of control systems.

IMPORTANCE OF THE STUDY

This study evaluates the efficiency of accounting information systems used in the Income Tax Department to achieve the strategic goal of improving the effectiveness of tax audit and

collection in Jordan. These systems provide the administration of the tax system with the necessary information to realize that goal.

Study Questions

This study raises the following questions:

- ❖ Is the accounting information system that the Income Tax Department applies for the purpose of improving the effectiveness of tax audit and collection operated by qualified human resources?
- ❖ Is the accounting information system that the Income Tax Department applies for the purpose of improving the effectiveness of tax audit and collection operated by an advanced computer system?
- ❖ Does the accounting information system that the Income Tax Department applies for the purpose of improving the effectiveness of tax audit and collection meet the requirements of good control systems?

Study Hypotheses

The previous study questions imply the following hypotheses:

The First Hypothesis: There is no relationship between the availability of an qualified human resources to operate the accounting information system and the contribution of that system to improving the effectiveness of tax audit and collection.

The Second Hypothesis: There is no relationship between the availability of an advanced computer system to operate the accounting information system and the contribution of that system to improving the effectiveness of tax audit and collection.

The Third Hypothesis: There is no relationship between the requirements of good control systems that should be available in the accounting information system and the contribution of that system to improving the effectiveness of tax audit and collection.

Study Variables

This study includes Three types of variables:

A - The main independent variables include:

- 1 - Qualified human resources.
- 2 – An advanced computer system.
- 3 – Good Control systems.

B - The dependent variable stands for the effectiveness of tax performance in Jordan.

It evaluates the effectiveness of tax performance in terms of:

- 1 - The effectiveness of tax audit.
- 2 - The effectiveness of tax collection.

METHODOLOGY OF THE STUDY

For the purpose of realizing the objectives of this study, the researcher will use the methods of descriptive analysis and quantitative analysis. This requires the researcher to collect data from previous studies and articles, make interviews with senior managers in the Income Tax Department, and review the most important and recent official reports in the Income Tax Department. The researcher needs also to build on his personal, academic and professional experiences as an ex-auditor in the Income Tax Department to analyze certain aspects of the topic of the study.

PREVIOUS STUDIES

A survey of the works exploring the role of tax management in increasing tax revenues yielded the following results:

A study entitled "The role of accounting information systems in reducing tax evasion in the IRS in the Republic of Yemen" by Doais (2008).

The study concluded that the accounting information system applied by the IRS in Yemen does not feature the characteristics required in effective accounting information systems; and that the IRS in Yemen does not have an integrated computerized system.

A study entitled "The extent of reliance on accounting information in the estimation of the income tax for Palestinian companies" by Hussein (2007).

This study sought to find whether corporations use IT accounting systems in the process of tax assessment; and whether those accounting systems meet the standards of effective systems.

A study entitled "The factors affecting the effectiveness of accounting information systems in the Department of Income and Sales Tax" by Al-Zubi (2006).

The study aimed to get acquainted with the accounting information system used in the Department of Income and Sales Tax, and identify the factors affecting the effectiveness of this system. This study found that the accounting information system which the Department of Income and Sales Tax in Jordan applies is generally characterized by efficiency and competency. The impact of all the variables except the demographic variable were measured to reach that conclusion.

A study entitled "accounting information systems used in the Income Tax Department and its impact on the effectiveness of the department in Jordan" by Jawdih (2004).

This study aimed to get acquainted with the accounting information systems used in the Income Tax Department and evaluate their impacts on the effectiveness of that department in Jordan.

This study concluded that the effectiveness of the Income and Tax Department is determined by its success in providing the Information Department with both human and financial resources and developing the computer software used in accounting information systems.

A study entitled "The impact of globalization, information technology and the Internet on the adaptability of the management information systems (with special reference to the Income Tax Department in Jordan)" by Kitana (2002)

The study recommends that more attention needs to be paid to the assessment software which the Income Tax Department applies to save time and efforts, and increase the efficiency of tax audits and fast delivery. It also emphasizes the necessity of developing a strategic plan to train and rehabilitate local technical personnel and reinforce self-reliance in the construction of information technologies.

LIMITATIONS OF THE STUDY

What primarily limits the scope of this study is that it closely examines accounting information systems used in the Income Tax Department in Jordan and emphasizes the significant role that the independent variables of human resources, advanced computer and control systems play in improving the efficiency of tax audit and collection.

Accounting Information Systems in the Income Tax Department in Jordan

INTRODUCTION

The rapid technological development has taken a considerable space in various fields due to its great contributions to effective treatment of information and data which all sectors badly need in the decision-making process. The significant increase in the volume and flow of information has led to a greater incorporation and application of modern technologies in the administrative, technical, and productive work in various types of administrative organizations around the world. (Guendhilji, and al-Janabi, 2007, p 21)

Definition of Accounting Information Systems

Accounting information systems refer to the set of components in an administrative organization. They

are designed to collect, classify, process, analyze and deliver financial and quantitative information to internal and external parties for the purpose of facilitating the decision-making process. These information systems are further defined as an integral component of the administrative organization known as the management information systems. (Al arbied and Zoubi, 2002, p 14)

The Main Activities of the Accounting Information Systems used in the Income Tax Department

The accounting information system used in the Income Tax Department seeks to achieve a set of key objectives, which are as follows: (The official website of the Income Tax Department)

1 - Expansion in the acceptance of samples based on the tax declarations submitted by taxpayers to the Income Tax Department.

2 - Speed, efficiency, and accuracy in processing taxpayers' declarations as well as the data collected from various sources.

3 - Providing accurate and correct information about the activities of taxpayers builds new bridges of trust, and restores old bridges of trust between taxpayers and the Income Tax Department.

4 - Expanding and increasing the support for the group in charge of collecting information about taxpayers; and consolidating cooperation between the department and the official and unofficial institutions in the fields of data collection and processing.

Elements of the Accounting Information System in the Income Tax Department

The Income Tax Department can neither work properly nor achieve its goals, unless it has an effective accounting information system that includes the following elements:

First, Computer System. (The official website of the Income Tax Department)

The Income Tax Department is among the first governmental departments and institutions in the usage and expansion of computers. The department has purchased and installed a computer system that involves a modern oracle database and the operating systems (Unix). In addition, it has purchased, installed and operated modern telecommunication networks that efficiently connect the headquarter in Amman with its offices in all the governorates. It has recently begun to apply the VIPS system which is used to process tax data.

The computer system in the department uses a wide range of information appliances to facilitate the performance of tax work there. The department is, for

instance, equipped with both digital computers and B3/B4 personal computers for general purposes. The computers used in the department are classified as supercomputers whose storage capacities range from 40-60 gigabytes.

As for the computer software, the department uses certain software programs for general purposes such as Microsoft Word and Excel, other programs such as Oracle and remote communications software for database management, and some applications software for special purposes.

Data communications use the central processing unit (CPU) which does not interfere with the sources of data, hardware data transfer (Modem Switch), data collection and operating systems. Databases are connected by a local area network (Lan), whereas external communications are performed by a wide area network (Wan). Certain codes are used by the department to send secret data.

As for databases, the department has been building a database and software languages by using (Oracle). It has taken measures to protect databases by assigning a password for each user, identifying the responsibilities of each employee and installing virus protection programs.

Second: Human Resources. (The official website of the Income Tax Department)

Proceeding from its interests in developing the skills of its technical and administrative personnel, the Income Tax Department has taken upon itself to improve the methods of training and keep pace with the latest findings of modern sciences in the areas of finance, tax and management. The diversity of training programs meet the aspirations of the department to raise the productivity and efficiency of the human element that can be effectively used to promote the ongoing processes of progress and modernization.

The department therefore enrolled its employees in training courses on topics related to administrative leadership, skills to deal with the public and computer, financial analysis, accounting, international accounting standards, cost accounting, English, and specialized workshops and seminars. (Annual tax Report of the Income Tax Department for the year 2012).

The human element in the Income Tax Department proved to be different from that in other departments according to the annual report for the year 2012 which distributed employees during the years 2009 to 2012 based on their academic qualifications as shown in the following table.

Table 1: The number of employees and their distribution according to their qualifications in the department.

	2009	2010	2011	2012
	Employee	Employee	Employee	Employee
PhD	9	12	13	13
Master	128	145	151	154
Higher Diploma	7	7	7	7
Bachelor	941	950	947	945
Diploma Average	239	235	225	240
Secondary or below	328	330	327	320
Total	1652	1679	1670	1679

Third, Control Systems. (The official website of the Income Tax Department)

Control information systems evaluate the performance of the Income Tax Department which began several years ago to simplify and accelerate tax processes to become more efficient. This was accompanied by preparing various directories that cover all aspects of the department's work. The services offered and procedures implemented by the department are centrally monitored by the Internal Control Department which uses the computer to follow up taxpayers' declarations and review the ones that are not processed on time.

The Income Tax Department has established an independent unit for internal control and quality assurance. This unit is charged with the responsibilities for controlling information, implementing the department's strategies, and controlling policies and procedures to ensure the optimal effectiveness of the department.

Furthermore, the department worked to improve the control performance level which the information system provides. This objective can be realized when

- ❖ The application for each service is processed by a computerized control system that arranges applications according to their dates of submission. Once the computerized application form is filled and submitted, a processing date is given. If the processing of an application took longer time than expected, the computer will send the control department colored signals indicating how long the service is delayed or suspended. This control system can observe any service at any time and in any governorates' department.

Table No. 2: includes the different colors of the signals that indicate how late the processing of an application for a service is.

Number	Color signal	Indicative	Period of time associated with providing the service
1	Blue	Paid	Process ended provided and
2	Red	Unpaid	Today
3	Yellow	Unpaid	One day
4	Green	Unpaid	More than one day
5	Brown	Suspended	Must mention the reason for suspension

- ❖ Following up the orders on the public services page by the control officer. That page displays the order code, date of entry, order status, tax number, service code, processing code, employee's code, code of the taxpayer's department, code of the authorized person, and the sequence number.
- ❖ Following up service performance by the control officer who checks at which department and by whom each order is processed and prepares a statistical performance report.

The Relationship between Accounting Information Systems and the Effectiveness of Tax Audit and Collection

The accounting information system used in the Income Tax Department must be effective enough to positively influence tax acceptance, audit and collection. This efficiency can be measured by reviewing the annual financial reports issued by the Income Tax Department.

First- Effectiveness of Tax Audit: (Annual report for the year 2012) Include:

A - Self-Assessment reports contain the data obtained and collected from taxpayers' declarations according to the following tables:

1 – Acceptance of declarations on the basis of the sample system. These declarations are prepared by the Income Tax Department and sent to taxpayers to fill.

Table 3: Number of tax declarations accepted under the sample system

	2009	2010	2011	2012
Number of declarations received from taxpayers	84805	92048	113661	144059
Number of tax declarations accepted under the sample system.	52 058	57 263	72 702	96 184
The percentage of tax declarations accepted under the sample system, to the total number of declarations received (%)	61	62.2	64	67
The number of declarations audited in accordance with the sample system (declaration)	32 747	34 785	40 959	47 875

Based on the previous table, the researcher believes that there has been an increase in the percentage of accepted tax declarations under the audit sample system compared to the total number of declarations received, reaching 67% in 2012 in contrast with the years 2009, 2010, and 2011.

The audit sample system that takes risk factors into account is considered among the most effective strategies that drive taxpayers to declare correct tax and file tax declarations in a timely manner. The department constantly seeks to develop the standards of this system, so that it can devote itself to closely audit undisciplined and unregistered taxpayers with high risk rates.

B – Auditing Declarations in the Audit Sample: (Annual report for the year 2012)

The objective of an audit is to improve the efficiency and effectiveness of tax auditing and make the best use of auditors' times. The auditing process is annually made by the auditors of the department who audit the declarations included in the audit sample. The following table shows the results of auditing these declarations:

Table 4: Number of declarations included in the audit sample for the years 2009-2012.

	2009	2010	2011	2012
The number of completed declarations	25976	33800	41727	25080
The difference between the value of the adjusted tax and the declared tax (JD)	151 128 722	136 836 669	115 089 151	100 880 240

According to this table, the researcher observes an increase in the number of declarations completed at the stage of self-assessment and a decrease in the value of difference between the tax adjusted by auditors and the tax declared by taxpayers. The researcher attributes that decrease to the rise of trust between the department and the taxpayer, and to the development of taxpayers' awareness of the tax system.

C – Activity of Audit Appeals : (Annual report for the year 2012)

The manner of processing taxpayers' appeals has undergone certain modifications since the beginning of 2009 when it was stressed that appeals ought to be processed within 90 days from the date of submission. Likewise, the procedures of appealing against the decisions of the Income Tax Department

have been reconsidered in terms of durations and deadlines. Today, all of the income tax departments use the same form for the purposes of speeding up the decision-taking process and tax collection, and exercising objective justice that protects the rights of both the treasury and taxpayers. The results of the appealing stage were as follows:

- The number of appeals processed under the provisions of the law (31 / g) was 15.212 in 2012, while they amounted to 15.515 in 2011. The value of due taxes reached JD 25.5 million in 2012, while it amounted to JD 26.5 million in 2011.
- The number of appeals processed under the provisions of the law (31 / h) was 12.111 in 2012, while they amounted to 12.028 in 2011. The value of due taxes reached JD 29.86 million in 2012, while it amounted to JD 38.6 million in 2011.
- The number of appeals processed under the provisions of the law (32 / C) was 229 in 2012, while they amounted to 853 in 2011. The value of due taxes reached JD 982 thousand in 2012, while it amounted to JD 2.07 million in 2011.

Second - Effectiveness of Tax Collection : (Annual report for the year 2012)

The effective procedures that the department has taken resulted in the rise of tax revenues from JD 2.7 billion in 2011 to JD 3.03 billion in 2012.

Table (5) shows the value of tax collections from 2009 to 2012.

	2009	2010	2011	2012
	Thousand (JD)	Thousand (JD)	Thousand (JD)	Thousand (JD)
Income tax	773,874	640,008	685,510	713,842
Sales tax	1,689,530	2,000,061	2,078,660	2,318,531
Total revenue	2,463,400	2,640,069	2,764,170	3,032,373

According to the official reports of the Income Tax Department, the percentage of tax collection witnessed a rise due to several reasons: (Official website of the Income Tax Department)

- 1 - Expanding the tax base through the inclusion of targeted sectors which used to evade paying the owed tax .
- 2 - Activating the information and investigation system, which noticeably reduced the cases of tax evasion.
- 3 – Adopting the principle of self- audit enhanced trust and credibility between the taxpayer and the department, and helped raise the level of voluntary

response, which led to a significant decline in the number of tax cases sent to the courts.

- 4 – The continuous development and improvement of tax legislations helped create a better investment climate, and contributed to a greater transparency in dealing with taxpayers.

CONCLUSION

The study found that the accounting information system used in the Income Tax Department positively influenced the effectiveness of tax audit and collection due to the existence of qualified human resources, an advanced computer system and competent control systems.

These conclusions support those of a study entitled "Accounting Information Systems Used in the Income Tax Department and their Impacts on the Effectiveness of the Department in Jordan" (Jawdih , 2004), and another study entitled "Factors Influencing the Effectiveness of Accounting Information Systems in the Income and Sales Tax Department"(Al-Zubi, 2006).

They also agree with the findings of the interviews made with senior staff in the Income Tax Department.

RECOMMENDATION

The researcher recommends , To work on activating the accounting information system, in a way that will be contributed in increasing the effectiveness of tax audit and collection to a higher level than it is today.

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