

Income Tax Law Number 28/2009 and Return on Investment (ROI): Evidence form Jordan

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Abstract:

The main aim of this study is to examine the effect of Jordanian income tax law number 28 for the 2009 on the return on investment level (ROI). Moreover, this study highlights on the Jordanian tax reform, which expected to affect the firm's performance, this study aim to test the tax reform's effect on the firm's performance that can be negative or positive. The firm's performance should improve if the tax reform provides a positive effect, while firm's performance will decrease if the tax reform provide a negative effect. Furthermore, the researcher uses the descriptive method of analysis, which is suitable to compare between the (ROI) before and after income tax law 28/2009. The population of this research includes all listed firms in Amman Stock Exchange (ASE) for the year 2009 and 2010. In addition, Sample is also including all listed firms in Amman Stock Exchange (ASE). The outcomes of this study show that the return on investment of 2010 after applying the income tax number 28/2009 is better than the return on investment before applying the tax law number 28/2009.

Key words: Tax; Income Tax Law28/2009; Return on Investment; Amman Stock Exchange; SPSS.

1. Introduction

Income tax department in Jordan was founded in 1951 under law number (50) for the year 1950, and since then over the tax

legislation and several amendments in order to develop and keep pace with economic and social developments and to fill the gap emerging as a result of the application. The last of these amendments was on the year 2009 under the provisional law number (28) for the year 2009.

Tax policy assume as one of the most important elements of fiscal policy in Jordan, the Jordanian tax policy aims to provide the Treasury with vital returns to finance the government general expenses, investment, encourage saving, the positive influence of consumption, price stability and to attain justice and social equity through re-distribution of incomes. Tax policy in Jordan seeking to coordinate between the national growths aims and tax system. Similarly Tax policy in Jordan need to balance between the rights of taxpayers and tax authority which demand the income tax department to provide tax services and enhanced voluntary compliance of taxpayers. (<http://www.istd.gov.jo/ISTD/Arabic/AboutISTD/Profile.html>)

The main aim of this study is to examine the effect of income tax law number 28/2009 on the level of return on investment (ROI). Moreover, this study highlights on the Jordanian tax reform, which expected to affect the firm's performance, this study aim to test the tax reform's effect on the firm's performance that can be negative or positive. The firm's performance should improve if the tax reform provides a positive effect, while firm's performance will decrease if the tax reform provides a negative effect. All governments seek to provide positive tax reforms in order to increase firm's performance, which lead also to increase the tax collection, Thereby increasing the government budget revenues (Jaradat, 2013).

The investment decision relies on the firm's performance as a critical factor which reflects the firm effectiveness. In order to calculate the firm performance, the financial analyst used the accounting profit as a main focus of attention. One of the most

financial tools used to measure the firms profit and performance is the return on investment (ROI). Financial analyst and investors usually used the Return on investment (ROI) to measure management effectiveness to increase income. ROI ratio connects the firm benefits from operations with investment amount or assets which used to generate profit. ROI was calculated by dividing profit after tax over total assets.

2. Literature Review and Hypotheses Development

2.1 Tax concept

Income tax is assumed as one of the financial support of the general budget in Jordan, in order to collect the needed funds to recover the public expenditure in order to fulfill the social welfare (Jaradat, 2013). Tax is the amount of money imposed compulsory by government or public authorities free of charge in order to cover the general expenses of the government, to achieve the public interest. There are several goals of tax. First, financial goals of tax that represent on the collect of funds to cover the government expenditure. Second, social goals which represent with redistribution of wealth, reduce of undesired habits and birth-control in the community.

2.2 Income Tax Number 28/2009

Income tax law 28/2009 is issued in 2009 and effective on 1-1-2010. Income tax law in Jordan aims to:

- 1- Encourage investment and raise economic growth.
- 2- Strengthen the competitive position of the Jordanian economy.
- 3- Improve the legal framework of the tax system.
- 4- Improve the fairness of the tax system.
- 5- Improve tax administration.

The most important main pillars of the income tax law 28/2009 is modifying the tax rates of legal persons in order to improve the investment climate and promote economic growth and

strengthen the competitive position of the Jordanian economy, and so the stimulus includes all economic sectors and in a fair, balanced and maintaining the application sectors for tax purposes through the following tax rates.

- 1- 14% of all legal persons.
- 2- 24% on main communication companies, banks, financial companies (including exchange companies), and financial intermediation companies, insurance companies, and legal persons carrying out financial lease businesses.
- 3- 30% of banks.

While the tax rates for the legal person or any company on the income tax law 57/1985 as follows:

- 1- 15% of the income derived from the project in each of these sectors (Mining, Industry, Hotels, Hospitals, Transport and Building construction).
- 2- 35% of the taxable derived from banks and financial company's income.
- 3- 25% taxable income for: (Insurance companies, Exchange and mediation, Telecom, Services and other businesses of all types and companies, any one moral else).

2.3 Financial Ratio Analysis

Historically, financial ratios analysis has been used for predicting, explaining of firm's efficiency and to assess the variability in financial management and objectives between cooperative institutions and investor oriented companies (Ambrose and Seward, 1988; Altman, 1968). McNamara and Ducan (1995) implement return on asset to clarify and calculate company's efficiency, they used it to be a prior year of (ROA). Chesnick (2000) specified several ratios in order to calculate company's performance containing profitability ratios and liquidity ratios. He discovers that profitability ratios used to measure the ability of companies to collect a net return on its

financial transactions. While, liquidity ratios calculate the ability of the companies to meet its short-run liabilities with liquid assets. Penman (2007) discovers that (ROE) is an absolute measure of a company's profitability through investigation the characteristics of (ROE). Ludwin and Guthrie (1989) show that conducting and analysis of big firms that produced several outputs is normally limited to realization ratios of outcomes to incomes. Ratio analysis results are difficult when considering the evaluation of the company's efficiency.

Evaluating firm's performance and efficiency play a critical role, which contain all business components, including: insider managers, current and potential investors and shareholders. Performance evaluations show that firms used its resources effectively and how investors and external parties are affected. Financial ratios are used to monitor the companies and evaluate efficiency.

2.4 Profitability Ratio

Profitability ratios are ratios that measure the firm's efficiency, business policies, investment decisions, and the management ability to achieve earnings In order to judge the extent of the company's success in implementing its planned policies and efficiency in the use of available resources (Al Shabib, 2009). Profitability ratios reflect the overall performance of the company where examines the company's ability to generate profits from its sales, profitability ratios are considered important metrics to measure the effectiveness of the company administration, investment , operations, and financing policies (Dehning & Richardson ,2002).

2.4.1 ROI (Return on Investment)

ROI is a financial tool to release additional profits amount achieved because of one or more investment. Firms use the ROI calculation as a comparative way to select the greatest profit

from different investment scenarios. ROI calculation is useful to choose the best of firm potential investments. ROI assume one vital important measurement used to evaluate the firm's investment efficiency or compare different investment efficiency. To calculate ROI we use the following formula:

$$ROI = \frac{\textit{Gain from Investmetn} - \textit{Cost of Investmetn}}{\textit{Cost of Investmetn}} \times 100\%$$

2.4.2 ROE (Return on Equity)

Return on equity (ROE) measure the firm's ability to attain the return of the money invested. The ROE ratio indicates the amount of revenue derived from the funds of the project shareholders. Moreover ROE ratio reflects the degree of management success to increase the owner's profit Teitelbaum (1996). To calculate ROE we use the following formula:

$$ROE = \frac{\textit{profit after tax}}{\textit{sherholders' funds}}$$

3. Study Hypothesis

H0: ROI 2010 > ROI 2009 Jordanian income tax law 28 for the year 2009 have positively affected to the return on investment (ROI).

H1: ROI 2010 < ROI 2009 Jordanian income tax law 28 for the year 2009 have negatively affected to the return on investment (ROI).

4. Research Methodology

This research used the descriptive method of analysis, which is suitable to compare between the (ROI) before and after income tax law 28/2009. The population of this research includes all listed firms in Amman Stock Exchange (ASE) for the year 2009

and 2010. In addition, Sample is also including all listed firms in Amman Stock Exchange (ASE). The researcher selects the sample relying on this standard:

- All firms are listed in Amman Stock Exchange (ASE) for the year 2009 and 2010.
- All financial reports published in the year 2009 and 2010.
- Earnings after tax for the year 2009 and 2010.
- Excluding listed firms that stopped working during the study period.

5. Research Result

5.1. Correlations

Table 1 shows the correlations between ROI 2009 and ROI 2010, we note that the correlation is 0.617 with significant 0.000 and the correlation is significant at the 0.01 level

		ROI 2010
ROI 2009	Pearson Correlation	0.617(**)
	Sig. (2-tailed)	0.000
	N	216

Table 1: Correlations

** Correlation is significant at the 0.01 level (2-tailed).

5.2. Nonparametric Correlations

Table 3 shows the nonparametric correlations, we found that the correlation coefficient is 0.659 with significant 0.000 and the Correlation is significant at the 0.01 level.

			RIO 2010
Spearman's rho	ROI 2009	Correlation Coefficient	0.659(**)
		Sig. (2-tailed)	0.000
		N	216

Table 2: Nonparametric Correlations

** Correlation is significant at the 0.01 level (2-tailed).

5.3. NPar Tests

Table 3 shows the Wilcoxon signed ranks Test, we note that the negative ranks ROI 2010 < RIO 2009 are 95 firms with a mean rank 99.9, while the positive rank ROI 2010 > RIO 2009 are 117 firms with a mean rank 111.86, we note that the ROI in year 2010 is better than year 2009. Moreover, we note that is 4 firms as ties and the total study sample are 216 listed firms.

		N	Mean Rank	Sum of Ranks
ROI 2010 – ROI 2009	Negative Ranks	95(a)	99.90	9490.50
	Positive Ranks	117(b)	111.86	13087.50
	Ties	4(c)		
	Total	216		

Table 3: Wilcoxon Signed Ranks Test (Ranks)

a ROI 2010 < RIO 2009

b ROI 2010 > RIO 2009

c ROI 2010 = RIO 2009

5.4. Test Statistics

Table 4 shows the test statistics, we note that Z is -2.011 (ROI 2010 – ROI 2009) based on the negative ranks with significant 0.044.

	ROI 2010 – ROI 2009
Z	-2.011(a)
Asymp. Sig. (2-tailed)	0.044

Table 4: Test Statistics

a Based on negative ranks.

5.5. T-test

Table 5 shows the study mean and standard deviation for the study variables, we note that the ROI mean for the year 2009 is 0.0031 with standard deviation 0.08356, while the ROI mean for the year 2010 is 0.0112 with standard deviation 0.06636, also we note that the study sample is 216 listed firms. We note that the ROI for year 2010 is better that 2009.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	ROI 2009	0.0031	216	0.08356	0.00569
	ROI 2010	0.0112	216	0.06636	0.00452

Table 5: show the Paired Sample Statistics

Table 6 shows the paired sample correlations for the two years 2009 and 2010, we note that the correlation is 0.617 with significance 0.000

		N	Correlation	Sig.
Pair 1	ROI 2009 & ROI 2010	216	0.617	.000

Table 6: show the Paired Sample Correlations

Table 7 shows the paired sample test, we note that the t value is -1.766 with a significant 0.049, which mean that it is significant at the 5% level. According to this result, we accept the main hypotheses which stated that Jordanian income tax law 28 for the year 2009 have positively affected to the return on investment (ROI).

		Paired Differences					t	Sig. (2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Confidence Interval of the Difference			
					Lower	Upper		
Pair 1	ROIN2009 – ROI 2010	-3.01	0.067	0.005	-0.0171	0.001	-1.766	0.049

Table 7: show the Paired Sample test

6. Conclusion

Based on the results discussed, we found that the income tax law number 28/2009 affects return on investment (ROI). We found that the return on investment on 2010 after applying the income tax number 28/2009 is better than the return on investment before applying the tax law number 28/2009. We also found that the ROI main for the year 2009 is 0.0031 while the ROI main for the year 2010 is 0.0112 which mean that the ROI of listed firm in Jordan after applying the income tax law number 28/2009 is improved. This result indicates that tax reform in Jordan and reduced taxable layer affect positively on the firm performance.

REFERENCES

- Altman, E. (1968). Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy. *Journal of Finance*, 23(4): 589-609.
- Ambrose, J. & Seward, J. (1988). Best Rating Financial Ratios and Prior Probabilities in Insolvency Prediction. *Journal of Risk and Insurance*, 55(2): 229-244.
- Chesnick, D. (2000). Financial Management and Ratio Analysis for Cooperative Enterprises, US Department of Agriculture, Rural Business Cooperative Service. RBS Research Report 175.
- Dehning, B., & Richardson, V. (2002). Returns on investment in information technology: A research synthesis. *Journal of Information Systems*, 16(1), pp: 7–30.
- Jaradat, M. (2013). Impact of Self-Assessment on Income and Sales tax Collections from the Point of View of Income Tax Auditors in Jordan Accounting and Financial Studies Journal, 22(8), pp: 176-189.
- Jaradat, M. (2015). Income Tax Assessment Techniques and Income Tax Collection: Evidence form Jordan. *European Academic Research*, 3(1), pp: 249-266.
- McNamara, R. & Duncan, K. (1995). Firm performance and macro-economic variables. School of business, Bond University, Australia, Discussion Paper No. 59.
- Penman, S. (2007). *Financial Statement Analysis and Security Valuation*, 3rd edition Boston, MA: McGraw-Hill.
- Shabib, D. (2009). *Investment and Investment Analysis*, the first edition, Dar AL-Yazouri Scientific, Jordan, Amman.
- Teitelbaum, R. (1996). What's Driving Return On Equity?, *Fortune* 133(8), pp :271-276.
- Ludwin, W. & Guthrie, T. (1989). Assessing Productivity with Data Envelopment Analysis. *Public Productivity Review*, 12(4): 361-372.
- (<http://www.istd.gov.jo/ISTD/Arabic/AboutISTD/Profile.html>)