

Influence Of Income Smoothing On Tax Profitability Of Commercial Banks Of Jordan

Tareq Hammad ALmubaydeen

Abstract: The study is based on the concept of Income smoothing (IS) and evaluates its influence on tax profitability. Its relevance basically lies in the fact that it helps in investigating legal manipulation in the accounting practices done by the management banks in Jordan. The sample size of this study included the previous four years (2015-2018) data of 5 commercial banks of Jordan. While a ton of literature is already present with respect to these variables, the current research concentrates its relationship between the two constructs in the context of the banking industry of Jordan to add novelty. That is, the research aims to fill the existing gap of the relationship between IS and tax profits in the banking sector of Jordan and produce concrete findings that whether a significant relationship exists resembling the previous studies conducted over other industries around the world. In order to investigate the relationship, secondary data (annual reports) collected from five banks were analyzed with the main focus given to their IS, Earning before tax (EBT), Total Assets (TA) and overall profits. To examine recent phenomenon only, data were restricted to the latest four years. Data were analyzed statistically using a correlation, regression analysis, and one-way ANOVA to generate concrete results. The results proved a significant, positive relationship between IS and tax profits indicating that smoothing of income enables banking sector in Jordan to represent stable profits and revenues in front of their respective shareholders and other stakeholders.

Index Terms: Income Smoothing, Tax Profitability, Commercial Banks, and Jordan. Author is the Vice dean of the Faculty of Economics and Administrative Sciences

1 INTRODUCTION

Income Smoothing is generally been described as one of the most widely practised approaches for relatively more creative accounting whereby the overall earning and price fluctuation is manipulated and rebuild certain aspects or levels of earning, which is normally generated by the firm [5]. According to [13] smoothing is a wise and reasonable action which may help the managers to smooth in their income by utilizing different means. [11] mainly started off their studies by presenting the relationship between such accounting methods and investment tax credits and growth rates of EPS and ROE. According to them, the relationship between them is noteworthy and mainly depicts several different income practices. In a more recent study like of [17], the income smoothing is known to be that form of earning management which relates to the dampening of the fluctuations under the reported earnings over the period of time. Simply speaking, the management of the companies are inclined towards taking actions for increasing the earnings when these are relatively low and for decreasing the earning even when the earnings are relatively high. The practical tactics employed by the management include both real as well as artificial methods to supervise volatility in earnings as the management is under constraint to satisfy predicted financial forecast, performance aims and objectives along with avoiding the need for leverage arrangements. However, often time's issues are raised regarding ethical implications as there exists a thin line between the IRS accounting standards and fraudulence [9]. The current research study's objective is to assess the influence of income smoothing index on the tax profitability of selected commercial banks of Jordan.

Hence, for this purpose the following research questions have been formulated: -Is there a relationship between income smoothing and tax profits of the selected banks? -Does the income smoothing factor, over the years, have influenced the tax profits of commercial banks in Jordan? -What is the difference in the income smoothing and tax profit trends of different banks of Jordan? An ample amount of literature exists which study the current variables [14] [2] [20]. Most of them indicate a highly positive correlation between Income smoothing as a management tool and tax profitability [14]. However, when researched in the context of Jordan, the literature fails to generate authentic findings that relate to this particular region. None of the current literature presents its findings on the Jordanian banking sector, which holds immense importance for the regional economy. This importance is reflected through the Central Bank of Jordan which reports credit facilities amounting up to JD 21,103.5 million and deposits of JD 32,598.5 million in 2015. Hence, unavailability of research literature based upon the banking sector in Jordan paved the way for this current study and contributed to the authenticity and novelty aspect. It means that this particular study is greatly significant in terms of its non-existence in context to the Jordan literature. The relevance of the present study basically lies in the fact that it helps in investigating legal manipulation in the accounting practices done by the management of companies and banks in Jordan. Even though such practices are internationally made legal through ethical alternation methods, the use of income smoothing particularly impacts the shareholder's interest and trust in the company.

2 LITERATURE REVIEW

The earning stability and the earning growth rates are considered as the most prominent hallmarks of the pristine banks. Hence, bank management might try to work on the reduction of earnings' variability by smoothing out the fluctuations in its recorded earnings. There can be many reasons for the banks to smooth out their incomes and earnings. According to [6], income smoothing is beneficial to the business as it helps in improvement of the overall risk perception of the banks to its investors, legislatures and regulators. It also helps in maintaining the steady scheme of compensation over a period of time for the managers. In addition to this, the management can actually provide a steady

• Dr. Tareq Hammad ALmubaydeen is currently a associate professor / accounting department at Zarqa university-Jordan Email- tmbydeen@zu.edu.jo

stream of dividends for its shareholders by smoothing out the earnings of the company. He adds, that as it is usually known that gauging the quality of bank management is quite hard, income smoothing or earning management mainly provides an excellent alternative for the relatively lower management quality in order to project a picture of high-quality management. Though the corporate income tax rates are mainly higher than that of the level of high-income levels as the income tax have regressively smoothed income which has reduced the overall long-run tax liabilities. This sort of earning management also plays a vital role in improving the price stabilities of the stock by the reduction of the volatility of perceived earnings. Usually, the financial statement users mainly evaluate the overall earnings after tax and before the extraordinary items, that is why the companies or banks mainly work on smoothing out the earnings after taxes. Not only in the banking sector but other financial/investment-based industries too experience income smoothing as a regular occurrence. In this context, [10] investigate the conduct of 770 insurance companies. They refer income smoothing as 'earnings management' as it assists managers to decide the value posted in the annual earnings report, preventing to report losses or profit decreases to an alarming threshold. The research was based during the period from 2000 to 2009 revealing significant earning management and thus showing that its occurrence is not new but something which has been carried on since past decades. However, it must be noted here, that various other studies have also provided conflicting positions with regards to income smoothing [18]. Some authors have proposed that this mainly depicts a feature of stability and persistence, while others have interpreted such an act as misleading and opportunistic behaviour. Based on [12], the management may get worried about conveying the stability of business, with a strong perception which market rejects the prediction values and risk of results. Moreover, other scholars claim that the earning management mainly forms a part of manager's characteristics, who is an integral agent who has a great capacity for mitigation and isolation of starting variation related to the performance rather than external users which are based on reported information [4]. The immense amount of literature present still fails to conclude the true effect and intention of smoothing financial income [19]. The obvious theory states this as a tool for misleading participants in financial markets in connection with existing or future earnings, risk levels associated with a firm and to draw out personal gains (for management). According to the IAS, the procedure of income smoothing is not legal as it utilizes false accounting process and interpretation for stabilizing fluctuations in the overall net income [1]. If the business does income smoothing, there is no correct information for determination of their actual earnings for avoiding taxes. However, in some cases smoothing is referred to as harmless due to the fact that it only amends the pattern of income coming into the firms with no effect on firms hidden cash-flow statements as those are dominated by insider's collective strategic production and financial decisions. Here insiders are referred to as individuals in the management such as executives and managers. However, 'real financial smoothing' is not regarded as legal means as referred to above. That is exploiting production and effort decisions in such a way to deliberate control outsiders' expectations. This impact is easily overlooked by outsiders because they are unable to truly observe the initial variables of marginal costs and thus rely on

disclosed figures of sales, the quantity of output and so on. [2] studied the relationship of wage smoothing, firm esteem and performances on the capital markets of Brazil. They identified that the majority of the firms have adopted this practice to manipulate financial reports through accounting departments, especially during economic turbulences. Mainly those firms participated that indicated a lower stock performance. As far as the question of ethics is concerned, altering financial statements does not reflect fraudulent behaviour as the management of these companies is legally allowed to determine and flex accounting procedures and practices. Their study also categorized wage smoothing into two distinctive sub-groups namely- natural smoothing and intentional smoothing. [8] revealed that adopting smoothing techniques not only benefit the management by exhibiting a stable performance in front of its shareholders but allows the company to gain government subsidies and tax holidays which further produce favourable outcomes in terms of profits. Easy and ethically 'approved' methods allowing smoothing of income include over and above depreciation charges for assets, uncollected or receivables (not declared as bad-debts yet) allowances from customers still recorded, warranty charges and obligations, loans and so on [1]. [2] identified several purposes due to which management seeks smoothing techniques. These include attempting to increase shareholder value quoted in the Stock Exchange which ultimately adds positively to firm's value and reputation, stable income streams reduce corporate risks of falling into high debts or even defaulting, thus reducing the firms cost of capital, improve relations with not just shareholders but employees, suppliers, governments and other stakeholders, decline in the risk of deportation and redundancies etc. Moreover, [15] believed that managers and executives with power and control over major organization practices can rightfully influence and tilt their supervised entities resulting in greater smoothing and larger impairments. However, their impacts are often times aligned with nation-wide effects if major banks hide their financial health problems resulting in adverse economic outcomes. [7] propose that for determining the income smoothing, Ekel's coefficient of variation can be used. There are generally many techniques for smoothing out the income of the companies. These techniques may vary from artificial to real smoothing methods. The model particularly reflects or are based on the facts that indicate that costs and revenues are linear over a time period, therefore are usually directly related. In addition to this, the overall model mainly proposes that the connection between the revenues and profits, the coefficient of variation in terms of sales and income is calculated as follows:

$$\text{Income smoothing index} = \frac{CV\Delta I}{CV\Delta S} < 1$$

ΔI =variation in income

ΔS =variation in sales

CV=coefficient of variation

3 RESEARCH METHODOLOGY

The research study is based in Jordan and follows a positivist approach. The aim of this research is to evaluate the impact of income smoothing on tax profitability of commercial bank of Jordan. Based on the objective the design of the current research is correlational and data has therefore been collected from secondary sources such as from the Annual Report of the selected banks. Specifically, the sample size of the study is 4-

year data of 5 commercial banks of Jordan. These include Bank of Jordan, Capital Bank, Arab Bank, Arab Jordan Investment Bank, and Jordan Ahli Bank. There are mainly three research variables used for the overall analysis. These are Income Smoothing Index (IS), Total Assets (TA) and Earning Before Tax (Tax Profits) (EBT). Out of this IS is the independent variable while the EBT reflects the dependent variables. Total Assets, on the other hand, serves as a control variable. Following are the research hypothesis formulated based on the purpose of the study:

- H₁: There lies a significant relationship between Income Smoothing and Tax Profitability of Banks in Jordan
- H₂: Income Smoothing significantly impact the tax profitability of the Banks in Jordan.

In addition to this, the collected data has then been evaluated using three of the major statistical testing methods including ANOVA, Correlation and Regression Analysis. These will be used for determining the mean difference between different banks, relationship and the impact of the independent variable on the dependent variable.

4 FINDING

This section of the study reflects the empirical findings of the collected data. The descriptive statistics of the collected information revealed that over the years the mean income smoothing of Arab Bank has remained the highest as compared to other banks. Jordan Ahli Bank income smoothing variables remained the lowest in the year 2017 and 2018.

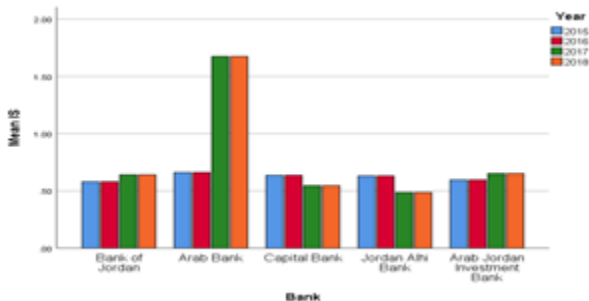


Figure – 1: Mean Income Smoothing

In order to evaluate the objectives of the study, the following tests have been performed on SPSS software.

4.1 ONE-WAY ANOVA

In order to test the mean difference between IS of different banks group, it is important to first test the normality and homogeneity of variances. The test for normality with respect to different banks indicates that KS and SW test both indicates that IS of all of the five banks follows non-normal distribution as the sig value of each of these are less than 0.05 level of significance.

Table – 1. Tests of Normality

Bank	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Bank of Jordan	3.07E-01	4		0.729	4	0.024
Arab Bank	3.07E-01	4		0.729	4	0.024
Capital Bank	3.07E-01	4		0.729	4	0.024
Jordan Ahli Bank	3.07E-01	4		0.729	4	0.024
Arab Jordan Investment Bank	3.07E-01	4		0.729	4	0.024

a. Lilliefors Significance Correction

In case of homogeneity of variances, the Levene Test results reveal that the assumption of homogeneity of variance has also been violated for all of the banks since the test value shows sig value below 0.05 level of significance.

Table – 2. Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
IS	Based on Mean	7.00E+31	4	15	0.000
	Based on Median	7.00E+31	4	15	0.000
	Based on Median and with adjusted df	7.00E+31	4	9	0.000
	Based on trimmed mean	9.14E+30	4	15	0.000

Despite the violation of both the assumptions we have assumed that a parametric test can be performed. Hence, the ANOVA test results indicate that the test results are significant at 0.05 level of significance and data provides sufficient evidence to conclude that there lies a significant mean difference between different groups of banks.

Table – 3. ANOVA

	IS				
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.055	4	0.264	3.726	0.027
Within Groups	1.062	15	0.071		
Total	2.117	19			

Specifically, the significant difference can be seen between the Arab bank and all the other banks as indicated in the table below. Bank of Jordan reflects significantly less income smoothing coefficient than the Arab Bank. Similar is the case with the Capital Bank, Jordan Ahli Bank and Arab Jordan Investment Bank. It means that greater income smoothing is observed in the case of an Arab bank than others.

Table – 4. Multiple Comparisons

		Dependent Variable: LSD				
(I) Bank		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Bank of Jordan	Arab Bank	-.55728*	0.18815	0.010	0.9583	0.1563
	Capital Bank	0.01949	0.18815	0.919	-	0.4205
	Jordan Ahli Bank	0.05165	0.18815	0.787	-	0.4527
	Arab Jordan Investment Bank	-0.01397	0.18815	0.942	-	0.3871
	Bank of Jordan	.55728*	0.18815	0.010	0.1563	0.9583
Arab Bank	Capital Bank	.57677*	0.18815	0.008	0.1757	0.9778
	Jordan Ahli Bank	.60893*	0.18815	0.006	0.2079	1.0100
	Arab Jordan Investment Bank	.54331*	0.18815	0.011	0.1423	0.9443
Capital Bank	Bank of Jordan	-0.01949	0.18815	0.919	-	0.3815
	Arab Bank	-.57677*	0.18815	0.008	-	0.1757

Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	0.03216	0.18815	0.867	-0.3689	0.4332
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-0.03346	0.18815	0.861	0.4345	0.3676
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-0.05165	0.18815	0.787	0.4527	0.3494
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-.60893*	0.18815	0.006	1.0100	0.2079
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-0.03216	0.18815	0.867	0.4332	0.3689
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-0.06562	0.18815	0.732	0.4667	0.3354
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	0.01397	0.18815	0.942	0.3871	0.4150
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	-.54331*	0.18815	0.011	0.9443	0.1423
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	0.03346	0.18815	0.861	0.3676	0.4345
Jordan Alhi Bank Arab Bank of Jordan Investme nt Bank Bank of Jordan Arab Bank	0.06562	0.18815	0.732	0.3354	0.4667

*. The mean difference is significant at the 0.05 level.

4.2 CORRELATION

When assessing the relationship between the IS, Total Assets and EBT. The relationship between IS and EBT indicates the strong positive relationship with Pearson correlation of 0.796 which is significant at 0.01 level of significance. Similarly, with the Total Assets, the IS value is related positively with 0.697 correlation. In addition to this, EBT and Total Assets also have a significant positive association between them. Here, H1 is accepted i.e. there is a significant relationship between IS and Tax Profitability of Banks in Jordan.

Table – 5. Correlations

		IS	EBT	Total Assets
IS	Pearson Correlation	1	.796**	.697**
	Sig. (2-tailed)		0.000	0.001
	N	20	20	20
EBT	Pearson Correlation	.796**	1	.935**
	Sig. (2-tailed)	0.000		0.000
	N	20	20	20
Total Assets	Pearson Correlation	.697**	.935**	1
	Sig. (2-tailed)	0.001	0.000	
	N	20	20	20

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

4.3 LINEAR REGRESSION

In order to evaluate the impact of income smoothing on the taxable profits of the selected five banks of Jordan, the linear regression analysis has been presented. The variables Total Assets, Income Smoothing are entered as independent variables while EBT of the banks has been entered as the dependent variable. The model summary and ANOVA table below indicate that the fitted model explains 91.4 percent variation in the EBT of the banks due to changes in independent variables. The fitted model is significant at 0.01 level of significance and data provides sufficient evidence to conclude a significant combined effect of the model on EBT.

Table – 6. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956 ^a	0.914	0.904	45.46955

a. Predictors: (Constant), Total Assets, IS

Table – 7. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	373401.675	2	186700.838	90.304	.000 ^b
	Residual	35147.165	17	2067.480		
	Total	408548.840	19			

a. Dependent Variable: EBT

b. Predictors: (Constant), Total Assets, IS

Lastly, the beta coefficients of the independent variables indicate that a unit increase in IS will increase the EBT of the bank by JD 123.176 million while controlling for firm size. This value is significant at the 0.05 level. It shows that the application of smoothing practices is profitable to Jordanian banks. Higher smoothing would lead to higher tax profits; thus, it would help to present a better picture of the organisation to the shareholders and other stakeholders. Here, H2 is accepted i.e. there is a significant impact of IS on EBT of the Jordanian banks.

Table -8. Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-57.843	27.251		-2.123	0.049
IS	123.176	43.571	0.280	2.827	0.012
Total Assets	0.011	0.002	0.739	7.453	0.000

a. Dependent Variable: EBT

These results present the perspective of the banking industry of Jordan regarding income smoothing, which is a new contribution to the existing scholarship on the subject. Moreover, the research also determines the relationship between the IS and EBT, showing how income smoothing is related to the profitability level of the big Jordanian banks.

5 CONCLUSION & RECOMMENDATIONS

The aim of the research is to evaluate the impact of income smoothing on tax profitability of five commercial banks of Jordan. Using a sample of four years of data for five selected banks of Jordan, the income smoothing value has been evaluated using different statistical analysis. Based on these objectives the aforementioned results are aligned with the findings from previous literature which suggests that there lies a significant positive relationship between the IS and the tax profits. In other words, since income smoothing helps the management of banks to portray a positive picture by either deferring or accelerating certain items, the current study recommends banks of Jordan to rely on applying IS index. The findings indicated that among the sample size selected, the mean income smoothing of Arab Bank has remained the highest as compared to other banks. In contrast, Jordan Ahli Bank exhibited the least use of smoothing techniques. Yet,

overall all banks selected did employ smoothing methods to artificially stabilize their incomes. The correlation analysis reflected a strong positive relationship between income smoothing and earnings before taxes. This means that banks with stable profits and earnings from one year to the next may achieve it by employing smoothing methods. In relation with Total Assets, IS again drove out positive results showing that banks with high assets are more likely to be involved in income smoothing. On the other hand, a linear regression model characterized TA and IS as independent variables while EBT as a dependent variable. The objective of running regression was to evaluate the statistical impact of IS on EBT while controlling bank's size (TA). The results showed that IS engagement of the management as a method to reduce fluctuation in income streams significantly increases EBT. Additionally, the findings of the current study reflect that the mean difference of income smoothing is found to be significant at 0.01 level between the Arab Bank and other banks of Jordan. Moreover, the impact of IS index is significant on tax profitability suggesting that the banks in Jordan are successfully applying the IS concept. The findings of the study recommend strong regulations in this regard since income smoothing may not benefit the shareholders and such manipulation of financial statements could be detrimental in the long run.

6 LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

The current research has certain limitations. These limitations include insufficient sample size in terms of a number of banks included in the study. For future researches, it is recommended to have an inclusion of more banks for better clarity and understanding. Future studies may consider other approaches of data collection and evaluation as well such as interviews and qualitative data analysis.

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