Relationship Between Firm Size and Profitability with Income Smoothing: Evidence from Food and Beverages (F&B) Firms in Jordan

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Abstract

This study examines whether firm size and profitability have an influence on the income smoothing practices of food and beverages (F&B) firms listed on the Amman Stock Exchange (ASE). All 8 F&B firms listed on the ASE are used as the study sample. Eckel model is used in determining whether a firm is smoother or non-smoother. The natural logarithm of total assets is used as an indicator for firm size, and return on equity is used as an indicator for profitability. Financial leverage is used as a control variable and measured using debt ratio. Data covering the period 2010–2019, of the firms is used in the analysis and hypotheses testing. Descriptive statistics are used in data analysis, and the logistic and multiple regression methods are used in hypotheses testing. All hypotheses are tested under a 95 percent level of confidence, which is equivalent to 0.05, a predetermined coefficient of significance. The study shows that firm size has a positive significant influence on income smoothing, while profitability does not have. Moreover, the study reveals that there is a collective significant impact of both firm size and profitability, when taken together, on income smoothing.

Keywords: Income Smoothing, Return on Equity, Debt Ratio, Firm Size, Profitability

JEL Classification Code: M41, L25, G30

1. Introduction

The term income smoothing is more likely associated with the manipulation of earnings, creative accounting, and the aggressive interpretation and application of generally accepted accounting principles. The term income smoothing is more likely associated with the manipulation of earnings, creative accounting, and the aggressive interpretation and application of generally accepted accounting principles. Smoothing income by abusing leeway in accounting principles is unethical and does a disservice to the users of the financial statements such as shareholders, creditors, and other stakeholders. Investment decisions are taken based on the reported published financial information of corporate business organizations. Financial statements are important to investors because they can provide enormous information about a company’s revenue, expenses, profitability, debt load, and ability to meet its short-term and long-term financial obligations. When financial statements show inaccurate, incorrect, or include misstated information, the decisions taken based on such information, will not benefit, or it may harm investors, creditors, and other decision-makers. Income smoothing refers to the different strategies and approaches used by accountants to control the impact of extreme volatility in corporate income (Ronen & Yarri, 2008). Income smoothing is the shifting of revenue and expenses among different reporting periods to present the false impression that a business has steady earnings. Management typically engages in income smoothing to increase earnings in periods that would otherwise have unusually low earnings. The common understanding meaning of income smoothing is the managements’ use of discretionary accounting and management, to reduce the level of variability in earnings (Li & Richie, 2016). The goal of income smoothing is to reduce the fluctuations in earnings from one period to another to portray a company as if it has steady earnings. It’s intended to smooth out periods of high income vs. periods of low income or periods with high expenses vs. periods of low expenses. Accountants do this by legally moving around revenues and expenses.
Thus, income smoothing can affect investors’ decisions and have consequences, which are of high importance and priority, especially in inefficient capital markets. Income-smoothing is measured by changes in firms’ net income compared to changes in discretionary accruals – non-cash accounting items that typically involve some element of uncertainty (for example, future receipts from receivables or estimates of inventory valuations) and thereby particularly lend themselves to manipulation. When a volatile income is smoothed, or changed to be in accordance with profits of prior years, the information became misstated and invalid for decision making. Exercising the phenomenon of income smoothing is not preferable for different parties outside the business. Investors, creditors, and other external stakeholders may lose all or a portion of their wealth when their decisions are based on a manipulated income. Advantages of having a smooth earnings stream for companies include lower costs of equity, higher credit rating, greater assurance among customers and suppliers about terms of trade, and anticipation of higher growth prospects among investors.

Governments may suffer also from exercising the phenomenon of income smoothing. When the actual income is decreased or increased, governments will collect less or more taxes. Income smoothing uses accounting techniques to level out fluctuations in net income from one period to the next. Companies indulge in this practice because investors are generally willing to pay a premium for stocks with steady and predictable earnings streams as opposed to stocks whose earnings are subject to more volatile patterns, which can be regarded as riskier. Income smoothing is not illegal if the process follows generally accepted accounting principles (GAAP). Talented accountants are able to adjust financial books in an above-board way to ensure the legality of income smoothing. However, many times income smoothing is done under fraudulent methods. Preventing or lessening income smoothing practices requires more understanding of the issue to introduce appropriate solutions. Restricting income smoothing practice is based first on determining the factors behind such practices. Investors look for stability in their investments. If a company’s financials show volatile earnings, an investor may be turned off by the risk and uncertainty of investing in this company. A firm that can show consistent returns from year to year is more likely to attract investors who feel more at ease when they see steady returns over a longer time period. Moreover, large-size firms have more incentive, ability, and probability to exercise the phenomenon of income smoothing. The findings of prior researches are still in conflict regarding the firm size and profitability relationship with income smoothing practice, but the issue may differ based on industry, country, and accounting method. The problem of the current study can be better presented by introducing the following question. Do firm size and profitability have an effect on the practices of income smoothing?

Managements’ practice of income smoothing led some firms to bankruptcy in past and will harm firms and their shareholders and creditors more in the future if no restrictions are issued and enforced to reduce such practices. Income smoothing is an active manipulation of earnings toward a predetermined target. The study is also important because it highlights the issue of income smoothing, and illustrates its practice by firms, so it provides different parties such as investors, shareholders, creditors, and others with information regarding the issue, and at the end provides protections for these parties, against income smoothing practices. The study adds more literature to the income smoothing issue and contributes to protecting different interested parties from the bad effects of this issue.

This study examines whether firm size and profitability have an influence on the income smoothing practice of food and beverages (F&B) firms listed on the Amman Stock Exchange (ASE). Moreover, the study educates investors, creditors, and other users of accounting information about income smoothing practices, so that they can take proper and right investment or credit decisions. Analyzing income smoothing in the Jordanian business environment, and highlighting its practices, methods, and effects, is one of the objectives, that this study attempts to achieve.

2. Literature Review and Hypotheses

Income smoothing is defined as a form of earnings management and is defined as the dampening of fluctuations in reported earnings over time. In other words, management is inclined to take actions to increase earnings when earnings are relatively low and to decrease earnings when earnings are relatively high (Chong, 2006). Mulford and Comiskey (2012) defined income smoothing as a form of income engineering designed to eliminate fluctuations in a series of income. Vakilifard and Allame (2001), defined income smoothing as a technique used by a company manager to reduce the change in the reported amount of income by means of artificial or real earnings management so that it can reach the desired income level. Practicing income smoothing reduces the quality of earnings, where the quality of earnings is defined as the ability of an enterprise to forecast future earnings (Dang, 2020), where managements of firms use earnings management phenomenon when it feels pressured to manipulate its earnings, just to achieve a predetermined target (Hernawati, 2021). However, real practice income smoothing goes beyond these. It encompasses all strategies used in hedging against high expenditure or cost and increasing business earnings or profit. These strategies range from acceptable accounting practices and generally accepted accounting principles, application of logical reasoning, etc. Managements may decrease or increase its income to be consistent with the income of the most recent years and expectations.
Income smoothing is a form of earnings manipulation to show that the company’s performance is good. Income smoothing can be detrimental to investors because investors do not know the real financial position and fluctuations of the company. Management of the company engages in income smoothing because investors tend to focus only on the amount of profit reported without regard to the process of generating profits. One incentive of income smoothing practice is that the management attempts to meet its prior forecasts. When there is a sharp drop in earnings, management may exercise income smoothing, to avoid a decrease in its share market value, because earnings have a direct effect on share market price. The second incentive of income smoothing practice is, managers’ compensation, especially when managers’ rewards are based on income or on meeting the predetermined goals of performance. Finally, firms would need to avoid violations of debt arrangements. The firm would have to take action to avoid debt arrangements. If a breach is found, then the other party may increase the interest rate and demand their money back immediately. This would cause short-term cash flow issues for the firm and in the long run, it can cause the “going concern concept” for the organization. This can be avoided by smoothing income, by increasing earnings. This would benefit firms as it can help them survive in the short term.

Based on the above discussion of income smoothing definitions and incentives, there are two forms of income smoothing. The first form is the form of reporting income higher than the actual, where this form is followed when managements have the incentive to affect the firm share market value or to keep the firm attractive and continue appearing as a good performing firm. A firm also increases the reported income when the management’s financial rewards depend on the amount of reported income. The second form of income smoothing is revealing reported income less than the actual, just to pay less income tax liability (Indrawan et al., 2018).

Mathews and Perera (1996), classified income smoothing into two types: original and artificial. practices: original and artificial. In original income smoothing, income smoothing is carried out by manipulating real transactions by delaying or expediting transactions. Conversely, in artificial income smoothing, income smoothing is carried out through the accounting steps of moving costs or income from one period to another by changing accounting policies.

Kustono et al. (2021) conducted research to analyze the quality of earnings and income smoothing motives in manufacturing companies in Indonesia. The research approach is carried out with a quantitative approach. The results of the study state that institutional ownership has no effect on earnings quality, institutional ownership has a negative effect on income smoothing, leverage has a negative effect on income smoothing, independent commissioners have a positive effect on earnings quality as well as independent commissioners have a positive effect on income smoothing. They assumed that the tendency of income smoothing can affect the quality of efficient earnings. Meanwhile, income smoothing affects the quality of company earnings. Management that performs income smoothing is more aimed at conveying the company’s prospects for generating profits rather than opportunistic motives.

Wijaya et al. (2020) determined the effect of profitability, financial leverage, and dividend policy on income smoothing in manufacturing companies registered on the Indonesia Stock Exchange in 2016–2018 with firm size as a moderating variable. This study used 38 manufacturing companies as a sample in this study and analysis of logistic regression. The results of this study indicated that profitability has a significant negative effect on income smoothing; firm size has a significant positive effect on income smoothing. In contrast, financial leverage and dividend policy have an insignificant effect on income smoothing. Firm size weakens profitability and the effect of dividend policy on income smoothing while firm size does not moderate financial leverage’s effect on income smoothing.

Almubaydeen (2020) evaluated income smoothing (IS) influence on tax profitability. Its relevance 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. 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. 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. The results proved a significant, positive relationship between IS and tax profits indicating that smoothing of income enables the banking sector in Jordan to represent stable profits and revenues in front of their respective shareholders and other stakeholders.

Ch (2019) aimed to obtain empirical evidence of the influence of financial performance proxy by profitability, liquidity, and capital structure to income smoothing practice. The population of this study covers property and real estate companies at Indonesia Stock Exchange in the period 2014–2017. The result showed that the independent variables profitability, liquidity, capital structure, and size of the company as a control variable, together explain 22.10% variation in the dependent variable income smoothing practice. The results also showed simultaneous independent variables, that is, profitability, liquidity, and capital structure significantly influence income smoothing practice.
Further, the test result showed that the profitability (ROE) variable and capital structure (DER) have a significant effect on income smoothing practice, but the liquidity (CR) variable has no significant effect on income smoothing practice.

Naljarreason et al. (2019) carried out a study to examine the impact of firm size and leverage on earnings management. The study is based on data covering the period 2013–2017, of a sample comprising listed manufacturing firms at the Indonesia Stock Exchange. The economic views method is used in data analysis, where the analysis and hypotheses testing reveals that the best panel regression model is the random effect model, and concluded that both firm size and leverage have a positive significant effect on earnings management of the manufacturing firms. The empirical results showed that leverage and firm size increases encourage managers to manipulate earnings.

Susanto and Pradipita (2019) investigated the effect of firm value and size on income smoothing. The sample of the research includes manufacturing companies listed on the Indonesian Stock Exchange from 2014–2016. The samples were determined using a purposive sampling method and 51 companies met the criteria used. Results showed that the effect of firm value on income smoothing is positive and significant. Meanwhile, the effect of firm size on income smoothing is negative and significant. Companies that create value in the eyes of investors will try to retain their investors by engaging in income smoothing. Income smoothing will convince investors to invest in the company. Meanwhile, large companies that are convinced that investors will continue to invest do not typically engage in income smoothing.

Indrawan et al. (2018) examined whether audit committee, firm size, profitability, and leverage, affect income smoothing in listed manufacturing firms at Indonesia Stock Exchange. Data covering the period 2013–2015, had been collected and used in analysis and hypotheses testing. Using the linear regression method, the study showed that firm size has a positive significant effect on income smoothing. This means that the bigger the size, the more practices of income smoothing. Profitability has an adverse relationship with income smoothing, which means that the more the profits of a firm, the lesser income smoothing practices. Besides, the audit committee and leverage also have an adverse relationship with income smoothing.

Nurliyasari and Saifudin (2017) determined the possible variables affecting income smoothing. The objective of the study was to analyze the factors influencing income smoothing of pharmaceutical listed firms at IDX. 9 pharmaceutical firms data covering the period 2009–2013 was used in the analysis. The factors that had been investigated in the study include; share price, ownership structure, firm size, profitability, and leverage. Using the logistic regression method in hypotheses testing, the study showed that share price and profitability do not affect income smoothing, whereas ownership structure, firm size, and leverage have a significant impact on the practices of income smoothing.

Tudor (2015) investigated the income smoothing level effect on earnings informativeness. The purpose of the study was to investigate the relationship between income smoothing and accounting conservatism. Income smoothing is computed by dividing the variation in income by the variation in cash flows from operations. Firms listed on the UK, France, and Netherlands stock exchanges had been chosen, and the data of these firms was used in hypotheses testing. Earnings informativeness is used using a returns-earnings regression based on Zarowin (2002). The study found that firms in the UK use less income smoothing than the firms of France and the Netherlands. The study also showed that income smoothing is used at higher levels after International Financial Reporting Standards (IFRS), but the most important conclusion is that income smoothing improves earnings informativeness in the pre-IFRS period for all firms, especially in firms of the UK.

Yang et al. (2012) carried out a study to empirically examine whether the mechanisms of corporate governance affect income smoothing behavior in the People’s Republic of China. The sample comprises 1,358 companies listed in the Shanghai Stock Exchange and the Shenzhen Stock Market during the period 1999 to 2006. By comparing the variability of income to the variability of sales, and income smoother can be identified if income is less variable than sales. The empirical results showed that income smoothing is more severe when the state is the controlling shareholder of the Chinese listed firm. Firms with more independent directors are more likely to engage in income smoothing. The governance mechanisms such as the board of directors, supervisory board, audit committee, external auditors, and shareholders’ participation are not effective in curtailing income smoothing in China.

Hejazi et al. (2012) investigated the impact of income smoothing and earnings quality on the performance of the listed firms at the Tehran Stock Exchange. Data covering the period 1999–2003, of a sample consisted of 96 firms had been collected and used in analysis and hypotheses testing. The study showed that neither income smoothing nor earnings quality affects performance. The study did not reveal a significant difference between the smoothers’ performance mean and the non-smoothers’ mean. Besides, no differences are found between firms of high earnings quality and those having low quality of earnings.

Michelson et al. (2011), carried out a study to investigate the different methods of income smoothing detection. Based on a sample of firms, 7 methods were tested and investigated in the study. The study showed that there is no large difference among 6 out of 7 of these methods, with regard to income smoothing, and only one was different.

Kusuma (2005), examined the variation in earnings-price ratios across Japanese and U.S. firms. The objective of
this study is to show that Japanese firms engage in income smoothing practices that stabilize earnings, there by increasing Japanese investors’ willingness to pay higher prices for Japanese stocks. Comparing the income smoothing index and the proportion of firms identified as smoothers shows that the intensity of Japanese firms practicing income smoothing is greater than that of U.S. firms. The results also show that the income-smoothing index is significant in explaining the cross-sectional variation of earnings-price ratios for Japanese firms but it is not significant for U.S. firms.

Based on the survey that had been made for the related literature and prior studies on income smoothing, three hypotheses had been developed as follows:

**H1:** The profitability of Food and Beverage (F&B) firms listed on the Amman Stock Exchange (ASE) does not affect the practices of income smoothing.

**H2:** The firm size of Food and Beverage (F&B) firms listed on the Amman Stock Exchange (ASE) does not affect the practices of income smoothing by these firms.

**H3:** There is no collective effect of profitability and firm size together, on income smoothing practices, of Food and Beverage (F&B) firms listed on the Amman Stock Exchange (ASE).

3. Methodology

The population of the study comprises all F&B firms listed on the Amman Stock Exchange by the end of 2020 to examine whether profitability and leverage are good predictors for income smoothing practices. Data covering 10 continuous fiscal years, along 2010–2019, had been collected, classified, and used in the analysis and hypotheses testing.

Income smoothing practice is the single dependent variable of the study, whereas the independent variables are profitability and firm size. The debt ratio is used in the study as a control variable. Income smoothing, as the dependent variable, is measured in the study using Eckel Index, which is found using the following formula.

\[
\text{Eckel Index} = \frac{CV_{AI}}{CV_{AS}}
\]  

Where:

CV: Coefficient of variation

\(\Delta I\): Change in income

\(\Delta S\): Change in sales

Return on Equity (ROE) is used as an indicator for firm profitability. ROE as a measure of financial performance is calculated by dividing net income by shareholders’ equity. With regard to firm size, the natural logarithm of total assets is used as an indicator for size. The best indicator for financial leverage, which is used as a control variable in the study, is the Debt Ratio (DR), where it is computed by dividing total liabilities by total assets.

Descriptive statistics including, the mean and the standard deviation were used in data analysis whereas, logistic regression analysis is used in testing the first 2 hypotheses, and the multiple linear regression method is used in testing the third hypothesis. Therefore, the regression method is developed to be as follows.

\[
IS = B_0 + B_1 \text{ROE} + B_2 \text{FS} + B_3 \text{DR} + E
\]  

All hypotheses are tested under a 95 percent level of confidence, which is equivalent to 0.05, a predetermined coefficient of significance. The main decision-making base to accept or reject a null hypothesis is the comparison between the computed coefficient of significance, and its corresponding predetermined one, which equals 0.05. Using the base above, the null hypothesis is accepted when the computed coefficient of significance is higher than the predetermined coefficient of significance, and the null hypothesis is rejected when the computed coefficient is less than the predetermined coefficient of significance. With regard to the third hypothesis, which encompasses the collective effect of the two independent variables, it had been tested using the multiple linear regression method. An additional and equivalent decision-making base is used with regard to the third hypothesis, based on the \(f\)-value. That is comparing the computed and tabulated \(f\)-value, where the null hypothesis is accepted when the computed \(f\)-value is less than the tabulated, and rejected when the computed \(f\)-value is higher than its corresponding tabulated one.

4. Results

4.1. Descriptive Statistics

Table 1 shows the minimum and maximum values, mean, and standard deviation of the related dependent and independent variables. Taking into consideration that income smoothing is a binomial variable in nature, the table shows that the mean of income smoothing is 0.75 with a 0.436 standard deviation. Because an income smoothing practicing firm is given 1, while a firm not practicing income smoothing is given 0, the mean of income smoothing indicates that most firms within the sample do not practice income smoothing. The table also shows that the mean of the debt ratio, a control variable, is 0.34 with a 0.246 standard deviation. The mean of the debt ratio indicates that most of the firms within the sample depend more on equity and less on debt in their capital structure. The standard deviation of the debt ratio refers to the low variability of debt in the capital structure for firms within the sample. With regard to the independent variable the natural logarithm of assets, as an indicator for
Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Minimum Value</th>
<th>Maximum Value</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Smoothing</td>
<td>0</td>
<td>1.000</td>
<td>0.750</td>
<td>0.436</td>
</tr>
<tr>
<td>Debt Ratio (DR)</td>
<td>0.07</td>
<td>1.000</td>
<td>0.347</td>
<td>0.246</td>
</tr>
<tr>
<td>Log. Assets</td>
<td>6.795</td>
<td>7.979</td>
<td>7.369</td>
<td>0.369</td>
</tr>
<tr>
<td>Return on Equity (ROE)</td>
<td>-345.44</td>
<td>0.22</td>
<td>-4.284</td>
<td>38.625</td>
</tr>
</tbody>
</table>

Table 2: Test of Data Validity and Study Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Ratio (DR)</td>
<td>0.825</td>
<td>1.207</td>
</tr>
<tr>
<td>Log. Assets</td>
<td>0.907</td>
<td>1.103</td>
</tr>
<tr>
<td>Return on Equity (ROE)</td>
<td>0.886</td>
<td>1.129</td>
</tr>
</tbody>
</table>

4.2. Correlations

The Pearson correlation coefficients among the entire dependent and independent variables are found and shown in Table 3. The table shows that the coefficient of correlation between ROE and log. assets equal 0.07, with a 0.540 coefficient of significance. In other words, no strong correlation exists between both independent variables. Because there is no strong correlation between both independent variables, the statistical power of the model is strong.

4.3. Hypotheses Testing

It was mentioned above, that all hypotheses had been tested under 0.95 level of confidence, or 0.05 (1 – 0.95) coefficient of significance. The first two hypotheses were tested using the logistic regression method, while the third had been tested using the multiple regression method.

4.3.1. Testing the First Hypothesis

The first hypothesis is developed to enable testing whether the profitability of F&B firms listed on the ASE, affects income smoothing practices by the management of these firms. The first hypothesis is listed in its null form, as follows.

The logistic regression method had been used in testing the first hypothesis. Table 4, shows the result of the test, which shows that the computed coefficient of significance equals 0.105, whereas the predetermined coefficient of significance is 0.05. Because the computed coefficient of significance is greater than the predetermined coefficient of significance, the null hypothesis is accepted. In other words, the tests show that profitability has no significant impact on the income smoothing practices by Jordanian-listed F&B firms.
4.3.2. Testing the Second Hypotheses

The second hypothesis had been developed to test whether firm size has a significant effect on income smoothing practices. The natural logarithm of total assets is used as an indicator for firm size. This hypothesis is tested using the logistic regression method. The hypothesis is listed in its null form, as follows.

Table 5 shows the results of the test made for the second hypothesis. As shown in the table, the computed coefficient of significance equals 0.002, where this value of the computed coefficient of significance is less than the predetermined coefficient of significance, which equals 0.05. Because the computed coefficient of significance is less than the predetermined coefficient of significance, the null hypothesis is rejected. In other words, the tests show that firm size has a significant positive effect on income smoothing practices by Jordanian-listed F&B firms.

4.3.3. The 3rd Hypothesis Test

The third hypothesis is different, where it is developed to examine the collective effect of both ROE as a measure of profitability and the natural logarithm of assets as a measure of firm size on income smoothing practices. The multiple linear regression method is used in testing this hypothesis. The hypothesis is listed again, in null form, as follows.

The results of the 3rd hypothesis test are shown in Table 6. The table shows that the computed \( f \)-value equals 8.241, and the computed coefficient of significance equals zero. Because the computed \( f \)-value is higher than its corresponding tabulated one, and because the computed coefficient of significance is less than the predetermined coefficient of significance, which equals 0.05, the null hypothesis is rejected, and instead, the alternate hypothesis is accepted. This result means that the logarithm of assets and profitability together have a significant impact on income smoothing practices by Jordanian-listed F&B firms.

### Table 5: The 2nd Hypothesis Test Results

<table>
<thead>
<tr>
<th>B</th>
<th>S.E</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log. Assets</td>
<td>2.927</td>
<td>0.950</td>
<td>9.497</td>
<td>1</td>
<td>0.002</td>
</tr>
</tbody>
</table>

### Table 6: 3rd Hypothesis Multiple Regression Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>( F )</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.68</td>
<td>3</td>
<td>1.227</td>
<td>8.421</td>
<td>0</td>
</tr>
</tbody>
</table>

5. Conclusion

This study examines whether firm size and profitability have an influence on the income smoothing practices of food and beverages (F&B) firms listed on the Amman Stock Exchange (ASE). All 8 F&B firms listed on the ASE are used as the study sample. Data covering the period 2010–2019, of the firms is used in the analysis and hypotheses testing. Eckel model is used in determining and classifying firms into smoothers or non-smoothers, while ROE is used as an indicator of profitability, and the natural logarithm of total assets is used as an indicator of firm size. The debt ratio is used as a control variable in the study. Using the logistic regression method in testing the individual effect of firm size and profitability, the study shows a significant positive effect of firm size, as measured by logarithms of assets, while no individual significant effect had been found of profitability, as measured by ROE, on income smoothing practices. Besides, using the multiple linear regression method, the study demonstrates that profitability and firm size together have a positive significant effect on income smoothing practices by Jordanian-listed F&B firms. The findings of the study are in agreement with the findings of Wijaya et al. (2020), Indrawan et al. (2018), Nurliyasar and Saifudin (2017), Nalareason et al. (2019), Susanto and Pradipta (2019), and Ch (209). Studies and investigations are recommended to be made for determining the possible policies, and procedures, that can restrict the practices of income smoothing.

References


