

Leverage, earnings management and audit industry specialization: the case of Palestinian-listed companies

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Abstract

Purpose – This study explores the relationship between leverage and earnings management in the context of Palestinian-listed companies, while also investigating whether audit industry specialization influences this relationship.

Design/methodology/approach – The data used in this study are extracted from public financial reports of 39 firms listed on Palestine Stock Exchange (PEX), spread across the service, insurance, industry and investment sectors, for the time period 2011–2022. A model is developed to test 4 hypotheses about the relationships between long-term and short-term debts, and earnings management, and then to examine the influence of audit industry specialization on these relationships.

Findings – The results depict a significant, negative relationship between long-term debt and earnings management. Whereas the association between short-term debt and earnings management is insignificant. Audit industry specialization is proven to have no influence on the relationships between the independent and the dependent variables. Results are robust for firms that changed their accounting policies and using different audit industry specialization proxies.

Originality/value – The association between leverage and earnings management is a significant research topic, given that previous research identifies credit ratings and debt covenant violations as key factors which motivate earnings management. This paper fills a substantial research gap by examining the relationship between the two variables in the context of Palestinian-listed firms, while emphasizing the distinction between long-term and short-term debts. It also highlights key relationships that have been neglected in this particular context, which adds to the body of literature. Furthermore, the research's findings provide a solid information

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base that is of great interest to accounting and auditing experts and that may be seriously evaluated to support and advance the PEX sector.

Keywords Leverage, Short-term debt, Long-term debt, Earnings management, Audit industry specialization, Palestine

Paper type Research paper

1. Introduction

Public enterprises were essential to economic growth of many nations between the 1930s and the 1970s (Zhu, 2005). According to previous literature, public enterprises continue to positively impact economic development (Doamekpor, 1998) and provide most of business activities (Manyika *et al.*, 2021). Corporations are to be run in a way that maximizes share value, which purports to reflect the present worth of the total anticipated future profits (Aoki and Aoki, 2010).

To finance their activities, companies can either employ debt financing, which includes interest-bearing obligations, or equity financing through share ownership (Czapińska, 2013). Given that it significantly affects the cost of capital, level of risk and performance of the firm, choosing the optimum capital structure arrangement is a significant choice (Danso *et al.*, 2021).

As managers are responsible for choosing the financing decision (Cole and Schneider, 2020), increasing information asymmetry might motivate them to go after their benefits (Gonzalez and André, 2014). Consistently, firms might sometimes choose to engage in more leverage to mitigate agency problems (Serrasqueiro and Caetano, 2015). This may induce managers to engage more in earnings management to control the outcomes of financial statements (Mahjoub and Miloudi, 2015). To do so, they take advantage of lax accounting regulations and legal gaps (Isiaka, 2019; Shu and Thomas, 2019).

The association between leverage and earnings management is a significant research topic. Previous research identifies credit ratings and debt covenant violations as key factors which motivate earnings management. For example, DeFond and Jiambalvo (1994) and Schrand and Zechman (2012) find that earnings management in firms that incur abnormal accruals increases significantly in the year before debt-covenant violation. In the same vein, Franz *et al.* (2014) and Sweeney (1994) observe firms practice more earnings management when debt covenant violations are imminent. Alternatively, Jha (2013) finds evidence that companies manage earnings downward in quarters where covenant violations take place while they raise earnings in quarters before they do. On another side, Alissa *et al.* (2013) and Liu *et al.* (2018) explain that firms manage earnings upward when below expected credit ratings and vice versa.

From a different angle, due to accounting for governmental activities and the examination of tax receipts, the auditing profession has existed for hundreds of years (Collings, 2011). The goal of audit is to equip the auditor with the knowledge necessary to determine whether a company's financial statements "fairly present the entity's affairs at the reporting date in all material respects" (Collings, 2011). DeAngelo (1981) defines audit quality as the likelihood that the auditor is able to identify fraud and errors in financial statements and reveal them honestly.

Despite the abundance of studies about leverage and earnings management, there is little work specifically focused on the Palestinian context, which represents an emerging economy characterized by its poor natural resource base, small market, lagging development, investments and policy decisions that prioritize tertiary (services) industries over primary (agricultural and mining) or secondary (manufacturing) ones, and imports over domestic production (Khalidi, 2017). Adding this to the unique characteristics as an occupied territory, by addressing the Palestinian context, a more nuanced understanding of the financial-related factors of conflict-affected areas is provided, paving the way for more insights that can be used to guide policy frameworks. Additionally, to our best knowledge, the association between leverage, earnings management and audit quality has not been addressed before in this particular context. Considering the critical role that the Palestinian-listed companies sector plays in attracting foreign investments and maintaining national savings, which

significantly contributes to the Palestinian economy by pooling money into productive projects, decreasing unemployment rates and thus improving the standards of living, it is essential to maintain and develop this sector through a thorough evaluation and assistance to decision-makers and stakeholders to create focused solutions. Furthermore, financial reporting and auditing aspects form essential pillars for continuity; therefore, this study addresses the relationship between leverage and earnings management, and the audit quality's effect on this relationship.

Various proxies are identified to measure audit quality. In this study, the authors employ audit industry specialization, which encompasses audit and non-audit skills and knowledge that audit firms deploy while providing audit services (Salehi *et al.*, 2019). Audit industry specialists provide higher audit quality through their experience, which is accumulated by serving other clients and employing and sharing best practices. Therefore, most of the scholars who investigate the link between audit industry specialization and audit quality suggest that they associate positively (see, for example, Chi *et al.* (2017) and Minutti-Meza (2013)).

The remainder of the study is structured as follows: the next section displays related literature and hypotheses development. After that, analysis is presented, and then the study concludes with a discussion of the results and implications.

2. Literature review and hypotheses development

2.1 *The accounting and auditing profession in Palestine*

The accounting and auditing practices have been there in the Palestinian context since the British Mandate for Palestine (1919–1948). However, after the 1948 Palestinian war (Nakba), most of the Palestinian accounting and auditing firms moved to neighboring countries such as Jordan (Ateeq, 2017). Following the 1993 Oslo Accords, the Palestinian Association of Certified Public Accountants (PACPA) was established with the mission of protecting the interests of its members (certified auditors) and upgrading their professional performance by providing continuous technical and ethical training (PACPA, 2022).

In addition, in 2004, the Palestinian Board of Professional Auditing (BOPA) was established as the entity entitled to regulate the auditing profession in Palestine by issuing a professional code of conduct, granting auditing certificates, holding certified auditing exams and conducting investigations, and sanctions or disciplinary procedures (BOPA, 2022a). The BOPA requires all licensed auditors to follow the International Standards on Auditing (ISA) (BOPA, 2019). According to the most recent record, 339 certified auditors are licensed to provide auditing services in Palestine (BOPA, 2022b); of this figure, 251 auditors are still working at either one of the 11 licensed auditing firms (including the big four auditing firms: EY, Deloitte, KPMG and PwC) or at their own offices which count to more than 150 licensed offices (BOPA, 2022b).

In accordance with Palestinian code of corporate governance, the firm's BOD and the audit committee must offer recommendations to the shareholders for the appointment of external auditors and approval of their fees at the annual meeting. External auditors need to be properly qualified and licensed (Code of Corporate Governance in Palestine, 2009). Nevertheless, Palestinian auditors perform their auditing services in a unique financial and economic environment; Israel's government has placed limitations on the Palestinian economy, limiting commerce and restricting Palestinians' mobility (Samhouri, 2018; Vaggi, 2011). Israeli checkpoints and closures diminish Palestinians' market accessibility and sharply raise transaction costs. Along with high taxes levied on the goods imported by Palestinian businesses (Ahmad, 2011), Israel also takes the majority of indirect tax receipts before returning them to the Palestinian government (Vaggi, 2011). Furthermore, Palestinian businesses are required to transact in Israeli shekels and get Israeli tax clearances in accordance with Paris Economic Protocol (Annex, 1994). This brings up the ongoing impact of the Israeli government's monetary policies on the Palestinian economy (Muhtaseb and

Eleyan, 2021). Not to mention the fact that the Palestinian Monetary Authority (PMA), which was founded following the 1994 Paris Economic Protocols, is unable to produce and run its own Palestinian currency; hence, it cannot create monetary policies that allow it to meet economic demands (IMF, 2012).

2.2 Leverage and earnings management

Modigliani and Miller (1958), whose theory forms the foundation of modern corporate finance, argue that debt increases both risks and returns to owners. However, because the likelihood of financial distress rises as leverage rises, they extended the model by subtracting the present value of financial distress cost to show how it lowers the firm's worth. In this way, the ideal debt-to-equity ratio includes weighing the benefits of tax shields against the costs of bankruptcy. On the other hand, the trade-off theory, introduced by Kraus and Litztenberger (1973), suggests that the most favorable capital structure mixture results when the benefits and costs which arise from debt financing are counterbalanced. Alternatively, according to the pecking order theory, which Myers and Majluf (1984) popularized, businesses often prefer internal finance to external borrowing. Whereas debt is preferable over equity if needs are greater than available retained earnings.

Few scholars assert that capital structures are typically stable (Andres *et al.*, 2014); many others, however, explain that firm-specific factors influence capital structures. Among these factors are *asset tangibility* (Ranjan, 2021), *profitability* (Shahzad *et al.*, 2020), *growth* (Jiang *et al.*, 2019), *liquidity* (Yusuf *et al.*, 2015), *firm's size* (Ji *et al.*, 2019; Shil *et al.*, 2019), *firm's age* (Chakrabarti and Chakrabarti, 2019; Shil *et al.*, 2019), *non-debt tax shield* (Kumar *et al.*, 2017; Shil *et al.*, 2019) and *business risk* (Ranasinghe, 2021).

Managers have access to more information than owners, which creates information asymmetry (Prayogi *et al.*, 2022). Riahi-Belkaoui (2004) describes earnings management as a strategy used by managers to obtain personal benefits while interfering with the process of external financial reporting. To manage earnings, they can use a variety of approaches such as changing the timing of asset sales (Wang *et al.*, 2010), altering the aging of receivables and bad debt ratios (Lee and Choi, 2016) and accelerating the recognition of revenues or postponing the recognition of expenses (Franz *et al.*, 2014). Earnings management is known to mislead information and adversely affect operating performance and stock returns (Kothari *et al.*, 2016).

Earlier research identified various motives for managing earnings such as *to influence compensation* (Alhadab and Al-Own, 2019), *to avert reporting losses* (Roychowdhury, 2006), *to meet analysts' forecasts* (Burgstahler and Eames, 2006), *to affect credit ratings* (Liu *et al.*, 2018) and *to avoid debt-covenant violation* (Jha, 2013). On another hand, Salehi *et al.* (2022) show that managers' narcissism, overconfidence and myopia positively influence real and accrual earnings management. Their findings are in line with the findings of Capalbo *et al.* (2018), Kontesa *et al.* (2021) and Schrand and Zechman (2012).

Literature which addressed financing decisions and earnings management association failed to come to a clear consensus. Al-Mohareb and Alkhalailah (2019) identify a significant and positive relationship between financial leverage and managing earnings. Their results are in line with earlier studies which claim that businesses with more debt tend to practice more earnings management to dodge covenant violations as noted in the previous section (e.g. Alzoubi (2018), and Lazzem and Jilani (2018)). Additionally, Haw *et al.* (2004) suggest that highly leveraged firms tend to manage earnings to overcome accounting constraints and enhance debt-contracting negotiation power. Alternatively, Jensen (1986) indicates that debt financing imposes an effective monitoring technique that leads to fewer earnings management practices. Also, higher leverage levels involve greater debt commitments, leaving managers with reduced levels of free cash flows and constraining their capability to engage in discretionary suboptimal projects (Jensen, 1986). Others who provide evidence that

is consistent with Jensen's (1986) argument include Ahn and Choi (2009), and Ghosh and Moon (2010). Therefore, the study hypothesizes the following:

H1. There is a significant relationship between long-term debt and earnings management in the context of Palestinian-listed companies.

On the other hand, the distinction between short-term and long-term debt and their relation to earnings management has not received significant emphasis previously. Short-term debt, as indicated by Vijayakumaran and Vijayakumaran (2019), introduces liquidity challenges and reduces a firm's creditworthiness due to quicker repayments. Choosing short-term debt involves a trade-off between underinvestment and liquidity risk costs. Fung and Goodwin (2013) note that monitoring creditors with short-term debt may lead to increased withdrawal and higher renegotiation costs. Datta *et al.* (2005) contend that managers choosing short-term debt expose themselves to extra monitoring activities. Therefore, the second hypothesis of the study is:

H2. There is a significant relationship between short-term debt and earnings management in the context of Palestinian-listed companies

2.3 Audit industry specialization and earnings management

High-quality audit enhances the reliability of financial statements and highlights the investors' assessments of the firm's value (Titman and Trueman, 1986). As cited by Prayogi *et al.* (2022), auditors can help bridge the gap between the interests of shareholders and executives. According to Azad *et al.* (2023), substantial audit modifications negatively impact earnings management; thus, earnings management could be reduced by paying more attention to a high-quality audit and, as a result, detecting misstatements and amending or reporting them. Additionally, a high audit quality raises financial accounts' reliability (Titman and Trueman, 1986). Consistently, audit quality is adversely associated with earnings management (Aliyu *et al.*, 2015). Furthermore, several studies addressed audit quality as a moderating variable; for example, Imen and Anis (2021) investigated the interrelationships between modified audit opinion and earnings management, and how audit quality might moderate these relationships; their findings show that firms that receive modified audit opinions manage earnings more effectively than those that receive clean opinions. They also found that the relationship between the audit opinion and earnings management is moderated by audit quality. Mardessi (2022) assessed the moderating effect of audit quality on the audit committee-real earnings management association. The results show that audit quality positively affects the relationship between the two variables.

As mentioned earlier, the study employs "audit industry specialization" as an audit quality proxy. Audit industry specialists provide a higher audit quality through their experience, accumulated by serving other clients and employing the best practices. Lopez and Vega (2019) indicate that firms audited by more specialized Certified public accountants (CPAs) tend to have lower degrees of discretionary accruals. Additionally, Ozcan (2019) addresses the association between audit industry specialization and earnings management for a sample of 97 non-financial firms listed on Borsa Istanbul, and provides evidence that audit industry specialization significantly and adversely affects earnings management. Consistently, Jayeola *et al.* (2017) identify a negative association between audit industry specialization and earnings management in the context of Nigerian banking sector. The same conclusion is achieved for a sample of 72 Jordan, industrial quoted companies (Alzoubi, 2018). Furthermore, Assawer and Anis (2019) provide evidence of a positive link between loan loss provisions and earnings management, indicating that managers use loan loss provision to smooth earnings; however, this relationship is mitigated by the auditors' specialty, demonstrating that the auditors' expertise reduces earnings management.

Therefore, the following two hypotheses are developed:

- H3.* More specialized audit firms negatively affect the significant relationship between long-term debt and earnings management in the context of Palestinian-listed companies.
- H4.* More specialized audit firms negatively affect the significant relationship between short-term debt and earnings management.

3. Methodology

3.1 Data

The data used in this study are extracted from financial reports of firms listed on PEX. A total of 48 businesses are listed on PEX, spread across the service, insurance, banking, industry and investment sectors (PEX, 2022). The research targets non-banking companies, thus eliminating 4 conventional and 3 Islamic banks which are supervised by PMA and have to adhere to the rules and regulations imposed (PMA, 2023). The study also eliminates 2 companies which were listed recently (in 2020 and 2021). The remaining 39 companies (81% of listed companies) form the sample of the study.

3.2 Variables and variables measurement

3.2.1 Independent variables: long-term and short-term debts. Following a respective strand of research, to account for leverage, long-term debt and short-term debt ratios to total assets are used (Danso *et al.*, 2021; Forte and Botelho, 2021; Hussain *et al.*, 2022; Shahzad *et al.*, 2020; Shil *et al.*, 2019).

3.2.2 Dependent variable: earnings management. A widely used indicator of managing earnings is discretionary accruals, which represent changes made to the accounting component of earnings (Fung and Goodwin, 2013). This study determines discretionary accruals using Kothari *et al.* (2005) model, as illustrated by the following:

$$TAt/At - 1 = \alpha 1 (1/At - 1) + \alpha 2 (\Delta REVt - \Delta RE Ct)/At - 1 + \alpha 3 (PPTt/At - 1) + \alpha 4 ROAt + et.$$

Where,

TAt: is total accruals for year t

$\alpha 1, \alpha 2, \alpha 3$: are the firm's specific parameters

At-1: is total assets for year t-1

ΔREC : is the difference between net receivables in year t and net receivables in year t-1

PPEt: is gross property, plant and equipment for year t

ROAt: is the return on assets for year t

et: is the residual, representing the discretionary portion of the total

The absolute value is taken into consideration since the goal is to examine the quality of earnings management rather than the direction (Fung and Goodwin, 2013; Hickman *et al.*, 2021; Mendoza *et al.*, 2020; Rezaee *et al.*, 2020).

3.2.3 Moderating variable: audit industry specialization. In line with a vast bulk of literature (examples include Garcia-Blandon and Argiles-Bosch (2018), Jaggi *et al.* (2015)), audit industry specialization is measured using the audit company's market share, based on the number of clients.

3.2.4 Control variables. To account for potential confounding impact, and based on a thorough review of previous literature, the study controls for several variables shown in Table 1 (available in supplementary material to article), for all of which a consensus has been achieved to affect the degree of EM.

A summary of all the variables used in this study, including their functions and measurements, is shown in Table 2 (available in supplementary material to article).

To test H1 and H2, the following multiple regression model is used:

$$\begin{aligned} EMit = & \beta_0 + \beta_1 LNGDBTit + \beta_2 SRTDBTit + \beta_3 FRMGRWTHit + \beta_4 ASTTANGit \\ & + \beta_5 BODSZit + \beta_6 CSHINTSTit + \beta_7 FRMAGEit + \beta_8 ROAit + \epsilon it \end{aligned} \quad (1)$$

Where,

EMit: is earnings management for firm *i* at time period *t*

$\beta_0 \dots \beta_8$: are the model parameters

LNGDBTit: is long-term debt for firm *i* at time period *t*

SRTDBTit: is short-term debt for firm *i* at time period *t*

FRMGRWTHit: is the firm growth for firm *i* at time period *t*

ASTTANGit: is the assets tangibility for firm *i* at time period *t*

BODSZit: is the board of directors' size for firm *i* at time period *t*

CSHINTSTit: is the cash flow intensity for firm *i* at time period *t*

FRMAGEit: is the firm age for the company *i* at time period *t*

ROAit: is the returns on assets for the company *i* at time period *t*

eit: is the error term for company *i* at time period *t*

Then to test the third and fourth hypotheses, audit industry specialization is incorporated with the previous multiple regression analysis:

$$\begin{aligned} EMit = & \beta_0 + \beta_1 LNGDBTit + \beta_2 SRTDBTit + \beta_3 AUDSPECLit \\ & + \beta_4 LNGDBTit * AUDSPECLit + \beta_5 SRTDBTit * AUDSPECLit \\ & + \beta_6 FRMGRWTHit + \beta_7 ASTTANGit + \beta_8 BODSZit + \beta_9 CSHINTSTit \\ & + \beta_{10} FRMAGEit + \beta_{11} ROAit + \epsilon it \end{aligned} \quad (2)$$

Where,

AUDSPECLit: is the audit firm industry specialization for firm *i* at time period *t*

4. Analysis and results

In Table 3 (available in supplementary material to article), the descriptive statistics for the main variables used in the study are displayed. They give a summary of the information

utilized in the study. The mean values for both long-term and short-term debts are 0.056 and 0.031, respectively. The findings also demonstrate that for certain businesses, debt-free funding was used entirely. Regarding earnings management, there is a significant difference between the companies listed on PEX during the study period, as indicated by the mean of 0.14 and the standard deviation of 0.384.

4.1 Testing H1 and H2

The results of Equation (1) are displayed in Table 4 (available in supplementary material to article). The findings show that long-term debt inversely affects earnings management at a significance level of 1%, indicating that the more the company finances its operations using long-term debt, the lower the occurrence of earnings management. Furthermore, short-term debt is inversely related to earnings management; however, this relationship is insignificant. Therefore, based on the results, H1 is accepted, whereas H2 is rejected.

4.2 Testing H3 and H4

Table 5 (available in supplementary material to article) shows the results of Equation (2), which indicate that although audit industry specialization weakly and positively influences the level of associations between long-term and short-term debts, and earnings management (coefficients = 0.011 and 0.012, respectively), this influence is insignificant (p -value > 0.05); therefore, H3 and H4 are both rejected.

4.3 Additional analysis and robustness check

4.3.1 Sub-groups analysis. In order to better confirm the results and provide depth to the research, a dummy variable is introduced to show whether companies altered their accounting procedures on an annual basis. This variable's justification is that companies typically manage earnings by being flexible with their accounting policies and procedures (Isiaka, 2019; Shu and Thomas, 2019). Therefore, the data are split into two groups: (1) companies that changed their accounting policies, and (2) companies that did not change their accounting policies. The first two hypotheses are reexamined for each group independently. As seen in Table 6 (available in supplementary material to article), long-term debt has an adverse effect on earnings management for companies that have modified their accounting principles and are more likely to manage earnings. This outcome is significant at 5%. Whereas the relationship between long-term debt and earnings management for firms which did not change their accounting policies and thus are less likely to manage earnings is insignificant. This finding supports earlier results.

4.3.2 Audit industry specialization - continuous market share. To check for the robustness of audit industry specialization impact, continuous market share based on clients' sales is applied as an alternate proxy of audit industry specialization. This indicator has been deployed as an audit specialization determinant by multiple scholars (e.g. Garcia-Blandon and Argiles-Bosch (2018), Kharuddin *et al.* (2019)). The results displayed in Table 7 (available in supplementary material to article) indicate that even when audit industry specialization is measured using clients' continuous sales, its moderation impact on the debts-earnings management association is insignificant.

5. Discussion

First, the results of the study demonstrate that long-term debt adversely influences earnings management. This finding aligns with a respectful strand of previous research. According to Jensen and Meckling (1976), the finance policy causes external creditors to be monitored and scrutinized more frequently, which limits managerial opportunism and

underinvestment. This is due to the fact that as debt level rises, the firm's credit risk and default likelihood rise as well (Hunjra *et al.*, 2022). Other authors explain that issuance of debt subjects managers to increased and examined surveillance, discouraging them from managing earnings, which is known as "debt control hypothesis" (Maurice *et al.*, 2020; Rey *et al.*, 2020). In the same vein, Naz and Sheikh (2023) contend that the use of debt for financing purposes increases creditors monitoring, which would induce managers to move toward real earnings management instead of accruals earnings management. Furthermore, Eliwa *et al.* (2019) argue that quality of accruals is an important factor that affects the cost of debt; they explain that the amount of interest which creditors are willing to receive increases when earnings quality decreases; therefore, managers are encouraged to improve earnings quality to avoid increasing cost of debt. Additionally, Abdeljawad *et al.* (2022) investigated the effect of debt on the relationship between overinvestment and financial performance in the context of Palestinian non-financial institutions. They indicate that debt is a useful strategy for decreasing free cash flow issue and enhancing company governance to manage agency issues.

Second, audit industry specialization is proven not to moderate previous associations. Although this finding does not support previous research which suggests that more specialized audit firms execute better audit quality, such as Chi *et al.* (2017) and Minutti-Meza (2013), the insignificant moderation impact is consistent with scholars who identified an insignificant effect of audit industry specialization on the level of earnings management, such as Yasser and Soliman (2018), Sumiadji and Subiyantoro (2019) and Hsu and Liao (2023). On the other hand, this result can be explained by Ateeq's (2017) argument that professional independence deficiencies, insufficient adherence to international accounting and auditing standards and other challenges face the PACPA. Additionally, Abdel Jawad *et al.* (2019) explain that the efficacy and efficiency of audits increase when analytical processes are used as a focus-directing, test-reducing and all-around reasonable check of the fair presentation of financial statements; nevertheless, they demonstrate that in the overall stages of an audit, Palestinian auditors use analytical procedures the least. In reviewing the overall fairness of financial statements, analytical procedures are primarily utilized to identify major changes in financial accounts. Furthermore, Mansour and Chenikhar (2020) argue that the application of ISAs and professional body inspection of their implementation in Palestine are hampered by the unstable political and economic environment.

6. Conclusion and implications

The association between leverage and earnings management is a significant research topic that is explored in the Palestinian context in this study. The study also investigates the impact of audit industry specialization on this association. Building on data extracted from reported accounting information of 39 non-banking firms listed on PEX for the period 2011–2022, the results depict significant, negative relationship between long-term debt and earnings management, whereas short-term debt is found to have an insignificant impact on earnings management. Furthermore, the results show that audit industry specialization does not have a moderating effect on the relationships between the independent and the dependent variables. These findings are robust for firms identified to change their accounting policies and using alternate audit industry specialization proxies.

This paper fills a substantial research gap by examining the relationship between leverage and earnings management in the context of Palestinian-listed firms, which undergoes an emerging economy where sustained growth depends on political and economic stability. It also highlights key relationships that have been neglected in this particular context, which greatly adds to the body of literature. In an emerging economy,

understanding the complex interactions between leverage, earnings management and audit quality is important for both academic research and practical applications; by examining how firms in these economies use leverage and manage earnings, more understanding is gained about these companies' risk-taking behavior and financial stability. The inverse link between long-term debt and earnings management implies that businesses with more debt will be more likely to preserve their financial reporting's objectivity and credibility. This highlights the value of effective corporate governance practices that encourage financial accountability and enhance investors' confidence. Thus, policymakers may take this finding into account to develop new regulations that promote reputable financial reporting practices. Additionally, the negative association between long-term debt and earnings management may influence the way investors and fund managers develop their investment decisions. Finally, this conclusion may motivate scholars to compare the results with those of other emerging economies to determine whether the association between long-term debt and earnings management holds true in various situations. Additionally, it is proposed that further research be done in this area to determine the causes of the aforementioned negative association between long-term and earnings management. The exploration of the link between debt and real earnings management would also advance literature to determine whether managers move to real earnings management when their debt burdens increase.

Furthermore, the finding that the relationship between debt and earnings management is unaffected by audit industry specialization has a number of implications for both academic research and auditing practice. This conclusion may be taken into account by regulatory agencies and standard-setters when examining and revising auditing standards to make sure they include a variety of audit-related topics, including earnings management. Since audit quality is important to clients and stakeholders, audit firms should continue to place their attention on these areas. Audit companies should uphold strict audit standards and compliance since they are crucial for preserving the public's confidence in the profession. The development of auditors should be a top priority for auditing firms so they can handle the complexities of various sectors. Although specialization might not have a direct impact on earnings management, it can enhance other issues in the audit process. Moreover, the study conclusion can direct future auditing and financial management studies. Researchers may look into potential moderating variables or contextual elements that impact the relationship between debt and earnings management. Finally, the impact of audit quality on the association between leverage and earnings can also be addressed by using additional audit quality proxies.

This study is not without limitations though. Given the uniqueness of the Palestinian context as an occupied territory, and unstable emerging economy with constrained growth opportunities, the generalizability of the study results is questionable. Furthermore, the population and sample of the study are relatively small when compared to other emerging economies financial markets, which also limits the generalizability of the results.

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Supplementary material

The supplementary material for this article can be found online.

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