

**SURPLUS FREE CASH FLOW, STOCK MARKET  
SEGMENTATIONS, AND EARNINGS  
MANAGEMENT: THE CASE OF JORDAN**

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MANAGEMENT: THE CASE OF JORDAN**

by

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## **DEDICATION**

*I offer my humble dedication to my beloved father and mother to whom I am indebted for my very being. Without them, I would not be the person I am today.*

*May Allah the Almighty prolong their lives with health and wellness. Amen!*  
*May Allah the Almighty grant me the time and ability to repay them. Amen!*

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## LIST OF ABBREVIATIONS

ASE	Amman Stock Exchange
CCG	Code of Corporate Governance
IFRS	International Financial Reporting Standards
ISA	International Standards on Auditing
GAAP	Generally Accepted Accounting Principles
JACPA	Jordanian Association of Certified Public Accountants
JSC	Jordan Securities Commission
OECD	Organisation for Economic Co-operation and Development
SDC	Securities Depository Centre
AFE	Arab Federation of Exchanges
FEAS	Federation of Euro-Asian Stock Exchanges
WFE	World Federation of Exchanges
IPO	Initial Public Offerings
NPV	Net Present Value
SEC	Securities and Exchange Commission
PCAOB	Public Company Accounting Oversight Board
OIE	Old Institutional Economics
NIE	New Institutional Economics
ST	Special Treatment
CEO	Chief Executive Officer
TADAWUL	Saudi Stock Exchange
QSE	Qatar Stock Exchange
ADX	Abu Dhabi Securities Exchange
DFM	Dubai Financial Market
KSE	Boursa Kuwait
CASA	Casablanca Stock Exchange
MSM	Muscat Securities Market
EGX	Egyptian Exchange
BHB	Bahrain Bourse

BSE	Beirut Stock Exchange
ISX	Iraq Stock Exchange
BVMT	Tunis Stock Exchange
PEX	Palestine Exchange
KHARTOUM	Khartoum Stock Exchange
DSE	Damascus Securities Exchange
CSRC	China Securities Regulatory Commission
NYSE	New York Stock Exchange
NASDAQ	National Association of Securities Dealers Automated Quotations
AMEX	American Stock Exchange
AIM	Alternative Investment Market
ACE	Access, Certainty, and Efficiency
JASDAQ	Japan Association Of Securities Dealers Automated Quotation
GEM	Growth Enterprise Market
SMEs	Small and Medium-sized Enterprises
TSFEC	Taiwan Securities and Futures Exchange Commission
IPO	Initial public offering
PP&E	Property, Plant, and Equipment
OLS	Ordinary Least Squares

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**LEBIHAN ALIRAN TUNAI BEBAS, SEGMENT PASARAN SAHAM, DAN  
PENGURUSAN PENDAPATAN: KES JORDAN**

**ABSTRAK**

Kajian ini membuktikan bahawa pengaruh lebih aliran tunai bebas dan segmen pasaran saham terhadap amalan pengurusan pendapatan peningkatan pendapatan di Jordan. Selain itu, kajian ini mengenal pasti kesan jawatankuasa audit bebas, dan kualiti audit, sebagai pemboleh ubah penyederhanaan dalam hubungan tersebut. Sampel kajian menggunakan semua syarikat bukan kewangan yang tersenarai di Bursa Saham Amman untuk tempoh yang meliputi tahun 2013 hingga 2017. Analisis data panel digunakan untuk menjawab soalan penyelidikan dan mencapai objektif penyelidikan. Hasilnya mendapati hubungan yang signifikan dan positif antara aliran tunai lebih dan pengurusan pendapatan memberikan bukti konklusif bahawa segmen pasaran saham secara positif dan signifikan berkaitan dengan pengurusan pendapatan. Di samping itu, kajian menunjukkan bahawa peranan pemantapan kualiti audit melemahkan hubungan antara aliran tunai bebas, segmen pasaran saham dan pengurusan pendapatan. Peranan penyederhanaan jawatankuasa audit bebas melemahkan hubungan di antara segmentasi pasaran saham dan pengurusan pendapatan. Pada masa yang sama, ia tidak mempunyai kesan yang signifikan terhadap hubungan antara aliran tunai dan pengurusan pendapatan lebih. Kajian ini menambah nilai kepada kesarjanaan dengan menyiasat pemboleh ubah segmentasi pasaran saham buat kali pertama dalam literatur. Tambahan pula, ini adalah percubaan empirikal yang pertama di Jordan untuk mengkaji pengaruh aliran tunai percuma yang lebih banyak ke atas pengurusan pendapatan. Kajian ini memberikan maklumat yang

bermakna bagi syarikat yang ingin memahami dan mengurangkan masalah agensi dalam konteks Jordan. Selain itu, hasil kajian akan memberi maklumat yang bermanfaat kepada pelabur, penguatkuasa, juruaudit luar, pembuat dasar dan pemegang saham.

# **SURPLUS FREE CASH FLOW, STOCK MARKET SEGMENTATIONS, AND EARNINGS MANAGEMENT: THE CASE OF JORDAN**

## **ABSTRACT**

The current study provides evidence concerning the influence of surplus free cash flow and stock market segmentations on income-increasing earnings management practices in Jordan. As well, the study identifies the effect of audit quality and an independent audit committee as moderating variables on those relationships. The sample of the study used all non-financial companies that were listed on the Amman Stock Exchange for the period spanning from 2013 to 2017. Panel data analysis was employed to answer the research questions and accomplish the objectives of the study. The analyses includes several statistical techniques such as descriptive statistics, univariate analysis, and multivariate analysis. However, the robust standard errors for pooled OLS regression were used as the primary statistical tool for this study. The results found a significant and positive relationship between earnings management and surplus free cash flow. As well, the results provided conclusive evidence that the stock market segmentation was significantly and positively associated with earnings management. In addition, the study showed that the moderating role of audit quality weakens the association between surplus free cash flow, stock market segmentations, and earnings management. The moderating role of the independent audit committee weakens the association between stock market segmentations and earnings management. Simultaneously, it has no significant effect on the association between earnings management and surplus free cash flow. This research adds value to scholarship by investigating the stock market segmentations variable.

Further, this is the initial empirical attempt to investigate the impact of surplus free cash flow on earnings management in Jordan. The study provides meaningful information for companies seeking to understand and reduce agency problems in the Jordanian context. Also, the results of the study will provide beneficial information to investors, regulators, external auditors, policymakers, and shareholders.

# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

The current PhD thesis examines the influence of stock market segmentations, surplus free cash flow on income-boosting earnings management of non-financial firms listed on the Amman Stock Exchange (ASE). This research starts with the introduction chapter, which provides the background of study in section 1.2. The problem statement is discussed in section 1.3. Next, research questions and research objectives are introduced in sections 1.4 and 1.5, respectively. Motivations for the study are then conveyed in section 1.6, followed by the scope of study in section 1.7, the significance of the study in section 1.8, definitions of key terms in section 1.9, and finally, section 1.10 summarises the thesis structure.

### 1.2 Background of Study

Basically, the decision-making process relies on financial reports (Tutino & Pompili, 2018). Financial statements are considered significant resources to evaluate the entity's performance (Chandra & Wimelda, 2018), and earnings are among the most potent details published in these financial statements that attract investors (Cuong & Ha, 2018). Investors are explicitly concerned about this bottom line of the income statement because it is an essential aspect of decision-making (Barkhordar & Tehrani, 2016). Two key accounting principles, which are the revenue recognition and the matching principles, create earnings. Centred on these principles, the accrual process is supposed to alleviate

matching and timing problems that are deep-rooted in cash flows so that earnings mirror the actual performance of a firm (Barker & Teixeira, 2018; Dechow, 1994).

Accrual accounting intends to record the financial impacts of circumstances, events, and transactions on an entity that have cash consequences in the periods during which those circumstances, events, and transactions happen rather than only in the periods during which an entity receives or pays cash (Dechow & Skinner, 2000). This accounting system gives the managers control of the selection and offers opportunities for the managers to use the discretion that is contained in that system to determine earnings in the direction of achieving their objectives (Bhundia, 2012; Fang, Huang, & Karpoff, 2016; Hashemi & Rabiee, 2011).

Hence, considerable evidence exists that managers may engage in earnings management using creative accounting methods by manipulating accruals (Chowdhury, Mollah, & Al Farooque, 2018; Hung & Chen, 2015; Safdar & Yan, 2016; Trejo-Pech, Weldon, & Gunderson, 2016). Earnings management reduces the reliability of the reported earnings which in turn masks the real performance of the company (Soliman & Ragab, 2014), distorts earnings quality, and diminishes trust in the financial reports (Saleem, Alifiah, & Tahir, 2016). As a result, shareholders have been losing the trust in the integrity of accounting figures, which led to growing attention to the quality of earnings among researchers (Ahmed AL-Dhamari & Ismail, 2014; Barkhordar & Tehrani, 2016).

Over the years, the role of corporate governance in maximising shareholders' wealth and firm performance has been a matter of debate across all countries (Handa,

2018). At present, the case of governance mechanisms effectiveness attracts the scholars' attention. This interest rose due to the widespread of corporate financial scandals of several high-profile companies like Enron, eToys, HealthSouth, Nortel, Rite Aid, Sunbeam, Tyco, Waste Management, and WorldCom. These scandals have shaken the trust in the financial information reliability, and they harmed shareholders, which results in severe concerns in respect to the governance effectiveness (Juhmani, 2017; Khalil & Ozkan, 2016; Zgarni, Hlioui, & Zehri, 2016).

These well-known companies, which previously had commanded financial respect by appearing to be financially sound, were later found to have been involved in the manipulation of earnings. The spread of these scandals in the late decades calls attention to the fact that strong financial performance does not always result from actual economic performance; instead, these scandals suggested that agents can manipulation financial information to appear better than the economic reality of a firm and to produce attractive financial outcomes (Litt, Sharma, & Sharma, 2013). Hence, when managers engage in earnings management practices, the reported figures may not represent the real economic situation of a firm. If shareholders make non-optimum decisions as a result of these practices, then earnings management might produce agency costs (Davidson III, Jiraporn, Kim, & Nemeč, 2004; Nekhili, Amar, Chtioui, & Lakhali, 2016).

Public shareholding companies are scrutinised for compliance with regulations, most of which are connected to financial ratios, which results in the creation of pressure on managers to manage earnings to meet the regulations (Habbash & Alghamdi, 2015). Indeed, many studies documented that these regulations create motivations to manage the

financial statements (Greenwood, Baylis, & Tao, 2017; Gu & Hu, 2015; Kassem, 2018; Pereira & Alves, 2017).

In Jordan, Amman Stock Exchange (ASE) persevered in its efforts in an attempt to develop the securities industry in various aspects and implementing the best practices in the market. On the regulatory level, the ASE revised and modified several legislations and by-laws that govern its market's operations. The main achievement was the issuance of the new directives for securities listing that are aligned with the international standards relevant to listing requirements (ASE, 2018c). On October 1, 2012, the ASE initiated the application of the new directives of listing of securities in the ASE for the year 2012 which were issued in provisions of Article (72) of the Securities Law No. (76) of 2002, that the Board of Commissioners of the Jordan Securities Commission (JSC) approved.

According to the Chief Executive Officer of the ASE, these directives introduced new concepts and an advanced vision in harmony with international standards in the context of markets segmentation and listing requirements, through the distribution of the listed companies in ASE on three different markets. The secondary market in which securities are traded has been divided into three sub-markets: the first, second, and third market. The distribution was in consonance with several standards, including shareholders equity, profitability, number of shareholders, capital, and company's free float. Public shareholding companies listed on these markets were differentiated with the permitted price fluctuations (ASE, 2018c). Table 1.1 below shows the specific listing requirements for each market.



Table 1.1 Listing Requirements for the Three Markets of the Amman Stock Exchange

Market	Criteria
First Market	<ul style="list-style-type: none"> <li>✓ The company must report net profit before tax for minimum two years within the latest three years before the transfer of listing, provided that the company's average net pre-tax profit for the latest three years of at least 5% of the company's paid-in capital.</li> <li>✓ The net shareholders' equity of the company must be 100% of its paid-in capital.</li> <li>✓ The free float shares ratio to the paid-in capital must be minimum (10%) at the end of its fiscal year if its paid-in capital is less than (50) million Jordanian Dinars.</li> <li>✓ The paid-in capital of the company must be (5) million Jordanian Dinars or more.</li> <li>✓ The number of the company's shareholders must be (100) shareholders or more at the end of its fiscal year.</li> <li>✓ Its shares have been listed for at least one year on the second market.</li> </ul>
Second Market	<ul style="list-style-type: none"> <li>✓ The relevant securities are registered with the JSC and deposited with SDC.</li> <li>✓ There are no restrictions on the transfer of ownership of relevant shares except restrictions mentioned in regulations in force.</li> <li>✓ The issuer has signed the listing agreement with the ASE, which determines the rights and obligations of the two parties in relation to the listing of the securities.</li> <li>✓ No doubts regarding going concern issue related to the company's activities should be contained in the company external auditor's report of its latest financial statements.</li> <li>✓ The issuance of audited financial statements for one fiscal year at least showing an operating activity.</li> <li>✓ The net shareholders' equity of the company shall not be less than (50%) of its paid-in capital.</li> <li>✓ The free float shares ratio to the paid-in capital must be minimum (5%) at the end of its fiscal year if its paid-in capital is less than (10) million Jordanian Dinars.</li> </ul>
Third Market	<ul style="list-style-type: none"> <li>✓ The listing of a company's shares shall be transferred from the first market or second market to the third market if it does not fulfil the listing conditions in the second market.</li> </ul>

*Note:* The shares of companies that receive ASE approval for listing are listed on the second market after fulfilling the listing requirements of that market.

*Source:* (ASE, 2017e).

As can be seen in Table 1.1, one of these regulatory requirements for the first market is that the company must report net profit before tax for minimum two years within the latest three years before the transfer of listing, provided that the company's average net pre-tax profit for the latest three years of at least 5% of the company's paid-in capital. This earnings-based criterion may lead management to the practise of earnings manipulation. Thus, the current study aims to provide an insight into these requirements by examining the impact of stock market segmentations on earnings management in Jordan.

The shares of a company are transferred from one market to another only one time during the year, and this transference takes place when a company gives the ASE its audited financial statements as they stand at the end of the firm's fiscal year. Notably, after tracing the corporate actions on the ASE's website, Figure 1.1 presents the movements of the listed companies on the different markets through the period of 2013-2017.

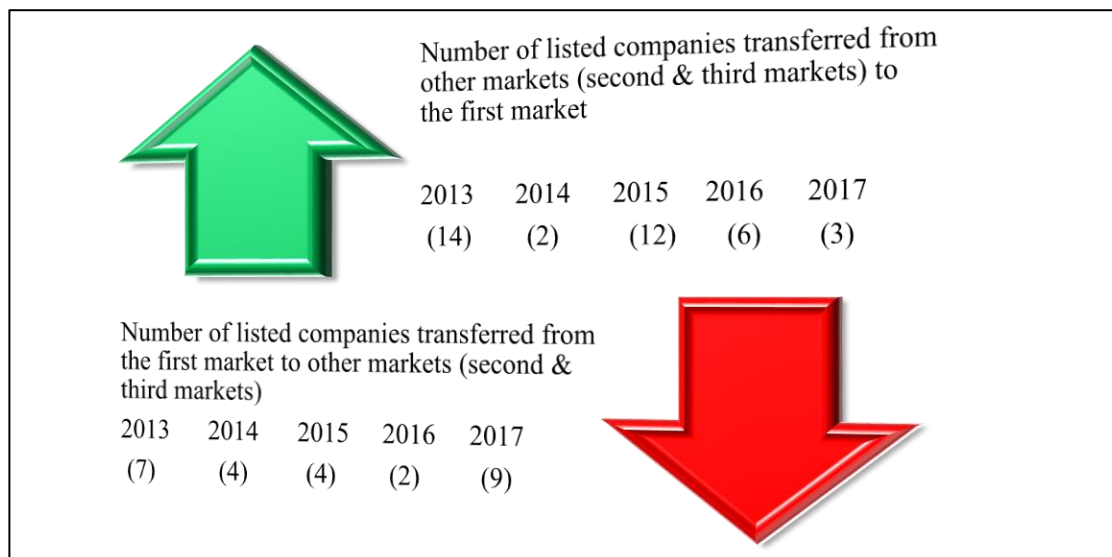


Figure 1.1 The Movements of the Listed Companies on the Different Markets

The ASE amended the trading bulletins and the data dissemination to cope with the recent market segmentations. A new index for each different market was launched at the beginning of 2013. However, Table 1.2 provides the distributions of the listed companies on ASE by market segmentations from 2013 to 2017, and Figure 1.2 presents the value of shares traded on the first market and the other markets (second and third markets) from 2013 to 2017.

Table 1.2 Number of Listed Companies on the ASE by Market

<b>Years</b>	<b>Number of companies listed on the first market</b>	<b>Number of companies listed on the other markets (second and third markets)</b>	<b>Total</b>
2013	62	178	240
2014	60	176	236
2015	72	156	228
2016	75	149	224
2017	69	125	194

*Source:* (ASE, 2018c).

Table 1.2 illustrates that the number of companies listed on the other markets (second and third markets) is larger than the number of companies listed on the first market. Simultaneously, the value of shares traded on the other markets (second and third markets) is higher than the value of shares traded on the first market, as shown in Figure 1.2. This indicates that transferring the listing of a firm's shares to the first market is

requiring much effort from the listed companies, which may be due to the earnings-based criteria that specified exclusively for the first market.

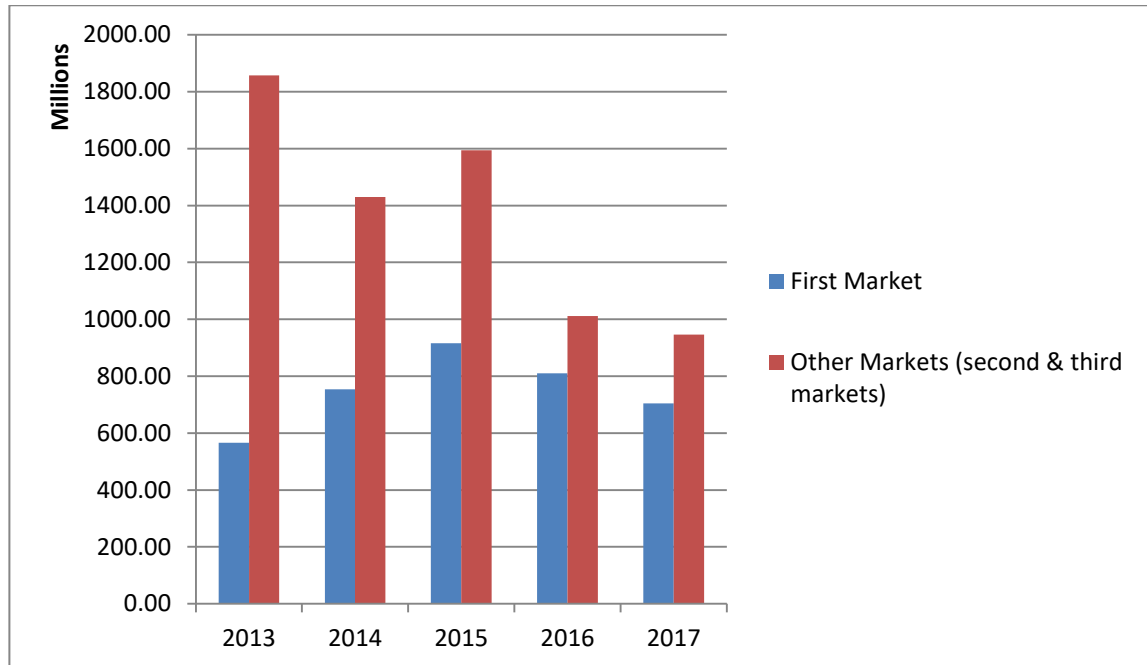


Figure 1.2 Value of Shares Traded by Market

The substantial growth in cash holdings of corporations across the globe has stimulated the interest of scholars (Chong, Ting, & Cheng, 2017; Martínez-Sola, García-Teruel, & Martínez-Solano, 2013; Moez & Amina, 2018; Nguyen & Nguyen, 2018). Lately, companies have initiated voluntarily reporting and including free cash flow disclosure in their earnings announcements (Adame, Koski, & McVay, 2018; Bhandari & Adams, 2017). Management worldwide has increased their cash holdings during the past twenty years considerably. In a 2014 report, Deloitte noted that the top 1000 global non-financial companies were holding \$2.8 trillion in cash. These numbers demonstrate that cash holdings are essential to companies and worthy of being examined (Amess, Banerji,

& Lampousis, 2015). In particular, Al-Amarneh (2015) reported that Jordanian firms listed on the Amman Stock Exchange were holding cash within the global range.

In this regard, Table 1.3 shows the cash on hand and at banks by industrial and service companies listed on ASE. This table presents that the ratios of the cash holding to the net assets of non-financial companies were 20.70%, 18.17%, 17.92%, 16.46% and 15.58% in the years 2013, 2014, 2015, 2016, and 2017, respectively.

Table 1.3 Cash Holding by Non-financial Companies Listed on the ASE

	<b>2013</b> <i>(million JOD)</i>	<b>2014</b> <i>(million JOD)</i>	<b>2015</b> <i>(million JOD)</i>	<b>2016</b> <i>(million JOD)</i>	<b>2017</b> <i>(million JOD)</i>
<b>Cash on hand &amp; at banks</b>					
Industrial sector	436.177	417.021	493.394	379.233	367.313
Service sector	518.449	406.190	343.139	377.019	324.887
<b>Non-financial sectors</b>	<b>954.626</b>	<b>823.211</b>	<b>836.533</b>	<b>756.252</b>	<b>692.200</b>
<b>Net Assets</b>					
Industrial sector	2,721.624	2,680.101	2,704.303	2,592.236	2,410.890
Service sector	1,889.948	1,851.396	1,962.840	2,002.135	2,031.909
<b>Non-financial sectors</b>	<b>4,611.572</b>	<b>4,531.497</b>	<b>4,667.143</b>	<b>4,594.371</b>	<b>4,442.799</b>
<b>The ratio of cash holding to net assets</b>					
Industrial sector	16.03%	15.56%	18.24%	14.63%	15.24%
Service sector	27.43%	21.94%	17.48%	18.83%	15.99%
<b>Non-financial sectors</b>	<b>20.70%</b>	<b>18.17%</b>	<b>17.92%</b>	<b>16.46%</b>	<b>15.58%</b>

Source: (ASE, 2018c).

The capital market in Jordan is imperfect, where information asymmetry and agency costs are applicable. Managers of listed companies on ASE have only a 4% investment in these companies, which makes agency conflicts more severe. Also, Jordan

adopted financial liberalisation in 1990, which, consequently, has led to a boost in the flexibility given to managers in controlling the cash holding (Zurigat, Sartawi, & Aleassa, 2014).

Further, a conflict of interests has the potential to create agency costs when management does not maximise the welfare of shareholders. In a state of affairs in which a firm has an excess free cash flow after all profitable projects have been financed, managers may invest the excess cash in unprofitable projects for their benefits, and then they practise earnings management using accounting discretion to cover up the negative net present value projects and to show better performance of the company (Chung, Firth, & Kim, 2005; Shadmehri, Khansalar, Giannopoulos, & Dasht-Bayaz, 2017). However, this study aims at examining whether companies listed on ASE with high excess free cash flow are engaged in income-increasing earnings management.

Many scholars have utilised agency theory in their earnings management studies (Alnawaiseh & Alomari, 2017; Chandra & Wimelda, 2018; Idris, Siam, & Nassar, 2018; Waweru & Prot, 2018). Agency theory is employed commonly to clarify the impacts of free cash flow on earnings management (Bukit & Iskandar, 2009; Cardoso, Martinez, & Teixeira, 2014; S. Jones & Sharma, 2001; Nouri & Gilaninia, 2017; Susanto, Pradipta, & Djashan, 2017), while some empirical works have been used the institutional theory in explaining the influence of external pressures on companies` accounting practices (Habbash & Alghamdi, 2015; Kury, 2007; Makhaiel & Sherer, 2017). They stressed that employing institutional theory in addition to agency theory can offer a solid theoretical framework for studying the earnings management phenomenon.

The aforementioned corporate failures like Enron and WorldCom were often driven by conflicts of interests, which are deep-seated in the agency relationship between the agent and the principal. Formulas need to be established for government to control the activities of all concerned parties in an organisation and to improve accounting information quality and transparency through mechanisms that monitor the management and other parties to reduce this conflict (García, Barbadillo, & Pérez, 2012).

Thus, the assumption is that the application of effective corporate governance mechanisms will minimise agency problems and remove the conflicts of interest between management and shareholders (Al Daoud, Ismail, & Lode, 2015; Balouei, Rostamy, Sharif, & Saeedi, 2018; Tomar & Bino, 2012). In addition to that, agency theory proposed that monitoring mechanisms would improve the compatibility between the interests of shareholders and managers so that any opportunistic behaviour would be mitigated (Kazemian & Sanusi, 2015), and an emphasis was placed on the presence of governance mechanisms and control systems in firms (Dion, 2016).

An external auditor is responsible for confirming that financial statements are fairly prepared and in accordance with accounting standards in force and affirming the accuracy of financial performance and financial position of a company. The substantive argument is that an external auditor adds reliability to the published financial statements (Alzoubi, 2016a; Habbash & Alghamdi, 2015; Lin & Hwang, 2010). Also, an external auditor minimises the information asymmetry that occurs between management and shareholders (Mahdi Salehi, Jafarzadeh, & Bakhshhosseiny, 2017). However, audit quality may boost the value relevance of earnings and increase the usefulness of accounting figures in the decision-making process (Alfraih, 2016). That is the more ability

of an auditor to capture the material misstatements, the higher quality of audit process (Mostafa, Diana & Hussien, 2013). The quality of an audit service is the mirror of the quality of the attested information (Nnadi, Efobi, & Oledinma, 2017).

An audit committee is one of the sub-committees of the board of directors and is comprised of non-executive directors that concerned with matters related to auditing, financial reporting, and internal control (Mishra & Malhotra, 2016; Spira, 1998). Many large companies have utilised their audit committees to protect themselves from fraud, financial liability, and mismanagement. The audit committee should be independent of management to have the means to perform its oversight function effectively (Zgarni et al., 2016) and typically consists of outside directors who serve as intermediaries between the internal and external auditors and the board of directors (Alves, 2013). This role reflects the principles of agency theory and the need to reduce the ability of managers to acquire private gains from a firm (Badolato, Donelson, & Ege, 2014). Also, an audit committee is seen as being able to improve the quality of financial reporting and limit earnings management practices (Miko & Kamardin, 2015).

Accordingly, audit quality and audit committee were aforementioned in several studies as efficient tools in restraining opportunistic managerial behaviour (Astami, Rusmin, Hartadi, & Evans, 2017; Nekhili et al., 2016; Noor, Sanusia, Heang, Iskandar, & Isa, 2015; Rusmin, Astami, & Hartadi, 2014). Thus, the present study assumes that audit quality and independent audit committee would weaken the relationships between independent variables, which are stock market segmentations and surplus free cash flow, and the dependent variable, which is earnings management.



### **1.3 Problem Statement**

Earnings are an essential item in the financial statements in which the bottom line in the statement of profit or loss represents, and this statement summarises the financial performance of an entity (Rahman, Moniruzzaman, & Sharif, 2013). In the literature, the quality of the entity's earnings is always used to investigate the quality of financial information (Azzoz, Abdel, & Khamees, 2016). The accounting system gives the managers the right and the ability to control of the selection of information to determine earnings in different times, so they have opportunities to exercise their judgment (Chandra & Wimelda, 2018). In this regard, many scholars have provided evidence that those managers may manage earnings (Barkhordar & Tehrani, 2016; Fang et al., 2016; Shin, Kim, Shin, & Lee, 2018; Tutino & Pompili, 2018; Yan-Xin, 2018).

The earnings management phenomenon became a global issue facing the accounting profession and has grown over the past twenty years and continues to be of interest to scholars (Alves, 2012; Hashim, Salleh, & Ariff, 2013). Corporate collapses like; Enron, WorldCom, HIH Insurance, Satyam Computer Services, and Arthur Anderson have strongly indicated that the many of today's companies are engaging in earnings management (Rani, Hussain, & Chand, 2013). Unfortunately, earnings management might not reflect the real performance of an entity, and shareholders will be unable to evaluate their economic decisions correctly (Goel, 2016; Yasser & Soliman, 2018).

In the Jordanian context, several financial corporate scandals like Shamayleh Gate in 2003 have occurred (Alzoubi, 2018). Indeed, Zureigat, Fadzil, and Ismail (2014) stated that several Jordanian firms in 2006 had tricked Jordanian banks to obtain around one billion US dollars as credit facilities, which, in turn, had triggered corporate financial

collapses in Jordan. Consistent with this notion, Alhadab (2018) reported that earnings management is exercised in Jordan to a large degree. Hence, these issues have attracted the government's attention to corporate governance (Alzoubi, 2016a).

In this respect, several studies in Jordan (Abadi, Hijazi, & Al-Rahahleh, 2016; Al-khabash & Al-Thuneibat, 2008; Al-Sa'eed & Riesheh, 2014; Al Qallap, 2014a; Alqatamin, Zakaria, & Arun, 2017; Alzoubi, 2016c; Alzoubi & Selamat, 2012; Kanakriyah, Shankat, & Freihat., 2017; Ramadan, 2016) have documented that the earnings management of the Jordanian companies listed in the Amman Stock Exchange was high compared with an acceptable level of discretionary accrual models.

For example, Al Qallap (2014b) indicated that 26.2% of service companies in Jordan engaged in earnings management, and Abadi et al. (2016) found that companies listed on ASE manipulated their earnings because the average of the discretionary accruals was 0.096. Alqatamin, Zakaria, and Arun (2017) documented similar findings with a mean of discretionary accruals of 0.097. Alzoubi (2016c) concluded that the mean of the absolute value of discretionary accrual was 9.3%, which indicates that on average, the managers of the listed companies on ASE practiced earnings management. Moreover, Kanakriyah et al. (2017) found that public companies in Jordan managed the reported earnings at a high level with a mean of 3.772.

The number of listed companies on ASE at the end of 2017 was 194 compared with 240 companies in 2013, as shown in Figure 1.3. This drop was attributable to the delisting of 37 services and industrial companies by virtue of the listing securities directives (ASE, 2018c). According to JSC (2018), 28 of these delisted companies had

violated the provisions of Securities Law concerning financial reporting practices. Malkawi (2018) stressed that the mismanagement of the corporate managers by accounting “irregularities” might lead the economy to be harmed.

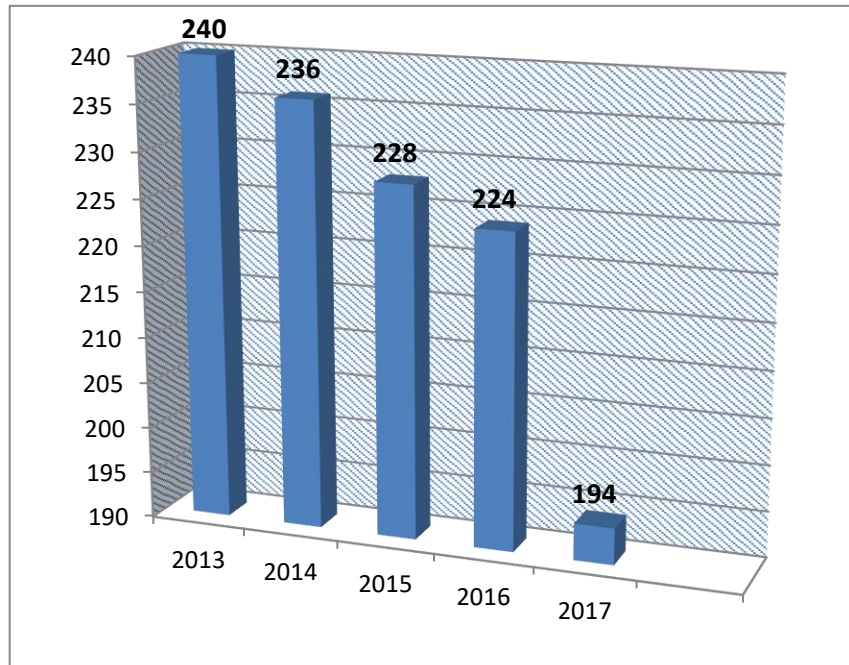


Figure 1.3 The Number of Listed Companies on the ASE, 2013-2017.

*Source:* ASE (2018c)

In detail, fifteen companies had submitted incomplete annual reports to the JSC. Seven companies had violated the disclosure instructions by failing to include certain items in their annual reports. Four companies had failed to notify the JSC and to issue a public notice related to material information. Three companies committed violations by practising deceitful or misleading acts. Three companies had committed a violation by providing incorrect or misleading data like not disclosing large transactions conducted by the company, and not preparing financial statements in conformity with International

Accounting Standards. Finally, one company has disposed the re-evaluation differences and not showing them as unrealised profits.

Accordingly, the series of violations from 2013-2017 point out the inability of the listed companies to present accurate financial reports to their shareholders. Thus, this indicates that earnings management is an issue of concern in Jordan.

Although much research has been conducted on earnings management topic, the phenomenon remains controversial. Researchers are still discovering new predictive variables of this phenomenon to take off its roots (Ramírez-Orellana, Martínez-Romero, & Marino-Garrido, 2017). In the context of Jordan, two potential variables may lead to engaging in earnings management practices, which make the current study original and valuable.

The first variable revolves around the classification of the listed securities (stock market segmentations) in ASE, along with the distinction granted to the first market. As of October 1, 2012, the board of directors of Amman Stock Exchange issued decision number (33/2012), which stated that the price thresholds of the traded stocks increased to  $\pm 7.5\%$  instead of  $\pm 5\%$  of the last traded price, and this advantage only applied to companies listed in the first market. The price threshold for the companies listed in the second and third market remained at  $\pm 5\%$  of the last traded price (ASE, 2017c).

Based on this new regulation, the first market would be more favourable for shareholders because this indicates that companies listed in that market are profitable and reputable as well as they are differentiated in the allowed stock price movements. Accordingly, listed companies might be interested in being listed in the first market due

to its privileges and to preserve the competitiveness, through managing their earnings upwardly so they can satisfy the condition of achieving a particular earnings limit. Thus, investigating the effect of the stock market segmentations on income-increasing earnings management is needed.

The second variable is the surplus free cash flow that Jordanian companies hold. Alzoubi (2013) stated that the non-financial companies listed on ASE hold a large volume of cash and cash equivalents. Al-Amarneh (2015) reported that Jordanian firms view cash as an essential resource. Alnawaiseh and Alomari (2017) concluded that many listed companies have free cash flow but that only 15% of Jordanian companies employed surplus cash flow efficiently.

Alzoubi (2016) explained two views of cash holdings in Jordan. First, cash is evaluated at a premium that exceeds its par value, in which a one-dollar amount in investments is worth more than one dollar. He added that when managers were unable to depend on external financing because this financing was either expensive or unavailable, they should rely on internal sources to finance their projects. In this, cash holding by management is valuable and significant for shareholders. Second, cash is evaluated at a discount from the par value, in which the one-dollar amount in investments activities are less than one dollar. This view is based on that argument that when management invests the cash in negative NPV projects, these poor investments lead to free cash flow problems as well a higher information asymmetry and agency problems. Eventually, Alzoubi (2016) concluded that cash is valued at a discount in Jordan, where the free cash flow and agency problems existed among non-financial companies listed on the ASE.

According to Almeida, Campello, and Weisbach (2004) (cited in Sindhu & Jinnah, 2014), managers prefer to possess a considerable portion of their assets in the form of cash. The lack of supervision by shareholders will lead to the utilisation of the excess cash flow by management for their interests (Ukhriyawati, Ratnawati, & Riyadi, 2017). Further, in a situation in which a company has a combination of low growth opportunities and a high cash flow; management might make poor investment decisions for their benefits, and thus they may be involved in income-increasing discretionary accruals to demonstrate the superior performance of a company (Astami et al., 2017). Therefore, studying the earnings management phenomenon in the situation of surplus free cash flow in Jordan is valuable.

However, the impact of the variables mentioned above might be reduced in the presence of the corporate governance mechanisms. These mechanisms serve an essential role in providing high-quality financial reports (Bajra & Cadez, 2018). In particular, Hwang and Lin (2008), in a meta-analysis of 27 previous research documents, found that audit quality and audit committee effectiveness had a negative and significant impact on earnings management. Additionally, Alzoubi (2018) found that the corporate governance mechanisms in Jordan, namely, audit quality and independent audit committee, produced control over the process of financial reporting and deterred earnings management practices.

The lack of adherence to the Code of Corporate Governance in Jordan is considered the most critical reason for sparking financial scandals. Indeed, Abbadi et al. (2016) provided evidence that some companies in Jordan breach that code. This current study examines the moderating roles of the independent audit committee and audit quality

on the nature of the relationship among stock market segmentations, surplus free cash flow, and income-increasing earnings management in Jordan.

#### **1.4 Research Objectives**

The current research seeks to accomplish the following objectives:

- i. To explore the influence of stock market segmentations on income-increasing earnings management of non-financial companies listed on the ASE.
- ii. To investigate the effect of surplus free cash flow on income-increasing earnings management of non-financial companies listed on the ASE.
- iii. To test the moderating influence of the independent audit committee between surplus free cash flow and income-increasing earnings management among non-financial companies listed on the ASE.
- iv. To test the moderating influence of the independent audit committee between stock market segmentations and income-increasing earnings management among non-financial companies listed on the ASE.
- v. To examine the moderating impact of the audit quality between surplus free cash flow and income-increasing earnings management among non-financial companies listed on the ASE.
- vi. To examine the moderating impact of the audit quality between stock market segmentations and income-increasing earnings management among non-financial companies listed on the ASE.

## 1.5 Research Questions

Based on the problem statement, this study investigates the influence of stock market segmentations and surplus free cash flow on income-increasing earnings management in companies that are listed on the ASE by addressing the following questions:

- i. What is the relationship between stock market segmentations and income-increasing earnings management among non-financial companies that are listed on the ASE?
- ii. What is the association between surplus free cash flow and income-increasing earnings management among non-financial companies that are listed on the ASE?
- iii. Does an independent audit committee weaken the association between surplus free cash flow and income-increasing earnings management among non-financial companies that are listed on the ASE?
- iv. Does an independent audit committee weaken the relationship between stock market segmentations and income-increasing earnings management among non-financial companies that are listed on the ASE?
- v. Does audit quality weaken the relationship between surplus free cash flow and income-increasing earnings management among non-financial companies that are listed on the ASE?
- vi. Does audit quality weaken the relationship between stock market segmentations and income-increasing earnings management among non-financial companies that are listed on the ASE?



## 1.6 Motivations of the Study

Five main factors motivated the current study. First is the recent market segmentations of ASE represented by classifying the listed companies into the first and second market and granting some privileges for the securities listed on the first market. Listed companies might be engaged in upward earnings management to be permitted a  $\pm 7.5\%$  change in their stock price thresholds to maintain their reputations and competitiveness with other listed firms so they can seem favourable to their shareholders. Therefore, stock market segmentations may be an attractive gateway to the managers to choose income-increasing earnings management, which provides good motivation for the current study.

Second, according to agency theory and some empirical work (Barkhordar & Tehrani, 2016; Fakhroni, Ghozali, Harto, & Yuyetta, 2018; Farahani, Mehri, & Pooya, 2016; Greiner, 2017; Nouri & Gilaninia, 2017; Salehi, Mohammadi, & Afshari, 2017; Shin et al., 2018), there is a possibility that management is stimulated to exploit free cash flow in inefficient investments for their personal gains and then resort to manipulating reported earnings to obscure the consequences of their poor investments. The relationship between earnings management and surplus free cash flow has been examined in developed countries with little attention paid to developing countries (Cardoso et al., 2014). Also, Jordanian companies hold a large amount of cash (Al-Amarneh, 2015; Alnawaiseh & Alomari, 2017; Alzoubi, 2013, 2016) that creates a good impetus for the present study to investigate earnings management in the situation of surplus free cash flow in Jordan.

Third, growing attention is being paid to corporate governance, where many reforms have been executed in several nations around the world; Jordan is one of these

countries. Several reforms have been conducted, and the latest one is the Code of Corporate Governance, which was disseminated in 2017. In this connection, Abbadi et al. (2016) highlighted that non-financial companies listed on ASE have not fully complied with the Code of Corporate Governance. Furthermore, the literature on corporate governance in Jordan contains contradictory results regarding the effectiveness of mechanisms of governance in mitigating earnings management practices for companies listed on ASE (e.g., Abed, Al-Attar, & Suwaidan, 2012; Al-Mousawi & Al-Thuneibat, 2011; Alzoubi, 2016a; Azzoz et al., 2016; Allam Hamdan, Mushtaha, & Al-Sartawi, 2013; Idris, Siam, & Ahmad, 2018). Accordingly, these contradictions provide another motivation for investigating the role of audit quality and an independent audit committee in controlling earnings management.

Fourth, the Jordanian financial market is small and depends greatly on foreign capital. The nation's geographic isolation makes it highly likely that agency costs and information asymmetry will occur, which creates more hazards for foreign investors (Alzoubi, 2018). Due to several factors like liberalisation, openness, security, and political steadiness that serve to attract the foreign investments, the Jordanian market is one of the most important Middle East and North Africa (MENA) markets. Therefore, Jordan is one country that users require pertinent accounting information before making an investment decision (Ghunmi, Al-Zu'bi, Badreddine, & Chaudhry, 2013; Siam & Khairi, 2014).

Fifth, the continuing wars and struggle in the countries neighbouring Jordan have led to a lowering the exports and trade exchange between Jordan and these countries because some border crossings have been closed, which has had negative impacts on many Jordanian industrial companies (Humeedat, 2018). As a consequence, these companies

turn to earnings management to relieve these negative effects. In this context, Gassouma (2019) highlighted that earnings management grew significantly after the revolutions of the Arab spring in the 2010s, as auditors and regulators lost some of their monitoring power over the accounting practices. Thus, these unusual economic conditions of Jordan motivate this study to provide a different insight into earnings management practices in the country.

### **1.7 Scope of the Study**

The present study concentrates on the impact of stock market segmentations and surplus free cash flow on income-boosting earnings management. Stock market segmentations may be an influential driver leading managers to practice upward earnings manipulations while the existence of the high surplus free cash flow may also lead to income-boosting discretionary accruals. The study also examines the moderating roles of two corporate governance mechanisms, which are audit quality and the presence of an independent audit committee. The study's model includes five control variables, namely, company size, dividend yield, return on assets, absolute total accruals, and industry.

The population of the study encompasses all non-financial Jordanian companies listed on ASE from 2013 to 2017. The industrial and service sectors were chosen due to their vital role in Jordanian economic, and financial companies were excluded because of their different regulatory and reporting requirements. The study utilised secondary data collected from the annual reports of companies and the ASE website.

## **1.8 Significance of the Study**

Customarily, because users of financial statements evaluate the success of businesses through earnings information, management might be encouraged to manage this data to boost financial statements through earnings management (Susanto et al., 2017). The significance of the study derives from the consequences of the reliability of the financial reporting published by the Amman Stock Exchange to all users of financial statements. These users depend mainly on the information that is extracted from the financial reports, with a view to making their economic decisions. As stated before, earnings management may have a negative impact on these financial reports, so that it is essential to study earnings management in an emerging economy like Jordan to protect those users who might be misdirected.

Jordan was chosen for the study first because it is a developing country, and the results of the current investigation may assist the other developing countries that have comparable cultural and economic status, especially in MENA. Second, Jordan became the 46th nation to observe the OECD Declaration on International Investment and Multinational Enterprises and is the most sophisticated economy in MENA. Jordan's compliance with the OECD Declaration on International Investment and Multinational Enterprises (2011) demonstrated the liberalisation of the Jordanian market, expanded its integration into the global economy and provided for responsible business conduct. Third, the Jordanian capital market has performed relatively well in attracting foreign investments and has the highest rates of foreign investment globally (OECD, 2013).

The Amman Stock Exchange's role as an intermediary for the capital flow in Jordan has led to exceptional, unusual levels of market capitalisation, which is around

300% of country's GDP (Yassin, 2017). Trading on the secondary market grew from JD 9.7 million in 1978 to JD 4.1 billion in 2017. The market capitalisation of subscribed shares is currently about JD 23.92 billion as contrasted with around JD 286 million in 1978, and the number of listed companies rose from 66 in 1978 to 194 by year-end in 2017 (ASE, 2018a). In particular, industrial and services sectors are considered as significant resources in driving employment and growing the economy of Jordan.

The current study endeavours to provide three essential theoretical, practical, and methodological contributions, as outlined below:

### **1.8.1 Theoretical Contributions**

In an ideal world, financial reports present the real picture of an organisation. However, this actual picture rarely exists when an organisation faces legitimisation pressures that lead management to manipulate the reported figures. This fact implies that concentrating only on micro-behaviour or agency-based incentives of self-interest would not be useful to grasp the earnings management complexities. The issue may be embedded in a systematic problem or environmental pressures, which also may influence management to manipulate accounting figures. So, the current research adds to the literature concerning Jordan by employing institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977), which addresses other behaviours that stem from pressures of cultural cognitive legitimacy, normative behaviour, and regulations (Kury, 2007).

The study provides new and different insights on the listing requirements in Jordan, by observing the consequences of the recent regulation of Amman Stock Exchange that increases the stock price thresholds for the companies listed in the first