The main objective of this interdisciplinary research is to examine the effect of Management Information Systems (MIS) on financial corporate corruption by providing theoretical evidence on how these systems improve corporate governance and internal audit quality and thus reducing financial corporate corruption. The researcher concludes that financial information generated by management information systems and presented to business management satisfies the necessity for reliable, unbiased, clear, and easily understandable information, thereby enabling business management to formulate its decisions in a timely and efficient manner.

Thus, an accounting information system as a subsystem of MIS can contribute to timely decision-making, corporate management, strategies for constant cost reduction and savings, effective communication, and cash and working capital management. Therefore, companies that have established good corporate governance practices can enhance their corporate value on a long term basis and thus be more competitive in helping to raise social wealth and reduce financial corporate corruption.

**Keywords:** Corporate Governance, Financial Corruption, Internal Auditing, Accounting Information Systems, Management Information Systems, Financial Reporting.
ملخص البحث

الهدف الرئيسي من هذا البحث البيني هو دراسة تأثير نظم المعلومات الإدارية على الفساد المالي للشركات من خلال تقديم أداة نظرية على كيفية تحسين هذه النظم لحوكمة الشركات وجودة المراجعة الداخلية، وبالتالي تقليل الفساد المالي للشركات. وخلص الباحث إلى أن المعلومات المالية المتولدة عن نظم المعلومات الإدارية والمقدمة للأداره تفي بالحاجة إلى معلومات موثوقة وغير متحيزه وواضحة وسهلة الفهم، مما يمكن الإدارة من صياغة قراراتها في الوقت المناسب وبطريقة فعالة. ومن ثم فإن نظام المعلومات المحاسبية باعتباره أحد الأنظمة الفرعية للمعلومات الإدارية يمكن أن يساهم في اتخاذ القرارات في الوقت المناسب، وحوكمة الشركات، و استراتيجيات الاستدامة لخفض التكاليف والادخار، والاتصال الفعال، وإدارة رأس المال العام.

وخلص الباحث إلى أن الشركات التي أرست ممارسات جيدة لأداره الشركات يمكن أن تعزز قيمتها المؤسسية على المدى الطويل، وبالتالي تكون أكثر قدرة على المنافسة في المساعدة على زيادة الثروة الاجتماعية والحد من الفساد المالي للشركات.

الكلمات المفتاحية: حوكمة الشركات، الفساد المالي، المراجعة الداخلية، نظم المعلومات المحاسبية، نظم المعلومات الإدارية، إعداد التقارير المالية.
1- Introduction

Management Information Systems (MIS) are computerized systems that transform financial and other related data into useful information. Management information systems, one of the most critical and important systems in an organization, have changed the way they capture, process, store, and disseminate information. Management Information Systems are very important to managing an organization and implementing internal control systems. MIS also support decisions taken in the context of coordination and control of organizational activities. (Kang and Yammeesri, 2017; Tan, 2016).

The recent worldwide corporate humiliations have demonstrated that the proper functioning of management information systems is crucial for improving governance in business organizations, since it produces primary financial reports utilized by stakeholders including investors, creditors and others. Although voluntary disclosures play a role in the decisions of investors, creditors, and other stakeholders, mandatory financial reports remain the primary tools for investing decisions particularly. Thus, the quality and reliability of information presented in financial reports is crucial to these stakeholders.

Internal audit has been acknowledged as the main driver of corporate disclosure which aims to increase the quality of financial information, to ensure the transparency in financial reporting and to increase the confidence between managers and shareholders. Also, the internal auditor became an integral part of corporate governance and follows every aspect of internal control, including rules, regulations, laws and expectations, risks and opportunities (Drogalas et al. 2016; Al-Jabali et al. 2011).

Besides that the use of transparent financial information in corporate control mechanisms enhances the effectiveness of the governance process which in turn prevents financial corporate corruption. Finally, A well-functioning management information system (MIS), free from scam, is likely to improve the corporate governance level in organizations, build a better business world, improve investor assurance, and support the efficiency of

So the researcher discoveries that the implementation of Management information systems will mend corporate governance, internal audit quality and as a result reduce financial corporate corruption.

2- Research Objective

The main objective of my research is to examine the effect of Management Information Systems on financial corporate corruption by providing evidence on how these systems improve corporate governance and internal audit quality and thus reducing financial corporate corruption. To achieve this objective, the research will focus on the impact of Management Information Systems on:

a) Corporate Governance.

b) The Quality of Internal Audit.

c) Reducing Financial Corporate Corruption

3 - Theoretical Framework

In this section I will discuss the Theoretical framework related to the impact of Management Information Systems on Corporate Governance, The Impact of Management Information Systems on Internal Audit Quality, and The Impact of Management Information Systems on the reduction of Financial Corporate Corruption.

3-1- The Impact of Management Information Systems on Corporate Governance

Corporate governance in the business context refers to the systems of rules, practices, and processes by which companies are governed.

In this way, the corporate governance model followed by a specific company is the distribution of rights and responsibilities by all participants in the organization. It assures that everyone in an organization has appropriate and transparent decision-making processes and that the interests of all stakeholders

Good corporate governance aims at ensuring a higher degree of transparency in an organization by encouraging full disclosure of transactions in the company accounts. Full disclosure includes compliance with regulations and disclosing any information important to the shareholders. For example, if a manager has close ties with suppliers or has a vested interest in a contract, it must be disclosed. Also, directors should be independent so that the oversight of the company management is unbiased. Transparency involves disclosure of all forms of conflict of interest.

Also, the corporate governance aims to ensure that the organization will be directed under specific guidelines which will serve the interests of every party of the organization, including the board of directors, managers, employees, suppliers, customers and others stakeholders. Finally, it is important for the corporate governance structure of an organization to comply with each country’s formal laws and regulations, the generally accepted accounting principles, the ethical standards and the cultural differences. (Duhnfort, et al., 2008).

Jean Du Plessis, James Mcconvill and Mirko Bagaric, in their book, "Principles of Contemporary Corporate Governance, https://corpgov-law.harvard.edu/2016/09/08/principles-of-corporategovernance/" point out that a corporate governance structure encourages accountability of the management to the company directors and the accountability of the directors to the shareholders. Through hiring independent directors, a company aims to create good corporate governance. The compensation of the chief executive officer has to be approved by the company directors to ensure that the compensation structure is fair and in the best interests of the shareholders. Any discrepancies in the company accounts or malfunctioning of the company is closely watched by the board of directors. The board has a right to question
strategic decisions. Corporate governance and accounting are interconnected with each other on the basis of the two principles of transparency and accountability. The effectiveness of the AIS is expected to strengthen governance mechanisms leading to the efficient functioning of capital markets. AIS provide the information that flows from firm to stakeholders continuously. This flow of information forms the basis for the decision making of the stakeholders.

Until now, compliance with CG principles has been limited to a few controls that might not protect transparency mechanisms (Lazarides and Drimpetas, 2008). Although budgets for IS/IT have boomed, many recent studies (Basu and Lederer, 2004; Moller, 2005) have started to challenge ESs’ effectiveness and efficiency and are arguing that ESs must be enriched in order to accomplish the goal of achieving competitive advantage for the firm and excellence in efficiency and productivity. Practitioners and vendors of ESs are struggling to find a way to do it. The new ESs must help the firm to comply with the provisions of the new legal framework, to align with the needs of market participants and to minimise the risk of fraud and foul play and consequently improve organisational performance. Many software vendors are viewing the CG reforms as a new marketing opportunity and are coming up with solutions that promise SOX handling. However, in this paper we argue that even if this is implemented, ensuring uninterruptible information flow does not guarantee good CG practices as required by the reforms. According to Fister (2002), the ES calls for a culture change (Marnewick and Labuschagne, 2005).

Uyar et al. (2017) study aimed at investigating the impact of the AIS as a subsystem from MIS on corporate governance. The study focused on four attributes of AIS, namely: bookkeeping, the efficacy of financial reporting, the adoption of the Turkish Accounting/Financial Reporting Standards, and the efficacy of the budgeting system. These four attributes address different aspects of AIS.
**The Effectiveness of the Accounting Information System**

- Bookkeeping System
- Efficacy of Financial Reporting
- the adoption of Accounting and Financial Reporting Standards
- Efficacy of budgeting System

**Figure1: Suggeste model**

*Bookkeeping* refers to the recording function. Bookkeeping helps organize and classify business transactions and plays a fundamental role in accounting practices and financial reporting. It is the initial process which provides data for further accounting applications. Mistakes or fraud in bookkeeping has a great effect on other practices. Therefore the reliability of financial reports is closely connected to the appropriate bookkeeping practices. If either intentionally or accidentally, bookkeepers make inappropriate recordings, this results in falsified financial statements and they lose their usefulness and efficiency in both internal and external decision-making. As a result, the effective use of the bookkeeping system impacts corporate governance positively.

*Financial reporting* refers to the external reporting function. One quality characteristic of financial reports is objectivity. The lack of reliability in financial reports is attributable to a deficiency in the people involved in preparing and monitoring the reports, such as board members and accounting personnel, a deficiency in the nature of accounting standards, a deficiency in the regulatory system or a combination of any of these. Therefore the quality
of financial information presented in financial reports, and the effective use of reports by managers is expected to improve corporate governance positively.

**Accounting Standards / Financial Reporting Standards** refer to the framework for the accounting practices. Globally accepted financial reporting standards are vital to various stakeholders such as investors, creditors, financial analysts, and others that utilize financial statements in their decision-making. The advantages of using a common set of accounting or financial reporting standards are listed as improved efficiency and effectiveness in financial reporting and auditing, enhanced comparability and greater transparency and reliability. These advantages are closely tied to the corporate governance mechanism, and are expected to contribute to good governance practices. Therefore the study expects that the use of accounting and financial standards will impact corporate governance positively.

**Finally the efficacy of the budgeting system** addresses the planning and controlling function. In addition to the responsibilities of external monitors such as auditors and regulators, management accounting plays an important role in the execution of good corporate governance through internal reporting and monitoring and providing timely and relevant information. Budgeting is a primary tool of management accounting, used as a planning and internal controlling device by business organizations.

An effective budgeting system contributes to corporate governance by not allowing managers to misuse the financial resources of firms and by setting the better allocation of resources.

Therefore the efficacy of the budgeting system impacts corporate governance positively.

The findings have several implications regarding board members, managers, and organizations. Establishing corporate governance mechanisms and resolving agency issues are among the boards’ primary responsibilities. In this
respect, they are expected to support managers and help them design an accounting information system so as to foster the employment of corporate governance mechanisms. In order to ensure this, managers should establish internal reporting procedures, and internal control and monitoring devices before inviting external control through independent auditing. Therefore, sufficient and necessary steps have to be taken from the very initial bookkeeping stage of financial transactions until the ultimate financial reporting process to ensure the delivery of quality financial information to their stakeholders. Moreover, the contribution of management accounting techniques (i.e. budgeting) to corporate governance should not be underestimated, as indicated by the empirical evidence. In particular, they are important for the allocation of resources appropriately, preventing the misuse of the financial and nonfinancial resources of the company, and generating value for their shareholders. One significant effect of the budgeting system on corporate governance underlines the implication that boards should give emphasis to management accounting practices, such as budgeting, to ensure internal monitoring practices, together with external reporting and monitoring. External reporting is an “end”, whereas internal reporting and controlling tools are “means”. Thus, in order to ensure the quality of external reporting, the means are expected to facilitate operations in a timely manner. However, it is assumed that boards do not demand sufficient emphasis on the utilization of management accounting in decision making (Mayanja and Van der Poll, 2011). Thus, the subject should be dealt with at the board level more seriously. There are implications for academics as well. Prior studies have mainly focused on the role of financial reporting and auditing in corporate governance, rather than management accounting. Ratnatunga and Alam (2011) also pointed out that the utilization of management accounting practices in strategic governance is barely mentioned in the relevant empirical studies. Thus, more studies are required regarding the influence of management accounting practices on corporate governance. As for the limitation of the study, we can say that the sample size is not large enough, thus, the reader should employ caution in terms of generalizing the results.
The results of the empirical analysis indicate that bookkeeping, financial reporting, and the budgeting system have a positive impact on the corporate governance level, whereas the adoptions of Accounting / Financial Reporting Standards do not. Thus, in order to foster corporate governance, managers should establish internal reporting procedures as well as internal control and monitoring devices before attempting external control through independent auditing.

Good corporate governance cannot exist without internal control. This leads to considering the role of internal control in corporate governance. Internal control is the process implemented by the board of directors and management to provide reasonable assurance that the following objectives are achieved: safeguarding assets, compliance with applicable laws and regulations, reliability and transparency of financial reporting, and efficiency and effectiveness of operations Internal controls are designed to protect an institution from loss or misuse of its assets, as well as to ensure that all transactions are properly authorized and thus guarantee or foster good corporate governance. (Kang 2017; Al-Zwyalif, 2015).

(Al-Zwyalif, 2015) study aimed to examine the role of internal control elements: control environment, risk assessment, control activities, communication and information, and monitoring in enhancing the corporate governance pillars which are: accountability, fairness, responsibility, and transparency. The study also seeks to determine the extent to which this commitment contributes to strengthening these pillars in the context of Jordanian insurance companies.

Based on the results of the statistical analysis, the study indicated that the commitment to all elements of internal control contributes to strengthening the corporate governance pillars at a high degree. The study also revealed that the commitment to each element of internal control contribute to strengthening the pillars of corporate governance at a high degree. These results show that the internal control has a significant role in enhancing the corporate gov-
ernance pillars in Jordanian insurance companies, and the successes of corporate governance requires compliance with all elements of internal control.

The researcher concludes that Management information systems improves corporate governance mechanisms that reduces agency problems in organizations and implementing an accounting information system (AIS) free from scam will build a better business world, improve investor confidence, and assist the efficiency of capital markets and concludes that the commitment to each element of internal control contributes to strengthening the pillars of corporate governance at a high degree.

3-2-The Impact of Management Information Systems on Internal Audit Quality

Accounting Information Systems as a part of Management Information systems are vital for internal auditors because they identify, assemble, analyze, classify record, summarize, and report transactions and other events. They process the transactions and maintain financial records. AIS advantage lies in storing and retrieving data for auditors to access information at their convenience. Further, AIS contribute to reliability of financial reporting such as generally accepted accounting principles (GAAP) and international financial reporting standards (IFRS).

Most of the participants in (Tan, 2016) study stated that the benefits of AIS were that they offered a reasonable guarantee that transactions were recorded to facilitate the preparation of financial statements in accordance with GAAP or IFRS. AIS have policies, procedures, organizational designs, and physical barriers that contribute to the control structure. They provide preventive controls designed to discourage errors or irregularities and include detective controls, which are designed to identify errors or irregularities after they have occurred. AIS also raise awareness of the need for internal controls. According to results of the study, there is a positive relationship between accounting information systems and internal auditing.
Internal audit has been acknowledged as the main driver of corporate disclosure which aims to increase the quality of financial information, to ensure the transparency in financial reporting and to increase the confidence between managers and shareholders. (Joksimović and Alseddig, 2017)

In the study of (Cohen et al. 2002), auditors as a part of the internal control system of a company, are considered as important actors in the corporate governance field. In the same study, the association between the audit process and the corporate governance is enhanced by the fact that weak corporate governance structures seems to cause a decrease in the quality of financial information reported and even to result in financial fraud. Cohen et al. also concluded that problems in internal audit procedures are related to weak governance structures.

(Suyono and Hariyanto 2012) in a more recent study examine the association of corporate governance with internal control, internal audit and organizational commitment. Their results show that internal control and internal audit have a positive significant relationship with good corporate governance. The rationalization of this finding is that the internal audit function has important roles in governing the organization, such as controlling, evaluating and monitoring.

In (Drogalas, 2016) study, internal audit is examined in terms of audit quality and the consulting role of internal audit. Data was collected via a survey questionnaire methodology and was analyzed using regression analysis. The results show that corporate governance is positively associated to the consulting role of internal audit, to internal audit quality and to the audit committee. Thus, the internal auditor becomes an integral part of corporate governance.

Therefore the researcher concludes that accounting information systems positively impacts the internal audit quality and as the internal audit quality
increases and effectiveness of internal audit increases, the governance mechanism will run well and the good governance practices can be improved.

3-3-The Impact of Management Information Systems on Financial Corporate Corruption

Corruption is dishonest behavior by those in positions of power, such as managers or government officials. Corruption can include giving or accepting bribes or inappropriate gifts, double-dealing, under-the-table transactions, manipulating elections, diverting funds, laundering money and defrauding investors. One example of corruption in the world of finance would be an investment manager who is actually running a Ponzi scheme.

There are many situations in which a person can be considered corrupt. In the financial services industry, chartered financial analysts and other financial professionals are required to adhere to a code of ethics and avoid situations that could create a conflict of interest. Penalties for being found guilty of corruption include fines, imprisonment, and a damaged reputation. Engaging in corrupt behavior may have negative long-lasting effects for an organization. In 2015, five prominent investment banks were fined a cumulative total of approximately $5.5 billion for rigging the foreign exchange market between 2007 and 2013.

Corruption is likely to cause inefficiency when assets are used inappropriately. When corruption occurs within an organization, unflattering media coverage typically follows, which may result in customers losing trust in its business practices and products. A comprehensive public relations campaign is often required to limit reputational damage and restore trust. This requires valuable resources such as time and money, which may result in other critical areas of the organization being deprived of resources, causing inefficiencies to develop and possibly financial losses to be realized.

In 2016, software company PTC Inc. was ordered to pay $28 million for claims it tried to bribe Chinese officials by providing approximately $1 million
in recreational travel. As this case has become public, PTC Inc. is likely to require a delicate public relations effort to restore its reputation. Organizations that have been known to engage in corruption find business development difficult. Investors and shareholders are reluctant to commit if an organization has a history of corruption, or bribes and favors are required to conduct business. Corruption is likely to increase criminal activity and organized crime in the community.

There must be a strong focus on education; it must reinforce best business practices and alert managers and employees where to look out for corruption. This can be achieved by introducing mandatory learning such as anti-money laundering (AML) courses. Senior executives and management must set a strong culture of honesty and integrity by leading by example.

Corruption is likely to be reduced with accountability mechanisms in place; this is likely to reinforce a culture that fosters strong ethical behavior while holding those to account who violate the norms. Corruption can further be reduced by making it easy to report, whether by managers, employees, suppliers, and customers, although it is often overlooked by colleagues. A robust control environment reduces the risk of corruption. Human capital management functions such as hiring and promoting employees should include thorough background checks.

Financial Corruption is an important issue in corporate governance in particular due to the fact that companies have a structure with features that can enhance corruption. In the corporate context the executives, directors and managers of a corporation are the centre of interest. Conflicts of interest and the creation of an information asymmetry provide the basis for the emergence of corruption within corporations. Moreover, the accompanying allocation of duties and responsibilities to executives can create a further gateway for corporate corruption.
The role of the board as a supervisory check and monitor on the operations of executive level management is significant and important.

Although there are a variety of reasons for the emergence of corporate corruption, poor corporate governance constitutes the principal source of corrupt behaviour in a corporate context. Two of the great corporate scandals in recent years, Enron and Parmalat, identify features of poor corporate governance that might cause corruption. Corporate corruption is not just about fraud but mismanaged conflicts of interest, misuse of corporate power and lack of internal controls can all give rise to corporate corruption.

Internal corruption can arise within a company if insiders conduct corrupt behaviour for their own benefit causing harm to the company at the same time. An example of such corruption inside a company is the misappropriation of corporate assets for the personal benefit of a manager. The manager intends to gain a benefit for him- or herself, therefore corruption affects the allocation of income and wealth within society.

The reputation of corporations that are associated with corrupt activities will also be affected. A decrease in a company’s reputation thus diminishes its efficiency for creating future profits. Also, Investors will eventually lose their confidence in the company as they cannot be sure if they will receive a fair return from their investment. Moreover, corrupt actions will lead to production inefficiency. This corporate inefficiency is further increased if the company focuses on gaining profits through corruption rather than improving its market position through innovative strategy and good corporate policy.

In addition to that, corruption hinders fair competition, because of distorted market opportunities and therefore causes market inefficiency as well. Additionally, this market inefficiency increases due to lack of transparency. Such decline of market transparency, which emerges out of the nondisclosure of transactions and derived profits, fosters uncertainty. This insecurity can deter foreign investors from participating in the country’s economy. Thus, this
can be seen as a supplementary aspect of how corruption lowers the economic growth of a country.

On the other hand, corporate governance constitutes one of the most effective instruments in preventing and diminishing corrupt activities within and between corporations by using existing corporate governance guidelines and principles. They emphasize enhancement in the composition of the corporate structure, in corporate transparency, in the enforcement of responsibilities and in establishing a moral awareness in terms of the harms resulting from corrupt behaviour. (Watson and Hirsch, 2010)

(Mensah et al. 2003) found empirical evidence in Ghana that effective internal control improved good governance practices and decreased the corruptions and reported that corporate governance was one of the most effective tools to reduce the incidence of corruption, especially in the corporate sector. (Also Virginia et al 2009) found that internal audit had a role to prevent the corruptions and support the good governance practices.

Besides corporate governance, financial information reported by an accounting information system contributes to early warning systems in terms of transparency. The preparation of financial reports serve as a comprehensive reliable, and easily accessible data source revealing the financial structure of a business, in line with the principle of transparency and thus aims at ensuring accurate and efficient decision-making by the management. The need of businesses for reliable information on their financial status increases further at times of crisis and corruptions and the availability of reliable accounting information reduce the severity of any crisis and corruptions. Also, financial reporting must be in compliance with national and international accounting standards.

As a result, the researcher agrees with results of (Yılmaz et al. 2016) and concludes that financial information generated by management information systems and presented to business management satisfies the necessity for relia-
ble, unbiased, clear, and easily understandable information, thereby enabling business management to formulate its decisions in a timely and efficient manner. Thus, an accounting information system can contribute to timely decision-making, corporate management, strategies for constant cost reduction and savings, effective communication, and cash and working capital management.

4. Conclusion

Management information systems especially its subsystem Accounting Information system positively impacts the internal audit quality and as the internal audit quality increases and effectiveness of internal audit increases, the governance mechanism will run well and the good governance practices can be improved and thus increase a corporation’s efficiency and economic growth and, moreover, the confidence of investors including shareholders in the corporation.

Therefore, companies that have established good corporate governance practices can enhance their corporate value on a long term basis and thus be more competitive in helping to raise social wealth and reduce corporate corruption.
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