



**The Role of Using Electronic Invoices in  
Reduce Tax Evasion Practices**

**"An Empirical Study"**

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## Abstract:

The present study aimed to highlight the pivotal role of electronic invoicing in reducing tax evasion practices, particularly in light of the ongoing digital transformation of Egypt's tax system. To achieve this objective, an applied empirical approach was adopted, targeting a random sample of 250 individuals representing four key professional groups: auditors, audit managers, accountants, and tax officers. The collected data were analyzed using the SPSS statistical software, and the results revealed statistically significant differences regarding the nature and determinants of electronic invoicing under the digital transformation framework. Furthermore, the findings indicated a statistically significant impact of electronic invoice adoption on limiting tax evasion practices.

Additionally, the researcher developed a practical guide applied across four tax offices during the period from 2020 to 2024. The findings showed a notable increase in actual tax revenues compared to the targeted revenues in the selected tax offices. This improvement was attributed to the implementation of the electronic invoicing system, intensified awareness campaigns aimed at taxpayers, the enforcement of strict penalties against violators, and various measures taken by the state to support digitalization and facilitate taxpayers' compliance in paying due taxes.

Based on these findings, the researcher recommends the continued development and expansion of the electronic invoicing system to cover all economic activities. Moreover, it is essential to strengthen the digital infrastructure and enhance the capacity of human resources within the Egyptian Tax Authority to promote transparency, ensure tax equity, and reduce opportunities for tax evasion in the future.

## First: Research Framework

### 1- Introduction

In the modern era, taxes represent one of the most prominent sources of public revenue upon which the state relies heavily to finance its expenditures and implement its economic and social programs. Tax revenues account for approximately 73% of the total public revenues of the state. However, the current tax system faces several shortcomings

and challenges, most notably the lack of trust between taxpayers and the tax administration. This mistrust contributes to the complexity and prolongation of tax assessment and collection procedures, resulting in the accumulation of tax arrears. These issues further exacerbate the phenomenon of tax evasion, thereby limiting the ability of the tax authority to achieve its core objectives, which include increasing tax revenues and promoting social justice within the tax community (Shehata, 2020).

This approach aligns with the implementation of the Unified Tax Procedures Law No. (206) of 2020, which represents a significant legislative milestone aimed at modernizing the Egyptian tax system. The law provides various benefits to taxpayers and contributes to the simplification of tax procedures, thereby constituting an unprecedented legislative shift that positions Egypt's tax system among the more advanced global models. Implementing this law required a comprehensive development of the legislative and regulatory frameworks, alongside upgrading the technological infrastructure of the Egyptian Tax Authority's facilities and investing in the development and qualification of human capital within the tax system. Furthermore, the adoption of the electronic tax audit system has yielded numerous benefits, most notably the restoration of trust between taxpayers and the tax administration. This trust fosters voluntary compliance in fulfilling tax obligations, reduces incidents of tax evasion and avoidance, and significantly enhances the efficiency and accuracy of audit processes, ultimately benefiting the overall tax system, the tax community, and the national economy (Mahmoud et al., 2023)

The development and implementation of the electronic invoicing (e-invoicing) system is closely linked to the rapid growth of global e-commerce and the emergence of the digital economy era. The expansion of the use of information and communication technology (ICT), particularly the internet, has led to a significant transformation in financial, economic, and social interactions toward electronic models. E-invoicing is one of the key outcomes of this evolution and constitutes a central component of the digital tax administration system (Zhang Bin& wang shuhua, 2017).

Amid this accelerating technological development, e-invoicing has become an indispensable necessity, especially with the widespread use of smartphones, mobile internet, computers, and a variety of modern IT applications. These combined factors have significantly contributed to the growing need for adopting efficient and modern e-invoicing systems (Zhong Fasheng, 2016).

Electronic invoices play a crucial role in enhancing tax oversight over commercial transactions, protecting consumer rights, and enabling real-time monitoring of invoices by the tax authority. Furthermore, e-invoicing contributes to curbing invoice forgery and manipulation, making it an effective tool in combating tax evasion (Sun Rongzhou et al., 2016). Additionally, e-invoicing helps rationalize resource consumption by reducing the reliance on paper, which positively impacts environmental protection. It also plays a role in shrinking the informal economy (Kathrin et al., 2017). The e-invoicing system is among the most prominent applications of digital transformation, as it enhances transparency in commercial activities by enabling the issuance and receipt of transactional data electronically via the internet (Anh Huu et al., 2020).

The researcher's perspective, the adoption of electronic invoicing is a modern and effective tool that enhances the efficiency of the tax system, in line with the global trend toward digital transformation. This shift represents a fundamental step toward reducing tax evasion practices and promoting greater transparency and tax equity. Accordingly, this study aims to explore the impact of implementing the electronic invoicing system within the Egyptian tax environment.

## 2- Research Problem

Taxation is considered a fundamental instrument for mobilizing public financial resources and an effective means through which the state intervenes to influence the economic and social life of its citizens, primarily by redistributing income. Given the critical role taxes play in supporting economic and social development, the state continually seeks to improve and enhance the efficiency of its tax system. In the Egyptian context, however, the tax administration suffers from deficiencies in the quality of tax audit processes, which has led to several negative

consequences. These include a decline in taxpayer trust, an increase in disputes, and a rise in tax evasion rates—factors that ultimately reduce overall tax revenues. In light of these challenges, it has become essential to reconsider the traditional tax system and adopt digital transformation mechanisms to address its weaknesses. Such reforms are necessary to enhance the efficiency of tax administration, increase revenue collection, and limit tax evasion (Hassan, 2024).

In recent decades, the world has witnessed a rapid technological revolution that has affected various aspects of life, making the adoption of electronic systems imperative. This has given rise to the concept of "digital transformation," which refers to the integration of information technology into institutional infrastructure, whether in the public or private sector. In this context, Egypt has made significant efforts to build a comprehensive digital infrastructure across many government entities, one of the most prominent being the development of the electronic tax system. The electronic tax filing system has already been implemented, requiring taxpayers to submit their returns through the electronic tax services portal. Furthermore, the electronic invoicing system has been activated, marking a major shift from traditional paper-based invoices to digital invoices. This enables the Egyptian Tax Authority to monitor all commercial and financial transactions whether in the sale or purchase of goods and services in real time. Such digital transformation contributes to detecting cases of tax evasion and fraud, enhances equity among companies operating in the Egyptian market, simplifies tax procedures, and supports the state's efforts to integrate the informal economy into the formal economic system (Mahmoud et al., 2023).

**In this context the research problem can be framed in the following questions:**

1. What is the nature and scope of the electronic invoicing system within the context of the digital transformation of Egypt's tax administration?
2. To what extent does the use of electronic invoicing contribute to reducing tax evasion practices in the Egyptian context?

### **3- Literature Review**

Literature review can be presented and analyzed in terms of their relation to the research variables in preparation for deriving its hypotheses and emphasizing its importance, through the following axes:

**First group: studies discussing the e- invoicing system in the context of digital transformation processes:**

Nikmatul& lesta (2019) This study aimed to analyze the effectiveness of the electronic invoicing system in facilitating tax payment processes by taxpayers in Indonesia, as well as to identify the limitations and challenges encountered during the implementation of this system within the Indonesian context. The study concluded that the system's effectiveness was limited, primarily due to several factors, most notably errors in the data entered into the system, low levels of tax awareness among taxpayers, and weaknesses in technological infrastructure. Based on these findings, the study recommended improving the quality and accuracy of the information integrated into the system, and enhancing tax awareness through educational and media campaigns aimed at clarifying the benefits of the system and how it operates. The study also emphasized the importance of developing technological capacities and providing training programs for both employees and taxpayers to ensure the system's effective utilization and to achieve its intended objectives in improving tax compliance.

Khaled (2024) This study investigates the implementation of the Electronic Invoice Tax System (EITS) in Egypt and its impact on taxpayer compliance (TPC), with particular emphasis on the mediating role of taxpayer satisfaction (TPS). The research aims to explore how EITS contributes to creating a more transparent and efficient tax environment that encourages higher compliance levels and fosters greater accountability among both individuals and businesses. Data were collected through a structured questionnaire administered to a sample of 400 taxpayers registered with the Egyptian Tax Authority (ETA). The data were analyzed using Structural Equation Modelling (SEM), Simple Linear Regression (SLR), and Path Analysis (PA). The study concluded a statistically significant positive effect of EITS dimensions on both TPS and TPC. Furthermore, The study recommended the mediating role of

taxpayer satisfaction in the relationship between EITS and taxpayer compliance.

Yousef (2025) This study aimed to analyze the impact of using electronic invoicing on improving the quality of tax accounting processes by examining the implications of implementing this system across various aspects of the taxation process. The study concluded statistically significant differences among respondents' views regarding the quality of tax accounting processes and their measurement indicators. Additionally, statistically significant differences were found in respondents' perceptions of the role of electronic invoicing in enhancing tax accounting processes, as well as a statistically significant impact of electronic invoicing on improving the overall quality of tax accounting. The study recommended the need to enhance the level of electronic disclosure related to tax accounting processes through the development of e-government applications, in a manner that contributes to improving the efficiency of the tax system and increasing levels of transparency and compliance.

### **Second group: studies discussing the tax evasion practices from an accounting perspective:**

Uyer et al., (2021) This study aimed to clarify the relationship between digital transformation in the delivery of government services and tax evasion practices by analyzing the role of modern information and communication technologies (ICT) in this context. The study's findings revealed that the digitization of government services significantly contributes to reducing tax evasion, as this transformation enhances transparency and efficiency in tax administration. The study also confirmed that the level of citizens' and society's adoption of ICT plays a critical role in strengthening this effect, with the impact of digitalization on curbing tax evasion being more pronounced in countries with higher levels of ICT usage. The study recommended the strategic utilization of ICT to improve the delivery of public services, particularly those related to tax administration, in a way that promotes tax compliance and increases public revenue. Specifically, the study emphasized the need to develop e-government infrastructure and enhance electronic filing and



declaration systems, thereby facilitating taxpayers' ability to submit tax returns and fulfill their obligations efficiently and flexibly.

Ashak (2024) The study aims to determine the different methods used by multinational companies to practice tax evasion through transaction with related parties and to provide suggestions that may help avoid these all methods used by multinational companies through their transaction with related parties to reduce the tax base and in turn the tax due, have been identified and analyzed. The situation of the Egyptian tax legislation and the Egyptian accounting standard No.15 of 2019 regarding the disclosure of related parties, towards such practices were determined. The study recommended a determination of the methods used for tax evasion in transactions related to multinational companies, which are represented in conducting related transaction between the parent company and its branches in tax haven countries, or through the permanent establishment ,or conducting netting agreement and mutual transaction through debt financing and use available flexibility in pricing tangible assets and mutual services ,as well as manipulation of the value of mutual intangible assets.Given that current tax legislation and the Egyptian accounting standard No.15 of 2019 don't include guidelines or control that can help the tax examiner or legal auditor discover or limit tax evasion practices through transaction between related parties,a setoff legislative and accounting suggestions was presented to avoid such illegal practices.

Abualatta (2025) This study aims to examine the impact of implementing tax administration governance through its core principles on enhancing risk management and addressing tax evasion practices in Egypt. A field study was conducted to empirically test the research hypotheses, utilizing a structured questionnaire administered to a sample of 384 participants, including tax inspectors, auditors, heads of tax offices, and external auditors from Certified Public Accounting (CPA) firms. the study employed empirical analysis based on official reports issued by the Egyptian Tax Authority (ETA) to assess the extent of adherence to governance principles and their role in mitigating non-compliance risks and improving the overall efficiency of the tax collection process. The study concluded significant differences in



respondents' perceptions regarding the principles of tax administration governance, ETA's adoption of risk management methodologies, and the prevalence of tax evasion practices. Moreover, the study recommended a significant positive impact of implementing governance principles on improving tax risk management and reducing tax evasion. the conclusion that the successful implementation of tax administration governance by the ETA contributes to enhanced taxpayer compliance and a measurable decline in tax evasion behaviors.

### **Third group: The role of using Electronic Invoices in Reduce Tax Evasion Practiced:**

Abou elenin (2024) This study aims to analyze the impact of implementing the electronic invoicing system on the quality of tax accounting information in the Arab Republic of Egypt. The study falls within the framework of contemporary scientific methodology, combining both inductive and deductive approaches to achieve a comprehensive understanding of the phenomenon under investigation. The fieldwork was conducted on a sample of 200 individuals, comprising employees of the Egyptian Tax Authority and a number of accountants working in accounting firms. A questionnaire was employed as the primary tool for data and information collection. The study concluded significant relationship between the implementation of the electronic invoicing system and the quality of tax accounting information. Furthermore, the study recommended indicated a statistically significant relationship between the implementation of the electronic invoicing system and the reduction of the negative effects of tax evasion in Egypt.

### **Conclusion of the Literature Review**

- Previous studies reveal a scarcity of research addressing the role of electronic invoicing in reducing tax evasion practices, to the best of the researcher's knowledge.
- The majority of studies have emphasized the importance of using electronic invoicing, due to its significant role in improving the performance of the tax system.
- Some studies have indicated that the use of electronic invoicing contributes to mitigating the negative impacts of tax evasion practices.

- A number of studies have confirmed that electronic invoicing helps enhance the quality of tax accounting information.
- However, previous studies have not clearly addressed the role of electronic invoicing as a tool for limiting tax evasion practices.

## Research Gap

### a. In Terms of Objective:

The primary objective of this research is to examine the role of electronic invoicing in reducing tax evasion practices. This is achieved by assessing the impact of implementing the e-invoicing system on enhancing transparency, improving the quality of tax data, and increasing the level of tax compliance, thereby contributing to narrowing the tax gap and achieving greater efficiency in Egypt's tax collection system.

### b. In Terms of Variables:

The research variables are defined as follows: electronic invoicing represents the independent variable, while tax evasion practices represent the dependent variable.

### c. In Terms of Scope of Application:

The study will be applied within the organizational structure of the Egyptian Tax Authority, including its regional offices, departments, and tax directorates, during the period from 2020 to 2024.

## 4-Research objectives

The primary objective of this study is to examine the role of electronic invoicing in curbing tax evasion practices, within the framework of compliance with the requirements of both Egyptian and international accounting standards. From this main objective, several sub-objectives are derived, as follows:

1. Explore the nature and key determinants of electronic invoicing in light of the digital transformation of the Egyptian tax system.
2. Assess the impact of electronic invoicing on reducing tax evasion practices within the Egyptian context.

## 5- Research importance

The significance of this study stems from the importance of its subject matter, which lies in examining the role of electronic invoicing in

reducing tax evasion practices. The significance of the study can be divided into two main dimensions:

### - Scientific Significance:

The scientific significance of this study lies in its contribution to enriching Arabic accounting literature by addressing one of the emerging topics related to digital transformation—namely, the implementation of electronic invoicing and its role in limiting tax evasion practices. The study also gains importance by shedding light on the accounting, regulatory, and professional frameworks governing tax accounting processes and clarifying their relationship with tax evasion practices, within the context of relevant Egyptian and international accounting standards.

### - Practical Significance:

The practical significance of the study derives from the vital role that electronic invoicing plays in enhancing the efficiency of the tax system by supporting a balance between tax equity and the accuracy of tax accounting. This, in turn, has a positive impact on improving state revenues and increasing the effectiveness of the public budget. Furthermore, the applied value of the study lies in providing a clear vision for tax authorities on how to activate the use of electronic invoicing as an effective oversight tool that contributes to reducing tax evasion practices, thereby promoting tax compliance and enhancing the transparency of commercial transactions.

## 6- Research Hypotheses

The study's hypotheses refer to the potential answers to the research questions and can be formulated as follows:

### The first hypotheses

"There are statistically significant differences regarding the nature and determinants of electronic invoicing in light of the digital transformation of the tax system in Egypt."

### The second hypotheses

"There is a statistically significant impact of the use of electronic invoicing on tax evasion practices."

## **Research approach**

The research will use both an inductive and a deductive approach to achieve its objectives, and test hypotheses:

### **Inductive approach:**

The researcher identified the dimensions of the research problem, formulated its objectives and hypotheses, and subsequently tested the validity of these hypotheses through an applied field study conducted at the Egyptian Tax Authority. This approach was employed to investigate the actual impact of implementing the electronic invoicing system on reducing tax evasion practices, through the analysis of data obtained from the study environment.

### **Deductive Approach:**

The researcher relied on the analysis of relevant previous studies—both Arabic and international—as well as the review of official reports and publications issued by specialized institutions and authorities. This was undertaken to construct the theoretical framework of the study and to derive the significance of electronic invoicing in promoting tax transparency and clarifying its role in curbing tax evasion practices.

## **7- Research limitations**

### **Objective limitations:**

The thematic scope of this study is limited to examining the role of electronic invoicing in reducing tax evasion practices. The study focuses on analyzing the relationship between the implementation of the electronic invoicing system and its effectiveness in minimizing opportunities for tax evasion by both individuals and businesses. The study is confined to discussing the technical and regulatory aspects related to the implementation of electronic invoicing, in addition to reviewing the mechanisms that enable the Egyptian Tax Authority to track and audit commercial transactions electronically

### **2. Place Limitations:**

The geographical scope of the study is centered on the organizational structure of the Egyptian Tax Authority. It includes the authority's regional offices, departments, and tax directorates, given their direct

involvement in the implementation of the electronic invoicing system and mechanisms for limiting tax evasion.

### 3. Time Limitations:

The temporal limits of the study covers the period from 2020 to 2024. This timeframe was selected because it represents a critical phase in the implementation of the electronic invoicing system in Egypt, and is characterized by a relative degree of stability, which allows for an objective analysis of the system's impact on reducing tax evasion practices.

## 8- Study community and simple

### a. Study Population

The study population comprises seven (7) centers within the organizational structure of the Egyptian Tax Authority. The Authority's tax offices are distributed across 95 regional directorates, encompassing 100 departments and 470 tax offices, according to the data published by the Egyptian Tax Authority under the Ministry of Finance (Egyptian Tax Authority, 2024).

### b. Study Sample

Due to the difficulty of conducting a comprehensive census resulting from time, effort, and cost constraints, a random sample of four tax offices was selected. These include:

- Qasr El-Nil Tax Office
- Abdeen Tax Office
- Maadi Tax Office
- Heliopolis Tax Office

### c. Data Sources and Collection Methods

The data related to the study variables will be obtained from the Information Unit of the Egyptian Tax Authority and publicly available data on the website of the Ministry of Finance. These data will serve as the primary source for the empirical analysis.

### d. Measurement of Study Variables

- **Independent Variable: Electronic Invoicing**

The determinants of electronic invoicing adoption are measured using a scale adapted from Johnson (2020), which includes multiple

dimensions reflecting the technical and administrative characteristics of e-invoicing:

1. Accuracy – Measures the precision and correctness of the information contained in the electronic invoice.
2. Efficiency – Reflects the efficiency of the issuance and distribution processes of electronic invoices.
3. Security – Measures the level of security associated with the issuance and exchange of e-invoices.
4. Compliance – Assesses the degree to which the electronic invoice adheres to applicable tax laws and regulations.
5. Quality – Evaluates the quality of invoice information in terms of comprehensiveness, clarity, and reliability.
6. Administrative Efficiency – Refers to how effectively management handles invoice data in terms of processing and analysis.
7. User Satisfaction – Gauges user satisfaction with the performance of the electronic invoicing system.
8. Integration – Reflects the ability of the electronic invoicing system to integrate with other electronic systems within the organization.
9. Flexibility Measures the system's ability to adapt to environmental, legislative, or technological changes.
10. Cost – Compares the costs of issuing and distributing e-invoices with those of traditional systems.

### - Dependent Variable: Tax Evasion Practices (Zaki, 2021)

Tax evasion is measured by assessing the gap between estimated and actual collected taxes. This method relies on calculating the annual gap between tax estimates and actual collections, while ensuring the selected time frame is free from extraordinary or disruptive events that might significantly distort this relationship.

The annual gap index is applied to three main types of taxes susceptible to evasion:

- Commercial and Industrial Profits Tax
- Non-Commercial Professional Profits Tax.
- Corporate Income Tax

The tax evasion amount is calculated using the following formula:

Tax Evasion Volume = Estimated Taxes – Actual Collected Taxes

Studies indicate that non-commercial professions are most prone to tax evasion, as the actual collected taxes from freelance professionals do not reflect the large number of individuals working in this sector or their relatively high income levels. The same applies to commercial and industrial activities, where the taxes collected often fall short of the actual profits and income generated in practice.

### **9- Research plan: the research is diuidd into several points:**

The research was divided as follows in light of the research problem, in order to achieve its objectives, to reflect the test of its hypotheses, and to draw the most important results and recommendations based on its methodology:

**First:** The general framework of the research.

**Second:** The Nature and Importance of the Electronic Invoice

**Third:** Implications of the Role of E-Invoicing in Reducing Tax Evasion Practices

**Fourth:** The Empirical study at the Egyptian Tax Authority.

**Fifth:** Conclusion, results and recommendations.

The following is a detailed presentation of the rest of the research axes:

### **Second: The Nature and Importance of the Electronic Invoice**

The electronic invoice is one of the modern systems aimed at enhancing the efficiency of commercial and tax operations, thereby contributing to the improvement of tax accounting processes. This system enables institutions to issue digital invoices instead of traditional paper-based ones, which leads to a reduction in administrative costs and an improvement in the accuracy of accounting data and information. Furthermore, the electronic system supports the tax accounting cycle by facilitating processes such as audit, inventory, registration, and ultimately the effective collection of tax revenues. Electronic invoicing allows institutions to automatically submit invoice data to the Tax



Authority, reducing human errors and improving the overall efficiency of the tax accounting system. Accordingly, adherence to tax laws and regulations, along with compliance with recognized security and privacy standards, is essential for the successful implementation of this system (Needles, 2022).

## 1-Definition of the Electronic Invoice

Gamaralalage Hiruni (2020) indicated that the electronic invoice represents a form of digital document that contains electronic data exchanged between the seller and the buyer. These invoices are transmitted through service providers responsible for delivering the goods or services. Moreover, the electronic invoice must be formatted in accordance with the technical and structural standards set by the electronic invoicing system to ensure compatibility and facilitate electronic processing.

Abou El-Einin (2024) indicates that the electronic invoice is a standardized digital document approved by the Egyptian Tax Authority, used to verify transactions related to the sale of goods and the provision of services. Each electronic invoice contains a digital signature that identifies the signer, thereby ensuring data integrity, reducing the risk of forgery and falsification, and enhancing security and confidentiality in tax-related transactions.

The researcher view, the electronic invoice as a digital document used to validate commercial transactions between the seller and the buyer. It is issued, exchanged, and stored electronically in accordance with specific technical and legal standards that ensure the accuracy, security, and confidentiality of the data. The electronic invoice represents a modern alternative to the traditional paper invoice, as it includes all essential information related to the transaction, such as details of both parties, the nature of the goods or services provided, the total value, and the applicable tax amounts. It also incorporates an electronic signature that confers legal validity and reliability to the document. This system contributes to accelerating accounting and tax procedures and serves as an effective tool in promoting transparency, reducing tax evasion, and enhancing the efficiency of financial resource management at both the institutional and national levels.

## **2- The Importance of Using Electronic Invoicing**

Sanday and Ismaila (2019) indicate that the implementation of the electronic invoicing system contributes to creating new job opportunities for emerging enterprises that provide e-invoicing services as third-party intermediaries between sellers and buyers. This system reduces time, cost, and space associated with supply transactions. Moreover, electronic invoices help reduce paper consumption and minimize human intervention in invoice preparation, which positively impacts customer relationship management. Similarly, Nguyen et al. (2020) emphasize that the electronic invoicing system enhances the efficiency and effectiveness of business operations and improves tax administration. It facilitates the auditing of tax returns and enables accurate determination of taxpayers' liabilities.

The researcher believes that the electronic invoicing system represents a pivotal step in the development of the tax system in the Arab Republic of Egypt, due to its effective role in enhancing the efficiency of tax audit processes. This, in turn, contributes to safeguarding the rights of the state treasury and supporting the achievement of the financial targets necessary for the continuation of national efforts toward sustainable development. Moreover, the system facilitates the integration of the informal economy into the formal economy, thereby promoting the principle of tax justice and supporting the establishment of a modern tax system aligned with global developments, in line with Egypt's Vision 2030 for digital transformation, The electronic invoicing system is considered one of the fundamental pillars of the Egyptian Tax Authority's development projects. It aims to establish a centralized system that enables the Authority to monitor all commercial transactions between economic entities through the instant and digital exchange of invoices. In this context, Ministerial Decree No. 188 of 2020 was issued, mandating the tax community to adopt the e-invoicing system. Furthermore, the Head of the Egyptian Tax Authority issued Decision No. 386 of 2020, which required 134 companies to begin issuing electronic tax invoices starting from November 15, 2020, as part of the first implementation phase. This was followed by Decision No. 518 of 2020, which obligated an additional 347 companies to begin

issuing electronic tax invoices as of February 15, 2021, within the second phase of implementation.

### **3-Advantages and Disadvantages of Implementing the Electronic Invoicing System**

#### **A-Advantages of Implementing the Electronic Invoicing System (Abo El-Enin, 2024):**

- 1- The implementation of the electronic invoicing system is considered one of the modern tools that contribute to enhancing the efficiency of commercial and administrative performance within organizations. By reducing geographical distance, time, and effort required to complete transactions, electronic invoicing offers significant advantages. Under traditional paper-based invoicing, customers tend to prefer dealing with nearby establishments due to the difficulty of obtaining physical invoices from distant suppliers. However, with the adoption of modern electronic invoicing systems, it has become possible to instantly receive certified and electronically authenticated invoices from the selling entity, thereby expanding market reach, increasing commercial activity, and promoting investment between individuals and organizations regardless of their physical locations.
- 2- From an administrative perspective, the e-invoicing system helps reduce operational expenses associated with issuing paper invoices, including the costs of paper, ink, office supplies, printing and copying machines, and stamps. Moreover, it saves time and effort required for manual invoice preparation by enabling automated data entry for items or services. This feature allows organizations to include an unlimited number of items in the invoice instantly and accurately, thus improving the efficiency of accounting processes.
- 3- Financially, electronic invoicing contributes to faster collections and improved cash flow. The system links the invoice directly to the customer and automatically sends a notification with the invoice amount and due date, enhancing customer awareness and timely payment. Additionally, electronic invoices can be integrated with modern online payment methods, facilitating quicker payment and reducing the risk of bad debts or doubtful accounts. This, in turn,

increases liquidity and profitability for organizations. Furthermore, the use of electronic invoicing minimizes the time and effort involved in collection processes, thereby improving overall financial efficiency. The Researcher believes that the implementation of the electronic invoicing system yields numerous benefits that contribute to enhancing the efficiency of tax administration and fostering a more favorable economic environment. The most prominent advantages include the following:

- Preservation of accounting records and data, reducing the risk of loss or damage through secure electronic storage that allows for easy retrieval at any time.
- Reduction of administrative costs associated with issuing paper invoices, including expenses for printing, stationery, and manual archiving, thereby improving operational efficiency.
- Facilitation of tax audit, assessment, and collection procedures through real-time access to accurate and standardized digital data, which minimizes reliance on manual inspection.
- Verification of invoice elements and data accuracy for all transaction parties, thereby enhancing the credibility and integrity of tax-related documentation and reducing opportunities for fraud or manipulation.
- Improvement of taxpayers' fiscal standing by streamlining value-added tax (VAT) reconciliation processes between various entities, which fosters better compliance and trust in the tax system.

### B- Disadvantages of Implementing the Electronic Invoicing System

Despite the numerous advantages offered by the electronic invoicing (e-invoicing) system, several challenges and limitations have been identified in its implementation, as noted by Kim (2018). These can be summarized as follows:

1. Security and Privacy Concerns: E-invoices may be vulnerable to cyberattacks and data breaches, posing risks to the confidentiality and security of financial and commercial information.
2. Difficulty Integrating with Legacy Systems: Many organizations face technical difficulties in integrating the e-invoicing system with outdated accounting or administrative systems that lack compatibility, which may hinder workflow and reduce efficiency.

3. Need for Employee Training: Implementing an electronic invoicing system requires preparing and training personnel to use new technologies, which involves additional training programs and may temporarily affect operational efficiency.
4. High Initial Implementation Costs: The upfront investment required for digital infrastructure, software, and technical equipment represents a financial burden, particularly for small and medium-sized enterprises, potentially slowing down the digital transition.
5. Challenges in Managing Electronic Documents: In the absence of an effective electronic document management system, organizations may struggle with organizing, storing, and retrieving e-invoices, which can hinder data accessibility and complicate tax processes.

**In light of the above, the researcher argues that,** despite its benefits, the e-invoicing system may result in increased short-term costs, especially in relation to employee training, integration with outdated systems, and the high initial setup costs. Therefore, strategic planning and adequate technical and financial support are essential to overcoming these challenges.

### Three: Implications of the Role of E-Invoicing in Reducing Tax Evasion Practices

#### 1- Define the tax evasion

Al-Sudani (2023) defined tax evasion as "a growing economic phenomenon, especially in countries that suffer from weak tax systems that are unable to identify all taxable individuals or accurately track their activities. This deficiency is reflected in various forms, such as the failure of some individuals or entities to register their economic activities, refrain from reporting them, or claim residency in other countries outside the state - such as Egypt in order to fall outside the scope of taxation under local legislation. It is worth noting that tax evasion is not limited to a specific social or economic class, nor to a particular type of entity, but rather is a behavior that can be practiced by various parties within the economic environment."

Abualatta (2025) Tax evasion is the intentional violation of tax laws by a taxpayer to avoid paying taxes, which might include not filing income tax returns or providing false information about tax liability.

## **2- The Relationship Between the Use of Electronic Invoicing and Tax Evasion Practices**

There is a strong correlation between the use of electronic invoicing systems and the reduction of tax evasion practices. The e-invoicing system provides a transparent digital environment that enables tax authorities to track and automate tax collection with high accuracy, confirmed a statistically significant relationship between the adoption of e-invoices and the improvement in the quality of tax system data, which in turn reduces the loopholes exploited by tax evaders. Practically, the Egyptian Tax Authority has reported that analyzing over one million invoices daily led to the detection of 17,000 cases of tax evasion. Among these, 4,600 companies reached settlements, resulting in the recovery of approximately EGP 5.5 billion during the first implementation phase in March 2022. This reflects the system's ability to expand the tax base and reduce the size of the informal economy (abu el-enin, 2024).

## **3- The Impact of Using Electronic Invoicing on Reducing Tax Evasion Practices**

The electronic invoicing system contributes significantly to reducing tax evasion practices and enhancing the efficiency of the tax system in the Arab Republic of Egypt. This is achieved through a set of mechanisms aimed at improving tax compliance and increasing transparency. As noted by Ibrahim Abdullah (2024) and Matthieu Bellon (2022), the implementation of e-invoicing represents a pivotal step toward establishing a more effective and equitable tax framework. One of the primary benefits of e-invoicing lies in its ability to enable the tax authority to accurately and comprehensively identify all entities and individuals subject to taxation. Furthermore, it facilitates the real-time documentation of all commercial transactions, thereby streamlining tax assessment processes. The system also accelerates and simplifies tax-related procedures, including auditing, verification, and



review, while minimizing the risk of issuing fictitious invoices or submitting misleading information.

- In addition, the e-invoicing platform allows for real-time monitoring of commercial interactions among economic entities, which strengthens the oversight capabilities of the tax administration and supports the integration of the informal economy into the formal sector. It also helps reduce manipulation and fraud in the data submitted to the tax authority. Thus, e-invoicing serves as a strategic tool to enhance tax collection efficiency, promote tax equity, and support the formalization of previously unregulated economic activities.
- The implementation of the electronic invoicing system contributes significantly to the development of modern and comprehensive databases characterized by a high degree of accuracy and reliability. These databases enable tax authorities to access real-time and detailed information on various economic activities. As such, they serve as a fundamental pillar for supporting sound tax decision-making, providing a robust foundation for forecasting potential changes in public revenues, and enhancing the effectiveness of long-term financial planning in alignment with the country's fiscal and economic policy objectives.
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In light of the above, the researcher contends that the use of electronic invoicing plays a pivotal role in enhancing the accuracy and integrity of tax-related information. It contributes to saving time, effort, and cost, while simultaneously improving compliance with tax laws and regulations and facilitating commercial exchanges. Accordingly, the adoption of electronic invoicing enhances the quality of tax accounting processes by streamlining tax audit procedures, improving the accuracy of taxpayer registration and documentation, and ultimately supporting the efficient collection of tax revenues.

### **Fourth: The Empirical study at the Egyptian Tax Authority**

In an effort to provide practical evidence reflecting the real-world application of electronic invoicing within the framework of modern technological systems as a fundamental tool for reducing tax evasion practices in the Egyptian context the researcher seeks to explore the following key dimensions:

#### **First: Study Methodology**

The study methodology will be discussed in terms of defining the study population and sampling units, to which questionnaire will be distributed, as well as identifying appropriate statistical analysis tools for the purposes of analysis and testing hypotheses in light of the nature and types of study data.

#### **1- Population and sample:**

The research community consists of four main categories: Tax Officer – Audit Division, Tax Officer – Seizure and Collection Division, Tax Officer – Enumeration and Information Division, Tax Officer – Information Technology Division, and due to the difficulty of limiting

their numbers, has been contacted by a random sample of 250 individuals, as shown in the following table:

**Table (1)**  
**Statement of the study simple**

	Categorize of the Research Sample	No.of Distribute List	No. of Corre List	The Percentage of Correct Listing i
1	Audit Division	50	35	70%
2	Seizure and Collection Divis	50	40	80%
3	Enumeration and Information division	75	65	86%
4	Information Techno Division	75	70	93,3%
Total		250	210	84%

Resource: prepared by the Researcher

• It is clear from table No.(1), that the number of correct lists that were entered and tested statistically is 210, where the percentage of correct responses represents about 84%.

#### **1. Data collection methods and sources:**

The primary data necessary to discuss the analytical aspects of the study was collected through a questionnaire distributed to Audit Division, Seizure and Collection Division

,Enumeration and Information division, Information Technology Division, in the Egyptian tax authority, as well as giving weights to each of the paragraphs according to a scale Five likert are as follows:

Spondents' respon	Strongly Agr	Agree	Neutral	Disagree	strongly Disagre
Coding	(5)	(4)	(3)	(2)	(1)

• The researcher relied on primary sources to gather data for the field study, by preparing and distributing a survey questionnaire that encapsulates the research variables. Below are the main axes of the survey questionnaire along with their respective number of items:

Axis 1: The Nature and Determinants of E-Invoicing in Light of the Digital Transformation of the Egyptian Tax System, and it includes 12 variable.

Axis 2: The Use of E-Invoicing and Its Role in Reducing Tax Evasion Practices, and includes 9 variables.

## Second: Results of the descriptive statistical analysis of the study variables:

### 1. Reliability testing of the measures used in the Research

The Researcher adopted to use the Cronbach's alpha as the most significant method of reliability analysis in evaluating the degree of consistency between the items of the scale under tests , through the association of variables within the same group, and the association of all variables with each other, based on the Cronbach's alpha test for reliability and validity, the following table shows the results of a Cronbach's test:

Table No. (2)  
Value Of Alpha Cronbach's Transaction for the Research Variables

	No. of statement	Alpha coefficient
1. The Nature and Determinants of E-Invoicing in Light of the Digital Transformation of the Egyptian Tax System	12	,85
3. The Use of E-Invoicing and Its Role in Reducing Tax Evasion Practices	9	,82
<b>The Entire Variables</b>	21	

Source: Prepared by the researcher based on the results of statistical analysis.

The table illustrates Cronbach's Alpha reliability coefficient for study variables (three main dimensions with 21 items). The values of Cronbach's Alpha ranged between 0.85 and 0.82 with an average of **0.79** for all study variables. These values are considered acceptable, reflecting the reliability of the study variables. These results support confidence in and validate the suitability of the research variables.

### 2. Presentation of the results of hypothesis testing analysis:

In this section, The researcher presents and analyzes the results of statistical analysis of respondents' answers to test the validity of research hypotheses as follows:

#### 2/1 - Statistical analysis results of hypothesis testing " The Nature and Determinants of E-Invoicing in Light of the Digital Transformation of the Egyptian Tax System ":

Hypothesis 1 states: " There are statistically significant differences regarding the nature and determinants of electronic invoicing in light of the digital transformation of the tax system in Egypt.". To test the

validity of this hypothesis, the results of the kruskal-wallis test indicators can be relied upon.

**Table (3)**

The Results of Testing The First Hypothesis Regarding The Nature and Determinants of E-Invoicing in Light of the Digital Transformation of the Egyptian Tax System Using Kruskal Wallis

Variables	Kruskal-wallis	
	Chi-squar	p- value
<b>▪ The Nature of Electronic Invoicing in the Context of the Digital Transformation of the Egyptian Tax System</b>		
X1. The electronic invoice is considered an official and recognized alternative to paper invoices in tax transactions.	10.5	,014
2. X2. E-invoicing contributes to enhancing transparency and accuracy in recording financial transactions.	8.07	,045
X3. E-invoicing helps improve tax collection efficiency by reducing opportunities for manipulation.	11.43	,05
3. X4. The electronic invoice is highly reliable in documenting commercial transactions electronically.	7.34	,09
X5. E-invoicing reflects a development in tax process management in line with digital transformation.	8.8	,032
5. X6. E-invoicing accelerates tax audit procedures and reduces administrative burden on taxpayers.	9.1	,029
<b>▪ Determinants of Electronic Invoicing in the Context of the Digital Transformation of the Egyptian Tax System</b>		
X7. The successful implementation of e-invoicing depends on the efficiency of the digital infrastructure and the relevant authorities.	7.1	,05
X8. Tax awareness and prior training of taxpayers are crucial factors for the effective use of e-invoicing.	10.4	,01
X9. A clear and mandatory legislative framework is	10.2	,01

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of the most important factors supporting the application of e-invoicing.		
X10. 10. Some entities face technical challenges that hinder the full implementation of e-invoicing.	8.8	,03
6. X11. The application of e-invoicing requires integration between electronic accounting system and the tax system.	7.4	,05
X12. The digital transformation of the Egyptian Tax Authority has supported the widespread implementation of the e-invoicing system.	7.9	,04
<b>Total</b>	<b>22.9</b>	<b>,023</b>

**The source:** Prepared by the researcher based on the results of statistical analysis.

- The Results of the Previous Table (3), There are Significant significant differences regarding the nature and determinants of electronic invoicing in light of the digital transformation of the tax system in Egypt, there the value Chi-square was (22.9) with a level significance of (0.023), in light of the presentation and analysis of Kruskal - Wallis Test results, that is mean there is an agreement opinion between them about variables.

**Table No. (4)**  
**Results of the Kruskal-Wallis test regarding the impact of E-Invoicing utilization on tax evasion practices**

Variables	Kruskal-wallis	
	Chi-square	p- value
<b>▪ The impact of E-Invoicing utilization on tax evasion practices</b>		
X13. E-invoicing contributes to improving the accuracy of accounting records and reducing errors resulting from manual processing.	7.21	,05
7. X14. The use of e-invoices helps limit the issuance of fake invoices, which are a common method of tax evasion.	21.04	,019
X15. E-invoicing enhances transparency in accounting transactions between parties.	4.320	,034
8. X16. Integrating the taxpayer's accounting system with the e-invoicing platform reduces opportunities for financial data manipulation.	7.014	,032

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X17. E-invoices enable tax authorities to conduct more efficient and effective accounting audits.	10.50	,02
9. X18. The use of e-invoices facilitates the track and control 10. of financial transactions from an accounting perspective.	14.789	,01
X19. E-invoicing reduces the possibility of partial complete concealment of taxable revenues.	6.685	,043
X20. Standardizing the format and content of e-invoices supports accounting documentation and tax compliance.	7.987	,023
X21. E-invoicing serves as an effective accounting tool for detecting gaps or inconsistencies in submitted tax data.	4.67	,06
<b>Total</b>	15.539	,019

**Source:** Prepared by the researcher based on the results of statistical analysis.

- The results of the previous Table (5), there are significant difference between the respondents opinions according to the impact of E-Invoicing utilization on tax evasion practices, there the value chi- square was (15.539) with a level significance of (,019), in light of the presentation and analysis of Kruskal-Wallis Test results, that is mean there is an agreement opinion between them about variables.
- To test the validity of this hypothesis, we can rely on the indicators of the results from the multiple regression analysis test.  
The researcher used multiple linear regression analysis to verify the impact of the independent variable ( The Electronic Invoicing) on the dependent variable (The Reducing tax Evasion).

**Table No. (5)**  
**The Results of the Multiple Regression Analysis**

Dependent Variable	Reducing Tax Evasion				
	B	R	R2	T. Test	
Independent Variable				Value	Level of Significance
Electronic invoicing	.543	.872**	.76	13.025	.000**

Correlation of Coeffic	.949
Coefficient of Determination	.901
Value of F	1003.586
Degree of Freedom (D	209
Level of Significance	.000**

\*\* Indicate statistical significance at the 0.05 according to T-Test results.

**The following can be found in the previous table:**

- Each autonomous variable in the model also varied separately with the dependent variable according to the correlation coefficient (R ) between (.872\*\*) & (.838\*\*), The results indicate the morale of the binding coefficient at a moral level5 (0,05%), it means there is a significant positive and strong correlation between the electronic invoicing and the reducing tax evasion.
- The goodness of fit of multiple linear model illustrated in Table No.(5) according to the value of R2 equal 90.1% which means that independent variables( electronic invoicing & Determinants Variable ( reducing the tax evasion practices) explained 90.1% of the change in the dependent variable can be interpreted as being due to independent variables.
- To measure the impact of independent variables on the dependent variable, the regression analysis method was used, and a statistically significant effect was found among the views of the electronic invoicing surveyors on reducing the risk of exchange rate changes where morale was valued .000\*\* ( P-value < 0.05).
- The level of significance is less than 5% and therefore there are no significant difference.

## Second: the empirical framework at the Egyptian tax authority

### 1. Overview of the Egyptian Tax Authority

The Egyptian Tax Authority is a governmental body affiliated with the Ministry of Finance, responsible for the collection of taxes across the Arab Republic of Egypt. It was established by Presidential Decree No. 154 of 2006, which mandated the merger of the former General Tax Authority and the Sales Tax Authority. The Egyptian Tax Authority seeks to foster trust within the tax community by offering modernized and efficient tax services. Over the past six years, the authority has undergone significant structural and procedural transformations, driven by the political leadership's decision to digitize and automate all internal



operations and processes. This strategic shift has contributed to enhancing the quality of services provided, developing the professional competencies of the authority's personnel, and restructuring its internal systems to support future success, The authority aims to consolidate its position as a reliable institution dedicated to supporting and advancing the national economy. This is to be achieved through the development of an effective administrative system, the reinforcement of trust among stakeholders in the context of secure digital transformation, the broadening of the tax base, and the realization of tax equity (Egyptian Tax Authority, 2024).

## **2- The Level and Form of Electronic Disclosure at the Egyptian Tax Authority**

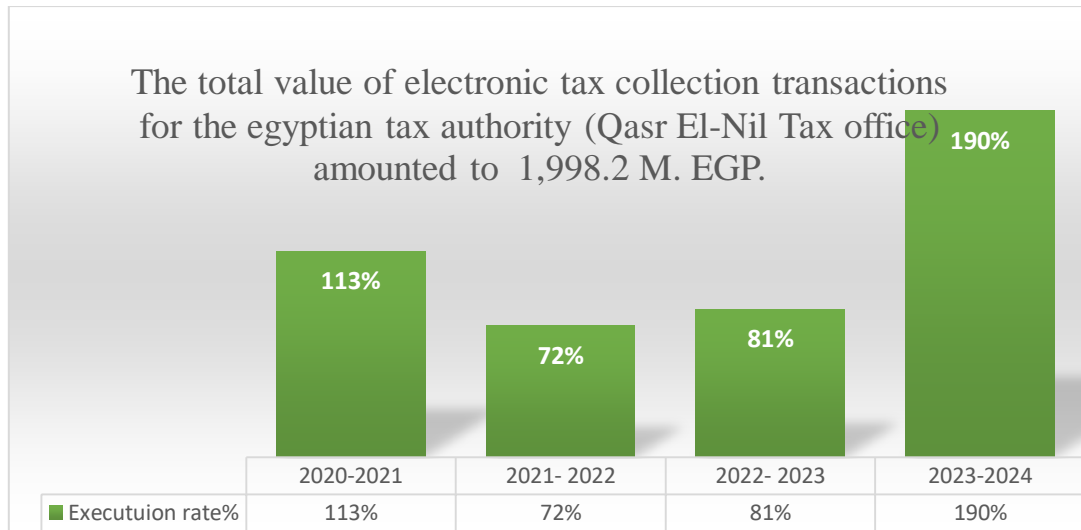
The Egyptian Tax Authority has undertaken significant efforts to develop all tax-related services and transactions—particularly in relation to electronic invoicing and other remote services—by fully leveraging its available resources to modernize the tax system as a whole. The Authority aims to facilitate a wide range of services for taxpayers with ease and efficiency, ensuring accessibility and responsiveness.

In alignment with global advancements in information technology, the Authority has proactively upgraded its digital infrastructure to enhance the efficiency and transparency of tax administration. Among these efforts is the provision of electronic platforms for the submission of all tax returns, as well as the integration of cloud storage systems through its official online portal. These initiatives reflect the Authority's commitment to staying abreast of digital transformation trends and fostering an environment of digital tax compliance.

(Egyptian Tax Authority, 2024)

- 1- The following figure illustrates the annual tax revenue collection rates resulting from the use of electronic invoicing at the Qasr El- Nil Tax Office during the period from 2020/2021 to 2023/2024.**

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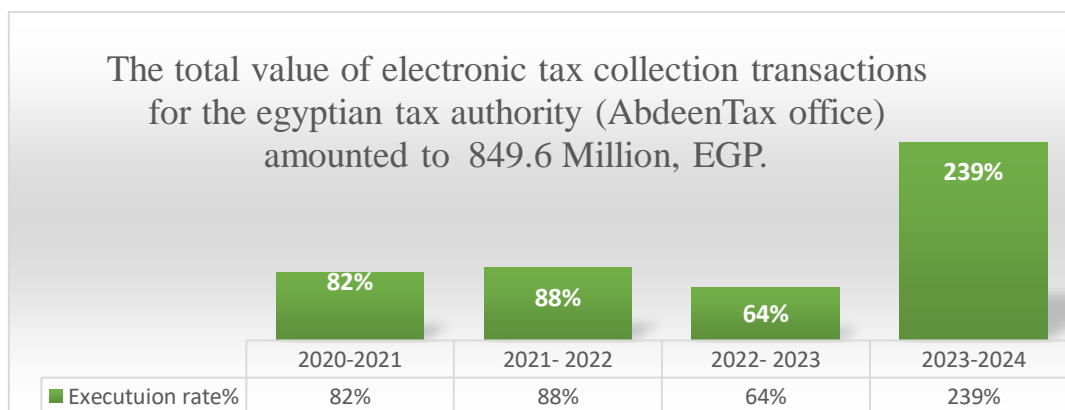


Source: Egyptian tax authority.

### The previous figure reveals the following:

Electronic tax collection reached 113% in the fiscal year 2020/2021. In contrast, the collection rate decreased to 72% in 2021/2022, then rose to 81% in 2022/2023. Finally, tax collection peaked at 190% in 2023/2024, marking the highest collection rate over the four-year period.

### 2- The following figure illustrates the annual tax revenue collection rates resulting from the use of electronic invoicing at the Abdeen Tax Office during the period from 2020/2021 to 2023/2024.



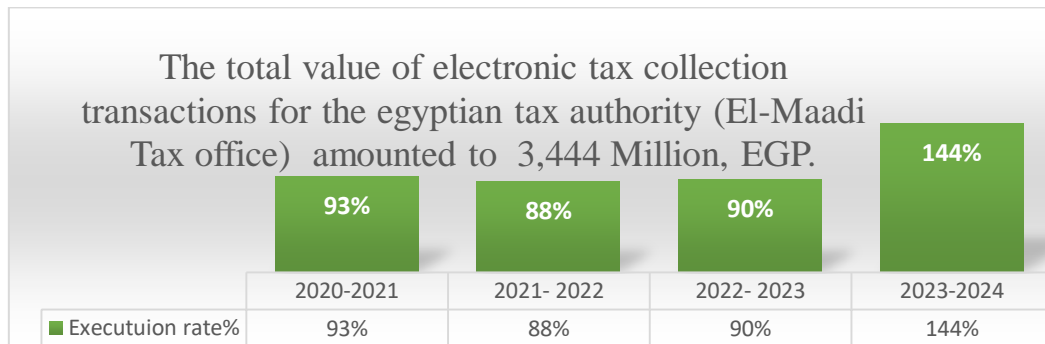
Source: Egyptian tax authority.

### The previous figure reveals the following:

Electronic tax collection reached 82% in the fiscal year 2020/2021. In contrast, the collection rate to 88% in the fiscal year 2021/2022, then

64% in the fiscal year 2022/2023. Finally, tax collection peaked at 239% in 2023/2024, marking the highest collection rate over the four-year period.

3- The following figure illustrates the annual tax revenue collection rates resulting from the use of electronic invoicing at the El-Maadi Tax Office during the period from 2020/2021 to 2023/2024.

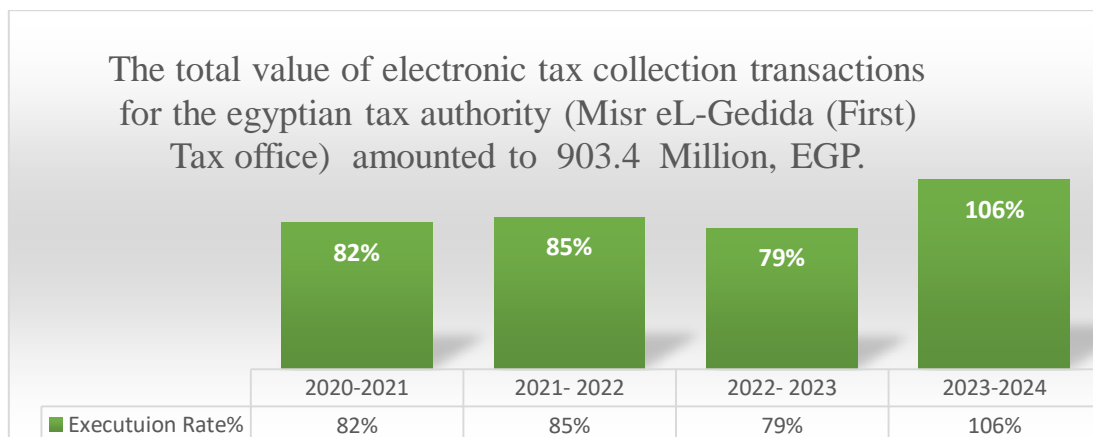


Source: Egyptian tax authority.

The previous figure reveals the following:

Electronic tax collection reached 93% in the fiscal year 2020/2021. In contrast, the collection rate to 88% in the fiscal year 2021/2022, then 90% in the fiscal year 2022/2023. Finally, tax collection peaked at 144% in 2023/2024, marking the highest collection rate over the four-year period

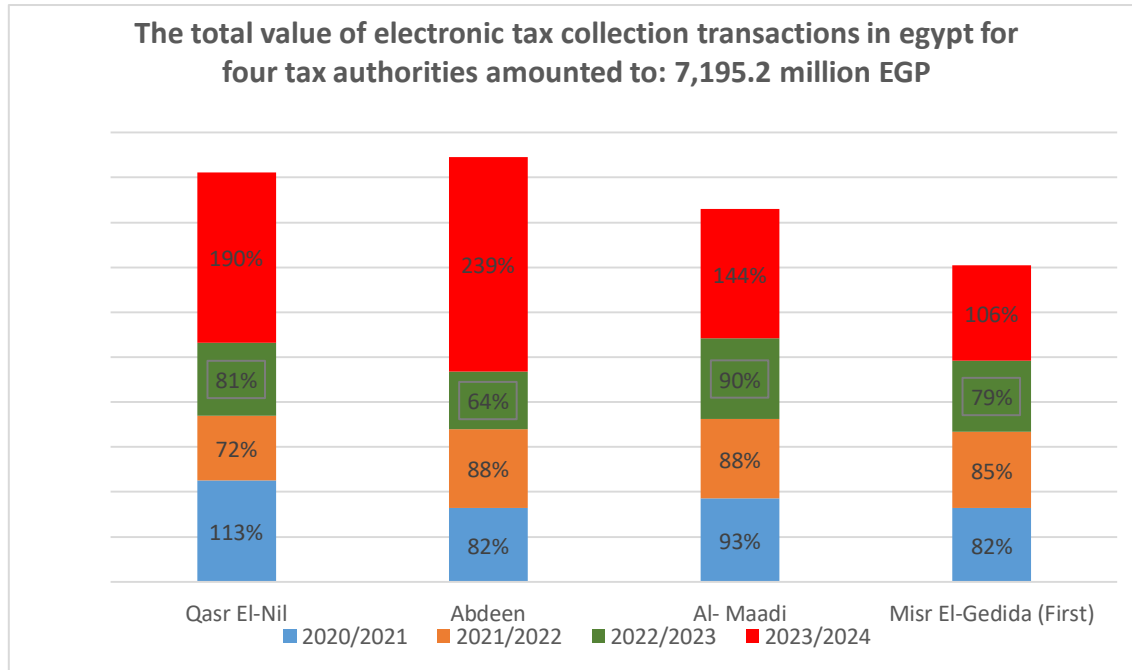
4- The following figure illustrates the annual tax revenue collection rates resulting from the use of electronic invoicing at the Misr El-Gedida (first) Tax Office during the period from 2020/2021 to 2023/2024.



Source: Egyptian Tax Authority

The previous figure reveals the following:

Electronic tax collection reached 82% in the fiscal year 2020/2021. In contrast, the collection rate to 85% in the fiscal year 2021/2022, then 79% in the fiscal year 2022/2023. Finally, tax collection peaked at 106% in 2023/2024, marking the highest collection rate over the four-year period.



• It is evident from the above figure:

The total value of electronic tax collection transactions from Kasr El-Nil Tax Authority, Abdeen Tax Authority, Maadi Tax Authority, and Nasr City First Tax Authority over the five-year period covered by the study amounted to EGP 7,195.2 million. The highest value of electronic tax collection was recorded by the Maadi Tax Authority, amounting to EGP 3,444 million, followed by the Kasr El-Nil Tax Authority with EGP 1,998.2 million, then the Nasr City First Tax Authority with EGP 903.4 million, and finally the Abdeen Tax Authority with EGP 849.6 million.

**The researcher concluded** that despite the economic and political circumstances facing the country—both domestically and internationally—such as the depreciation of the exchange rate, high inflation rates, and rising energy prices, all of which negatively affect the stability of economic activity, in addition to several crises including the COVID-19 pandemic, political conflicts like the Russia–Ukraine war, and the Gaza war, which have directly and indirectly impacted

economic activity, the actual tax revenues in some tax offices have nonetheless exceeded the targeted amounts.

**The researcher** inferred that this increase in tax revenues can be attributed to the incorporation of new economic activities and the integration of the informal economy into the formal tax system, resulting from the government's implementation of digital mechanisms and reforms. These included intensified anti-tax evasion campaigns and the enforcement of strict penalties on violators, which led to the collection of overdue taxes and increased revenue.

**Furthermore**, this improvement reflects the effectiveness of state measures such as the digital transformation, the implementation of the e-invoicing system, and other facilitations provided to taxpayers. It also highlights the critical role of auditors in confirming the accuracy of companies' financial statements. In this context, the role of the electronic invoice system emerges clearly, particularly in its contribution to limiting and combating various tax evasion practices.

### **Fifth: Conclusion, results and recommendations**

#### **- Conclusion**

The study aimed to highlight the importance of the electronic invoice as a modern tool in developing the Egyptian tax system and its effective role in confronting tax evasion practices. This study came in response to governmental trends towards digital transformation and enhancing tax transparency and accountability by implementing a unified electronic system to monitor financial and commercial transactions between taxpayers and the Tax Authority.

The study adopted both the descriptive analytical method and the applied approach. A field study was conducted on a purposive sample of tax directorates in Cairo (Qasr El Nil, Abdeen, Maadi, and Nasr City First). A structured questionnaire was used as the primary data collection tool, targeting tax inspectors and tax management officials. The data were analyzed statistically using tools such as the Kruskal-Wallis test and various descriptive statistical methods.

The results revealed a statistically significant relationship between the application of the electronic invoice system and the reduction of tax

evasion practices. The electronic system contributed to narrowing the tax gap by accurately tracking commercial operations and linking them electronically to the tax system, which led to an increase in actual tax collection compared to targeted amounts. It also played a role in integrating informal economic activities into the official tax framework.

### - Results

- 1- The study reached a set of fundamental findings that affirm the effective role of adopting the electronic invoicing system in reducing tax evasion practices within the Egyptian context, particularly in light of the accelerated digital transformation of the tax administration system. The results revealed that the implementation of the e-invoicing system has directly contributed to enhancing the efficiency of tax collection by accurately tracking financial transactions and automatically linking them to the Egyptian Tax Authority's database. This has significantly reduced opportunities for manipulation and underreporting of taxable activities.
- 2- Furthermore, the empirical results from selected Egyptian tax offices (Qasr El-Nil, Abdeen, Maadi, and Nasr City 1) indicated that actual tax revenues exceeded targeted figures in certain fiscal years, despite prevailing economic challenges. This increase is largely attributed to the effectiveness of digitalization tools and the proper enforcement of the e-invoicing system, which contributed to better tax compliance and the integration of informal economic activities into the formal tax framework.
- 3- Survey data also indicated a statistically significant relationship between the use of e-invoicing and the reduction of tax evasion practices. Respondents demonstrated a heightened awareness of the importance of e-invoicing in achieving tax transparency and promoting compliance. Moreover, the system has played a pivotal role in supporting automated tax audits and inspection processes.
- 4- Based on these findings, the study recommends expanding the adoption of the e-invoicing system across all sectors, increasing awareness and training programs for taxpayers, and strengthening



the digital infrastructure that supports this transformation. These measures are considered essential pillars for advancing tax reform and improving revenue collection efficiency in Egypt.

### Recommendations:

1. Continue expanding the implementation of the electronic invoicing system across all economic activities and taxpayer categories, to ensure comprehensive coverage and reduce opportunities for tax evasion.
2. Enhance the digital infrastructure of the Tax Authority to ensure the efficiency and sustainability of the electronic invoicing system, while also providing technical support to taxpayers.
3. Intensify awareness and training programs for taxpayers and accountants on how to use the electronic invoicing system and understand its role in supporting the formal economy and promoting tax compliance.
4. Activate regular electronic tax monitoring through the use of data analysis tools and artificial intelligence to detect suspicious activities and curb tax evasion attempts.
5. Introduce stricter legislation to combat tax evasion by enforcing more severe penalties, while ensuring that such laws are applied fairly and transparently.
6. Incentivize compliant taxpayers by offering tax benefits or administrative facilitations to encourage voluntary compliance and build trust in the tax system.
7. Support integration between the electronic tax system and other governmental entities, such as customs authorities, commercial registries, and banks, to enhance data exchange and reduce manipulation risks.
8. Develop the human resources within the Tax Authority by providing continuous training in electronic auditing and data analysis systems, thereby improving performance efficiency and promoting tax justice.





**Future Research :**

1. The Impact of Digital Transformation on the Quality of Financial Reporting in Economic Units (An analytical study on a sample of listed companies).
2. The Role of Artificial Intelligence in Developing Internal Accounting Control Systems Focusing on the business environment amid global economic crises.
3. The Relationship Between the Application of International Financial Reporting Standards (IFRS) and Reducing the Expectation Gap Between Auditors and Users.
4. The Impact of Environmental Accounting Disclosure on Investors' Decision-Making A field study on industrial companies.
5. The Effect of Using Blockchain Technologies on Enhancing the Transparency of Accounting Operations.
6. The Efficiency of E-Invoicing Systems in Improving Tax Collection Effectiveness from an Accounting Perspective.
7. The Impact of Integrated Reporting on the Evaluation of Financial and Non-Financial Performance of Companies  
An applied study on large enterprises.
8. The Role of the External Auditor in Combating Money Laundering Crimes in Light of International Accounting Standards.
9. Assessing the Impact of Corporate Governance on the Quality of Accounting Information and Financial Disclosure.
10. Measuring the Impact of Using Cloud-Based Accounting Software on Financial Performance Efficiency in Small and Medium Enterprises (SMEs).

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**Appendix N0. (1)**  
**Questionnaire**

**Dear Mr. ....**

After Greetings,

This questionnaire represents one of the basic aspects of completing a research in the commercial sciences "specializing in accounting" entitled: "The role of activating joint audit programs in reducing the exchange rate volatility risks".

The main objective of the research is to identify, **The role of using Electronic Invoices in Reduce Tax Evasion Practiced** this will be achieved by identifying the key factors that lead to these risks, the mechanisms to address them, and accounting for the financial effects in financial statements.

To achieve the goal of the research, we are confident in your sincere cooperation to fulfill the questions contained in this questionnaire, and we assure you that your answers have a great impact on drawing conclusions and making recommendations and will only be used for scientific research purposes.

Thanking you for your kind cooperation with us,,,,,,,,,,,,,



**First: personal data:**

- **General data for those who complete the questionnaire: please put a mark (V) in**

**front of the degree of response that suits you. Qualifications:**

Bachelor..... Postgraduate ..... Diploma..... Master's.  
PHD.....

**Management to which it belongs:** Senior management..... Financial  
management.....

Risk management..... Compliance and governance management Experience  
Years:

Less than 5 years..... From 5 to 10 years..... 10 to 15 years..... From 15  
years and more.....

**Second : specific questions related to the research topic to test  
the research hypotheses**

**First group: Below is a set of statements Regarding the The Nature and  
Determinants of E-Invoicing in Light of the Digital Transformation of  
the Egyptian Tax System**

- ( please put a mark (V) in front of the degree of response that suits you)

		Strong agree	agree	neutral	disagr	Strongl disagre
A	<b>The Nature of Electronic Invoicing the Context of the Digital Transformation of the Egyptian Tax System</b>					
1	The electronic invoice is considered an official and recognized alternative to paper invoices in tax transaction					
2	E-invoicing contributes to enhancing transparency and accuracy in recording financial transactions.					
3	E-invoicing helps improve tax collection efficiency by reducin					

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	opportunities for manipulation.					
4	11.. The electronic invoice is highly 12.reliable in documenting commercial transactions electronically.					
5	E-invoicing reflects a development in tax process management in line with digital transformation.					
6	E-invoicing accelerates tax audit procedures and reduces administrative burden on taxpayers.					
<b>B</b>	<b>▪ Determinants of Electronic Invoicing in the Context of the Digital Transformation of the Egyptian Tax System</b>					
7	The successful implementation of e-invoicing depends on the efficiency of the digital infrastructure of the relevant authorities.					
8	Tax awareness and prior training of taxpayers are crucial factors for effective use of e-invoicing.					
9	A clear and mandatory legislative framework is one of the most important factors supporting the application of e-invoicing					
10	Some entities face technical challenges that hinder the full implementation of e-invoicing.					
11	The application of e-invoicing requires integration between electronic accounting systems and the tax system.					
12	The digital transformation of the					

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	Egyptian Tax Authority has supported the widespread implementation of the e-invoicing system					
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**Second Group: Below is a set of statements Regarding the impact of E-Invoicing utilization on tax evasion practices :**

( please put a mark (V) in front of the degree of response that suits you)

		Strongly agree	agree	neutral	disagree	Strongly disagree
1	E-invoicing contributes to improving the accuracy of accounting records and reducing errors resulting from manual processing					
2	The use of e-invoices helps limit issuance of fake invoices, which is a common method of tax evasion					
3	E-invoicing enhances transparency in accounting transactions between parties					
4	13. Integrating the taxpayer's accounting system with the invoicing platform reduces opportunities for financial data manipulation.					
5	E-invoices enable tax authorities to conduct more efficient and effective accounting audits.					
6	14. The use of e-invoices facilitates the tracking and control of financial transactions from an accounting perspective.					
7	E-invoicing reduces the possibility of partial or complete concealment of taxable revenue					
8	Standardizing the format and					



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	content of e-invoices supports accounting documentation and tax compliance.					
9	E-invoicing serves as an effective accounting tool for detecting gaps or inconsistencies in submitted tax data					

## Appendix N0. (2)

مصلحة الضرائب المصرية  
مكتب رئيس المصلحة  
وحدة المعلومات

سلسلة زمنية لحصيلة عدد من ماموريات (ضرائب الدخل) مقارنة بالربط

(القيمة بالمليون جنية)  
٢٠٢٠/٢٠١٩

الماموريات	٢٠٢٤/٢٠٢٣			٢٠٢٣/٢٠٢٢			٢٠٢٢/٢٠٢١			٢٠٢١/٢٠٢٠		
	المحصل	الربط	نسبة التنفيذ	المحصل	الربط	نسبة التنفيذ	المحصل	الربط	نسبة التنفيذ	المحصل	الربط	نسبة التنفيذ
١ مأمورية ضرائب قصر النيل	١,١٨٧,٢	٦٢٥,٨	%١٩٠	٤٨٣,١	٥٩٩,٣	%٨١	٤٢٨,١	٥٩٤,٤	%٧٢	٤٦١,٢	٤٠٩,٩	%١١٣
٢ مأمورية ضرائب عابدين	٤١١,٠	١٧٢,٢	%٢٣٩	١٤٥,٨	٢٢٦,٥	%٦٤	١٨٣,٤	٨١٦,١	%٨٨	١٣١,٠	١٥٩,٤	%٨٢
٣ مأمورية ضرائب المعادى	١,٥٠٣,٥	١,٠٤٥,٦	%١٤٤	٧٩٧,٨	٨٨٣,٧	%٩٠	٧١٦,٢	٦٣١,٢	%٨٨	٥١١,٥	٥٥٠,٢	%٩٣
٤ مأمورية ضرائب مصر الجديدة أول	٢٩٨,٩	٢٨٢,١	%١٠٦	٢٢٦,٦	٢٨٧,٨	%٧٩	٢٥٠,٦	٢٤١,١	%٨٥	١٧٢,٣	٢٠٩,١	%٨٢

• اجمالي عدد ماموريات و المراكز المدججة و وحدات التحصيل بالمصلحة (ضرائب دخل) (٢٣٣)

رئيس وحدة المعلومات

(خامس العاصي)