

A Current Approach to the Problem of Businesses in Turkey Keeping Two Different Computerized Accounting Records, Official and Informal, For the Purpose of Avoiding Taxes

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Abstract

Keeping two different computerized accounting records, official and informal, has been increasingly met in the world of business, particularly in some developing countries such as Turkey. The authentic and counterfeit businesses, bureaucracies, politicians, employees, managers, accountants, tax inspectors, academics, and so on constitute the social network that deploys the parallel dual accounting records supported by its juridical and institutional mechanisms. The Turkish Revenue Administration approved e-Invoice, e-Ledger, and e-Dispatch applications, which promote the application of electronic accounting records and veritable businesses relying on the bureau. However, businesses still maintain dual accounting records, violating the Tax Procedure Law that mandates the e-Ledger format and other legal provisions. Businesses prefer to enjoy the informal dual accounting books, particularly against the VAT, for the purpose of minimizing taxes, working capital discounting, and access to the benefits of banking transactional discounting, fiscal amnesty, or facilitation sponsored by the informal atmosphere or ideal conditions. The problematic issue, therefore, can be formulated as follows: What is the reason for businesses in Turkey to keep official computerized accounting records while simultaneously maintaining informal ones using the same formal e-Ledger system? This essay provides a discussion of the possible theory-based answers to this basic question that lies beneath the issue mentioned above. For the purpose of addressing this issue, the study proceeds with a criticism of a set of theories and opinions derived from literature in the sociology of accounting, accounting and informality, and public economics. The problem of keeping two different computerized accounting records has great catalytic potential to draw the attention of bureaucrats, deputies, and other ordinary citizens to related problems in Turkey. Conducting qualified research in collaboration with tax authorities should take place, and its outcomes should be shared with the public and decision-makers in order to negate the wrong beliefs in Turkey.

Keywords: Computerized Accounting, Accounting Records, Tax Evasion

1. Introduction

- In Turkey, there is a legal obligation for businesses to keep accounting records. However, it is impossible to say that every operation is recorded in the formal books because it is not possible to

control these books all the time by the administration. (Bayram et al., 2022). There is no way for the government to impose all businesses to keep an electronic accounting system either. The finance department can also create and store its own reporting system, which is independent of the traditional accounting system kept at the end of each period (Roszkowska, 2021). Businesses can keep a second accounting system in which they only control their expenses and record their bank account and cash income. In this case, e-Invoice, e-Ledger, etc. Instead of creating e-Receipt and e-Record, the firm can store the same information in a non-ERP accounting system that it owns (Han et al., 2023).

- In this study, the problem of businesses in Turkey keeping two different accounting records, formal and informal, in order to avoid taxes, and using two different computerized accounting programs for official and unofficial records will be addressed (Ramdhani et al., 2021). This involves the accounting profession, the professional software industry, and the tax administration. The inability to explain this issue with specific constraints deepens the problem further (Rajgopal, 2021). The considerations that emerged in an environment where competition is expected emphasize that all three sides must act together and benefit from their synergy, highlighting cooperation with each other rather than rivalry, in order to avoid potential risks and reduce the potential effects (Tekin et al., 2021). The aim of this work is to contribute to making the business environment in Turkey more competitive (Gümüş et al.2021).

1.1. Background of the Issue

- Globalization and deregulation are significant decisions that have affected the world and are the new economic restructuring tools (Madhok, 2021). Economies have become partly insecurely planned, partly subject to competition, and controlled or steered by monopolistic and large companies. Small-scale businesses are having difficulty keeping pace with the inflow of an excessive amount of money facilitated by globalization. Hence, in all countries, including Turkey, the number of small businesses facing crises is increasing day by day. In today's world, Turkey has an economy that operates under globalization at every level (Engidaw, 2022). There are numerous connections with other countries in agriculture, industry, and services. Especially since the 1980s, public authority has shifted from an interventionist economy to a private interventionist system in the framework of the development strategy known as a liberal market economy. However, there are still a large number of companies and businesses in Turkey that work using methods and approaches that were just as common back in the interventionist era. Among these, two different accounting records are still legally kept in almost every company (Javaid et al., 2022). Both records are computerized, where the same company uses two different programs that are entirely independent of each other. Companies in Turkey may use both registered and unregistered programs; however, they keep two sets of books that are legally identical. They are working like this so as not to pay taxes on one of these records. Such irregular business ethics presenting inaccurate and fraudulent information are carried out in a legal manner in Turkey (Ağır&Artunç, 2021; Telatar& Birinci, 2022). This contradictory reality goes completely against accounting ethics in terms of law and the principles of accounting. As it conflicts with all commercial ethical requirements and accounting principles, it is deemed important to conduct an accounting study on this subject. An accounting problem that businesses are subject to has been discussed (Baud et al., 2021).

1.2. Significance of the Problem

- In order to avoid tax obligations, businesses in Turkey use a dual accounting record system. These businesses maintain an official record, which is used only for the purpose of submitting financial statements to the tax authorities, and an unofficial record (Yayman, 2021; İşbil et al., 2021). They employ two separate accounting programs to keep these two different accounting records. These businesses use the original invoice and an unofficial invoice, depending on the customer's wishes (Valdivia, 2023). The official program is utilized to issue both the official and unofficial invoices to the customer; however, the original invoice is subsequently deleted from the system. This study examines how these businesses use this dual system. We use a real-life research method and test its reliability with different sources (Adiloglu, 2022).
- The recent discussions about the electronic tax auditing systems have either matured or weakened the purpose. Results showed that businesses use both legal and illegal methods. The use of businesses' social security identity numbers printed on the invoice is adopted as the most widely used legal method (Doğan & Hamidow, 2022; Kayhan, 2021). For the illegal method, businesses prefer to make double entries in the commercial books and use a different accounting program. Businesses' aspects and approaches to the issue are useful for both academicians and tax collectors when evaluating the subject. The running of the dual accounting system performance measurement in the private sector and the suggested solutions for reducing the use of the informal economy help scholarship and tax auditing as well (Garanina et al., 2022; Han et al, 2023).

2. Tax Evasion through Dual Accounting Systems

- A report suggests that close to 500,000, or 21.3% of Turkey's 2.5 million registered companies, don't do any of their business through their formal accounting systems, resulting in losses to the government in 2003 totaling \$1.7 billion. In other words, 20 percent of registered Turkish companies, or 0.4/3.1 million taxpayers, produce an incredible 21.3 percent of Turkey's gross national product and don't pay any corporate taxes whatsoever (Yapicioglu, 2023; Kaya, 2022; Chuyu, 2022). How is such a thing possible? Just as in the time of Mohammed, there are those whose "faith is weak" and who don't know the Koran well are extracted, while those who display strong "Islamic values" don't pay taxes. I badger unsuspecting accountants on park benches and around kitchen tables until their eyes bulge as they describe to me the hidden world of the unregistered Turkish company - the "system of dual accounting" (Tüzün et al., 2024; Altin & Yilmaz, 2022).

2.1. Definition and Types of Dual Accounting Systems

- The dual accounting system creates problems for both the institutions and the government. The emergence of two independent records, with one official and the other completely hidden from the system, generally derives from the accounting and recording problems of business. The availability of commercially easy-to-use software, especially in developing countries, has made the establishment and maintenance of various accounting systems for businesses more accessible (Schaltegger et al., 2022; Börzel&Zürn, 2021; Ansell et al., 2023). The businesses, using the potential of information technologies, are obtaining ready-made, affordable, and easy-to-understand group financial statements. Also, they can keep their day-to-day records quickly and regularly due to

the ease of recording. However, the availability of easy-to-use accounting software can help businesses avoid taxes (Shveda et al., 2021; Dbouk, 2022).

- The companies keep both their official and unofficial accounting records through computerized accounting programs. They record the real transactions to be in conformity with the tax laws on one hand and provide the information they need on the other (Levytska et al., 2022). In many of these businesses that use double bookkeeping, both records remain in-house and create accountability, inventory, income, and other accounting problems for the government. At the core of the issue is the use of a dual accounting system, official and unofficial records, and two independent groups of computer programs, without difficulty in differentiating and cross-examining the records (Ramdhani et al., 2021; Varol, 2022).

2.2. Impact on Tax Revenues

- The relevant study draws the result that, even though under-declaration is not only an indicator of tax evasion and tax avoidance, it is also a direct form of hidden income. Both in short-term and long-term, the high rate of under-declaration of activity can make it difficult to develop an under the table economy, and thus make economic development difficult to sustain (Ebekoziem et al., 2024; Addo, 2022). The firms that continue manufacturing under-declaration, though not at high rates, might well prefer that the responsible legal context of manufacturing registered activities were to be developed rapidly. Otherwise, these entrepreneurs could find themselves disadvantaged by their own enlightened compliance (Nemes et al., 2022; Ferreira & Sandner, 2021). There is a need for a level playing field with regard to the issue of the consequences of firms becoming disadvantageous through their own enlightened compliance. Although exporting from a developing country by means of under-declaration has shown some exporters that there is an easy way to increase their trade finances and competitiveness, problems inevitably arise in production structure (Addo & Avgerou, 2021). The under-declaration temptation might grow readily, but the supply and unemployment problems do not necessarily get easier to solve. Creating and sustaining such a structure requires a continuous resource among firms avoiding taxes. In addition, under-declaration, which is not in accordance with the rules of the free market, would help implode the market particularly. The registration tantamount to willingness to be considered legitimate by regulatory agencies and institutions (Bertassini et al., 2021; Tajpour et al., 2022).

3. Regulatory Framework and Enforcement

- The structure of tax administration and tax control systems is heavily influenced by the economic and political structure of countries. Tax enforcement is likely to differ across countries because political constraints and institutional factors also affect the ease of imposing and collecting taxes. Previous taxation literature pointed out that tax reforms have different types and contents according to the income levels of countries (Benkraiem et al., 2021; Kurauone et al., 2021; Aruoba, 2021). Tax enforcement is one of the most important parts of tax law. Tax enforcement can be described as different nations having different flavors, and tax compliance can be explained as an important dimension that affects tax enforcement in the community at the domestic level. It seems that many countries, especially at certain income and political levels, still use the tax power of the state to support the operation of the government (Do et al., 2022; Lutfi et al., 2023; Batrancea et al., 2022;

Amaning et al., 2021). Therefore, the inefficient or completely abnormal operation itself is clearly important for tax law interpretation, as indicated by large-scale tax evasion. However, the existing literature about the differences between countries' income levels conducts a study on companies operating in different countries and tax evasion (Mehmet, 2023; Saptono et al., 2024).

- Turkey has both closed and open data from two different accounting and tax systems. In Article 80 of the Turkish Commercial Code numbered 6762, there is a method for determining the accounting records of companies that are obliged to keep their accounting records electronically. Bookkeeping is that all kinds of commercial books and documents to be kept in the books of companies are systematically and orderly (Taş & Erdil, 2024; Hosiyatovich et al., 2023; İşbil et al., 2021). Contrary to actual conditions, the currency unit of Turkey takes the events in and changes as stipulated, recorded on paper and in an article. The Turkey Revenue Administration offers e-Ledger applications through the internet. For the companies that are obliged to keep their accounting records electronically, it is enough to keep their legal books according to the type and content determined by the Revenue Administration (Altın & Yılmaz, 2022). For the companies that are not obliged to keep their accounting records electronically, in accordance with Article 210 of the Turkish Commercial Code numbered 6102, accounting books and inventory must be properly maintained and financial affairs must be orderly and in accordance with the legislation. As commercial branches are subject to legal control, they can keep their books and work collectively and separately after being approved by the tax office across common ledgers (Uzun & Deran, 2021; Diallo, 2021; Tüm&Ulus, 2021).

3.1. Existing Laws and Regulations

- Before the problems of making multiple independent financial records, which are actually related to the same job, by wholly, partly, and unregistered businesses, diverse commercial ways of doing business have been tried in Turkey in order to solve issues within the scope of taxation (Demircan et al., 2021; Savci and Das2023; Ünver and Alkan, 2021). This includes keeping two separate accounting provisions about the books and records of the financial statements they are taxed under, which has been included in numerous laws and regulations. The primary and secondary regulations published for the fulfillment and control of the tax liabilities of commercial and industrial businesses developed in line with the application of this article (Ağır&Artunç, 2021; Ramdhani et al., 2021; Taş & Erdil, 2024).
- The use of the words "should be recorded" and "must be mandatory" trends in the laws and regulations, respectively, and penalties were imposed in administrative and criminal fields for reporting, recording, and inaccurate recordings (Özdemir & İcimsoy, 2021; Aydın & Avincan, 2022). In addition to these punishments, administrative fines have been imposed on businesses that do not keep the required data, provide the information and documents requested by them, or submit incomplete or inaccurate information. Measures of law have been accepted by the administration to address incomplete records, illegal alterations, and arbitrary actions within the scope of the tax (Beerepoot et al., 2023).

3.2. Challenges in Enforcement

- The gap between the rules and practice represents an enforcement challenge. The empirical data show widespread use of two independent programs and maintenance of two accounting records. One of them is used to prepare the periodic financial reports that are submitted to the Ministry of Finance, and consequently is a formal accounting record. The other is usually hidden to prevent official discovery and is called an informal accounting record (Javaid et al., 2022; Han et al., 2023). It is employed to maintain practical records of daily business activities and to facilitate decision-making by owners or other managers. There are three main reasons for keeping two different accounting records, one formal and the other informal: a) The decrease in the accounting security of the taxpayer b) The decrease in political confidence of the society and the use of public services of bad quality (causing tax evasion in the short term) c) The increase through unfair competition (Han et al., 2023; Chen et al., 2021).

4. Technological Solutions for Compliance

- In the consulting study, we suggested some solutions to enable the use of a single program for managing formal and informal records. Additionally, from a political economy perspective, solutions that incorporate elements to improve political accountability, which hinges on increasing the likelihood of audits, must be proposed to promote compliance with business taxation in Turkey. In this section, we present some engineering policy interests and new technological solutions aimed at addressing the framing problem of compliance with business tax laws in Turkey (Günay and Topal, 2021; Bayram et al., 2022). These solutions possess attractive qualities of technical and economic efficiency and ownership by Turkey, as they are innovative Turkish intellectual products. This study thoroughly reviewed the current state of business taxation in Turkey and suggested possible political-economic remedies to address issues of low compliance with personal and corporate income taxes, value-added taxes, and excises that account for most business tax revenues (Taş & Erdil, 2024; Varol, 2022).
- We focused on technological remedies that are either currently available or under development in various policies. The reason for this focus is Turkey's strong desire to join the EU, which has led to increasingly favorable attitudes towards e-commerce solutions and electronic government in general. E-transactions, enterprise, and business resources are more politically and freely employed than possible legal and fiscal policy actions (Akin, 2024; Alkan et al., 2021). Generally, these proposed solutions benefit from the speed and distributive capabilities of electronic technologies, but they also raise concerns about potential abuse, necessitating regulation, and may have negative consequences. We will periodically revisit this important subject, but here we merely present some technological policy solutions that are in their infancy and deserve Turkey's attention (Civaner et al., 2022; Ağır&Artunç, 2021).

4.1. Advantages of Integrated Accounting Systems

- One advantage of an integrated accounting package has to do with the elimination of reconciliation problems associated with different systems running simultaneously and the consequent elimination of reconciliation personnel. An integrated accounting system can cover a range of business

operations and provide significant improvements in management reporting. It stores data in a controlled and shared environment, consequently enhancing the data quality and consistency (Nofel et al., 2024). It involves online updates, which, when combined with querying systems, allow the user to acquire up-to-the-minute information. Because all data files are updated together, the accounting records are compatible with each other, ensuring that all information is accurate and up to date for the next operation or decision. It is also possible to prepare and use detailed accounting reports that provide a business manager with a means to oversee business operations in real time. The ease of use and degree of standardization inherent in integrated accounting systems result in economies of scale and lead to higher rates of technology diffusion (Han et al., 2023). Furthermore, if all of the components meet their acceptance tests, the business can use the integrated accounting system almost immediately, with only minimal training required. Moreover, they use a common standard interface, facilitating its interchange with other systems and applications available on the market. A further advantage of integrated accounting systems involves the purchase of business-specific machines. Because an integrated accounting package needs to be executed only once, it may be sufficient to install it on one machine. This results in a cost decrease, which may have already been balanced by the IT warehouse management system purchase. Additionally, it can be faster than in the case of an organization that uses different systems, in learning the use of the accounting software, which further reduces the overall staff cost (Wei, 2022).

4.2. Blockchain Technology in Accounting

- In this last part, it will be mentioned how blockchain technology is used in accounting. With the spread of scripless accounting, the functioning of the accounting discipline in a completely electronic environment and the integration of accounting documents with electronic data interchange systems is possible (Han et al., 2023). With the use of internet extensions and developments in telecommunication technology, e-commerce transactions realized via the internet also extend the frontiers of accounting. The realization of electronic accounting applications, important international accounting standardizations, and their use in practice will be possible with the help of additional security elements that can be provided by smart cards and encryption systems in global and national access needs. At this point, blockchain technology can be preferred (Yang, 2023).
- Blockchain is an open ledger technology that allows people to perform transactions with each other without the need for third-party trust, due to the security that data cannot be changed. In the background of blockchain, data is kept in a chain of transactions, and it includes circulating, ever-increasing, and chronologically sequential blocks (Tan & Saraniemi, 2023). These are combined with a link, and this operation is called creating the blockchain. In the transactions between the relevant individuals, the intermediaries are taken out of the system, and hence the cost of the transactions is decreased. This increases the competition and the quality of the transaction. The long-term effect of these increases is the acceleration of investment and economic development. Today, many individuals prefer cryptocurrencies instead of legal currencies, and they use cryptocurrencies in their finance and investment transactions (Hairudin et al., 2022).

5. Case Studies and Examples

- In this part, various case studies and examples are examined regarding businesses keeping two different accounting records, formal and informal, in order to avoid taxes and using two independent computerized accounting programs for official and unofficial records.(Ağır&Artunç, 2021; Ozdamar et al., 2021; Aksoy et al.2021; Sarıgül &Topcu, 2021). The examined departments of many official and public institutions and organizations provide sure, concrete, accurate, reliable, and evolving judgments about the above discussion when an enterprise insists on whether or not it has used them, if used, when, and why this has to be performed. Mostly by thinking, "Why could we pay? Let's wait for the real control of the institution?" some taxpayers want to prepare the first and use the second set of their accounting books (Hanlon & Nessa, 2023). Over time, this method has become a habit of businesses, especially small-sized ones, who do not prefer to pay taxes and waste money, and it has looked like a totally widespread illness of the sector. Adding a few issues to the knowledge point on this topic and since the inquiry here has a methodological aspect, it was made on the basis of the officials in the relevant departments for the financial statements of 2012 (Kılınçer& Karahan, 2021; Resmi et al., 2021).

5.1. Notable Cases of Dual Accounting in Turkish Businesses

- Currently, Turkish businesses keep two different accounting records: formal (official) and informal (unofficial), in order to avoid taxes. Using two independent computerized accounting programs for these records is widespread. This paper discusses some noteworthy cases of businesses with dual accounting records (Çetiner, 2023). Special effort has been made to identify such businesses via sector-based analysis as well as a wide array of sources, including unions, consumer protection associations, and professional chambers. There can be no doubt that the problem is significantly broader in scope than the examples here. The case studies presented in many ways appear as extreme examples of the dual accounting system and concern major economic actors (Hendrycks et al., 2021).
- The examples given here are particularly noteworthy for being complex organizations. These companies are present in different sectors of the economy. Such businesses are the focus of the paper since these cases have symbolic value in the sense that they are the visible dimension of the problem. This paper does not aim to be widely representative but instead aims to consider a particularly visible, if perhaps extreme, aspect of the problem. We see many examples in our research, but some of these examples will be enough to explain the depth of the problem (Lian et al., 2022).

6. Impact on the Economy

- The effects of the theoretical regulations and legislation that are traditionally established to address and solve various problems represent a fundamental aspect of economics. The differences between these regulatory frameworks and the practices typically applied in the business realm are crucial to understand, especially when considering the informal first and second economies, as well as the irregular distributions that impact the national economy. All of these elements constitute key challenges faced in the field of economics (Giorgi et al., 2022).

- Within the context of Turkey, the reconstruction of macroeconomic models that rely on outdated microdata—primarily stemming from census updates that are meant to occur every ten years—is a significant barrier to forming effective solutions to economic issues. These census updates are critical for informing short-term and medium-term development plans (Akarçay et al., 2021). Furthermore, the ongoing need for updates to tax cadastral data banks serves as another essential aspect in understanding and addressing economic challenges. The lack of current information in these areas is viewed as a major constraint that undermines the reliability of decision-making processes aimed at resolving both global and local economic problems (Theodorakopoulos et al., 2024).
- These persistent challenges not only hinder growth performance but also obscure the genuine wealth and resources present within specific countries and their households. As such, the irregular distributions that can often occur within companies emerge as vital factors influencing those companies' profitability. In light of these issues, fostering transparency within the economy becomes a pressing necessity. It is essential to identify and clarify who is obligated to pay taxes and to what degree, as this information significantly influences overall economic health and activity (C. Köbis et al., 2021). To achieve this transparency, there must be a concurrent application of various administrative measures, including corporate governance, accounting standards, tax laws, and regulatory frameworks. Additionally, the establishment of institutional organizations or partnerships that facilitate independent governance is seen as imperative (Williams et al., 2022). These bodies should focus on providing oversight of non-independent accounting practices to ensure that the accounting process is adhered to in a fair and equitable manner. Such steps are not just beneficial but considered essential for maintaining the national indivisibility of Turkey's economy amidst the challenges posed by irregular distributions and other economic complexities (Hassan et al., 2024).

6.1. Loss of Tax Revenue

- While the residential income tax primarily covers personal income, it is essential to note that it does not encompass business income derived from various business operations. Profits generated and salaries drawn from business activities are taxed in accordance with a corporate tax framework, which may often include specific reductions or cuts (Salah and Jarboui 2023). Furthermore, the requirement for maintaining detailed cost accounts is no longer mandatory when determining business income for tax purposes, signaling a shift in regulatory practices. The Income Tax Law becomes applicable particularly in instances of unequal income distribution among partners, violations of certain legislative stipulations, revelations of illegal activities, or any manipulations of official records (Molla et al., 2021).
- In scenarios where unregistered economic activities exist—activities that fail to have their identity and location of operation recorded in the business registry chamber—it falls upon the tax inspection authorities to identify and document such occurrences. It is crucial to understand that tax revenue can be compromised for a myriad of reasons. Notably, almost 70% of contemporary studies conducted by tax inspection bodies concerning tax loss highlight fiscal irregularities, predicting those irregularities can lead to a significant loss, estimated between 15 and 20% of potential tax revenue (Salah & Jarboui, 2023). The measurement of fiscal irregularities poses challenges, largely due to various factors that cause such occurrences to be not only temporary but also sporadic. These

factors typically include the diverse nature of markets across different countries, the varying profiles of businesses and consumers, the interdependent mechanisms that lead to tax circumvention practices, the differing rates of corruption, and the management of expenses by businesses (Özcan, 2021).

- Consequently, the parallel economy in modern nations is estimated to range between 10 and 20 percent of the total economic activity. Specifically, in Turkey, the average ratio of the parallel economy is around 10 percent when compared to the official Gross Domestic Product (GDP) (Salah & Jarboui, 2023). The tax evasion rate, which was previously documented at around 60%, has seen a slight reduction and currently stands at approximately 55%, a change attributed to recent legal regulations aimed at enhancing tax compliance and reducing evasion. In Turkey, it has been established that around 120 to 130 billion dollars are circulated in cash and other forms of transactions related to the parallel economy, prompting various recommendations and strategies to tackle this issue effectively. The global landscape undoubtedly reflects a significant underground economy that poses challenges for fiscal authorities worldwide (Arioglu & Ocak, 2024).

6.2. Distorted Economic Data

- As a direct consequence of the establishment of two independent accounting records for each distinctive individual business entity, there will inevitably exist two distinct sets of comprehensive accounting records and, correspondingly, two separate financial statements that cannot be overlooked. It is critically important to note that legal bookkeeping is primarily employed solely for the purposes of fulfilling tax obligations and adhering to reporting requirements as mandated by the state's regulatory framework (Ameen & Wahhab, 2024; Tashkandi, 2022). Furthermore, every business typically utilizes this specific financial statement exclusively when it is under the scrutiny of a fiscal inspection or audit process, which can occur at various intervals throughout the financial year. In light of recent substantial amendments to commercial law, companies that have over 150 partners are now legally required to list their shares on the stock exchange to ensure compliance with regulatory frameworks aimed at promoting transparency and accountability in financial practices. To adhere to these emerging regulations and guidelines effectively, businesses are responsible for diligently preparing either commercial financial statements or, alternatively, consolidated financial statements that encompass a broader scope of their financial activities and positions. These vital financial documents and statements are meticulously prepared by independent auditing firms that are dedicated to maintaining objectivity, integrity, and reliability in their reporting practices (Tashkandi, 2022). The management teams of businesses often do not receive accurate and timely information regarding their true financial condition, which can lead to various challenges and complications in the decision-making processes undertaken by parties involved in the organization. This lack of transparency in financial status can potentially result in misguided choices and actions that may adversely affect the overall health and sustainability of the organization in both the short and long term. Such financial oversights and inaccuracies can have cascading repercussions on strategic planning and operational effectiveness within the business environment (Lin & Ding, 2024).
- It is quite understandable why useful yet accurate financial statements cannot be readily prepared. The intricate creation of dual accounting records in order to maintain shadow accounts emerges as a

significant environmental outcome, which directly stems from notable changes in tax policy or alterations in tax scales (Poletti-Hughes & Dimungu-Hewage, 2023). Moreover, these dual accounting records for shadow accounts are also an environmental result of an overabundance of government regulation or stringent enforcement practices. This situation is often driven by interest group rent-seeking behaviors and/or instances of bribery, which further exacerbate the existing issues associated with rent-seeking behavior (Lin & Ding, 2024). Nonetheless, such observed behaviors are not exclusively limited to business entities; rather, they are prevalent in every society, particularly in areas where excessive regulations and rigorous inspection activities dominate. This phenomenon is especially pronounced in underdeveloped and transitional countries, where the stringent oversight adds layers of complexity to business operations. Moreover, the awareness that this kind of dishonesty may eventually be uncovered and subjected to punitive measures typically results in a lower likelihood of choosing to engage in deceitful practices (Özcan, 2021; Poletti-Hughes & Dimungu-Hewage, 2023).

7. Recommendations for Policy and Practice

- It is widely understood to be an absolute necessity to thoroughly examine the various countries where such significant tax base erosion from accounting records is observed with alarming frequency. In addition to this examination, it is crucial to develop full and comprehensive solutions that will effectively protect tax revenues from such erosion in an enduring and sustainable manner. Therefore, a wide range of suggestions is being developed specifically targeting various aspects of public policy, professional accountancy organizations, legitimate firms, and also firms that maintain unofficial employee records (Özcan, 2021; Tashkandi, 2022). The ultimate goal of these suggestions is to significantly reduce the extent of keeping two distinctly different accounting records—one that is formal and the other that is informal—thus addressing a persistent issue in many environments. Furthermore, it is essential to emphasize that accountants should take an active and proactive role in promoting honesty, transparency, and accountability in the recording and reporting of financial transactions to uphold integrity and trust in the financial system overall. The empirical findings and insightful suggestions presented within the context of this paper are intended not only to contribute to the broader academic and professional literature but also to assist tax authorities more effectively, inform public policy, and enhance accounting practices universally across different industries. As a meaningful contribution, the underlying purpose of this extensive research is to bring to the forefront of discussion the pressing situation of businesses in Turkey that maintain two different accounting records, one being formal and the other informal, all as a deliberate strategy to evade taxes and exploit loopholes in the system (Tashkandi, 2022; Özcan, 2021). Moreover, these businesses utilize two independent computerized accounting programs to manage their official and unofficial records separately, which complicates efforts for regulatory oversight and tax collection. Utilizing a qualitative study approach, which involves in-depth interviews as a primary data collection method and aims to capture a comprehensive view of the situation, this topic represents a pioneering public professional academic study conducted within the specific context of Turkey's unique economic and regulatory landscape (Ameen & Wahhab, 2024; Halili & Gonzalez, 2023). The findings gathered from this innovative research indicate that the phenomenon of maintaining dual records is not only widespread but also intentional and systematic across various sectors in Turkey. It is notable that there are small, medium, and large businesses that are actively engaging in both of these problematic

practices, highlighting a significant challenge for fiscal authorities (Halili & Gonzalez, 2023; Salah & Jarboui, 2023). The specific contributions to the existing area of knowledge stem from the detailed results of the study itself, the targeted recommendations aimed at effectively reducing the prevalence of these practices over time, and the thorough establishment and clear explanation of the system criteria needed for these recommendations to be effectively implemented. These elements collectively represent subsequent key outcomes of this important research endeavor aimed at enhancing the integrity of accounting practices and ensuring compliance with tax regulations in a more effective manner (Özcan, 2021; Tashkandi, 2022).

7.1. Strengthening Regulatory Oversight

- When we undertake a thorough examination of accounting records and various programs, especially from a fraud perspective, their susceptibility becomes significantly tied to the specific accounting regulations enforced within the country. A business that engages in tax evasion may still maintain legally recorded entries specifically for its informal operations, even though it fails to adequately cover its tax liabilities (Sönmez & Yılmaz, 2022). These businesses are known to grow rapidly, and the advent of computerized accounting programs has enabled them to almost seamlessly conduct separate accounting specifically for tax-like liabilities. Such systems often include distinct general ledger records and unique account coding processes tailored specifically for these operations. In this scenario, we see that double-entry accounting systems, along with accounting ledgers designed explicitly for tax-like accounts, are effectively putting the tax auditor under an intensified level of examination control (Gu et al., 2023). Meanwhile, the bookkeeper is tasked with the critical role of rewriting and recalculating any incorrect entries found on the books to minimize the significant fraudulent errors that might otherwise be present, ultimately striving for greater accuracy in the financial records. Therefore, it is entirely plausible that a tax auditor has already undergone an ample and thorough auditing process during the re-examination phase. If the auditor opts to appeal to the tax disputes resolution for a period, leveraging that robust computer program, it is noteworthy that double accounting could have been established solely with the intention of saving time and streamlining the audit process, ostensibly improving operational efficiency within the constraints of legal compliance (Sönmez & Yılmaz, 2022).
- Decision-makers have always sought to effectively combat tax evasions, leading to the assignment of various responsibilities aimed at ensuring fairness and efficiency in supervising this critical issue. The complexity of economic and social factors involved in tax evasion presents significant challenges. Developed countries are increasingly recognizing the harsh reality that it is unrealistic to expect a complete prevention of tax evasion through the interaction alone between taxpayers and tax authorities. This crucial issue requires a steadfast and comprehensive approach to dismantle tax evasion successfully (Özcan, 2021; Molla et al., 2021).
- The problem of preventing computerized accounting fraud further complicates efforts to maintain compliance with tax regulations. Such fraud often arises through a lack of adherence to both established laws and fundamental principles of ethical accounting practices. This situation creates a pressing need for greater scrutiny and control within the systems designed to monitor accounting practices. If the methodologies currently employed by various countries to combat computerized accounting fraud are determined to be insufficient, the existing tax gap continues to grow,

demonstrating a clear deficiency in regulatory effectiveness (Molla et al., 2021; Özcan2021; Gu et al., 2023).

- This growing tax gap indicates that the dynamics of demand and supply behaviors alone are not enough to address the issues at hand. Therefore, it is essential to consider additional alternatives, including the enhancement of enforcement policies, which must be employed to dynamically engage with tax law and relevant economic theories. The interplay between policy measures and the principles of economics is vital in creating a more robust framework that can effectively mitigate tax evasion and safeguard the integrity of taxation systems worldwide (Gu et al., 2023; Sönmez & Yılmaz, 2022).

7.2. Promoting Ethical Business Practices

- An ethical business environment has the potential to significantly promote voluntary tax compliance by effectively reducing both the opportunities and the incentives that may lead individuals and businesses to engage in tax fraud and evasion. To further establish and promote an ethical business environment, it is crucial to understand that setting high tax rates may sometimes produce unintended negative consequences, especially in countries that are characterized by a low tax compliance culture (Sönmez & Yılmaz, 2022; Arioglu& Ocak, 2024; Özcan, 2021). The extent of tax evasion could be mitigated through the implementation of general measures designed to encourage the development of a "taxpaying culture," which emphasizes lawful behavior and compliance with tax laws. In addition, orienting support activities by official bodies and professional peers plays a critical role; for example, the existence of sectoral ethical guidelines and specific requirements for tax documentation tailored to particular industries can provide valuable guidance (Halili & Gonzalez, 2023; Salah & Jarboui, 2023).
- For all these measures to be effective, it is essential for licensed tax advisers to actively take steps and implement strategies aimed at fostering a more ethical culture and enhancing compliance efforts. This includes a crucial shift away from the existing culture of tax avoidance that can undermine trust in the system (Tashkandi, 2022; Salah & Jarboui, 2023). Furthermore, the introduction and enforcement of more robust whistleblowing legislation and processes should be a priority; these measures need to be effective and attractive enough to encourage individuals to report unethical practices without fear of reprisal. Ultimately, every taxpayer should be made to feel that they cannot achieve gains and compete with the behaviors exhibited by "good taxpayers" through engaging in illegal activities that violate tax laws (Salah & Jarboui, 2023; Tashkandi, 2022).

8. Conclusion

- There are a significant number of reasons why Turkish businesses can effectively be kept and maintained both on paper and in various computer accounting programs. To elaborate further on these reasons: Businesses operating within Turkey often fail to keep meticulous track of cash flow and receivables that include money, checks, notes, as well as similar forms of receipts, whether in foreign currency or in Turkish Lira. This oversight occurs even when they do not receive any corresponding documents that should be recorded in their registers, which stands in clear violation of established legal requirements (Yayangida et al., 2023; Boubakri et al.2021).

- If there are indeed opportunities to realize and distinguish the processes involved in the maintenance of commercial enterprises that utilize both paper and computer accounting programs, it is conceivable that double-entry computer accounting programs could be employed to work cohesively within the same framework. This would help ensure that businesses, particularly those with record retention statuses, maintain comprehensive records that comply with legal requirements throughout the requisite retention period while also allowing for short-term accounting solutions. It is rather surprising to note that commercial enterprises which are maintained using computerized systems also exhibit characteristics of hard copy records, and they require a dual record retention strategy to effectively save and present financial information (Boubakri et al. 2021).
- This situation is particularly noteworthy because there is no explicit provision within existing laws that accommodates such practices. Despite being engaged in computerized record keeping, commercial enterprises are still burdened with the requirement to maintain a separate register for these training sessions or pieces of data (Yayangida et al., 2023). This can lead to confusion and inefficiency, especially when both official and unofficial records are being maintained simultaneously. Ultimately, this scenario also constitutes a breach of legal statutes, reflecting a disconnection between the actual practices of these businesses and the legal expectations set forth by regulatory authorities (Özcan, 2021; Okere et al., 2024).

8.1. Summary of Key Findings

- As a result of the extensive empirical work carried out within the defined scope of this comprehensive study, it has been discovered that a significant number of businesses operating in Turkey are engaging in the practice of maintaining two distinctly different accounting records, which are referred to as formal and informal records (Okere et al., 2024; Yangida et al., 2023). This approach is adopted specifically to avoid paying taxes and utilizing two independent computerized accounting programs that function in parallel for both official and unofficial records. It has been identified that businesses' reliance on two independent computerized accounting programs emerges as one of the most critical methods employed for keeping illegal accounting records. When the literature was examined prior to conducting this research, the frequency with which businesses keep these two disparate accounting records—formal and informal—so as not to fulfill their tax obligations to the state was found to be quite high (Tezcan, 2023). Moreover, they utilize those two independent computerized accounting programs to manage both sets of records. The explanations for such practices include not only the lack of genuine tangible assets but also the tendency to exaggerate the assets owned by the business, along with the general non-payment of taxes. These factors are clearly presented as driving motives behind such clandestine processes. However, it is noteworthy that the specific methods and systems employed in this context have not been meticulously examined in detail prior to this research. (Etukudo et al., 2022). The research conducted in this particular field has revealed insights into both the operation of these computerized accounting programs and the underlying reasons prompting the transition to the use of two independent computerized accounting programs, details that have not been sufficiently documented in the existing literature so far. (Kaur & Kaur, 2024). The primary aim of the current research is to unveil the intricacies concerning how the problem of businesses paying an insufficient amount of tax to the state continues to be perpetuated, why businesses opt to utilize two separate and independent

computerized accounting programs specifically, and in scenarios where they do make records, how they execute that process. The results derived from the study indicate that the emergence of this problem is fundamentally a consequence of the actions of businesspeople. Therefore, a comprehensive measuring society is deemed essential to effectively address and potentially resolve the ongoing issue at hand (Gong et al., 2023).

8.2. Future Research Directions

- Given the complex dimension of the issue at hand, there are numerous aspects of it that can be diligently researched. Several promising future research directions regarding the study are: 1) The unique issue in Turkey concerning the maintenance of two distinctly different accounting records, one being formal and the other informal, specifically designed to circumvent tax obligations, as well as the utilization of two independent computerized accounting programs, can be explored further in various countries that are encountering the same persistent problem. This would allow for a comparative analysis that could yield valuable insights. 2) The extent of assistance that corporations receive in maintaining two separate accounting records – effectively determining the size and scale of the problem – can be studied not only within Turkey but also across different nations facing similar challenges in their accounting practices. This would contribute to a broader understanding of how companies navigate fiscal regulations. 3) The present study solely examined how a single company manages to uphold two independent computerized accounting records by employing two distinct accounting programs, utilizing information gathered from interviews. A deeper inquiry into the same issue within a singular computerized accounting program for corporations that maintain more than one accounting book can also be investigated, or if such an exploration has already occurred, the findings can be integrated into this ongoing research to provide a more comprehensive overview. 4) Furthermore, the issue has been approached from an auditing perspective. An important question arises: how does the general perception of the issue, particularly with regards to a firm that receives support, relate to or contribute to the company's ability to deal with the challenges it faces? Understanding this relationship could unveil significant truths about the interplay between auditing practices and corporate compliance (Uzliawati et al., 2023; Salah and Jarboui, 2023; Sönmez & Yılmaz, 2022).
- The subject of the study is the results of the extensive reorganization amendments that have been implemented within the computerized accounting records. The primary aim of these amendments is to establish a formal and comprehensive connection between the accounting records themselves and the annual financial statements produced by the companies (Uzliawati et al., 2023). A crucial aspect of this research was centered around the practice of tax avoidance and how it is navigated through the mechanisms set in place by such practices. Within the scope of the study, this pertinent subject is examined from an accounting perspective rather than delving deeply into the tax perspective typically associated with such matters. The relationship between taxes and the company was intentionally kept superficial and not overly intricate (Etukodo et al., 2022; Tezcan, 2023). Therefore, the study will not engage in elaborate discussions regarding how much tax is paid or the specific procedures that are followed by the companies in question. The focus remained primarily on uncovering the outcomes and results of companies that have received professional support from accounting firms, alongside the current practices they faced in real-time situations. The study is not

intended to delve into or discover rumors, intentions, or predictions regarding these practices. Such aspects are decisively out of the defined scope of this examination and will not be discussed further (Sönmez & Yılmaz, 2022).

9. Authors' Biography

- He was born in 1986 in Nizip district of Gaziantep. He completed his primary education at Cumhuriyet Primary School in 2000 and his high school education at Nizip Hasan Çapan Anatolian High School in 2004. In 2005, he enrolled in the Mathematics Department of the Faculty of Science at Atatürk University and studied Chemical Engineering for a while as part of the double major program in 2007. He graduated from the Mathematics Department with a degree and high honors in 2009 and started his master's degree with a thesis in the Geometry Department of the Institute of Science at Atatürk University in the same year. After receiving academic English preparatory education at the Institute of Science at Atatürk University, he transferred to the Algebra and Number Theory Department of the Institute of Science at Gaziantep University. He taught as a part-time lecturer at Gaziantep Vocational School of Gaziantep University in the 2009-2010 Academic Year. He started his Pedagogical Formation education at Gaziantep University in 2010 and completed this education in 2011. In the 2011-2012 Academic Year, he started working as a Mathematics Teacher at Gaziantep College Foundation Private High Schools, which was founded in 1963 and is the first and oldest private school in Gaziantep. In the same year, he started writing student information processing and measurement and evaluation software at Gaziantep College Foundation Private Schools. In 2012, he started his undergraduate education at Anadolu University, Faculty of Business Administration, Department of Business Administration. While he was going to start his duty as Gaziantep College Foundation Information Processing Manager in the 2012-2013 Academic Year, he was appointed as a lecturer at Gaziantep University Oğuzeli Vocational School in 2013. In 2014, he was appointed as the Deputy Head of the Department of Management and Organization at Oğuzeli Vocational School and with the bilateral agreement of Gaziantep University, he started his doctorate education with the thesis topic "Software Defined Networking and Information Security" at South-West University "Neofit Rilski" (Bulgarian State University) on Computer and Mathematics. He completed his BA in Business Administration in 2015. In 2015, he started his undergraduate education in Sociology at Atatürk University Open Education Faculty and Law at Gaziantep University Faculty of Law. In 2016, he started his Master's degree with a thesis at Gaziantep University Institute of Social Sciences, Department of Business Administration and in the same year he was appointed as Deputy Director (Principal), Head of Computer Technologies Department (Principal), Head of Law Department (Acting), and Chairman of the Advisory Board at Gaziantep University Oğuzeli Vocational School. He completed his Master's degree with a thesis at Gaziantep University Institute of Social Sciences, Department of Business Administration on 18.01.2018 and started his PhD education at the Institute of Science, Department of Mathematics, Department of Analysis and Theory of Functions in the 2017-2018 Academic Year. In the 2018-2019 Academic Year, he won a TÜBİTAK domestic PhD scholarship and transferred to his PhD education at Gaziantep University Institute of Social Sciences, Department of Business Administration. He completed his law internship education with Attorney Ömür TAŞAR, focusing on Enforcement and Bankruptcy Law. He is currently continuing his doctorate education at Gaziantep University, Institute of Social Sciences, Department of Business Administration and has 6

published papers, 1- SCI-Expanded, 1- Scopus indexed article, 2- national and 2- international refereed articles published in journals.

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