THE EFFECT OF POLITICAL CONNECTION ON TAX EVASION: POST-REVOLUTIONARY EVIDENCE FROM TUNISIAN FIRMS

Raïda Chakroun a, †, Azza Khemir b

a† Associate Professor; IHEC Carthage, University of Carthage, Tunisia. and Member of the LIGUE LR99ES24- ISCAE- University of Manouba, Tunisia

b PhD Student; IHEC Carthage, University of Carthage, Tunisia

† raïda_c@yahoo.fr (Corresponding author)

ARTICLE HISTORY:
Received: 02-Jan-2020
Accepted: 16-Mar-2020
Online available: 06-Apr-2020

ABSTRACT
In this study, we examine the effect of political connection on tax evasion in the Tunisian context. We use a sample of 72 Tunisian firms observed from 2012 to 2015. To measure firms’ political connections through their board of directors, we manually collected a wide-ranging data set from various sources. To measure tax evasion we relied on a fundamental proxy: the effective tax rate (ETR). The findings show that politically connected firms are more likely to avoid taxes via the practices of tax evasion than non-connected firms. Thus, directors who have former political position tend to favor the tax evasion. The results may be useful for investors in their process of evaluation of benefits and risks associated with their investment and also for tax authorities in the establishment of their plans of enforcement activities. To the best of our knowledge, until now this is the first study to investigate the effect of political connection on tax evasion for Tunisian firms.

Contribution/ Originality
In this paper, we report for the first time the effect of political connection on tax evasion in the Tunisian context. This contribution is interesting because Tunisia is considered as a newly democratized country after the revolution of January 2011. Through empirical and quantitative analysis, this paper highlights that political connection is an important determinant of tax practices.

DOI: 10.18488/journal.1007/2020.10.4/1007.4.111.126
ISSN (P): 2306-983X, ISSN (E): 2224-4425


© 2020 Asian Economic and Social Society. All rights reserved
1. INTRODUCTION

The relationship between companies and the external environment is based on varied legal rules that organize interactions between them. These rules define rights and obligations of companies toward society. However, Gouadain (2000) states that: "it is not enough to set rules to be applied ". It’s always ambiguous for companies to apply correctly the legal rules due to their complexity to their permanent evolution as well as to their compulsory aspect. Chen et al., (2010) affirm that taxes present an important cost because they reduce the companies’ cash flows. We note that taxes present an important part of the operating costs of companies.

Tax evasion is described as the effect of decreasing legally what is implemented by taking advantage of regulation in the tax field optimally. Rego and Wilson (2012) formulate that: “Tax evasion is the act of avoiding or reducing taxes by subjecting patrimonies or benefits in a country different from the one where they should be taxed. Tax evasion may involve companies or individuals. In a broader sense, tax evasion consists in using legally different means to reduce tax burden. We distinguish tax avoidance from tax evasion that is an illegal technique”. Hasseldine and Morris (2013) state that the perception of tax evasion varies from companies’ actors. So while shareholders and executives consider tax evasion as a way to maximize profit, other stakeholders classify this practice as a socially irresponsible act. But, what is really ambiguous is why some firms choose to engage in tax evasion while others give the impression that they do not.

Companies tend to adopt strategies that aim to reduce taxes and consequently maximize profit. In order to facilitate and cover these practices, the managers may weave direct or indirect political links with belonging to political parties or by creating different relationships with politicians. Hence, several studies have shown that political connection can have many advantages and facilities (Goldman et al., 2008).

Faccio (2007) suggest that a company is considered as politically connected if one of its major shareholders or a member of its board of directors is at the same time a member of parliament, a minister or belongs to a political party. Chaney et al. (2011), in the same context, expand the previous definition by stipulating that a company is politically connected if, over a given period, at least one of its shareholders or managers belongs to parliament, is a statesman or is close to a particular politician or a political party.

Several authors addressed the theme of political connection. Chen and Zhang (2019) examine religiosity and political connection. Wang et al. (2018) focus on political connection, internal control and firm value. Habib et al. (2018) discuss the empirical literature related to political connection, financial reporting and auditing. Habib and Mohammadi (2018) analyze the link between political connection and audit report lag. Added to that the aim of the research of Huang et al. (2018) is to study the effect of political connection on corporate financial constraints. However, very few studies have examined the relationship between political connection and tax evasion (Francis et al., 2016; Kim and Zhang, 2016). Moreover, these previous studies were conducted on US context. Our study tends to fill this gap in the literature by investigating the association between politically connected firms and the extent of tax evasion for Tunisian firms.

Tunisia is a country that experienced a revolution in January 2011. The Tunisian revolution allowed the Tunisians to move from a situation of a dictatorship to a situation of partisanship diversity where democracy is implored. Revolution offered more freedom and serenity to people in their political choices. In the post-revolution context, Tunisia is experienced mutations and changes at all political, economic and social levels. At a time of reforms in Tunisia business, the government and economic and social actors are called upon to take these changes into account and integrate them into their

1 Faccio (2007) considers an individual to be a major shareholder if s/he owns directly or indirectly 10% of the voting rights.
policies and strategies. Nowadays, Tunisians are neither afraid of declaring their political orientation nor of supporting a party different from the dominant one. In this context, several managers submitted their candidatures for the 2014 presidential elections, such as Yessine CHENNOUI and Slim RIAHI. This is an illustration of the phenomenon of political connection which is spreading more and more in Tunisia.

According to the above developments, we state our research question as follows: to what extent may be managers of politically connected firms promote tax evasion for Tunisian firms?

This research is based on a sample of 72 publicly traded companies over the period from 2012 to 2015. The period of study began after the Tunisian revolution which allowed us to test the effect of political connection on tax evasion in a democratic political environment. The results show the existence of a positive link between political connection and tax evasion. This result allowed us to confirm political connection as one of the determinants of tax evasion. Our results may be useful for investors in their process of assessing the benefits and risks associated with their investment and also for tax authorities in the establishment of their plans of enforcement activities. To the best of our knowledge, until now this is the first study to investigate the effect of political connection on tax evasion for Tunisian firms.

This study has contextual and theoretical contributions include, it is the first research that highlighted the impact of political connection on tax evasion in Tunisia. Indeed, the study is a pioneer in proving some evidence in the business and political field in a country characterized by a great political transformation. Second, we used the theory of fraud to analyse the behavior of the fraudster and, to our knowledge, this theory is used for the first time to analyse the phenomena of tax evasion. Third, this study contributes to the literature of taxation in emerging markets by studying the determinants of tax evasion at the firm level.

This paper is organized as follows: in the first section, we present the institutional and theoretical framework. The second section examines a brief overview of literature review. In the third section, we present the methodology. Finally, the fourth section discusses the results.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Utomo et al. (2016) believe that tax strategies put in place by companies depend primarily on directors with power and control. Thus, if a majority shareholder is in need for financing and has knowledge of tax matters, then the likelihood of resorting to tax evasion is significant. In addition, Ignatowski and Korte (2014) add that the preferences of managers may influence their strategies in the company; their attitudes towards leadership and also the subjectivity of the remuneration of the employees can affect the annual earnings (Bushman et al., 1996). In this sense, the political connection of managers could affect the tax evasion. Khlif and Amara (2018) investigate the link between political connection and tax practices by focusing on developed, developing and emerging economies. However, Chen et al. (2017) recognize the loss of political connection as a factor of increased risk and regulatory sanctions under the theory of political costs.

On the one hand, using a sample of 35 countries, Khlif and Amara (2019) outline that the political connection is positively associated with tax evasion and this relationship becomes stronger for high corrupt environment.

On the other hand, studies based on developed and emerging countries conclude that there is a positive link between political connection and tax evasion.

For developed countries, we relied on a work conducted in the American context (Kim and Zhang, 2016 and Christensen et al., 2015).
Kim and Zhang (2016) assert that politically connected firms are more tax aggressive than not connected firms. This result could be explained by the fact that the politically connected firms have a lower expected cost of tax enforcement, better information regarding tax law and enforcement changes, lower capital market pressure for transparency, and greater risk-taking tendencies induced by political connection. Christensen et al. (2015) seek to address whether managers’ personal political orientation helps explain tax avoidance for the firms they manage. This paper uses a political orientation as a proxy for managerial conservatism, which is an ex ante measure of manager’s propensity toward risk. The results indicate that firms with top executives who lean toward the Republican Party actually engage in less tax avoidance than firms whose executives lean toward the Democratic Party.

For emerging countries, we based our research on the work of (Francis et al., 2016; Aminah et al., 2017; Chen et al., 2014; Lin et al., 2018; Rijkers et al., 2015). Francis et al. (2016) concluded that political preferences may affect tax strategies; shareholders engage in more tax planning because of political rents. Aminah et al. (2017) conducted a study on the manufacturing companies listed on the Indonesian Stock Exchange in the period 2011-2015. The results showed that the profitability and political connection has a positive influence on tax avoidance. While company size, intensity fixed assets and leverage do not influence tax avoidance. Chen et al. (2014) find some evidence that political connection affects tax evasion, resulting in lower tax burdens for politically active firms. Lin et al. (2018) examined whether ties to politicians by corporate boards of directors weaken the effectiveness of the tax authorities in constraining tax avoidance in China. Rijkers et al. (2015) studied the impact of political connection on tax evasion in Tunisia over the pre-revolution period (1987-beginning of 2011). This study based on customs data dealing with imports achieved by companies connected with 114 individuals including the previous president BEN ALI and his relatives. These findings underline that BEN ALI connected firms are more likely to falsify declarations and that the evasion gaps are increasing with the share of politically connected importers.

As shown, politically connected firms earn a lot from their political connection. Political connection, for instance, increases the performance and the value of firms (Maoloul et al., 2018). Tax evasion is also associated with risk-taking equity incentives (Armstrong et al., 2015), so firms with political ties may tend more to tax evasion because of their higher risk-taking tendencies (Boubakri et al., 2013). These results lend support to a positive relation between political connection and tax evasion that is due principally to the high protection of political operators. In addition, Kim and Zhang (2016) offer five reasons to explain why politically connected firms proceed to tax evasion more than non-connected firms. First, politically connected firms are protected by their political connection. Second, politically connected firms have the ability to access information regarding future changes in tax regulations and enforcement that enable them to explore better time-series differences in tax laws using the suitable tax strategies. Third, politically connected firms have less pressure to be transparent in taxation. Fourth, political connection could reduce the political costs of the tax evasion. Fifth, political connection could be associated with a higher degree of tax evasion due to their risk taking effect.

Besides, if tax authorities discover tax manipulation activities for a firm, interest and penalties will represent a significant cost to this firm (Rego and Wilson, 2012). Costs of being tax aggressive are expected to be higher for politically connected firms because they are politically visible (Chaney et al., 2011). Furthermore, detection may damage the firm’s social image. Then, these results illustrate that political connection could be associated with lower tax evasion. Thus, politically connected firms could be less inclined to tax evasion than non-connected firms.

Consequently, we find that positive effect of political connection on tax evasion is more convincing while it is concurred with the findings of the majority of previous cross-country studies and country-level studies. Consequently, our hypothesis is formulated as follows:
Alternative hypothesis: Politically connected firms proceed to tax evasion more than other firms.

3. INSTITUTIONAL AND THEORETICAL FRAMEWORK

3.1. Political connection in Tunisia

In the literature there seems to be no general definition of political connection. In their study based on Chinese firms, Fun et al. (2007) define a politically connected firm: “as being politically connected if the CEO is a current or former officer of the central government, local government, or the military”.

Khlif and Amara (2018) propose that: “political connection may take several forms including the presence at least of one politician (e.g., a member of parliament, a minister, a president, a king, and any other top appointed bureaucrat in the government), in firm’s ownership structure, board of directors or audit committee”. Boubakri et al. (2008) state that politically connected firms, are generally incorporated in major cities, are highly leveraged and operate in regulated sectors. These authors attempt to define political connection and claim that: “a company is politically connected if at least one member of its board of directors or its supervisory board is or was a politician; that is a member of parliament, a minister or any other top-appointed-bureaucrat”. The standard definition used in the literature is suggested by Faccio (2006):” a firm is politically connected if at least one of the firm’s largest shareholders or one of its top officers is a member of parliament, a minister, a head of state or closely related to a top official”.

Before the 2011 revolution, Tunisia presented a landscape of a politically stable country. Although the country was fully controlled by the only political party in power "the constitutional democratic rally" known as “RCD” and the opposition was humiliated (World bank, 2014). Economically, in the last century, Tunisia knew a proliferation of economic performance through prudent economic management. During the beginning of the 2000s and according to the World Bank report of 2008, tax rates were considered to be very numerous and tax regulations so complex and the rate of corruption was fairly high. These important factors hampered doing business, until the 14th January 2011. It is also important to mention that Tunisia was ranked 133 over 190 countries on paying taxes by the World Bank in 2015 and was ranked 140 over 190 in 2017.

The revolution of January 14th 2011 caused an upheaval at the Tunisian political environment. Tunisia is considered as newly democratized country. A transition was made with freedom of expression, the institution of the democratic path and democratic elections. Across the Tunisian revolution, the political landscape was transformed from monopolism to pluralism. However, this favorable political situation caused an economic instability due to the lack of security. The radical change that knew the Tunisian political scene was seen as the factor that affects directly the extension of political connection most.

Like other emerging countries, Tunisia is characterized by interventionist governments a high level of nepotism, corruption, and informal relationships (Ben et al., 2016). More specifically, Tunisian politically connected companies are characterized by a weak protection for minority shareholders due to the weaknesses of the disciplinary constraints encountered by these companies (Ben et al., 2016; Maaloul et al., 2018).

At the time of writing this paper there is still a little work conducted on political connection in the Tunisian context. The main work is those of Maaloul et al. (2018), Ben et al. (2016) and Lassoued and Ben (2014).

Maaloul et al. (2018) prove that political connection helps improve companies’ performance and value based on a sample of non-financial companies listed on the Tunis stock exchange over the period 2012-2014. Then, Ben et al. (2016) use executives’ political connection to measure firms’
political costs. These authors point out that the executives’ political connection is not directly related to earning management. In addition, they demonstrate that firms with political connection enjoy a significantly lower insurance right, tax and donations and grants compared to other firms. Finally, Lassoued and Ben (2014) claim that political connection in Tunisia gives firms advantages such as tax benefits. Indeed thanks to their political ties, the firms connected politically to enjoy better tax benefits and are offered more government subsidies. It seems that political relationships help firms to more protect from juridical constraints.

3.2. Tax evasion in Tunisia
Taxes are the main contributors to the Tunisian government’s revenue. Tunisia is an emerging country characterized by a black and non-official economy and the avoidance of paying taxes. Tax evasion is not expanded uniformly between firms: some firms avoid paying taxes more than others. Tunisian law has been enacted to highlight the importance of tax collection and the government pays serious attention to tax evasion via principally tax evasion/avoidance campaigns.

Khlif and Amara (2018) outline the difficulty in distinguishing between the concepts of: tax aggressiveness, tax avoidance, tax management, tax shelters, tax enforcement and tax evasion. Several previous researches come to the conclusion that there is no clear definition of tax evasion. Picur and Riahi-Belkaoui (2006) suggest that it could be defined as: “the illegal practices to escape from taxation that can occur in an isolated incident within the activity or in the informal economy where the whole activity takes place in an informal manner”.

Tax evasion is recognized as an illegal reduction of the tax. Indeed, Sikka (2010) points out that legal or illegal tax evasion cannot be approved since this practice, which relies on legal loopholes, costs a great deal of loss to the state. However, according to the portal of the financial economy of action and French public accounts, tax evasion has two aspects. The first aspect is legal, it consists in the use of the loopholes in the law to reduce the taxation basis. This act is known as tax optimisation. The second aspect is illegal; it is about circumventing tax laws and is known as tax evasion. Indeed, the French context qualifies tax evasion as acceptable or unacceptable according to the concordance of taxpayers’ practices with the legal texts.

The previous literature on tax evasion is relatively recent. Shackelford and Shelvir (2001) argue that aggressive tax manipulation practices are numerous and slightly known. Francis et al. (2016) provide several reasons to account for the phenomenon of tax evasion such as economic problems, social equity and risk aversion. Despite the increase in the number of studies which studied the taxpayer behavior in the recent years, there is a limited understanding of the determinants of tax evasion. Indeed, Desai and Dharmapala (2006) believe that companies engage in tax planning if they consider that these practices are totally advantageous and that the costs that emerge from tax avoidance are negligible. They add that tax evasion is generally assessed at the corporate level; taxpayers ensure that the tax savings arising from tax planning exceed the costs of tax planning. Utomo et al. (2016) conceive that the decision of tax evasion depends on the ownership structure of the companies. As a result, family-owned businesses are more likely to aggressively lower their tax burden in order to benefit from tax savings (Chen, 2010).

3.3. Theoretical framework
3.3.1. The fraud theory
With regard to the ambiguity of the definitions of tax evasion and the difficulty of asserting its legal nature, we assume that the fraud theory is a suitable explanatory theory of the study of the impact of political connection on tax evasion.
Fraud theory has recently attracted a great deal of attention from policymakers and other economic actors who have been incited to discuss the phenomenon of fraud. This tough task requires increased knowledge of tax law as well as determinants and consequences of tax evasion.

Cressey (1986) suggest, through the Cressey triangle, three needed factors to commit the act of fraud in a company:

- Financial problems: the motivation
- The appearance of the opportunity
- The rationalization

The reasons for committing fraud can be financial or non-financial, internal or external to the company (Murdock, 2008). The reasons may, also, be related to a lifestyle that the fraudster seeks to obtain or to salaries based on commercial skills or even to an intention to hide errors. Reasons for fraud may also arise from a lack of market-oriented financial stability or the desire to obtain low-cost financing (Dechow et al., 1996). Albrecht et al. (2010) consider that personal financial losses, the inability to compete with other business, the need to meet financial expectations, and to cope with unexpected financial crises may be key reasons for fraud. However, Cressey (1986) and Lister (2007) postulated that the ground is a necessary clause but is not sufficient for the act of fraud. Thus the presence of a strong pressure constitutes a suitable ground for the fraud. This pressure, however, does not lead clearly to fraud.

Opportunity is the second angle of the triangle. In the presence of motivation, the individual is not able to defraud if the opportunity does not exist. Hence, the place of the individual in society contributes to creating the opportunity to commit fraud. Opportunities can be created in an inefficient or too weak hierarchical supervision, a perfect knowledge of the control devices as well as their faults or an unstable organization. Lister (2007) identified that opportunities may arise from non-separation of tasks and complex transactions or organizational structures, board of directors’ weak governance or lack of control by auditors. Rae and Subramaniam (2008) found that the opportunity presented to individuals is usually a weakness in the environment. Indeed, the individual can exploit this weakness and make this fraud real.

Rationalization is the third angle of the Cressey triangle. The latter, i.e. rationalization, constitutes the oxygen which preserves the phenomenon of combustion (Lister, 2007). This clause constitutes rational justifications that the fraudster may present in order to legitimize his behavior. The justifications always tend to be relative to the company’ interest even if it is not always the case.

Thus, tax evasion can be dealt with according to three factors: the pressures that may be financial ones as a result of the economic situation of the companies, or external factors that serve the interests of the shareholders or the opportunity factor that lies, in our case, in the degree of power acquired by politically connected leaders.

3.3.2. Theory of social capital

To study the topic of corporate tax evasion, we choose to adopt a sociological approach. The theory of social capital states that the characteristics of CEO’s may have influence on the firms’ results. This concept highlights the importance of individual contribution and defines its source. The social capital view explains that it’s possible to tie relationships in order to only achieve goals or to take advantages. Thus, social relationships and human capital may be considered as a resource in companies. Political alliances from the directors of firms provide many advantages. In fact, Faccio (2006) finds that the fact of announcing that someone is politically connected generates a cumulative abnormal return.
Political ties are a resource that provides some privileges such as reputation and recognition as well as the access to key resources. In the same way, Kim and Zhang (2016) conclude that politically connected firms “can have lower detection risk, better information regarding future changes in tax regulation or enforcement, lower capital market pressure for transparency, lower political costs associated with aggressive tax planning, and higher risk-taking tendencies”.

Boubakri et al. (2013) state that firms with political connection are more likely to take risks, that’s why politically connected companies can be considered as more tax aggressive because the political capital in companies gives more facilities and insurance of protection from negative events and aggressive tax positions can be seen as a risky investment (Rego and Wilson, 2012).

4. METHODOLOGY

4.1. Data collection

This study is based on a sample composed of all publicly traded Tunisian firms. After eliminating firms of the financial sector and firms with several missing data, we obtained a final sample of 72 firms (Table 1 presents the details) observed over a period of 4 years (from 2012 to 2015). We ended up with 288 observations.

The choice of the period of the study is justified essentially by the revolution of 14th January 2011. The revolution triggered several modifications in Tunisia principally the freedom of expression. Indeed, we seek through this study to examine tax evasion as a consequence of political connection in Tunisia. However, it is necessary to specify that the year 2011 was a year of total chaos that is why it is more adequate to start the analysis from the year 2012. We also choose to limit the sample to 2015 because in 2016, a new government has been put in place and several measures against corruption have been taken. Therefore, we consider that the period 2016-2019 present a different period that should be studied apart.

The financial data was collected from the financial statements and the stocks guide at the website of the Tunisian Stock Exchange. Regarding data relating to the political affiliation of the managers, they were collected through diversified sources. Indeed, we used the portal of the Tunisian government, the website of the ISIE (Independent High Authority for Elections) and the website "Marsad Majles" to identify deputies, ministers and secretaries of state.

<table>
<thead>
<tr>
<th>Table 1: Sample construction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publicly traded companies</strong></td>
</tr>
<tr>
<td>I- Listed companies</td>
</tr>
<tr>
<td>Principal market</td>
</tr>
<tr>
<td>Alternative market</td>
</tr>
<tr>
<td>II- Companies not admitted to listing</td>
</tr>
<tr>
<td>Total of the sample</td>
</tr>
<tr>
<td>Financial companies</td>
</tr>
<tr>
<td>Companies with missing data</td>
</tr>
<tr>
<td>Total final Sample</td>
</tr>
</tbody>
</table>

4.2. Measuring variables

3.2.1. Tax evasion

The literature related to the measurement of tax evasion is relatively recent. Indeed, it does not present a perfectly accurate measurement proxy but settle for jurisprudence. Previous studies have used several measures to capture tax planning of firms because each measure has its own limitations. However, the effective tax rate, has been most commonly used to measure tax evasion (Lennox et al., 2013; Desai and Dharmapla, 2006; Frank et al., 2009).
Indeed, Lanis and Richardson (2012) measured the effect of board characteristics on tax evasion through the ETR. This measure is used to calculate the effective tax rate of firms in the study of Armstrong et al. (2015). This measure has been criticised on grounds that ETR values may be negative or over than 1 due to tax credits. Christensen et al. (2015) operationalize tax avoidance by using two common measures: the firm’s financial accounting effective tax rate (GAAP ETR) and the firm’s cash effective tax rate (Cash ETR).

ETR: Effective tax rate, calculated by the ratio of income tax to pre-tax income.

\[
ETR = \frac{Total\ tax}{Earning\ before\ tax}
\]

We consider that firms engaged in tax evasion are those with effective tax rate values statically lower than the theoretical tax rate. The theoretical tax rate for firms in Tunisia during the period from 2012 to 2015 is 30% for non-financial firms and 25% for financial firms.

4.2.2. Political connection

Chaney et al. (2011) indicate that a political activity is established if one of the directors belongs to a political party or holds a key political position in the government. Shin et al. (2018) consider managers to be politically connected if they belong to a party or if they are close to a politician or if they also hold a key position in the state as a government minister or if they are judges or prosecutors or socialist activists. Hillman (2005) defines political connection as the ability to access key elements that make the company more competitive.

In this study, the broad definition of political connection which includes different positions namely minister or deputy or belonging to a political party is used. After the revolution, the weight of political power in Tunisia seems to be no longer the same. Indeed, we started by extracting the names of the directors in the boards who are available in the stock guides. Then, we thoroughly investigated the personalities on the official websites of the Tunisian state.

Like Shin et al. (2018), the measure of political connection is a dummy variable that takes (1) if one of the directors present a political connection through the occupation of a post of minister, a secretary of state or a deputy during the study period, and (0) if it does not.

4.3. Empirical model

As it was mentioned, we test the link between tax evasion and corporate political connection in the Tunisian context. We have used a multivariate linear regression made for the specific purposes of this study. We underline that the dependant variable in our case is the tax evasion expressed by the proxy of effective tax rate. The independent variables are the variable of interest that is the political connection variable combined with several other control variables.

Our empirical model is reported as follows:

\[
ETR_{i,t} = \alpha + \beta_1 POLCON_{i,t} + \beta_2 AQ_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 SECTOR_{i,t} + \beta_5 ROA_{i,t} + \epsilon_{i,t}
\]

\[i = \{1..72\} \text{ and } t = \{2012, .., 2015\}\]

ETR: Effective tax rate: a proxy used to detect the phenomenon of tax evasion.
POLCON: Political connection that takes (1) if presence of political connection during the study period, (0) otherwise.
AQ: Audit quality is measured by a dichotomous variable that takes (1) if the firm is audited by a big four or (0) otherwise.
SIZE: Size of companies is calculated by the natural logarithm of total assets, \(SIZE = \log\) (total assets)
SECTOR: The sector’s variable is a qualitative measure that can take several forms namely: Sector of industry, Sector of Agribusiness, Property Sector, Distribution Sector.
ROA: Return on assets is measured by the net income divided by total assets.

5. DISCUSSION OF RESULTS

5.1. Descriptive statistics

We find that about 15% of our observations are politically connected over the studied period. Furthermore, in 2014 the number of firms politically connected was doubled as compared with their number in 2012. This can be explained by the gradual stability of the economic and political climate in Tunisia and consolidated by the legislative and presidential elections of 2014.

The mean of the ETR ratio is approximately equal to 9.4% which is significantly lower than the statutory tax rate (30% for nonfinancial firms). Indeed, this average, which is lower than the statutory rate, would probably be related to three factors:

- The appearance of new tax rules during the study period (from 2012 to 2015).
- The complexity of understanding tax rules already in force.
- Tax manipulations carried out by firms.

In this regard, we could see in Figure 1 that the effective tax rate seems to be explained by tax manipulation, for the greater part. The graph also shows that the effective tax rate has decreased sharply from 11.35% to 7.38% between 2012 and 2014.

![Figure 1: Evolution of average of the effective tax rate](image)

The rate is derived from the article 49 of the code of personal income tax and corporate tax.

In this regard, we could see in Figure 1 that the effective tax rate seems to be explained by tax manipulation, for the greater part. The graph also shows that the effective tax rate has decreased sharply from 11.35% to 7.38% between 2012 and 2014.

Furthermore, we analyze the variable ETR more in depth. Table 1 compares the ETR our proxy for tax evasion for each sub-sample of connected and unconnected firms.

**Table 2: Comparative table of connected and unconnected firms**

<table>
<thead>
<tr>
<th></th>
<th>Connected Firms</th>
<th>Unconnected Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>-0.065</td>
<td>-0.550</td>
</tr>
<tr>
<td>Mean</td>
<td>0.059</td>
<td>0.100</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.275</td>
<td>1.390</td>
</tr>
<tr>
<td>Standard-Diviation</td>
<td>0.088</td>
<td>0.160</td>
</tr>
<tr>
<td>Variance</td>
<td>0.0078</td>
<td>0.027</td>
</tr>
</tbody>
</table>

2 This rate is derived from the article 49 of the code of personal income tax and corporate tax.
5.2. Bivariate test
We used the unpaired Student's T test to compare the ETR means of the connected and unconnected companies. The Student’s test enables to ascertain whether the difference in means between the two sub-samples is not simply due to the importance of the variance at the sample level but to the existence of a real difference.

The analysis showed a significant result. It confirms significant differences between the subsample of connected and unconnected firms. More specifically, the mean of the ETR of the connected firms is lower than the mean of the unconnected firms (0.059 against 0.10). This finding confirms that politically connected firms are engaged in aggressive tax planning and have a tendency to reduce their tax burden.

Table 3: Mean's comparison test

<table>
<thead>
<tr>
<th>Sub-sample</th>
<th>Observations</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>184</td>
<td>0.356</td>
</tr>
<tr>
<td>1</td>
<td>104</td>
<td>0.199</td>
</tr>
<tr>
<td>P-VALEUR</td>
<td></td>
<td>1,15E-11</td>
</tr>
</tbody>
</table>

Decision rule: Rejection of H0< 0.5

5.3. Interpretation of empirical results
Before the estimation of the parameters of the multivariate model, we test the hypothesis of the absence of multi-collinearity between the explanatory variables by using the Pearson correlation matrix that allows us to demonstrate the correlations between quantitative independent variables.

The table below displays the absence of correlation for quantitative variables. In fact, the couple of variables (SIZE, ROA) present a weak significant correlation (0.225) this value is inferior to (0.7).

Table 4: Pearson correlation matrix between quantitative control variables ROA and Size

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>0.22558*</td>
<td>1</td>
</tr>
</tbody>
</table>

*, **and *** denote significance at the 10,5 and 1% level
ROA = net income / total assets . SIZE= Log (total assets)

For the qualitative variables: Quality of Audit, Sector and Political connection, we checked the problem of multi-collinearity through the Chi2 test. Results confirm the absence of correlation problem. Decision rule: If p-value <0.5, there is no linear relationship between the variables.

Table 5: Collinearity test of qualitative variables

<table>
<thead>
<tr>
<th>CHI2 TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECTOR-AQ</td>
</tr>
<tr>
<td>SECTOR-POLCON</td>
</tr>
<tr>
<td>POLCON-AQ</td>
</tr>
</tbody>
</table>

SECTOR: industry, service, agribusiness, distribution or real estate. AQ = (1) if the firm is audited by a big four and = (0) otherwise. POLCON =1 if a director is politically connected and = 0 otherwise

In addition, we use the VIF test which allows us to determine the existence of multi-collinearity problem. A multicollinearity problem is identified if the value of VIF<0.5 and mainly between 0.3 and 0.5.
Table 6: VIF Index for dependent variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>ROA</th>
<th>SIZE</th>
<th>SECTOR</th>
<th>AQ</th>
<th>POLCON</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIF</td>
<td>1.2464</td>
<td>1.4165</td>
<td>1.5957</td>
<td>1.2464</td>
<td>1.40821</td>
</tr>
<tr>
<td>VIF Mean</td>
<td>1.2464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ROA= net income/average total assets, SIZE= log (total assets). SECTOR = service, agribusiness, distribution or real estate. AQ = (1) if the firm is audited by a big four and = (0) otherwise. POLCON =1 if a director is politically connected and = 0 otherwise.

The result found through the VIF test confirms those found by the Pearson correlation matrix as well as those of the Fisher tests. Consequently, the absence of multi-collinearity is confirmed.

Table 7: Results of multivariate linear regression

| ETR         | Coefficient | T value | P<|t| |
|-------------|-------------|---------|-------|
| Intercept   | 0.016       | 0.135   | 0.893 |
| POLCON      | -0.068***   | -2.63   | 0.009 |
| ROA         | 0.215***    | 2.985   | 0.003 |
| Distribution Sector | 0.203***   | 5.952   | 0.0001|
| Realestate Sector | 0.089**    | 2.019   | 0.044 |
| Industry Sector | 0.031      | 1.124   | 0.262 |
| Service Sector | 0.070*     | 1.916   | 0.056 |
| AQ          | -0.019      | -0.779  | 0.436 |
| SIZE        | 0.003       | 0.237   | 0.813 |

R² : 0.1947 Residual SD: 0.1436 Adjusted R² : 0.1716 F(8) = 8.433 P-value = 2.889e-10

* *** and *** denote significance at the 10,5 and 1% level.

ETR: Effective tax rate. ROA= net income/average total assets, SIZE= log (total assets). SECTOR = service, agribusiness, distribution or real estate. AQ = (1) if the firm is audited by a big four and = (0) otherwise. POLCON =1 if a director is politically connected and = 0 otherwise.

The estimation of the multivariate model is reported in the table 7. We stated that the model is globally significant (p-value < 0.1% for Fisher's test). Our model showed a value of R² = 0.185 very close to the R² value found by Adhikari et al. (2006) in the Malaysian context.

Table 7 highlights that the POLCON has a negative and significant impact on the tax evasion. Therefore, value of the ETR decreases if the firm is politically connected. We noted that the lower the value of the ETR is, the more the company is involved in activities related to tax evasion. As a result, we conclude that politically connected firms are more engaged in tax evasion practices. This result confirms our hypothesis and could be explained by the fact of the presence of managers-politicians influence the tax strategies adopted by the Tunisian firms. More specifically, it appears that these managers-politicians are empowered to facilitate aggressive tax manipulation. Indeed, managers, when they choose to break into the political world, adopt strategies to reduce the tax payment. Besides, our result is in compliance with fraud theory and social capital theory that highlight the need for an opportunity to perform tax evasion. In our case, political power is a very favorable opportunity for tax evasion despite the moderate public monitoring and the risk of detection after the revolution in Tunisia. Our result reinforces the view that politically connected firms in Tunisia do not face significant political and reputational costs from tax evasion involvement.

Our result is in accordance with the findings of (Francis et al., 2016; Adhikari et al., 2006; Kim and Zhang, 2016). In addition, our results confirm the statements of Facchini (2006) on the types of entrepreneurs-politicians "Three types of political profit can be identified in the literature: predation..."
profits, collective profits and coordination profits. To each of these types of profit corresponds a figure of the political entrepreneur: the predator, the reformer and the candidate. The Austrian origin of the theory of the political entrepreneur, besides the fact that it inscribes the theory in a world out of equilibrium, led him to ask questions that the standard theory does not approach in the same way. The main difference is probably in the reasons they give for entrepreneurial orientation ".

However, the results illustrate that ROA is positively correlated with the ETR. Thus, the performing firms tend to avoid tax evasion. Indeed, tax evasion is a risky tax strategy. Therefore the performing firm avoid this strategy that has a negative impact on the reputation of the company. These results are consistent with those of Rego and Wilson (2012) who state that the more performing firms are; the more they do not opt for aggressive tax activities.

For the link between tax evasion and the business sector, we find that the coefficients of the SECTOR variable are globally significant and are all positive. Results show that the firms belonging to the distribution sector are less tax aggressive. The agribusiness sector, however, is the sector with the most tax evasion. This result could be justified by the strong regulation of the distribution sector.

6. CONCLUSION

This study investigates the phenomenon of tax evasion for Tunisian firms and tends to examine this phenomenon as a consequence of political connection. At the best of our knowledge it is the first study dealing with this objective in the Tunisian context, despite the fact that tax evasion among politically connected firms has recently been attracting academics and practitioners.

This study proves, as discussed above, that politically connected Tunisian firms are engaged in tax evasion but it has some limitations on the measurement of variables and specifically the political connection variable. We note also that this study is only limited to Tunisian firms so our results may not be generalizable to other countries.

The major implication of the results is the fact that the regulators should be aware of the political factors effect on the behavior of managers regarding taxation to provide appropriate rules. Overall, more empirical research is required for a better understanding of the tax evasion determinants in different international contexts. For future research, corporate governance mechanisms could be incorporated as a moderator of the relation between tax evasion and political connection. Besides, future research could examine the impact of political connection on other corporate accounting choices.

Funding: This study received no specific financial support.
Competing Interests: The authors declared that they have no conflict of interests.
Contributors/Acknowledgement: All authors participated equally in designing and estimation of current research.

Views and opinions expressed in this study are the views and opinions of the authors, Asian Journal of Empirical Research shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.
References


Lister, L. M. (2007). A practical approach to fraud risk: comprehensive risk assessments can enable auditors to focus antifraud efforts on areas where their organization is most vulnerable. *Internal Auditor*, 64(6), 61-66.


