



# Chief Executive Officer Political Connection and Firms' Investment Horizon: Evidence from Tunisian Firms

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#### **ABSTRACT**

**Background and Objective:** The impact of political relationships on corporate behavior is very important for an organisation. Hence, the objective of this paper was to examine the impact of political connections on investment decisions, specifically the investment horizon of Tunisian firms. **Materials and Methods:** During the period 2015-2020, this research was conducted with 27 Tunisian listed firms. The methodology used for this work was a positive approach built on a hypothetical-deductive methodology. After reviewing the current theory, some hypotheses were developed and submitted to empirical tests. Binary logistic regression on the different variables was chosen to explain the impact of the political connection on the investment horizon. **Results:** The politically connected Tunisian companies have a positive and significant impact on the investment horizon and encourage long-term investment. This relationship was confirmed during this period, which was marked by serious events such as the health crisis and political unrest. **Conclusion:** The political entities on which this study is based belonged to the former regime, its allies and close associates. The loss of the advantages obtained under the old regime is therefore obvious. For companies, turning to long-term investments is the best way to benefit from the future and to have sustainability.

# **KEYWORDS**

Political connection, investment horizon, Return on Equity (ROE), firm size, future investment opportunities

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# **INTRODUCTION**

Recently, the impact of political relationships on corporate behavior has attracted attention. For instance, political interactions have a significant impact on the value of businesses<sup>1</sup> long-term investment returns<sup>2</sup>, the success of initial public offerings (IPOs), renegotiations and preferential lending agreements<sup>3</sup>.

The network of corporate political relationships is central to economic policy research. Numerous studies show that political relationships increase an organization's value<sup>1,4</sup> and firms actively build political relationships by funding political campaigns and hiring connected political administrators<sup>2,5</sup>. While the



relationship between political connections and organizational value is indisputably well established, we know little about how these connections increase an organization's value and affect its investment decisions.

However, the way in which political relationships add value to businesses from the perspective of the investment decision made by businesses has not been thoroughly examined. This study attempts to fill this gap by examining the relationship between political relationships and firms' investment decisions through an examination of the impact of political relationships on the investment time horizon. The impact of political influence was examined on the investment horizon using a new set of manually collected data on investment decisions made by Tunisian companies listed on the stock exchange.

This study analysis was based on two hypotheses. One theory is that businesses with political ties favor long-term investment, while another contends that businesses connected to politics favor short-term investment. The uniqueness of this study lies in the selection of the context and time frame. In fact, political instability and a health crisis characterize the period between 2015 and 2020. Therefore, it's critical to consider how political connections will affect the investment horizon under these circumstances.

The objective of the study was to demonstrate the influence of political links between Tunisian firms on the investment horizon to give it more weight.

## **MATERIALS AND METHODS**

The methodology used for this work is a positive approach built on a hypothetical-deductive methodology. After reviewing the current theory, some hypotheses were developed and submitted to empirical tests. The selected sample was composed of 27 Tunisian companies that were listed on the Tunis Stock Exchange over a six-year period (2015-2020).

**Inclusion criteria:** The choice of work with these firms was based on the expectation that they are the best performers, on the fact that they meet a number of criteria for the validity of this study and on the fact that they make the applicability of our hypotheses more likely.

**Exclusion criteria:** The publicly traded companies must also make public their financial reports and other information, which frequently reflect their reality. They could therefore be used as a source of data for the estimation of the model. To prevent sectorial correlation effects, empirical analysis opted to omit financial enterprises such as banks, insurance companies, development and portfolio management firms, etc. These firms do not share the same characteristics of the investment decision process as non-financial firms.

The sample design process, descriptive statistics and correlations between the various model variables are all covered in the sections that follow.

**Data for the sample include:** Data acquired from the annual reports of the companies, which were primarily received from the Financial Market Council and on the other hand, collected from the financial accounts of businesses listed on the Tunis Stock Exchange.

The following standard was used for businesses with political ties:

- Any company must be able to identify its owners or shareholders and if it has a board of directors, it also needs to be aware of its members. The identification of companies with political ties is then done using this information
- In fact, a corporation is deemed politically connected if a minister, a member of a political party, a legislator or any other politically connected person holds stock or serves on the board of directors

**Variables estimation:** Two types of variables were estimated in this research. One is an endogenous variable and the other is an exogenous variable.

# **Endogenous variable**

**Investment horizon:** Because businesses make money by investing in assets whose potential returns exceed their initial costs, the investment horizon is a key component of their overall business strategy<sup>5</sup>.

Indeed, the horizon plays a central role in the investment decisions of firms because these decisions depend on trade-offs between expected cash flows at different times in the future on the basis of forecasts that have the potential for significant error or bias<sup>6</sup>.

Azouzi and Jarboui<sup>7</sup> assert that leaders have a responsibility to achieve results within condensed time frames by referring to agency theory. In order to learn quickly how these investments performed and reduce any uncertainty over their own value on the job market, these leaders embrace short-term investment projects.

The rate of investment (industrial and commercial assets) as a criterion for the investment horizon in this study was measured by the given formula:

Investment rate (TI) = 
$$\frac{\text{Operating assets}}{\text{Total assets}}$$

Azouzi and Jarboui<sup>7</sup> Chang *et al.*<sup>8</sup>, Cliche<sup>9</sup>, Gervais *et al.*<sup>10</sup> and Malmendier and Tate<sup>11</sup> all applied this measure:

- If this ratio is higher than 0.5, the investment choice is short-term
- If this ratio is lower than 0.5, the investment choice is long term

# An investment decision has two possibilities:

- If the manager chooses the long-term investment: A negative variation in the capital investment rate
- The manager chooses the short-term investment: A positive variation in the capital investment rate

# **Exogenous variable**

**Political connection:** The majority of studies on politically connected firms measure political connections by a dummy variable<sup>4,12</sup>. Similarly, the political connections (PC) variable takes the value of 1 if at least one majority shareholder or managing member is politically connected and 0 otherwise.

This binary variable equals 1 if at least one shareholder or managing member is a member of parliament, a minister, or is closely connected to a politician or political party.

Indeed, any firm whose shareholders or board of directors include a minister, a person belonging to a political party, a member of parliament, or any person with political connections is considered politically connected.

# **Control variables**

**Size of the company:** According to Ball and Foster<sup>13</sup>, size has been used to represent a significant number of quantities such as the competitive advantage of a firm and the ability of the management team.

Thus, size can be confused with a signal about the effectiveness of investment choices. This is the reason why we use size as a control variable in this research.

This variable can be measured in different ways but the majority of studies have used total assets or sales as a measure of firm size. In this study, we will measure the size of the firm using the logarithm of the firm's total assets (LNTAILLE):

**Future investment opportunities (FIOP):** Future investment opportunities are measured by Tobin's <sup>14</sup>. Tobin's Q is defined as the ratio of the market value of a firm to the replacement value of its assets <sup>14</sup>. If Tobin's Q is greater than one, the firm has profitable investment opportunities and vice versa. In our study, we use an approximation of Tobin's Q i.e. calculated as follows:

$$Q = \frac{Market\ captialization + Book\ value\ of\ the\ debt}{Total\ assets}$$

- If the manager chooses to underinvest: low free cash flow and future investment opportunities
- If the manager chooses to overinvest: low future investment opportunities and free cash flow

**Return on Equity (ROE):** It has to do with financial rentability. Therefore, this ratio expresses the ability of the capital invested by investors to generate a certain level of net profits while also representing the rentability of their funds:

$$ROE = \frac{Net income}{Equity}$$

**Estimation models:** This binary logistic regression model uses as dependent variable TI which is equal to 1 if the ratio is greater than 0.5 (long-term investment) and 0 if not, the independent variables correspond to all the variables already studied (firm policy connection, return on equity, firm future opportunity and firm size).

The choice of binary logistic regression is justified by the impossibility of implementing linear regression for these two reasons:

- Linear regression can extend to infinity as the value of the independent variable increases to infinity, whereas a probability, by definition, must lie between 0 and 1
- Regression with a binary variable could not respect the principle of the normal distribution, because all the values lie at 0 or at 1

# Representation of the study model:

IH= 
$$\alpha$$
+ $\beta_1$ PC+ $\beta_2$ ROE+ $\beta_3$ FIOP+ $\beta_4$ FSIZE+ $\epsilon$ 

Where:

IH = Investment horizon

PC = Refers to the company's policy connection

ROE = Return on Equity

FIOP = Refers to the opportunity for future investment

FSIZE = Refers to the size of the firm

E = Error term

PC is an indicator variable that is 1 if the firm is politically connected.

**Statistical analysis:** This study uses binary logistic regression on the different variables: This is to explain the effect of political connection on the investment horizon.

#### **RESULTS AND DISCUSSION**

**Endogenous variable:** The descriptive statistics of a sample of 27 Tunisian listed companies during the period from 2015 to 2020 was presented in Table 1.

The average IH investment horizon variable is equal to 0.6037736, the standard deviation is equal to 0.4906579 and the minimum and maximum values were, respectively 0 and 1.

To see the homogeneity/heterogeneity of the sample according to the variable studied the coefficients of variation for each variable (standard deviation/mean) were calculated.

The CV of TI is 0.8126521266>0.15. This indicated heterogeneity in the sample with respect to the Investment horizon (IH).

**Exogenous variable:** Results in Table 2 showed that the correlation between the explanatory variables varies from -0.0219 to 0.2765.

According to the work of Gujaarati<sup>15</sup>, this problem can only be said to exist when the correlation between the variables exceeds 0.8. In this case, analysis can conclude that there is no autocorrelation.

In current case, the results obtained showed that the correlation of the explanatory variables is less than 0.8. Indeed, results showed that the correlation coefficients between the majority of the variables are low and that the highest correlation coefficient (0.2765) was between IH and PC.

# Presentation of the model:

$$IH = \alpha + \beta_1 CP + \beta_2 ROE + \beta_3 FIOP + \beta_4 FSIZE + \epsilon$$

The objective of this model is to show the impact of the political connection on the investment horizon of the firm. Table 3 presented the regression results.

Binary logistic regression on the different variables was chosen: It aims to explain the impact of the political connection on the investment horizon.

This test uses IH as the dependent variable, which is worth 1 if the ratio is greater than 0.5 (overinvestment) and 0 otherwise. The independent factors correspond to the set of variables that have already been studied.

The decision to use binary regression is justified by the fact that linear regression cannot be implemented for the following two reasons:

- A probability, by definition, must be located between 0 and 1, but a linear regression can extend to infinity when the value of the independent variable increases to infinity
- The regression with a binary variable might not adhere to the normal distribution rule because all values are either 0 or 1

**Binary logistic regression between the investments rates (IT):** Table 3 presented the Binary logistic regression between the investments rates (IT) which designates the investment horizon(IH) and the political connection (PC) with a sample of 27 Tunisian companies listed on the stock exchange during a period from 2015 to 2020.

Table 1: Descriptive statistics of the Tunisian companies

Variable	Obs	Mean	Standard derivation	Minimum	Maximum	
ĪH	159	0.6037736	0.4906579 0		1	
PC	162	0.6296296	0.4844013	0	1	
FIOP	158	0.9515203	0.8802449	0.048	5.47	
FSIZE	159	18.12338	1.117358	15.344	20.611	
ROE	159	2.364505	29.20897	-3.252	368.307	

IH: Investment horizon, PC: Political connection variable, FIOP: Opportunity of future investments, FSIZE: Size of the company and ROE: Financial profitability

Table 2: Correlation matrix between the explanatory variables

Variable	IH	PC	FIOP	ROE	FSIZE
IH	1.0000				
PC	0.2765	1.0000			
FIOP	0.2485	0.1834	1.0000		
ROE	-0.0964	0.0593	-0.0605	1.0000	
FSIZE	0.1606	0.1890	-0.0219	-0.0299	1.0000

IH: Investment horizon, PC: Political connection variable, FIOP: Opportunity of future investments, FSIZE: Size of the company and ROE: Financial profitability

Table 3: Binary logistic regression between the investments rates (IT)

		Robust				
TI	Coefficient	Standard error	Z	p>z	95% Conf.	Interval
PC	0.9854898	0.3567599	2.76	0.006	0.2862532	1.684726
FIOP	0.6701937	0.2346613	2.86	0.004	0.210266	1.130121
ROE	-0.0168004	0.0078513	-2.14	0.032	-0.0321886	-0.0014121
FSIZE	0.237975	0.1652497	1.44	0.150	-0.0859086	0.5618585
_cons	-5.070867	3.029553	-1.67	0.094	-11.00868	0.8669483

Number of obs = 158, Pseudo R2 = 0.1147, Tl: Investment rates, IH: Investment horizon, PC: Political connection variable, FIOP: Opportunity of future investments, FSIZE: Size of the company and ROE: Financial profitability

According to this estimation, the factors chosen account for a portion that is at least acceptable of the influence of the political connection and behavioral biases on the investment decision (horizon of investment) of the companies in our sample (R2 = 11.47%).

The analysis of the data shows a positive and significant relationship between the political relationship and investment rate ( $\beta$  = 0.9854898, p = 0.006). The positive relationship shows that the political relationship has a good effect on the investment rate (which expresses the investment horizon).

In our model, the value 1 indicates that society is politically connected for the variable CP.

In terms of investment rate, 1 indicates long-term investment.

According to this estimate, politically connected businesses favor long-term investments more<sup>3,15,16</sup>. This supports current hypothesis H1b, which states that when a business is politically connected, it makes investments and reaps the benefits in the long term. The more political connections a firm has, the higher the rate of investment, the more likely its leaders are to make long-term investments and the more the firms benefit in the long run. This finding was consistent with Goldman *et al.*<sup>5</sup>, who pointed out that political connections create value by anticipating the benefits that the connected person may enjoy in the long run. This positive relationship is justified by the fact that a leader who manages political relationships chooses the investment over the long run because they have the private information they need to profit in the future and continuously seek to harm others who are uninformed. For this reason, political relationships are crucial and advantageous in order to attract long-term investments.

**Control variable:** The futures investment opportunity variable has a positive correlation coefficient ( $\beta$  = 0. 6701937), which indicates that it has a positive and significant impact (p = 0.004%) at the 5% investment time horizon (TI). The existence of future investment opportunities is significant and aids leaders in choosing long-term investments.

Financial profitability (ROE) has a negative ( $\beta$  = -0.0168004) and significant (p = 0.032) relationship, which negatively affects the investment horizon.

This shows that when financial profitability decreases, a firm is more motivated to make long-term investments. In other words, when ROE decreases, the investment rate increases and long-term investments are favored.

**Size of company:** The size of the company has a positive ( $\beta$  = 0.015099) and marginally significant (p = 0.19) impact on the investment horizon at a 10% threshold. This finding supported the hypothesis that large companies are the most long-term investors and supported our choice to use the size of the company as a signal for the investment horizon. Consequently, a key factor in investment decisions is the size of the company.

This work helps to shed light on the role of political relations in companies' investment choices. This is a detailed analysis of the different results obtained. Our results indicate that the political tie has a positive effect on investment choices. Similarly, we present a variety of observed empirical evidence describing that firm size and other characteristics all have an effect on investment choices. However, our work has a number of limitations that should be mentioned. A first limit lies in the fact that certain psychological aspects treated theoretically could not be completely approached empirically. This limit is due, on the one hand, to the nature of the data sought (which may be perceived as personal, even secret by the managers contacted) and on the other hand to the search tool used, which does not allow get all the requested information. A second limitation is that the sample only contains listed non-financial companies, which affects the statistical power (sample size) of the results found.

### CONCLUSION

This essay examines the impact of political connections on investment horizons. The results showed that firms with political connections encourage long-term investments. This decision is consistent with rent appropriation. Long-term investments incur higher costs, but political connections motivate managers by providing benefits, such as private information and tax breaks. The political entities on which this study is based belonged to the former regime, its allies and close associates. The loss of the advantages obtained under the old regime is therefore obvious. For companies, turning to long-term investments is the best way to benefit from the future and to have sustainability.

# SIGNIFICANCE STATEMENT

This study aims to provide precise indications to explain how political connection influences corporate investment choices. The uniqueness of this study lies in the selection of the context and time frame. In fact, political instability and a health crisis characterize the period between 2015 and 2020. Therefore, it's critical to consider how political connections will affect the investment horizon under these circumstances. Taking into account the political relations of the leaders of Tunisian companies in improving their choices is certainly important for a better understanding of companies' decisions, but one can wonder whether the success or the failure of these leaders would not also be linked to other external factors related to the environment, markets.

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