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ELECTORAL UNCERTAINTY, MACRO -ECONOMIC ENVIRONMENT AND CORPORATE INVESTMENT STRATEGY

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ABSTRACT

Our study looks at the relationship between firm's investment spending in fixed and intangible assets and electoral uncertainty around two types of national elections: presidential and parliamentary elections. We analyze investment sensitivity to electoral uncertainty from 1996 through 2017 using a sample of 1485 firms from 45 countries. We find that, regardless election type, firm's fixed investment significantly decrease around elections. Precisely, firms hold investment spending in before elections and restart the year following year. In this case, firms adopt a wait-and-see strategy. But, in the context of corruption control the potential negative effects are reduced. We thus highlight how different types of investments respond to various electoral shocks since microeconomic processes respond to policy uncertainty based upon firm's resource needs. We conclude that the effect of political uncertainty on business investment depend on the degree of political uncertainty and the investment to be undertaken.

Keyword: Political economy, Policy uncertainty, Electoral uncertainty, business investment.

JEL Code : G02, G11, G12, D81.

1. INTRODUCTION

The elections which led to the renewal of the president of the country, the members of the government and the advice members of parliament increase the risk of political inversion.

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They allow the administrators to revalue the decisions of investment. The uncertainty of the political environment is mainly due to the modifications of the fiscal policies and regulations loom which could influence financial markets reactions. The elections can provoke strong reactions from financial markets since new government frequently change the rules of the game. Then, firms may either expand or hold back their investment purchases based upon how the market consider how new policies will alter the economic outlook. More specifically, both accidental and scheduled political events have significant impacts at the firm level, (**Francis & all, 2014.**). (**Marcelin & Mathur**) argued that the company's investment in different assets can be subject to several types of political uncertainty such as presidential elections and legislative elections. They noted that presidential elections reduce the risk of political uncertainty, allowing businesses to better predict risks. (**Marcelin & Mathur, 2018**) argued that elections affect different types of investment. According to (**Francis & all, 2014.**) and (**Chevalier-Roignant & all, 2011**) political uncertainty significantly affects the company since investment projects can be actively managed in response to the resolution of this political instability and also macroeconomic aggregates. (**Pawlina & Kort, 2005**) argued that elections affect different classes of investment as business investment opportunities present a set of real options to earn productive assets.

According to (**Bernanke, 1983**), the potential value of the company depends on the outcome like good or bad news.(**McDonald & Siegel, 1986**) examined the relationship between companies' investments of and national elections. They found that every country is characterized by its institutional quality explaining that the elections have a very important effect on the macroeconomic environment and the investment in fixed or intangible assets. They found that companies having a strong intensity of capital are the least sensitive to the election results ex ante. **While Julio and Yook (2012**) confirmed that companies can delay their investments during the adoption of discouraging measures under the profit taxation before the election. Consequently, the investment depends on the resolution of the electoral uncertainty and on the strengths of the competition (possibility of market shares loss). Several studies confirmed the negative impact of the political uncertainty on investment expenditure. The effect of the electoral risk on companies postpones from a country to another according to the needs in investment and capital endowments, (**Bloom & all, 2007a**) With respect to resource endowments and types of elections, we intend to expand the literature by studying the effects of various types of elections, political regimes, on different asset classes. We consider that firm's investment in different asset classes responds differently to political uncertainties induced by (1) presidential elections and (2) parliamentary elections and that relative power of political regimes may alleviate the degree of policy uncertainty transmitted to firms around election years.

Our study concerns the choice of the moment to invest in fixed or intangible assets in a context of electoral uncertainty (presidential and parliamentary) while identifying transmission mechanisms connecting policy with the macroeconomic

fluctuations and the strategy of investment of companies. The literature concerning the financial development distinguishes companies with capital and with immaterial intensity raised and their sensibility to certain types political regimes (**Fisman & Love, 2007**) and (**Marcelin & Mathur, 2018**). This sensibility at the risk raises the following question: what are what the types of subsidies affect the reaction of companies to the electoral shocks? In fact, the decision of investment of companies in fixed assets and intangible assets during the years of presidential election, by opposition in the years of national elections under parliamentary systems, stays at present a subject of debate. According to the study of (**Julio & Yook, 2012**), no matter what is the political system of countries, investment in tangible assets does depend on national elections periods.

The remainder of the study proceeds as follows. Section II presents a brief literature review and the theoretical underpinnings of electoral and political uncertainty and firm's investment decisions. Section III describes the data. Section IV discusses the main variables and the methodology implemented. Section V presents the results while section VI concludes.

2. RELATED LITERATURE

The review of the literature suggests that the relationship between democracy and growth is ambiguous. Numerous theories predict an opportunistic political business cycle, whereby incumbents induce short-term economic expansions in the pre-election period, but, in real economic outcomes, empirical studies do not validate such cycles for gross domestic product (GDP).

Recently, several studies analyzed corporate investment during electoral years (**Julio & Yook, 2012**) and (**Marcelin & Mathur, 2018**). In fact, others studied investment behavior in the context of political instability, (**Nielsen, 1976**); (**Bernanke, 1983**); (**McDonald & Siegel, 1986**); (**Rodrik, 1991a**) and (**Pindyck & Solimano, 1993**). (**Clark, 1979**), (**Hibbs Jr, 1977**) and (**Nordhaus, 1975**) and (**Hassat & Sullivan, 2015**), (**Brogaard & Detzel , 2015**) postulate that the political uncertainty has significant effect on corporate decisions and macroeconomic aggregates. The decline in investment expenditure has a number of adverse consequences such as the slowdown in economic activity and the increase in high political costs, (**Caballero & Pindyck,1996**.). Moreover, (**Jens, 2017**) considers the election of governors as a source of uncertainty. This author noted a 5% drop in investment before the elections and up to 15% for sub-samples of companies particularly sensitive to political uncertainty. He found that companies are delaying the issuance of equity and investment debt before the election. More specifically, politically connected firms post lower profits compared to unconnected firms, and this lower performance is traced to higher labor costs. Using a different approach this author has found evidence to support idiosyncratic volatility and debt reversal channels through which political uncertainty affect credit risk.

According to (**Bloom & all, 2007b**), firms become more cautious, in political uncertainty. (**Julio & Yook, 2012**) support that, both presidential and legislative elections have advantages and costs that depend on the degree of political uncertainty.

(**Bertrand & all, 2007**) confirmed that connected firms post lower profits compared to unconnected firms, and this lower performance is traced to higher labor costs. More particularly, in election years, they find that for French firms, politically connected firms display higher rates of jobs creation and lower rates of jobs destruction. Since investment is viewed as provider of hope in the future and countries and firms are often judged by their performance along this aspect, (**Caballero, 1999b**) argues that aggregate investment is a key variable. For (**Lijphart, 1992**) and (**Mainwaring, 1993**) , presidential government regime is less likely to sustain stable democracies than the parliamentary one. On the other hand, (**Linz, 1994**) affirmed that sharing the power in a parliamentary system can origin unpredictable shocks, including acute political instability fuelled by lengthy negotiations to maintain a majority in power, as minority parties and independent legislators can withdraw their support for the ruling coalition and its political concessions to maintain stability.

Consequently, political uncertainty influences the macro-economic environment. Several studies have been conducted in order to expand understand of this relationship like (**Alesina & Roubini, 1992**) and (**Nordhaus, 1975**) nd al, (1989) and Wron and Leon (2014). From a Political view of investment, large empirical literatures emphasize the negative effect of politicians' behavior on firm's investment decisions. (**Nordhaus, 1975**) and (**Alesina & Roubini, 1992**) explore opportunistic models to explore politicians' office preservation instinct. (**Rogoff & Siebert, 1988**) and (**Rogoff, 1990**) confirm their rational business cycle model concerning the rational expectation of electors. More particularly, the share of informed voters affects the size of the observed election cycles, (**Akhmedov & Zhuravskaya, 2004**) and (**Shi & Svensson, 2006**). At a standstill, the political business cycle hypothesis (PBC) remnants inconclusive in a number of models like (**Alesina,1987a**) and (**Drazen, 2000**). In fact, they highlight that the evidence of electoral cycles in aggregate activity and inflation is weak. In Japan, (**Cargill & Hutchinson, 1991**) show that real GNP growth was correlated with the timing of elections. Similarly, (**Wron & Leon, 2014**) examined the relationship between elections, political uncertainty, and GDP over a period of time between 1975-2014 for two samples: quarterly data from 16 OECD countries and one with annual data for 56 non-OECD democracies. The potential effect of elections and electoral risks in different political regimes on investments depends on economic agent's perceptions and the degree of political uncertainty in election years. (**Carey & Shugart, 1995**) and (**Tsebelis, 1995**) pretend that presidentialism is a game of null sum because it causes majoritarian tendencies, temporal rigidities and dual democratic legitimacies. Unlike presidential regime, in a parliamentary regime, characterized by a larger plurality and negotiations to obtain majority support and a prime minister, the political process may become dysfunctional in the absence of political, social and economic continuous readjustments.

In fact, the parliamentary regime may provoke unpredictable shocks causing acute political instability caused by long negotiations to maintain a ruling majority since minority parties and ranked and file lawmakers can revoke their support for the

ruling coalition and policy concessions. Since it exclude ruling party from enacting and implementing radical policies, it is hard to establish the direction of causality between electoral uncertainty and firm's capital affectations. At last, the effect of parliamentary elections on firm investment remains an inquiry of a special empirical attention particularly in terms of variations in political regimes across countries and their effect in terms of policy uncertainty on firm's investment strategies. In fact, policy or political uncertainties of political regimes may drive the differences on how firms allocate investible funds.

3. DATA AND METHODOLOGY

3.1. Data

In order to study the effects of electoral uncertainty on corporate investment, this study is in line with the strategy implemented in (**Julio & Yook, 2012**) and Marlekin et al. (2019).We assumes that uncertainties of different types of elections are varies across countries and depend on political systems. In fact, investors may perceive elections within different political systems differently. For this reason, we differentiate between types of elections and investment expenditures in fixed assets and in intangible assets in election years and combine different types of elections systems across several countries with variations in a firm's asset structure under electoral uncertainty.

Our sample covers institutional, micro and macro- level data during two electoral cycles and provides sufficient variation to analyze the financial effect of electoral uncertainty. This particular period offers significant variability for firms, countries, and industries. First, we collect data on political institutions from the World Bank's 2017 Database of Political Institutions (DPI). We utilize several dummy variables to take into account the electoral regime of the country (presidential or legislative Election) and to capture the specificity of the period preceding or following the presidential or legislative year. Second, we use various sources of macro-level variables including; Government Stability, Democratic accountability and Control of corruption. We include other country-level economic indicators such Inflation, Exchange rate, Budget deficit/ surplus and GDP growth. Finally, we utilize firm's balance sheet items extracted from the World Bank data base. The variables consist in: Firm Size measured by the natural logarithm of the book value of total assets, intangible intensity ratio(IIR), derived as the ratio of intangible assets to the previous year's total assets, capital expenditures or capital intensity ratio, measured by the growth rate of fixed assets to the previous year's total assets (CAPEX),: natural logarithm of capital expenditures deflated by the rate of inflation, *Operating cash flow/total asset* is a firm's operating cash flows deflated by its total assets in year t, (Operating cach flow). We admit that if firms are capital intensive they require more operating cash flows and important investments in capital stocks in order to realize an efficient production factors use, while firm's total assets, an indicator of scale, are normalized by the firm's corresponding country's GDP.

The appendix 2 presents some descriptive statistics on the sampled countries and corresponding reporting firms. The number of elections includes the two types of

elections presidential and parliamentary elections. Number of observations refers to firm year data spanning over thirty five industries from sixteen countries over the time period between 1996 and 2017. Electoral data are obtained from the Database on Political Institutions. CAPEX = Fixed assets/Total assets, and Intangible intensity ratio = intangible assets/Total assets or IIR as dependent variables, firm's size, is the natural log of firm's total assets; Operating cash flow/total asset is a firm's operating cash flows deflated by its total assets in year t. Firm level data are extracted from the World Bank database. Macroeconomic uncertainty is a GARCH (1, 1) volatility index involving series such as changes in exchange rate, inflation, budget deficit/surplus, and growth rate.

3.2. *Methodology*

We analyze the effects of electoral uncertainty, measured by types of elections on business investment measured by intangible capital expenditures during an election period. In this context, it is assumed that uncertainties differ from one country to another according to political systems and types of elections. Compared with several studies, we find that changes in assets in business investment represent a novelty in an environment of electoral uncertainty. We use Generalized Method of Moments (GMM) of standard multivariate investment rates developed for dynamic panel models by Holtz-Eakin et al. (1988), (**Arellano & Bond, 1991**) and Bover (1995) and (**Blundell & Bond, 1998**) combined with the dynamic model in Baum et al. (2010). Using data for an unbalanced panel for the period 1996- 2107 from 16 countries, we test a dynamic model of investment rates for two types of national elections: presidential and parliamentary. We assume that independent variables are strictly exogenous and are used as instruments for the differentiated equation. The empirical strategy follows an established pattern consisting of using the standard multivariate investment specification, which controls for firm level characteristics.

The empirical model used can be presented as follows:

$$Y_{ijt} = \delta_0 + \delta_1 Y_{ijt-1} + \delta_2 E_{jt} + \delta_3 X_{ijt} + \delta_4 VOL_{jt} + \upsilon_i + \varepsilon_{ijt},$$

Where i, indexes the firm, j the country, and t the year, respectively. The dependent variable, *Y_{ijt}* , represents, alternatively, (1) a firm's investment ratios computed as the growth in capital expenditures measured at the beginning of the year's book value of firm's fixed assets(*CAPEX*), derived as *CAPEX* or firm's aggregate capital expenditures in fixed assets normalized by corresponding previous year's total assets; (2) intangible assets to total assets at the end of the previous year; derived as a firm's intangible intensity ratio, *IIR*, or the value of a firm's intangible assets normalized by corresponding previous year's total assets. We included in the model the lagged of the dependent variable Y_{ijt-1} in order to capture the continuity in the behavior of fixed and intangible investments. Variables of interest, *E_{jt},* consist of a set of dummy variables measuring presidential and legislative elections. The first election dummy variable takes a value of one if there is a presidential election in country j in year t and 0 elsewhere. The second election dummy equals one if a legislative election in country j in year t and 0 elsewhere. To examine the effect of election cycles on fixed and intangible investment, we include pre- and postelection

indicators, $Et-1$ and $Et+1$, that vary with each category of election. The X matrix designs the control variables consisting in operating cash flows, and firm size and *Asset/GDP*.

These variables control for firm-specific characteristics that influence firm's' investment policies. We also we introduce, *VOL*, a *GARCH* (1, 1) generated volatility index to control for countries' macroeconomic conditions. In fact PBC political business cycles are comprised of political business cycles induced by political events and partisan business cycles induced by budget cycles or partisan policies after changes in government ideology. Other variables included in the model refer to some institutional and political measures, interacting with the various election-timing dummies to capture potential differences in a country's strategy during the course of the election years such us Government Stability, Democratic Accountability, Control of corruption and other country's level data. Firm fixed effects are captured by vi, and εijt represents the error term.

5. DISCUSSION

In this section, we present empirical results of patterns of two types of investment spending around presidential and legislative national elections. The central issue is to evaluate how the rates of investment in fixed and in intangible capital are affected by these two types of elections. While there have been a great deal of research on investment under uncertainty, the literature on investment around election cycles has mainly focused on tangible investment.

According to empirical results, electoral uncertainties are linked to the macroeconomic policy induced by the budget cycles. These uncertainties influence changes in investment rates across asset classes. Egypt and Tunisia have high volatility caused by the Arab Spring Revolution and may have had an impact on macroeconomic performance in recent years. In our model, the policy variables interact with the various dummy variables of the electoral calendar to capture the potential differences in business investment strategy over the election years. Our model focuses on macroeconomic variables related to the political and fiscal cycles that may affect a firm's investment decision. Using the GARCH model (1,1), as in the work of (**Bollerslev, 1986**), (**Bollerslev & all, 1992**), macroeconomic volatility was measured to assess the macroeconomic uncertainty of each country based on three variables; inflation rate, real exchange rate and GDP growth. As a result, rising inflation, declining GDP growth and increased exchange rate volatility have been attributed to low investment spending.

The results of Table 1 show that there is a statistically insignificant relationship between isolated presidential elections and a company's capital investments in election years. All control variables are significant and have the expected sign. Large companies (with very high cash flow) have very large capital expenditures. All regressions include a temporal index, allowing checking differences in time between firms from one country to another, as well as a more net electoral effect. In addition, we see that companies reduce their investment activities considerably during national election years. A significant drop in capital spending was confirmed during the

presidential election years. Therefore, the effect of presidential elections is stronger for enterprises with larger intangible assets.

Like (**Julio & Yook, 2012**), our empirical results of the second regression (OLS) show that the electoral effect is lower during the years of autonomous presidential elections as opposed to the parliamentary elections. We notice that companies reduce their fixed and intangible investments during the years of presidential elections. Our study suggests that the real effect of the political uncertainty on the investment at the level of the company is stronger, according to the vector of political uncertainty and the type of the investment undertaken. These results are in accordance with (**Julio & Yook**, **2016b**) and (**Kelly & all, 2016**) search results. Several other studies developed the relationship between the firm's investment and the parliamentary systems. (**Gerring & all, 2009**) postulate that the parliamentary government, with regard to the presidential system, is associated with flexible politics, pricing investment, reduced import duties, improved exchanges and a higher level of GDP per capita.

Table 1: Regressions for firms' investment during national elections cycles

Regression 1	*CAPEX*	*CAPEX*	*CAPEX*	*IIR*	*IIR*	*IIR*
Presidential election	−0.0005			−0.0077		
	−0.0005			0.0147		
Parliamentary election			−0.0005**			−0.0031
			0.0002			0.0028
Asset/GDP	0.0004***	0.0004***	−0.0001	−0.0047	−0.0030	0.0079***
	[0.0001]	[0.0001]	[0.0001]	[0.0040]	[0.0037]	[0.0022]
Operating cach flow	0.0001	−0.0000	−0.0001	0.0005	−0.0038	−0.0130
Volatility index	0.0000	0.0000	0.0000	−0.0001**	−0.0000*	−0.0000*
	[0.0000]	[0.0000]	[0.0000]	[0.0001]	[0.0000]	[0.0000]
AR[2] p-val.	0.3905	0.3576	0.5778	0.1000	0.1109	0.1301
Sargan test p-val.	0.3560	0.1679	0.3504	0.9656	0.9694	0.6059
Regression 2						
Presidential election	−0.0054*			−0.0025		
	[0.0038]			[0.0037]		
Parliamentary election			−0.0039*			−0.0078***
			[0.0029]			[0.0029]
Adj.R2	0.0752	0.0651	0.0559	0.0882	0.0792	0.0229

This table presents the results of the structure of business investment during national election years held between 1996 and 2017. We use GMM dynamic panel data techniques to estimate regressions. The presidential election is a dummy variable,

which takes a value of 1 in the year of holding a presidential election. Parliamentary elections are a dummy variable that takes a value of 1 in the year the election is held to replace the legislature of a country in a parliamentary system. Standard errors are presented in square brackets. *, ** and *** indicate statistical significance at levels of 10%, 5% and 1%, respectively.

The appendix 3 presents the results of the structure of business investment during national election years held between 1996 and 2017. The first three specifications show basic regressions in the effect of elections on the capital investment rates of firms, defined as the growth of CAPEX. Similarly, specifications 4 to 6 use the intangible intensity ratio, IIR, the ratio of (intangible assets t to intangible assets t-1) as dependent variables. We use GMM dynamic panel data techniques to estimate regressions. Standard errors are presented in square brackets. *, ** and *** indicate statistical significance at levels of 10%, 5% and 1%, respectively.

Chauvet and Necklace (2009) confirmed that the elections can activate an increased volatility in poor and unstable countries. The companies of stable countries should be less worried by the radical changes of their politics while the most unstable countries suffer from reduced investments and growth rate. According to our results in appendix 3, we notice that the CAPEX and the IIR is positive and significant and furthermore, there is a positive relationship between firm's spending, stocks of capital and intangible assets. Our results are in line with (**Marcelin & Mathur, 2015**) findings showing that in stable countries, firms can improve their capital expenditures, but the electoral uncertainty has a slowing down effect on expansion. Altogether, our results assert that interaction term between the parliamentary election and the control of the corruption is positive and significant at least at the level of 5 %. It suggests that countries having most capacity in terms of control of the corruption present less political instability. We notice in the 3 columns (1, 2 and 4 of the table 4) the presence of a positive and statistically significant coefficient between both types of elections (presidential election and members of Parliament) and the stability of the government. In this context, we can say that the investors are less worried by the electoral uncertainty in countries endowed with strong institutions

In the case of political uncertainty, several companies delay some previously planned investments. According to Canes-Wrone and Park (2012), the firm's situation in a national election environment is more sensitive than a stable environment. In this case, firms accelerate their investments in all asset classes before the election. Accordingly, the company considers the election cycle date to avoid late investment costs. The pre-election and post-election effect is particularly strong around presidential elections.

Table 2: Univariate baseline regressions: before and after national elections

Dep.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Pre−presidential election	−0.001*						0.0001					
	[0.0012]						[0.0006]					
Pre−Parliamentary election			−0.0036*						−0.0019*			
			[0.0008]						[0.0001]			
Post−presidential election				−0.0018						0.0328***		
				[0.0085]						[0.00]		
Post−Parliamentary election						0.0030						0.0054***
						[0.0036]						[0.00]
Adj.R2	0.0314	0.0108	0.0268	0.0296	0.0123	0.0215	0.0142	0.0639	0.0785	0.0426	0.0328	0.0409

*This table presents the level MLS results for business investment rates before and after national elections during 1996-2011. The first six specifications use firm's investments in capital goods. Standard errors are presented in square brackets. *, ** and *** indicate statistical significance at levels of 10%, 5% and 1%, respectively.*

Next, we suppose that the coefficients for the years before and after the elections are nulls if firms reduce their investment purchases during the pre-election years and resume their investments in the year following the national elections. The results of the investment versus election estimate are shown in Table 6. Although lower for presidential elections, the coefficient remains consistent with the control of pre-election and post-election years. The coefficients for the years before and after the elections are statistically significant at least at the 5% level. In particular, capital expenditure declined significantly in the pre-election year and recovered significantly in the year following the election.

Table 3: Timing of elections: Regressions for firms' investment over the electoral cycle.

	CAPEX	CAPEX	CAPEX	IIR	IIR	IIR
Presidential election	−0.0131			−0.0121*		
	[0.0148]			[0.0125]		
Pre−presidential election	−0.0021**			−0.0169**		
	[0.0185]			[0.0249]		
Post−presidential election	0.0025**			0.0048		
	[0.0241]			[0.0048]		
Asset/GDP	0.0001	0.0003***	0.0001***	0.0104***	0.0015	−0.0007
	[0.0008]	[0.0019]	[0.0007]	[0.0027]	[0.0013]	[0.0014]
Operating cach flow	0.0001	0.0002*	0.0000	−0.0018	0.005*	0.0042
	[0.0004]	[0.0001]	[0.0001]	[0.00]	[0.0026]	[0.0043]
Volatility index	0.0000	0.0000	0.0000	−0.0000**	0.0000	−0.0001***
	[0.0000]	[0.0000]	[0.0000]	[0.0000]	[0.0000]	[0.0000]
Parliamentary election			0.0012			−0.0125*
			[0.0015]			[0.0142]
Pre−Parliamentary election			0.0010			0.0192*
			[0.0019]			[0.0152]
Post−Parliamentary election			−0.0002**			−0.0058
			[0.0001]			[0.0142]
AR[2]P- VAL	0.1181	0.3295	0.3625	0.5248	0.1285	0.1628
Sargan TEST P-VAL	0.1258	0.1748	0.1284	0.5124	0.3265	0.2158

The decline of the pre-electoral period exceeds widely the post-electoral resumption. It suggests a negative impact on the investment due to the elections. By using a linear combination of the estimations before and after the elections, we notice a capital spending reduction associated with the national elections. This result is against the

results of the study of (**Dinç, 2005**)which notices no significant increase of the loans. It seems that the effect of the electoral uncertainty develops and dissipates during the post-election years, which has a positive and significant impact on the investment policy of firms. It is interesting to note that capital expenditures decrease during the presidential elections, this spending is systematically lower when the elections of the president and the parliament are simultaneous. The effect of the national elections shows itself during the electoral cycle. The decrease of the investments of companies by type of asset during the years of national elections is an important result, given that certain investments planned in firms with strong intensity of capital can be irreversible so that firms maintain a process of orderly functioning or a competitive advantage. (**Bernanke, 1983**) and (**Caballero & Pindyck, 1996)** asserted that the investors do not really expect to know when neither in which form the spending in fixed assets is going to start again, nor to make the future projects progress to take advantage of the lower cost of the capital and of the shorter delivery deadlines.

5. CONCLUSION

Economic policy is critical for prosperity and so how it is shaped is of enormous importance. It is now widely accepted that good economic policies and governance is principally an internal process rather than those imposed from outside. This paper provides evidence for two electoral cycles in firm's investment sensitivity and macro-economic factors. We integrate two empirical models GMM and GARCH for 1485 firms during 1996-2017. Empirical results show that, regardless election type, investments are adjusted downward. More particularly, the results also show that firms curtail investment spending in the year leading up to an election and resume investing in the year following a national election. Consequently, facing electoral uncertainty companies will adopt a wait-and-see strategy. We interestingly find that control of corruption reduce the potential negative effect of elections. In other words, the most stable countries have a high investment rate and can raise their living standards while preserving the democratic process. In other words, the most stable countries have a high investment rate and can raise their living standards while preserving the democratic process. Anchored in several studies in the financial development literature, the focus on resource endowment highlights how different types of investments respond to various electoral shocks. This study avoids the notion that all firms respond to the electoral uncertainty in a similar fashion since microeconomic processes respond to policy uncertainty based upon firm's resource needs.

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APPENDIX

Appendix 1 : Variable description

Variable	Description
Firm Level Data: Source, World Bank Scope	
Firm Size	The natural logarithm of the book value of total assets
Asset/GDP	Total assets normalized by the firm's corresponding country's GDP.
Operating cach flow	Operating cash flow/total asset is a firm's operating cash flows deflated by its total assets in year t.
Investment Intensity ratio (IIR)	Investment intensity ratio or firms' growth opportunity is calculated as the ratio of intangible assets to the previous year's total assets.
CAPEX	Capital expenditures or capital intensity ratio, measured by the growth rate of fixed assets to the previous year's total assets.
Institutional-Level Data: Source, Database of Political Institutions	
Presidential Election	A dummy variable that takes on a value of one if a presidential election occurred during a particular firm year.
Legislative Election	A dummy variable that takes on a value of one if a legislative election occurred during a particular firm year.
Pre- Presidential Election Year	A dummy variable that takes on a value of one for the firm year preceding the year of a presidential election
Post- Presidential Election Year	A dummy variable that takes on a value of one for the firm year following the year of a presidential election
Pre- Legislative Election Year	A dummy variable that takes on a value of one for the firm year preceding the year of a legislative election
Post- Legislative Election Year	A dummy variable that takes on a value of one for the firm year following the year of a legislative election
Macro-level data: Source, World Bank Scope	
Government Stability	An index that assigns values ranging from 1 to 12, where lower values indicate less stable countries
Democratic Accountability	An index that assigns values ranging from 1 to 6, where lower values indicate lack of accountability of elected officials before their constituents
Control of corruption	This metric assesses the level of corruption within the political system. It assess the extent to which corruption by government official constitutes a threat to investments; distorts the economic and financial

	environment; reduces the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability; and, introduces an inherent instability into the political process.
Budget deficit/surplus	Central government revenue less public expenditures in percentage. A positive value represents a surplus while a negative one represent a deficit
Inflation	Growth in the Consumer Price Index
Exchange rate stability	Variations in the exchange rate of a country's domestic currency against the U.S. dollar from its previous year's value
Per capita GDP	Per capita Gross Domestic Product
GDP Growth	Growth in Gross Domestic Product

Appendix 2: Descriptive statistics

Country.	# obs.	Election type	# of elections	CAPEX	IIR	Firm's size	Operating cash flow	Macroeconomic uncertainty
Argentina	19	Presidential	20	0.58	0.05	7.33	0.13	−0.21
Moritania	45	Presidential	5	0.57	0.05	6.46	0.05	−0.58
Algérie	39	Presidential	4	0.54	0.06	6.84	0.07	−0.24
Egypt	34	Presidential	6	0.63	0.06	7.05	0.08	−0.72
Tunisia	62	Presidential	6	0.85	0.08	6.85	0.07	-0.85
France	79	Hybrid	5	0.37	0.16	6.88	0.06	−0.12
Germany	133	Parliamentary	4	0.50	0.08	6.92	0.07	−0.04
Indonesia	223	Presidential	7	0.66	0.02	5.91	0.11	0.43
Libya	47	Presidential	5	0.55	0.06	6.28	0.06	−0.42
Italy	183	Parliamentary	6	0.37	0.17	6.54	0.04	−0.32
Japan	157	Parliamentary	8	0.56	0.01	6.69	0.06	−0.08
Malaysia	38	Parliamentary	5	0.51	0.04	5.35	0.04	0.39
South Africa	58	Parliamentary	4	0.82	0.02	8.71	0.09	−0.42
Turkey	75	Parliamentary	6	0.68	0.02	5.76	0.06	0.53
United Kingdom	171	Parliamentary	5	0.48	0.13	6.82	0.10	0.08
United States	122	Presidential	14	0.52	0.12	6.79	0.08	−0.19
Total	1485							

Appendix 3: Regressions for firms' investment across institutional settings

	CAPEX	CAPEX	CAPEX	IIR	IIR	IIR
Presidential election	−0.0031*			−0.0127***		
	[0.0054]			[0.0268]		
Parliamentary election			−0.0015			0.0096
			[0.0028]			[0.15]
Asset/GDP	0.0004***	−0.0014	0.0010***	0.0005	0.002	−0.0074
	[0.0003]	[0.0004]	[0.0007]	[0.0012]	[0.0019]	[0.001]
Operating cah flow	0.0004	0.0000	0.0012	0.0016	0.0012	0.0002
	[0.0002]	[0.0002]	[0.0002]	[0.0031]	[0.0031]	[0.0030]
Volatility index	0.0000	0.0000	−0.0000	0.0000	0.0000	−0.0000*
	[0.0000]	[0.0000]	[0.0000]	[0.0000]	[0.0000]	[0.0000]
Ctrl of corruption	0.0001***	0.0001***	0.0001***	−0.0013	−0.0004	−0.0016
	[0.0000]	[0.0000]	[0.0000]	[0.0018]	[0.0017]	[0.0016]
Control of corruption ELECT	0.0028*			0.0246*		
	[0.0022]			[0.0124]		
GOV.Stability	−0.0000	0.0001*	0.000	−0.0016	−0.0023	0.0036
	[0.0000]	[0.0001]	[0.0001]	[0.0020]	[0.0022]	[0.0023]
GOV.Stability* ELECT	0.0002***			0.0132		
	[0.0002]			[0.0024]		
Ctrl of corruption ELECT			0.0004***			0.0007**
			[0.0002]			[0.0003]
Checks−and−balances ELECT			0.0005			0.0012
			[0.0002]			[0.0035]
GOV.Stability Parl ELF			0.0012			−0.0007
			[0.001]			[0.0024]
AR[2] p-val.	0.1955	0.4505	0.6391	0.6395	0.9236	0.6566
Sargan test p-val.	0.1559	0.1343	0.4596	0.8343	0.6266	0.2723