Розділ 2

ДЕРЖАВНЕ РЕГУЛЮВАННЯ ПРОЦЕСІВ ЕКОНОМІЧНОГО І СОЦІАЛЬНОГО РОЗВИТКУ

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DETERMINANTS OF CORPORATIZATION IN TOGO: CAPITAL, CREDIT, AND SECTORAL DISPARITIES[1]

Abstract. This article explores the determinants of corporatization in Togo, focusing on access to credit, capital, and the domain of operation. Corporatization aims to enhance efficiency, transparency, and financial performance of public enterprises by aligning them with private sector practices. This transformation is influenced by various economic, political, and institutional factors. The theories used to analyze these determinants include public choice theory, which examines the principal-agent relationships between policymakers and public enterprise managers, and transaction cost theory. The article employs a Probit model to assess the marginal effects of different explanatory variables on corporatization using data from the 2018 General Enterprise Census (RGE) in Togo. The results show that access to credit has a positive and significant marginal effect, suggesting that improved credit access is associated with increased corporatization. Similarly, capital has a positive effect, indicating that an increase in capital correlates with a rise in corporatization. However, the domain of operation shows a negative marginal effect, potentially reflecting sectoral disparities or specific

conditions that negatively impact corporatization. The article concludes by emphasizing the importance of improving credit access and increasing capital to boost corporatization, while considering the specificities of different sectors. Policymakers and researchers should focus on targeted interventions to maximize the benefits of corporatization and attract foreign investments by creating a stable and regulated environment.

Introduction

Corporatization has its origins in the economic reforms of the 1980's and 1990's, spearheaded by the neoliberal policies of leaders such as Margaret Thatcher in Britain and Ronald Reagan in the United States. These reforms aim to reduce the role of the state in the economy, promote competition and increase the efficiency of public services. Economic theories include institutional theory, which suggests that separating ownership and control can lead to inefficient performance, and property-rights theory, which suggests that private-ownership structures can better balance the interests of managers and employees. As in many developing countries, the consolidation of public institutions in Togo is a process driven by various economic, political and institutional factors. The management of state-owned enterprises is often criticized for being inefficient and lacking in transparency. Since the 1980s, Togo has implemented economic reforms with the support of international financial institutions such as the IMF and the World Bank. The reform aims to improve economic management and promote development, including through privatization and integration programs. Mention may be made, inter alia, of the Togolese Water Society (TdE). The Togolese Water Company was one of the largest public enterprises in Togo to undergo major reforms. TdE's corporate objective was to improve the efficiency and quality of drinking water services. Togo Telecom, a telecommunications service provider, has also been reorganized to be competitive and operate. The creation of Togocom marked a turning point in the telecommunications industry.

The social consequences of corporatization are diverse. On the one hand, improved performance can lead to better services. On the other hand, there can be an increase in prices and a decrease in access for the poor. In some sectors, corporatization can support sustainable performance through better resource management and technological innovation. But profit-seeking also carries the risk of breaching environmental standards. It should be noted that corporization can be carried out in many fields. The corporatization of health care has sparked much debate. Some say that this leads to better care and better resource management. Others worry that this could undermine access to health care and equity. In education, corpora-

tization can bring management and efficiency benefits. However, concerns remain about the impact this will have on the quality of education and equal opportunities for all students. The corporatization of public services such as water and electricity has often led to increased service delivery and efficiency. But concerns about cost and access to equity remain valid. According to TdE's annual report, after consolidation and restructuring, turnover increased by 15% between 2015 and 2020. Revenues of the Togo Electric Power Company (CEET) also increased by 12% over the same period, thanks to better management and investments in infrastructure. According to the World Bank, foreign direct investment (FDI) flows to Togo reached $100 million in 2020, of which millions were allocated to integrated sectors such as energy and water. The construction of the autonomous port of Lomé and the expansion of the airport of Lomé-Tokoin were carried out in the form of public-private partnerships (PPPs), which attracted hundreds of millions of investments. It should also be remembered that following the partnership, the CEET launched several solar projects and increased the share of renewable energies in the country's energy mix from 5% to 10%. Over the same period, the number of people with electricity increased from 40% to 50%. Between 2015 and 2020, the percentage of drinking water increased from 50% to 65% thanks to infrastructure investments. However, impacts can have negative or mixed effects on certain parameters such as employment. As part of the restructuring, TdE reduced its workforce by 10% but also created new jobs in technology and distribution. In addition, more than 200 CEET staff have benefited from continuing training programs to improve their technical and managerial skills. Although the determinants of cooperation do not have the same impact compared to other countries in the region. In terms of profitability and efficiency, joint ventures in Togo, for example, have had to implement reforms to increase efficiency and reduce costs. These reforms may take some time, but improvements usually become visible in the medium term. Unlike neighboring countries like Ghana or Côte d'Ivoire, these countries' firms can benefit from good infrastructure and business practices that, when used together, can increase their profits and performance. The same is true for quality services, where countries with a large market such as Nigeria can attract more investment and rapidly improve the quality of services.

Based on these findings, this article asks the general question: what are the determinants of corporatization in Togo? There're two other subsidiary questions in this general question: (i) What are the determinants of corporatization in Togo? (ii) does the type of sector determine the corporatization decision?

To answer these questions, this article sets out as a general objective to analyze the determinants of corporatization in Togo.

More specifically, it will: (i) Analyze the determinants of corporatization in Togo and (ii) show if the type of sector determines the corporatization decision in Togo.

Based on the literature and the observed facts, the hypotheses are:
- The profile of the director and the amount of the investment capital determine the most corporatization in Togo

-    Access to credit increases the likelihood of corporatizing small and medium-sized enterprises and decreases for large enterprises that need to be members of an employer organization.

This article is of great importance to policy makers, researchers, businesses and society in general. First, this research allows for a better analysis of post-corporatization benefits, such as reduced costs and increased efficiency. The study therefore contributes to assessing the impact of cooperation on the growth of the country's economy, in particular through resource allocation and trade competition. Finally, this article identifies how integration can make a country more attractive to foreign investors by providing a stable and regulated environment.

The rest of this article is as follows. Section 2 presents the literature review on the determinants of corporatization. Section 3 discusses the methodological framework and finally Section 4 presents and discusses the results and concludes.

1.   **Literature review**

This section is devoted to the synthesis of theories and empirical work that have addressed the determinants of corporatization.

Corporatization aims to improve the efficiency, transparency and financial performance of public enterprises by bringing them more in line with private sector practices. The determinants of this transformation are multiple and vary according to economic, political, and institutional contexts.

Several theories lay the groundwork for this analysis. These include public choice theory, agency theory, transaction cost theory, and institutional theory.

Concerning the theory of public choices, it highlights the problem of the principal-agent. This theory analyzes how relations between (senior) policymakers and managers of state-owned enterprises (SOEs) can lead to inefficiencies. Corporatization is seen as a way to reduce these inefficiencies by aligning agents' incentives with the objectives of the main ones (Hanania, 2023). It applies the tools of economics to the analysis of the behavior of political agents and government institutions. The main elements of this theory start with rational actors, which assume that individuals (including politicians, bureaucrats, and voters) act rationally to maximize their personal utility.

Second, this theory explores the incentives and motivations of the different actors in the political process. For example, it can analyze why a politician would make certain decisions based on his or her desire to be re-elected. On top of this, the public-choice theory examines how public goods (such as national security) can be by produced because individuals have an incentive to benefit from them without paying the cost of so doing the free rider problem. Finally, the theory highlights government inefficiencies and failures, such as corruption, favoritism, and the capture of regulators by special interests (Andrews et al. 2022).

In line with the agency's theory, by transforming state-owned enterprises into corporate entities, governance structures are being modified to align managers' incentives with performance and profit objectives, thereby reducing agency problems (Nordberg, 2021).

Beyond these two theories, transaction-cost theory also has links to corporatization. The latter can reduce transaction costs associated with the management of public enterprises, notably by simplifying decision-making processes and introducing market mechanisms (Williamson, 1975). Corporatization tends to reduce transaction costs by making decision-making processes more transparent and improving governance (Williamson, 2010). Corporatization of water and electricity services has shown significant improvements in efficiency and service in some countries, while in other contexts gains have been more limited (Mallapragada et al., 2023).

Regarding institutional theory and its implications, corporatization reforms are often influenced by institutional pressures, such as the demands of international organizations, governance standards, and societal expectations (Scott, 2013). Corporatization enables public entities to achieve greater legitimacy by adopting recognized management structures and practices in the private sector, which can improve stakeholder confidence and facilitate access to resources. The transition to corporatization can be seen as an institutional change, with old bureaucratic norms and routines superseded by market-oriented practices.

As for the economic factors, we can note our financial performance, the budgetary pressure. In political terms, political will is the most important factor. Similarly, political stability can facilitate reforms by ensuring continuity in policy implementation. There is also the influence of stakeholders such as trade unions and employees and/or public opinion. Public perceptions and support also play a role in implementing reforms (Harris et al., 2020). Legal environment, investor protection and governance structures may also be decisive factors. The literature on the determinants of corporatization highlights a complex mix of economic, political and institutional factors. Successful reforms often depend on the confluence of many of these factors, as well as on how they are implemented and adapted to local contexts.

This literature review provides a solid basis for understanding the various factors that influence the corporatization of state-owned enterprises, providing theoretical and empirical perspectives on this complex process.

2. **Methodology for analyzing the corporatization determinants**

This section is dedicated to the presentation of the methodology adopted for the analysis of the factors influencing corporatization.

2.1. **Model Estimate**

The choice of the estimation model is based on a set of theoretical configurations. Corporatization is a multifactorial process influenced by economic, political, social, legal, and institutional variables.

The use of an econometric model, such as logistic regression, makes it possible to quantify the effect of each factor on the probability of corporatization. The estimated coefficients provide an accurate measure of the magnitude and direction of influence of each independent variable. Econometric models, and in particular logistic regression, are well suited to situations where the dependent variable is binary (for example, an entity is corporatized or not). This often corresponds to the reality of

corporatization decisions, which are often binary (yes/no). This type of model offers robust tools to test the statistical importance of explanatory variables. Significance tests (t-test, p-values) are used to check which variables have a significant impact on corporatization. Econometric models control confounding variables by including several explanatory variables simultaneously. This reduces the potential bias associated with omitting important variables.

Thus, on the basis of these elements presented, in this article, the probit model is used. We consider a Corporatization (Y) dependent variable which is a binary variable indicating whether an entity has been corporatized or not.

The basic model could be specified as follows:

$$Y_i = (\beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} \dots \dots .. + \beta_k X_{ki} + \varepsilon_i)$$

With

Y_i is the dependent variable for entity i

X_{ki} is the value of the j-th explanatory variable for entity i.

β_0 is the ordinate at the origin

β_k is the coefficient of the k-th explanatory variable

ε_i is the error term.

The empirical specification is as follows:

$\Pr(CORP_i = 1)$ = F (β_0 + β_1 Gender of the manager + β_2 Education level + β_3 Access to credit + β_4 Age of entity + β_5 Member + β_6 Capital + β_7 Region + β_8 Establishment area + ε_i)

The explanatory variables X_1, X_2, $\dots \dots \dots ..$, X_k represent the economic, political, social, legal and institutional factors identified above.

$\Pr(CORP_i = 1)$ is the probability that business i is corporatized.

β_0 is the ordinate at the origin.

$\beta_.$, β_2, ... are the coefficients of the explanatory variables.

γ_i represents business-specific fixed effects.

δ_i represents time fixed effects.

ε_i is the error term.

2.2. **Data and description of variables**

• **Nature and source of the Data**

For the purposes of this article, the information collected from Togolese companies was used. These data are from the General Business Census (GBR) conducted in Togo in 2018 by the National Institute of Statistics and Economic and Demographic studies (INSEED). Through this census, the aim is to determine the number of legal and illegal economic units, how they are distributed, where they are distributed according to the sectors of activity, their status and above all to better understand the role of the informal sector. Compilation of national accounts in the new system of the United Nations National Accounts in its 2008 version (SNA 2008). The EGR targets all economic units in the formal and informal sectors located and operating in the national territory, i.e. 119,318 economic units spread over the whole territory, including 17,785 formal and 101,533 informal.

- **Description of variables** (table 1).

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Table 1

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Presentation and measurement variable

Variables	Measuring variables
Dependent Variables	
Corporatization	Binary variable indicating whether a public enterprise has been corporatized 1 = corporatized (formal enterprises with a share held before and now above 50%), 0 = non-corporatized (formal enterprises with a share held before and now above 50%)
Small Enterprises Corporatization	Binary variable indicating whether a public enterprise has been corporatized 1 = corporatized (small formal enterprises with a share held before and now above 50% and currently below 50%), 0 = non-corporatized (small formal enterprises with a share held before and now above 50%)
Medium Enterprises Corporatization	Binary variable indicating whether a public enterprise has been corporatized 1 = corporatized (medium-sized formal enterprises whose share held before is above 50% and currently below 50%), 0 = non-corporatized (medium-sized formal enterprises whose share held before and currently is above 50%)
Large corporatization	Binary variable indicating whether a public enterprise has been corporatized 1 = corporatized (large formal enterprises whose share held before is greater than 50% and currently less than 50%), 0 = non-corporatized (large formal enterprises whose share held before and currently is greater than 50%)
Explanatory variables	
Sex of leader	1 = Male; 0 = Female
Education Level	1= no education; 2= non-formal school; 3= primary; 4= secondary lower level; 5= secondary upper level; 6
Access to credit	1= difficulty in accessing credit; 0 = easy access to credit
Entity Age	Non-negative continuous variable
Member	1= the enterprise belongs to a group and 0 if not
Capital	1= investment capital is insufficient and 0 if not
Region	1= Grand Lome; 2= Maritime; 3= Plateaux; 4=Centrale; 5= Kara; 6= Savanes
Location Area	1= Communal domain; 0= Prefectural domain

Source: Author

3. **Presentation and Analysis of results**
- **Descriptive analysis**

Table 2 below presents the descriptive statistics of the variables taken into account in this analysis.

To verify the results obtained with the Probit model, three types of tests are carried out. First, the Hosmer and Lemesbow test (1980) justifies the validity of probit regression of the determinants of corporatization in Togo (Table 4). This test, whose value of chi2(832) =955.48 and significant at the threshold of 1%, shows that the model adjusts reasonably well.

Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
Corporatization	17785	0.998	0.047	0	1
Corporatization of small businesses	16306	0.67	0.47	0	1
Corporatization of medium-sized enterprises	1141	0.121	0.326	0	1
Corporatization of large enterprises	338	0.02	0.141	0	1
Sex of leader	17785	1.523	.626	1	3
Education Level	17785	3.808	1.432	1	7
Access to credit	17785	2.242	0.767	1	3
Entity Age	17785	6.332	7.047	1	99
Member	17785	0.009	0.097	0	1
Capital	17785	2.046	0.918	1	3
Region	17785	2.008	1.552	1	6
Location Area	17785	1.406	0.491	0	1

Source: Author, based on data from RGE, 2018

The graph 1 shows a Receiver Operating Characteristic (ROC) curve, a tool commonly used to evaluate the performance of a binary classification model. This curve represents the relationship between model sensitivity (or recall) and specificity at different classification thresholds. Sensitivity (true positive rate) is displayed on the vertical axis and indicates the proportion of positive cases correctly identified by the model. In other words, it measures the model's ability to detect positive cases (Dorfman & Alf Jr, 1969).

Area under ROC curve = 0.8592
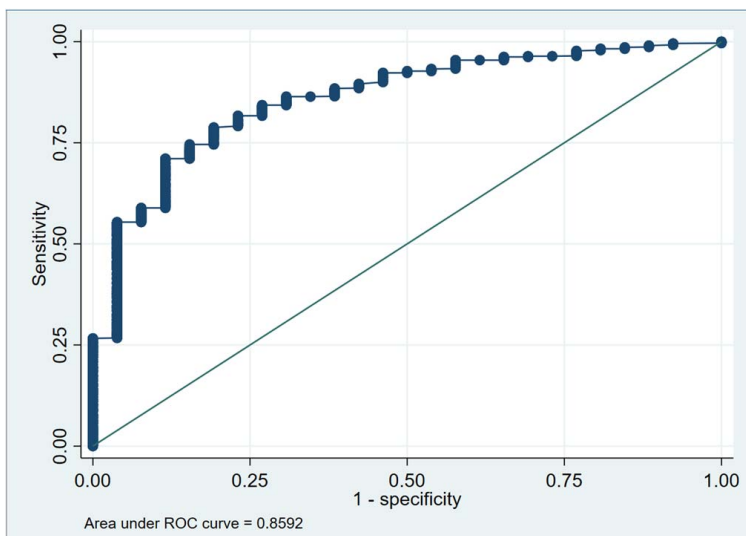
Source: Author, based on data from RGE, 2018

Graph 1. ROC Curve for the Estimated Probit Model

The curve plots the model's performance against the different thresholds used to discriminate between the two classes (positive/negative). An ideal ROC curve approaches the top left-hand corner of the graph, indicating high sensitivity with a low false-positive rate. In this case, the curve is well above the green diagonal, which represents a non-discriminatory (random) model. A perfectly random model would have an area under the Area Under the Curve (AUC) of 0.5, while a perfect model would have an AUC of 1.

In this curve, the AUC is 0.8592. This means that the model has a very good discrimination capacity. The closer the AUC is to 1, the better the model is at differentiating between positive and negative cases. A CUA of 0.8592 indicates that the model can correctly classify around 85.92% of positive and negative class pairs, showing solid performance for a classification task.

Finally, the result of the sensitivity and specificity test suggests that the percentage of good prediction is 97.77% (Table 3). This means that the overall rate of classification is correct (David W. et al., 2013). The mean value of the VIF, which is 1.237, shows that there is no problem of multicollinearity in our model. This absence of perfect multicollinearity allows us to estimate a linear model such as logistic regression.

Table 3

Probit model prediction test at 5% threshold

Classified	True D	~D	Total
+	1141	26	1167
-	0	0	0
Total	1141	26	1167

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Classified + if predicted Pr(D) >= .5
True D defined as corp != 0
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Sensitivity	Pr(+| D)	100.00%
Specificity	Pr(-|~D)	0.00%
Positive predictive value	Pr(D| +)	97.77%
Negative predictive value	Pr(~D| -)	.%
False + rate for true ~D	Pr(+|~D)	100.00%
False - rate for true D	Pr(-| D)	0.00%
False + rate for classified +	Pr(~D| +)	2.23%
False - rate for classified -	Pr(D| -)	.%
Correctly classified		97.77%

Source: Author, from EGR data, 2018

- **Analysis of econometric results**

Table 4 shows the marginal effects of various explanatory variables on corporatization in Togo. Results include marginal coefficients (dy/dx), standard errors, z-statistics, p-values, and 95% confidence intervals.

The results from this regression are as follows. Access to credit shows a significant positive marginal effect on corporatization in Togo. The result suggests that the harder it is to access credit, the greater the probability of corporatizing a firm. In many developing countries, including Togo, limited access to credit can hinder the growth of firms and households. Encouraging greater availability of credit can stimulate productive investment and improve economic performance.

The significant positive effect of access to credit on corporatization is consistent with the findings of several studies in developing countries. A study conducted by Khandker, (2005) in Bangladesh has shown that access to microcredit has a significant impact on reducing poverty and improving the living conditions of beneficiaries. Research by Dupas & Robinson, (2013) in Kenya found that access to credit increased savings and investment in small businesses, leading to improved household incomes.

Analysis of our results also shows that capital has a significant positive marginal effect on corporatization in Togo. This means that when investment capital is insufficient, the probability of corporatizing a firm increases by about 2.9%, suggesting that increased capital investment could have a measurable positive impact on results.

The significant positive effect of capital on corporatization indicates that the increase in capital contributes positively to corporatization, which is in line with the results of other studies. De Mel et al., (2008) found in Sri Lanka that capital injection in the form of grants to micro-enterprises significantly increased their revenues. This stabilizes the actions carried out within the company dismissing any possibility of corporatization. In Ghana, a study by Fafchamps et al., (2014) found that capital transfers have positive effects on business performance.

The same is true for the age of the entity, which is positively linked to the likelihood of corporatization in Togo. The results show that the older the entity is, the more likely it is to be corporatized, increased by 0.2%. One reason for this is that the leaders and managers who manage the firm give way to others who do not necessarily understand the basics.

On the other hand, the area of establishment shows a significant negative marginal effect on the decision to corporatize an undertaking. This observation indicates that when the enterprise is located in a communal area, the probability of being corporatized decreases by 2%. The significant negative effect of the location domain on corporatization is interesting and requires further exploration. In the contexts of specific agricultural or industrial entities in Togo, for example, local specificities such as communal reforms and land code regulations can influence how the choice of field affects economic outcomes. A study by Banerjee & Duflo, (2005) has shown that certain sectors, in particular those requiring specialized skills and active involvement of local communities, can lead to less favorable economic results for workers or enterprises when the area of location does not take this into account.

Although many studies show significant effects of educational attainment and gender on health and economic outcomes (Psacharopoulos & Patrinos, 2004), outcomes may vary depending on local contexts and the specificities of the samples studied. A study carried out in Nigeria by Alayande & Alayande, (2004) found similar results, where some demographic variables did not have a significant effect on poverty because of the complex interactions between different socio-economic factors.

The results of this analysis for Togo show similarities with the findings of other studies in developing countries. Access to credit and capital are key factors in improving economic and social outcomes, while some specific features of the areas may have negative impacts.

Table 4

Estimation of corporatization determinants in Togo

Corporatization	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Sex of leader	0.005	0.013	0.420	0.674	-0.020	0.030	
Education Level	-0.002	0.006	-0.410	0.679	-0.013	0.009	
Access to credit	0.029	0.012	2.400	0.016	0.005	0.053	**
Entity Age	0.002	0.001	1.690	0.091	-0.000	0.003	**
Member	-0.022	0.020	-1.090	0.276	-0.062	0.018	
Capital	0.029	0.016	1.820	0.069	-0.002	0.060	**
Lome							
Maritime	0.007	0.023	0.320	0.749	-0.037	0.052	
Plateaux	-0.025	0.019	-1.300	0.193	-0.063	0.013	
centrale	0.296	0.018	1.63	0.103	0.0059	0.065	
Kara	-0.010	0.026	-0.400	0.686	-0.061	0.040	
Savanes	0.103	0.243	0.42	0.67	-0.374	0.581	
Implementation Domain	-0.020	0.012	-1.700	0.089	-0.042	0.003	***

Mean dependent var	0.976	SD dependent var	0.152
Pseudo r-squared	0.206	Number of obs	1106
Chi-square	33.308	Prob > chi2	0.000
Akaike writes. (AIC)	217.650	Bayesian writes. (BIC)	272.743

Hosmer's test	
Number of observations	1.167
Number of covariates	841
Pearson de chi2(832) =	955.48
Prob > chi2 0.0018	

*Note: *** p<.01. ** p<.05. * p<.1*

Source: Author, based on data from RGE, 2018

After these effects for all enterprises, an analysis by enterprise category was made. Respectively, columns 2, 3 and 4 record the effects of the different variables on the corporatization of small, medium and large enterprises.

For small businesses, the results reveal several significant influences. The level of education of the leader is negative and significant. This result suggests that for small businesses run by individuals with higher education levels, they are 5.91 times less likely to be corporatized. The analysis of the results obtained points out that the difficulty of access to credit has a positive and significant effect, indicating that the difficulty of access to credit favors the corporatization of small enterprises by 7.99%.

Contrary to the overall results obtained, the analyzes show that as the age of the entity increases, the probability of older small enterprises being corporatized decreases by 0.21%.

This time, membership in an organization or network has a significant negative effect on corporatization. This result indicates that membership is associated with less corporatization in a proportion of 20.4%, in contrast to other enterprises that are not members of an organization or an employer. Finally, investment capital has a negative and significant effect, suggesting that smaller firms with more capital are less likely to be corporatized (-5.04%). In terms of location, small enterprises in all regions are more likely to be corporatized than those in Greater Lomé only in varying proportions and impacts. Those in the plateaux and savanes regions are those with a higher probability of being corporatized, 44.4% and 43.3% respectively, in contrast to the small enterprises in Lome.

The results indicate that for small businesses, access to credit plays a crucial role in corporatization, consistent with studies by Nawai & Shariff, (2012), which found that access to finance is a major barrier for small businesses in developing countries. Moreover, the negative relationship between educational attainment and corporatization contrasts with some research showing that more educated entrepreneurs are generally more likely to formalize their businesses to access financing and market opportunities (McKenzie & Woodruff, 2014). However, the negative effect of capital on corporatization is similar to the observations of Ayyagari et al., (2011), where smaller firms with less capital were more likely to remain informal.

For medium-size enterprises, the manager's level of education has a positive and significant effect, suggesting that enterprises run by individuals with a higher level of education have a 5.5% probability of being corporatized. This might be because they are more observant, and can make decisions with regard to possible short-, medium-, and long-term effects. For this category of enterprise, the results show that the probability of corporatizing a business decrease by 6.4% with access to credit. It should also be noted that the probability of corporatizing such an enterprise increases by 0.4% with the age of the entity showing that older enterprises are more likely to be corporatized. In parallel with these results, the probability of corporatizing a company decreases in each of the regions of Togo, unlike in Lome. In the Maritime region it decreased by 33.9%, in the Plateaux 39.8%, in the Centrale 36.1%, in the Kara 26.4%, and in the Savanes 38.5%.

Our findings are consistent with studies by Bruhn and McKenzie (2014), which show that more educated entrepreneurs tend to formalize their businesses to take advantage of the benefits of legality and stability. However, the negative effect of access to credit on corporatization is surprising and could indicate that medium-sized enterprises with access to credit can afford to remain informal to avoid additional costs or rigid regulations, as observed by Claessens & Djankov, (2002) Older firms that are more likely to corporatize confirm the observations of McKenzie & Sakho, (2010), who found that firms with a longer and more stable history have more reason to formalize themselves to ensure their growth and sustainability.

Unlike the other two categories of companies, for large companies, the gender of the leader has a negative and significant effect. The result shows that the probability of corporatizing a company decreases by 5.46% when the company is run by a woman. Like medium-sized enterprises, the level of education of the manager has a positive and significant effect indicating that enterprises run by individuals with a higher level of education are more likely to be corporatized. The same goes for the sense of the effect of access to credit, which reduces the probability of corporatization by 4.06%. Thus, the lack of investment capital at the level of large firms has a positive and significant effect. Statistics show that the probability of corporatizing large firms increases by 4.57% when investment capital is insufficient.

For large companies, the negative effect of gender on corporatization is consistent with studies by Minniti & Naudé, (2010) which show that women entrepreneurs in developing countries face specific challenges that make them less likely to formalize their companies. The positive outcome of educational and capital levels on corporatization of large enterprises is in line with research by La Porta & Shleifer, (2014), which shows that large enterprises run by educated and well-capitalized individuals are more likely to corporatize to maximize opportunities for growth and profit. On the other hand, access to credit having a negative effect could indicate that these large companies use their access to finance to navigate and perhaps exploit the gray areas of formalization.

Following the determinants obtained, we apply an Oaxaca-Blinder decomposition to the determinants of corporatization in Togo in Table 6, analyzing three dimensions: capital, credit and domain. The decomposition enables us to understand the average differences between two groups for each characteristic.

Analysis of the results reveals that the coefficients of both groups are significant in all dimensions (capital, credit, domain), indicating that there is a significant difference between the two groups in terms of corporatization.

The results of this decomposition show that access to credit has a significant negative effect on the corporatization difference (-0.00794). Through decomposition, the results show that the age of the entity has contrasting effects on the corporatization decision.

For the capital dimension, it has a negative effect on the overall part, but a positive and significant effect on the explained part (0.0242). In the credit dimension, the overall effect is positive (0.0289) and for the location domain, it is also significant in the explained part (0.00230).

It should be noted that observable factors such as the age of the entity, access to credit, etc. explain some of the differences, particularly in the capital (-0.0109) and credit

Table 5

Estimation of the determinants of corporatization by company category in Togo

VARIABLES	Enterprises		
	Small Business	Medium Business	Large Business
Sex of leader	0.0395	-0.0406	-0.0546**
	(0.0351)	0.0327	(0.0267)
Education Level	-0.0591***	0.0550***	0.0201**
	0.0121	0.0122	(0.0101)
Access to credit	0.0799***	-0.0640**	-0.0406**
	(0.0298)	(0.0264)	(0.0165)
Entity Age	-0.00210*	0.00399***	0.00334***
	0.00123	(0.00115)	(0.000621)
Member	-0.204***	-0.00544	0.100***
	(0.0588)	(0.0546)	0.0234
Capital	-0.0504*	0.0337	0.0457***
	(0.0267)	(0.0238)	0.0161
Lome			
Maritime	0.180***	-0.339***	-0.0798*
	(0.0469)	(0.0577)	0.0430
Plateaux	0.444***	-0.398***	-0.0640**
	(0.0770)	(0.0866)	(0.0264)
Centrale	0.363***	-0.361***	-0.00544
	(0.0975)	(0.110)	(0.0546)
Kara	0.219***	-0.264***	-0.0865
	(0.0713)	0.0701	(0.0595)
Savanes	0.433***	-0.385***	-0.315***
	(0.0940)	(0.108)	(0.098)
Communal			
Prefectural	0.0378	0.0184	-0.0813***
	(0.0343)	(0.0303)	0.0252
Multicolinearity test			
Mean VIF	1.02	1.02	1.02
Broad ALIVE	2.36	2.36	2.36
Wald test		-0.0406	
LR chi2		0.0327	
Prob > chi2	0.0000	0.0000	0.0000
R2 User ID	0.1083	0.1278	0.1835
Df	12	12	12
Comments	2109	1.141	338

Notes: Standard errors in parentheses; *** p<0.01. ** p<0.05. * p<0.1

Source: Author, based on data from RGE, 2018

Table 6

Oaxaca blinder decomposition according to capital, credit and sectoral

VARI-ABLES	Capital			credit			Domain		
	overall	explained	unex-plained	overall	explained	unex-plained	overall	explained	unex-plained
Sex		6.08e-05	0.0262		0.000119	0.0170		-0.000162	-0.0196
		(0.000248)	(0.0323)		(0.000452)	(0.0375)		(0.000609)	(0.0448)
Education Level		0.000305	-0.0457		-0.000154	0.0328		0.000317	-0.0901
		(0.000652)	(0.0567)		(0.000365)	(0.0832)		(0.000680)	(0.110)
Access to credit		-0.00794**	0.0513					0.00262	-0.0549
		(0.00382)	(0.0400)					(0.00176)	(0.0602)
Entity Age		-0.00171*	0.0242**		2.55e-05	0.0289**		0.00230*	-0.0208
		(0.00103)	(0.0109)		(0.000820)	(0.0132)		(0.00123)	(0.0165)
Member		0.000983	-0.00430		1.56e-06	0.00482		0.000678	0.000736
		(0.00163)	(0.00509)		(0.000335)	(0.00327)		(0.00118)	(0.00585)
Region		-5.52e-05	0.00289		-1.11e-05	0.0137		-9.78e-06	-0.0227
		(0.000385)	(0.0144)		(9.16e-05)	(0.0192)		(8.76e-05)	(0.0177)
Domain		-0.00258	-0.0677*		-0.00196	-0.0567			
		(0.00176)	(0.0356)		(0.00150)	(0.0484)			
Capital					-0.00679**	0.0184		0.00294*	-0.0646*
					(0.00308)	(0.0340)		(0.00162)	(0.0388)
Group_1	0.960***			0.951***			0.984***		
	(0.00980)			(0.0132)			(0.00515)		
Group_2	0.994***			0.990***			0.947***		
	(0.00407)			(0.00464)			(0.0173)		
Difference	-0.0342***			-0.0383***			0.0377**		
	(0.0106)			(0.0140)			(0.0180)		
Explained	-0.0109*			-0.00877**			0.00867**		
	(0.00575)			(0.00375)			(0.00359)		
Unex-plained	-0.0233**			-0.0295**			0.0290*		
	(0.0102)			(0.0137)			(0.0172)		
Constant			-0.0102			-0.0885			0.301
			(0.0847)			(0.0868)			(0.185)
Observa-tions	747	747	747	747	747	747	747	747	747

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Source: Author, based on data from RGE, 2018

(-0.00877) dimensions, but their effect is relatively weak. However, the unexplained differences are significant in all dimensions, particularly in the credit (-0.0295) and domain (0.00867) dimensions. These results also demonstrate that unobservable factors or coefficient differences, such as discrimination or unmodelled behaviour, play an important role. Thus, efforts must be made to better understand and reduce the unexplained disparities that appear to have a significant impact on corporatization in Togo.

Conclusion

This article highlights the crucial importance of specific economic and institutional factors determining corporatization in Togo. The results highlight that access to credit and capital play a key role in promoting corporatization, while the area of implementation presents challenges that require particular attention.

The results of this study point to a few recommendations for **improving access to credit.** Policies need to be put in place to facilitate access to credit by state-owned enterprises. This could include banking reforms aimed at reducing interest rates and easing borrowing conditions for strategic firms. Then, for the **capital increase. In this respect,** it is essential to encourage investment in the capital of public enterprises. This can be achieved through tax incentives, public-private partnerships, and specific government support programs aimed at strengthening companies' financial capacity. And finally, **on adopting Good Governance Practices**: To overcome domain-specific barriers, companies need to adopt robust governance practices. This includes establishing effective boards of directors, adopting financial transparency standards, and implementing performance management policies.

However, future studies should focus on analyzing the determinants of corporatization in specific sectors to identify best practices and barriers specific to each area. It would be beneficial to examine the impact of recent policy reforms on the corporatization of state-owned enterprises, assessing how legislative and regulatory changes influence the economic and operational performance of enterprises. Finally, a comparison with neighboring countries such as Ghana or Côte d'Ivoire could provide valuable insights into successful strategies and common challenges, allowing Togolese policies to be tailored to regional best practices.

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Determinants of corporatization in Togo: capital, credit, and sectoral disparities

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ДЕТЕРМІНАНТИ КОРПОРАТИЗАЦІЇ В ТОГО:
КАПІТАЛ, КРЕДИТ ТА СЕКТОРАЛЬНІ ДИСПРОПОРЦІЇ

Анотація. Ця стаття досліджує детермінанти корпоратизації в Того, зосереджуючи увагу на доступі до кредитів, капіталу та сфері діяльності. Корпоратизація спрямована на підвищення ефективності, прозорості та фінансових показників державних підприємств шляхом приведення їх у відповідність до практик приватного сектора. На цей процес впливають різні економічні, політичні та інституційні фактори.

У статті використовуються теорія суспільного вибору, яка аналізує відносини «принципал-агент» між політиками та керівниками державних підприємств, а також теорія трансакційних витрат. Для оцінки маржинальних ефектів різних пояснювальних змінних на корпоратизацію використовується пробіт-модель на основі даних Генерального перепису підприємств Того за 2018 рік (RGE).

Результати показують, що доступ до кредиту має позитивний і значущий маржинальний ефект, що свідчить про те, що покращення кредитного доступу сприяє збільшенню рівня корпоратизації. Аналогічно, капітал має позитивний вплив, що означає, що його зростання корелює з підвищенням рівня корпоратизації. Однак сфера діяльності демонструє негативний маржинальний ефект, що може відображати секторальні диспропорції або специфічні умови, які негативно впливають на корпоратизацію.

У статті підсумовується, що покращення доступу до кредитів та збільшення капіталу є ключовими факторами для стимулювання корпоратизації, при цьому необхідно враховувати особливості різних секторів. Політикам та науковцям слід зосередитися на цільових заходах для максимізації вигод від корпоратизації та залучення іноземних інвестицій шляхом створення стабільного та регульованого середовища.

Ключові слова: *теорія суспільного вибору, корпоратизація, пробіт-модель, секторальні диспропорції.*