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The determinants of corporate corruption in Cameroon

Henri Atangana ondoa
University of Yaoundé II

Abstract

The objective of this study is to identify the determinants of corporate corruption in Cameroon with data of the national institute of statistics in Cameroon. I find out that, companies have devoted 0.747% and 1.56% of their turnover (companies' revenue) respectively to pay bribes and to give gifts to civil servants. In addition, corporate corruption in Cameroon is caused by poverty and the weak institutions, it is more rampant in certain regions rich in natural resources. For these reasons, the government should fight against corporate corruption in poor communities and in localities rich in natural resources. It must particularly promote governance in the following public administrations: police, gendarmerie and taxes. It should also enhance its credibility by communicating its strategies to fight against corruption. Finally, it must simplify administrative procedures.

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Contact: Henri Atangana ondoa - atanganaondoa@yahoo.fr.
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1-Introduction

Corruption invades some enterprises in developing countries because of the numerous advantages that it confers to these units of production. These advantages are generally three-fold: firstly, corruption reduces the wastes of time generated voluntarily by agents of public services or civil servants. This saving of time allows economic operators to meet up with other lucrative activities that, a priori, compensate the cost of corruption; this is what Tanzi (1998b) calls « accélérer le service ». Secondly, corruption breaks the obstacles to the realization of some economic activities. As a matter of fact, civil servants use tricks connected to their discretionary power to extract with impunity these bribes. They have therefore, the power to block an activity if we do not pay a bribe; this is what Tanzi (1998b) calls « lubrifier la roue » . In this context, one might think that the main victim of corruption is the state who bears the costs of production of certain public goods and services. Some countries are also losing their reputation at the international level because of corruption (Essama, 2007). Yet, these extract incomes lead to the distortion of resources (capital formation, knowledge and innovations) intended for production (World Bank, 2009). But the users of public services are also sometimes victims when they are forced to pay the public services that are free.

According to Transparency International (2002), corruption can be defined from the demand-side (author of the act) and from the supply-side (exposed sector). Focusing on the 'author of the act of corruption', one can distinguish passive and active corruption. Active corruption is a practice which is aimed at proposing, unlawfully, direct or indirect, offers, promises, gifts or some form of advantages to push a person performs an act of her function, mission or mandate. In the contrary, passive corruption is an implying practice whereby a person requests or approves, unlawfully, direct or indirect, offers, promises, gifts or some form of advantages to perform or refrain from performing an act of her function, mission or mandate. Concerning the sector exposed to this phenomenon, it is necessary to recall that corruption has long been considered as a problem of public authorities and thus only public services could not suffer from it. It is as a result of this reason that it is defined as the use of a public service to satisfy a private interest or need.

In Cameroon, corruption is endemic and affects almost all the activity sectors; the country was classified the most corrupt country in the world in 1998 and 1999, though in 2010 it was classified the 10^{th} (Transparency International, 2010). For instance, every year Cameroon private enterprises devote averagely 10 % of their turnover to unofficial payments. Worthy to note, 4 out of 10 cases of bribes are paid to avoid a problem with the authorities or an intermediary (Transparency International Cameroun 2006). In addition, because of illicit trade, the national company that manufactures textile products (CICAM) registered in 2006 a reduction in her turnover of 41 %, about 10 000 000 dollars. As a result CICAM downsized her staff by 20 % in June 2006 (GICAM, 2010). Thus, it appears corruption is the second biggest hurdle businesses face Cameroon. Indeed, a study by the INS (2010) identified four main problems of Cameroonian companies. These problems are by order: taxes (58,8% of enterprises are confronted with this problem), 50.6% for corruption, 37,6% for access to credit and 35,2% for administrative formalities (INS, 2010). In a 1998 corruption survey, interviewees were asked why they pay bribes for free government services. 30% responded that it was because "everyone do it" and 50% indicated that it was because they "had no option, 20% did so because they had "no time to waste" (Manga Fombad, 2004).

In the extension of the tradition initiated by Becker (1978), an enterprise accepts corruption if the expected net income is positive. In this perspective, the probability to accept corruption and the amount of the payoff resulting from the interaction between an enterprise and the civil servant. Therefore, I seek to identify the factors that determine the amount of the bribe and the amount of the gift and the probability of enterprise to pay bribe/gift to certain officials in

Cameroon. Indeed, I identify the characteristics of enterprises, which confronted with institutional failures such as bad administrative procedures decide voluntarily or under duress to pay bribe to the civil servants. The rest of the work is organized as follows: section 2 discusses the results of previous research works; section 3 develops the methodology and section 4 presents the results.

2 Literature review

Several studies have shown that institutions are the main determinants of corruption. Indeed, when institutions are weak, the incentives embodied in political, administrative, and legal institutions must be such that officials are left with an incentive to exploit their discretionary power to extract or create rents (Toke and Aidt, 2003). According to Mauro (1995), countries characterized by a corrupt bureaucracy develop activities that extract incomes or allowances. Andvig and Moene (1990) argue that the higher the frequency of bureaucratic corruption, the higher is the propensity for a bureaucrat to be corrupted. In their model, the equilibrium corruption level depends on both supply and demand effects. Demand effects arise because the higher the proportion of corrupted government officials, the easier it is for an agent to find a corruptible official. On the supply side, they introduce an exogenous probability of getting caught by another official, but if the supervisor is also corrupted the official can bribe the latter in order to keep her job. Hence, the higher the number of corrupted officials, the stronger are the incentives for an official to be corrupted (Gatti Roberta, Stefano Paternostro and Jamele Rigolini, 2003).

Concerning the effect of state on the incidence of corruption, it is shown that corruption increases with the size of the State because the public sector is generally more corrupt than the private sector. Some have suggested a simple positive relationship between state size and corruption or rent-seeking (Tanzi 1994; Buchanan, 1980). The greater the share of GDP redistributed by government, the greater the spoils for corrupt allocation. In larger cities, the extent of bribery may be higher because economic activity may be larger and more varied in scope, which may increase the contact with government. It can also be argued that the relationship between enterprises and government officials may be less personal in larger cities in comparison to smaller ones, which may make it easier to ask for a bribe (Hunt 2004). In the contrary, studies carried-out by Johnson, Kaufman and Zoido-lobaton (1998), Bonaglia et al (2001), Fisman and Gatti (2002) found a negative relationship between corruption and the size of the public sector. In addition, Treisman (2000), Ali and Isse (2003) observed controversial results and further demonstrated that interventionism reduces the level of corruption.

The literature that studies the effect of natural resources on corruption is rather small. Ades and Di Tella (1999) present a theoretical model which predicts that resource rents and rents induced by a lack of product market competition foster bureaucratic corruption, as well as evidence that corruption increases in the proportion of total exports accounted by fuel, minerals and metals. In his broad cross-country study, Treisman (2000) shows that this proportion is a robust determinant of corruption. Leite and Weidmann (2002) find that natural resource exports (as shares of GNP) tend to increase corruption. Isham et al. (2005) show that this effect is most pronounced for ‘‘point source’’ natural resources such as oil, minerals, and plantation crops. Where resource rents are high and institutional quality is low, a number of entrepreneurs will choose to become rent-seekers. If there are externalities in production (i.e. profitability increases in the number of producers), an increase in resource rents will cause so many entrepreneurs to shift into rent-seeking that total national income will be reduced. Rent-seeking can therefore be said to make the size of the cake smaller, or an economy worse off, even though it has received an additional infusion of income through natural resources. A rent-seeking perspective suggests that countries with bad institutions suffer a resource curse, while those with good institutions do not (Kolstad, Soreide and Willians, 2008). On the other,

a growing literature has shown that the abundance of natural resources can result in poor institutions which lead to rent-seeking, political mismanagement, or conflict across population groups, with disastrous consequences for growth (Caselli, 2006; Hotte, 2005).

On quite a different plan, it is established that low competition increases the level of corruption. Indeed, profits are lower in a market economy and as a result, enterprises do not see the need to pay bribes (Gerring and Thacker, 2005). But on the other hand, if competition is limited, profits are higher and civil servants will have the opportunity to request bribes. Ades and Di Tella (1999) used the degree of opening of an economy as an indicator of competition. Their results indicate that there exist a negative relationship between the degree of opening and the level of corruption. Another variable that also explains corruption is the share of import in GDP. Herzfeld and Weiss (2003) and Treisman (2000) report that a higher import share leads to less corruption. A high import share implies lower tariff and non-tariff import restrictions. The presence of such restrictions like the necessary licenses to import, for example offers an opportunity to bribe. Similarly, restrictions on foreign trade, foreign investment, and capital markets stimulate corruption**.** The above results are not always observed in Africa. Indeed, countries such as Equatorial Guinea and Congo are at the same time open and corrupt.

The institutions of a free society free press, secondary associations, etc may make exposure more likely, as may the practice of electoral politics. Particular legal systems may also offer private businesses greater protections from predatory officials. Industrial organization arguments suggest that the internal structure of the state may influence the supply of corrupt services. When bureaucracies are more decentralized, with less internal discipline, bureaucrats may compete to extract maximal rents (Shleifer and Vishny 1993). The structure of institutions is likely to change over the course of development; that is, the protection of property rights might get stronger as the country develops economically. Example, Ades and Di Tella (1999) found that corruption is higher in countries where domestic firms are sheltered from foreign competition. So, the higher degrees of competition are associated with lower levels of corruption. Fisman and Gatti (2002) found corruption to be lower in countries with higher fiscal decentralization. Andvig and Karl Moene (1990) in their model assume that the expected punishment for corruption when detected declines as more officials become corrupt, because it is cheaper to be discovered by a corrupt rather than a non corrupt superior. Graeff and Mehlkop (2003) documented the relationship between a country's economic freedom and its level of corruption. Brunetti and Weder (2003) found that higher freedom of the press is associated with less corruption. Van Rijckeghem and Weder (2001) showed that the higher the ratio of government wages to manufacturing wages, the lower is corruption in a country. In contrast, an increase in the income of the potential victim would increase the propensity to ask for a bribe. Alternatively, an increase in the quality of the institutions in the country, which would increase the probability of apprehension, would in turn reduce the propensity to ask for a bribe (Mocan Naci, 2004).

3 Methodology

In this section, the model, the data collected by the Cameroon national institute of statistics and the variables will be presented.

3.1 : Model

The objective of this study is to identify the characteristics of firms that carry out acts of corruption. For this reason, I use a two-stage model because the company firstly chooses to pay a bribe or a gift to a public official, and then it determines the amount it will pay. This approach is similar to the "two-part models" whose insights can be obtained from Manning (1997). The data presented are by definition truncated. Indeed, it is only if the company

accepts the corruption that I can investigate the factors that pushed to choose such amount of the bribe or gift. Using the method developed by Heckman (1979), the model can be formalized as follows for each firm i:
The company accepts the corruption that is to say, it pays a bribe or a gift to a public official (selection equation)
To be more specific, here are two questions that were asked to business leaders in 2010 by the National Institute of Statistics of Cameroon:

In 2010, have you offered gifts during meetings with the civil servants of the following public administrations: 1) taxes, 2) Customs, 3) common, 4) business, 5) police / gendarmerie, 6) other ?
In 2010, have you paid bribes during meetings with the civil servants of the following public administrations: 1) taxes, 2) Customs, 3) common, 4) business, 5) police / gendarmerie, 6) other ?
If the company has answered yes to any of these questions, she chose an illegal act according to the regulation in Cameroon. Thus, its behavior is modeled in equation (1).

$$z_i^* = w_i\gamma + u_i \quad (1)$$

z_i^* is observed if and only if firm i agreed to pay a bribe or a gift to a public official (selection equation)
Estimation of the value of bribe or gift (substantial equation)
In the second step, the company determines in accordance with the civil servant the value of the bribe or gift it must pay. Thus, it answers these two questions:

If you gave gifts to civil servant, how do you evaluate its monetary value?
If you have offered bribes to officials, how do you evaluate its monetary value?

$$y_i = x_i\beta + \varepsilon_i \quad (2)$$

Equation (2) is observed if and only if $z_i^* > 0$
with w_i and x_i sociodemographic variables observable; y_i value of the bribe or gift ; u_i follows a normal distribution *N* (0;1) and ε_i a normal distribution N(0, σ ε), ρ correlation coefficient of the error terms. B and γ are vectors of parameters to be estimated.
This type of model is usually estimated by the method of Maximum Likelihood (ML). However, as convergence is sometimes difficult, Heckman estimator obtained in two stages is sometimes preferred. The selection equation is then first estimated by a Probit model. Then, a regression by Ordinary Least Squares (OLS) gives the coefficients of the second equation. Heckman method allows an approximation of the results found by MMV. When the correlation coefficient (ρ) is equal to 0, the coefficients of the substantial equation obtained by OLS is not biased. In this particular case where the error terms of both equations are not correlated, the selection equation has no reason to be because the two decisions are independent.

3.2 The variables

To identify the determinants of corporate corruption, I choose the variables to be used in the two equations (selection and substantial). Therefore, the selection of variables was guided by the results of the above literature as well as the specific features of the Cameroonian economy.

a) Selection equation

1) The firm characteristics

Turnover: in general, companies with a turnover higher cooperate with several other public and private administrations. These multiple contacts led some entrepreneurs to offer bribes or gifts to civil servants.

The type of enterprise: in Cameroon, nearly 45% firms are individual enterprises (INS, 2010). They employ family members and do not pay wages. Contacts with public administrations are limited. For this, the opportunities to pay bribes are rare.

2) The characteristics of the enterprise environment

The poverty rate: the relationship between living standards and the incidence of corruption oppose the authors for several years. Some believe that poverty causes corruption, while others think the opposite. The expected effect is ambiguous.

Region of the enterprise: Cameroon is subdivided into 12 regions (see table i) and each entity has its own individual characteristics that may or may not influence the probability to pay bribe. For example, Yaoundé (political capital) and Douala (economic capital) are two regions. The two cities (Yaoundé and Douala) are generally not poor and public services are also well represented. Thus, the expected sign of the variable "region 1 and region 2" should be positive. But the sign of the other variables is ambiguous because living standards vary in these regions. By adding the dummy for n-1 regions, I shall estimate the pure effect of independent variables (by controlling for the unobserved heterogeneity).

I introduced an indicator (H) natural resources constructed from the following main resources: petroleum, timber, diamonds and sea. The variable H takes the value 1 if region j produces natural resource i. This variable is defined in the equation (3). The expected effect of natural resources on corruption is positive because the abundance of natural resources can result in poor institutions.

$$H = \sum_{i=1}^{5} h_{ji} \qquad i=1, 2, 3, 4, 5 \quad \text{and} \quad j=1, 2.....10 \qquad (3)$$

In addition, an interaction variable will be used because there is reason to believe that the effect of one independent variable depends on the value of another independent variable. This variable (poverty) * (number of enterprises) will permit to verify the effect of local poverty on the probability to pay bribe.

The number of companies in the region: this variable is an indicator of competition. The expected effect should be negative.

2) The institutional variables

In the survey conducted by the National Institute of Statistics in 2010, business leaders were asked to give their opinion on the quality of governance in public administration. They also described their attitude vis-à-vis certain public administrations. Example, they were asked to say whether they have been using to justice for the resolution of trade dispute over the last three years. They were also asked whether they had confidence in the judicial system in Cameroon. Thus, I shall use two dummy variables ("recourse in justice" and "trust in the judicial system") that allow us to relay the influence of the judiciary on the impact of corruption in Cameroonian companies. The effect of these variables on the incidence of corruption should be negative because the quality of institutions reduces corruption.

Business leaders were also asked to give their opinion on the following institutional factors: administrative procedures, corruption in public administrations, the tax burden and the time for payment of bills in a public administration. Each of these questions had four modalities ranging from the best to the worst modality. I have grouped these modalities into two groups (best / worst). This has allowed us to create two dummy variables that correspond to characteristics of Cameroonian public administrations. It is obvious that if a company chooses

the best modality, it trusts the public administrations. In this perspective, it is less able to pay bribe.

Two institutional variables related to contacts between public administrations and the private sector will be used in this study. This is the variable total number of days that the company has met the taxes and customs administrations in 2010 and the variable number of days that the company has met other public administrations. The probability of paying bribes increases with these contacts.

b) Selection equation

In addition to the above variables, I use four dummy variables to take into account the specificity of certain public administrations. These variables are: taxes administration, municipalities, trade and police/gendarmerie. This specification will permit to identify administrations which collect more bribes and gifts.

3.3 Estimation method

The basic problem faced in the estimation of the equation (2) is that this specification cannot control for unobserved heterogeneity. The value added can increase because of corruption and the enterprise can use the value added to pay bribe. The variable "valued added" is thus endogenous. To overcome this difficulty, I used the method of 2SLS. in the first stage, I regress the value added by the other explanatory variables, then I generate the predicted value of the added value. This predicted value is then introduced into the equation (2).

3.4 Data and descriptive statistics

The data come from the National Institute of Statistics of Cameroon. This institution was created in 1992 and has long experience in the collection of primary data. In 2011, the Cameroon National Institute of Statistics conducted a business climate survey. The questionnaire had 12 sections and all sections were concerned with all issues of governance. The survey was conducted in urban and rural areas.

Table i : Incidence of corporate corruption by region

	Yaoundé	Douala	Adamaoua	Centre - Yaoundé	Est	Extrême Nord	Littoral-Douala	Nord	Nord Ouest	Ouest	South	Sud-Ouest	Cameroon
N	185	225	97	104	73	115	111	115	137	168	114	143	1587
Bribe	38.92%	52.4%	58.5%	52.8%	75.35%	40.0%	40.54%	45.22%	54.01%	57.74%	46.49%	67.83%	52.30%
Gift	4.32%	8.00%	34.02%	55.77%	31.5%	24.3%	38.74%	16.52%	2.92%	31.55%	40.35%	30.77%	23.76%
H	4.2	5	1	3	4.4	0	3	0	1.1	2.2	4.5	5	3.22

Note: H is an indicator of Natural resources. "source": Author from INS(2011)

In Table i, I can find that the incidence of corporate corruption is particularly high in the three regions (Adamoua, Sud-oeust and Est) of Cameroon. Indeed, 75.35% of the enterprises in the region of Est and 67.83 % of these of Sud-ouest acknowledged to have paid bribes. The indicator of natural resources is also high in Est and Sud-Ouest region. In contrast, the enterprises of the Center region and those of the south have more paid gift. It is because the south-west and east regions are rich in natural resources. Indeed, the eastern region is rich in timber and the Southwest in oil. In addition, the center region and the south region share the same culture. In 2010 0.52.3% of companies and 23.76% of companies have paid or given bribes and gifts to public administrations in Cameroon.

On average, these companies have devoted 0.747% and 1.56% of their turnover respectively to pay bribes and give gifts to civil servants. The public administrations that have most benefited are: customs, municipalities, police / gendarmerie and the Ministry of Commerce. In addition, the incidence of corruption is higher in the following administrations: taxes, municipalities and police / gendarmerie. The average value of gifts given to civil servant is estimated at 1393 dollars and 530 dollars for bribes (see Table ii).

Table ii : Incidence of corruption in the public administrations

Variable	Obs	Mean	Std, Dev,	Min	Max
taxes					
Value of bribe/ turnover	369	1.249%	0.0532706	0	71.429%
Value of gift/turnover	373	2.087%	0.0598355	0	71.429%
Nominal value of gift (in dollars)	382	1769.131	6753.953	0	100000
Nominal value of bribe (in dollars)	378	995.4974	3577.844	0	40000
custom					
Value of bribe/ turnover	73	0.879%	0.0265588	0	16.667%
Value of gift/turnover	73	2.121%	0.04476	0	25.00%
Nominal value of gift (in dollars)	74	7326.324	17358.23	0	100000
Nominal value of bribe (in dollars)	74	2578.432	6277.4	0	40000
Police/gendarmerie					
Value of bribe/ turnover	212	1.440%	0.0889776	0	125.000%
Value of gift/turnover	218	2.290%	0.0538633	0	50.000%
Nominal value of gift (in dollars)	223	3231.525	10588.73	0	100000
Nominal value of bribe (in dollars)	217	1974.203	8138.066	0	100000
Municipality					
Value of bribe/ turnover	240	1.57%	0.0638259	0	71.43%
Value of gift/turnover	245	2.44%	0.0637759	0	71.43%
Nominal value of gift (in dollars)	250	2554.28	9700.701	0	100000
Nominal value of bribe (in dollars)	245	1233.42	3928.377	0	40000
Trade					
Value of bribe/ turnover	185	1.086%	0.0465893	0	55.556%
Value of gift/turnover	183	1.778%	0.0357067	0	25.333%
Nominal value of gift (in dollars)	188	2473.83	10512.18	0	100000
Nominal value of bribe (in dollars)	190	931.0421	2961.201	0	20000
other administrations					
Value of bribe/ turnover	88	1.775%	0.0835677	0	71.429%
Value of bribe/turnover	89	3.563%	0.1057495	0	71.429%
Nominal value of gift (in dollars)	92	1730.891	3252.102	0	20000
Nominal value of bribe (in dollars)	91	1255.385	4320.955	0	30000
Cameroon					
Value of bribe/ turnover	1359	0.747%	0.0478541	0	125.000%
Value of gift/turnover	629	1.567%	0.0504215	0	71.429%
Nominal value of gift (in dollars)	649	1393.945	6410.034	0	100000
Nominal value of bribe (in dollars)	1458	530.2565	3565.168	0	100000

*"**Source" : Our estimation** from INS (2011)*

4 Results of the study

The estimations results are presented in Table iii and the models are globally significant.Wald statistics are estimated at 271 and 170 respectively for the two models (gifts and bribes). ρ is significantly different from 0 (H0 : ρ =0). The rejection of the null hypothesis (*pvalue* < 0.01) shows that the substantial equation is not independent of the selection equation, the two decisions are not taken independently. That is why I can affirm that the estimation of these models by OLS method would have provided the biased estimators. To present the main factors that cause corporate corruption in Cameroon, I present the results in two-steps. In a first step, I focus on the influence of the internal and environmental factors on corporate corruption. Then, I present the influence of institutional variables.

4.1The influence of internal and environmental factors on corporate corruption in Cameroon

The results presented in Table iii show that the value of gifts and bribes that enterprises pay to government officials grow with turnover. But, the incidence of corporate corruption decreases with the square of the turnover. In other words, there is a level of turnover at which the incidence of corruption begins to decrease with the turnover. In this study, the value of this turnover threshold is estimated at 24,391 dollars. This means that small enterprises are more corrupt than the big ones.

In addition, the value of gifts and bribes decreases with the poverty rate and increases with its square (see the coefficients of these variables in table iii). This means that businesses in poor

areas spend huge sums of money to pay bribes and to give gifts to public administrations. The threshold value of this rate is estimated at 33.46%. Thus, when the poverty rate exceeds 33.46% in a locality, companies spend huge sums of money to pay bribes and gifts to public administrations. However, in the poorest regions, the incidence of corporate corruption decreases with high rates of poverty (beyond 63%). In other words, when the poverty rate exceeds 63% companies refuse corruption. This result is supported by the negative sign of the interaction variable between the poverty rate and the number of firms in the region. That is, companies located in the poorest regions refuse corruption. However, in 2007, the maximum rate of poverty was estimated at 65.87% in the Far North region. Thus, if the incidence of corruption increases with the square of the poverty rate up to critical level of 63%, I can say that enterprises of poor regions and small enterprises are more corrupt than others. These results are explained in the literature. In fact, corruption can be seen as an inferior good, where the demand falls as income rises. Also, along with an increase in income, more resources are available to combat corruption. Mostly proxied by GDP per capita, income is also used to control for structural differences across countries. It is generally found that income has a negative and significant effect on corruption, even though Kaufmann et al. (1999) and Hall and Jones (1999) question the causal relationship between corruption and income.

However, in this study, it is shown that individual companies pay less bribes and gifts. This is because individual firms are generally family businesses and contact less public administrations. In addition, these companies do not generally pay taxes and often employ family members.

The values of bribes and gifts of the companies that are located in the regions of Adamoua, East, North West, South and Southwest are high. This is because three of the four above regions are poor. Indeed, in these regions the poverty rate exceeds 45%, while the national average was estimated at 39% in 2007 (INS, 2007). Once again, corporate corruption is mostly the fact of business in poor regions. It should also be noted that two of the four regions are rich in natural resources. It is the eastern region (rich in wood) and the South West region (rich in oil). However, the correlation between natural resources and the incidence of corruption is often high. In the Eastern region for example, forestry companies are generally in irregular situation. They often pay gifts and bribes to police and municipal authorities to carry out their activities. These results are explained in the literature.

4.2 Influence of the institutional factors on corruption in Cameroon

In Tables ii and iii, it is shown that the most corrupt public administrations in Cameroon are taxes police / gendarmerie and municipalities. Those who receive the best gifts are the customs, police / gendarmerie and taxes. Indeed, in police / gendarmerie and the tax administrations, users of public services respectively have 84.1% and 55.3% chances to give a gift to officials (see table iii).This is because these administrations have more contact with private companies for either pay taxes or to pay customs duties for import or export of goods. Taxes and police are the most corrupt public administrations while their employees often receive several bonuses. These results therefore contradict those of Tanzi, Vito (1998), Van Rijckeghem and Weder (1997) and Herzfeld and Weiss (2003). Indeed theses authors argue that public sector wages are highly correlated with the rule of law and the quality of the bureaucracy, which may therefore may have an effect on corruption. In developing economies, civil servants often receive wages that are so low that they entice corrupt behavior. Thus, an increase in public sector wages significantly reduces corruption according to them.

Table iii: The determinants of corporate corruption in Cameroon

	Cadeau	Select	Bribe	Select
Log (turnover)	0.314***	0.0829	0.2618*	0.157**
	(0.110)	(0.0760)	(0.157)	(0.0657)
[Log (turnover)] *[Log (turnover)]	0.0113	-0.0155*	0.0126	-0.0254***
	(0.0122)	(0.00849)	(0.0190)	(0.00752)
Poverty rate	-0.126***	-0.0570	-0.0840**	0.144***
	(0.0305)	(0.0421)	(0.0397)	(0.0366)
(poverty rate)*'poverty rate)	0.00177***	0.000412	0.00124**	-0.00125***
	(0.0042)	(0.00308)	(0.00522)	(0.00259)
The company believes that public administra are corrupt	0.476**	0.0185	0.540	0.8099***
	(0.203)	(0.136)	(0.427)	(0.123)
Taxes	0.841***		-0.532	
	(0.276)		(0.418)	
Police/gendarmerie	0.553***		0.151	
	(0.179)		(0.215)	
Municipality	0.165		0.183	
	(0.177)		(0.257)	
Trade	0.294*		-0.274	
	(0.164)		(0.226)	
the company has used in justice for a commercial dispute	0.123		-0.3175**	
	(0.157)		(0.185)	
Contact (days) with public administrations in 2010	0.00832		0.0209***	
	(0.00651)		(0.00744)	
The company believes that the tax burden is high	0.0747		-0.0396	
	(0.199)		(0.221)	
Company believes that administrative procedures are bad	0.362*	-0.0604	0.229	0.123
	(0.191)	(0.132)	(0.237)	(0.109)
Company believes the payment of bills in pub ad takes time	0.391***		0.0453	
	(0.151)		(0.179)	
Individual companies	-0.390**	-0.0512	-0.532***	-0.0645
	(0.159)	(0.122)	(0.192)	(0.0970)
Indicator of naturall resources	0.191**	0.1512**	0.32***	0.221***
	(0.197)	(0.222)	(0.102)	(0.270)
_Iregion_2	-0.370		0.177	
	(0.293)		(0.529)	
Iregion_3	0.912***	0.101	-0.0350	0.0774
	(0.390)	(0.258)	(0.474)	(0.217)
_Iregion_4	1.557***	0.538**	1.227**	0.665***
	(0.398)	(0.271)	(0.520)	(0.220)
_Iregion_5	1.525***		1.820***	
	(0.422)		(0.581)	
_Iregion_7	1.421***	-0.0252	1.003**	0.468**
	(0.389)	(0.319)	(0.467)	(0.231)
_Iregion_8	0.513	-0.212	0.182	-0.287
	(0.485)	(0.261)	(0.589)	(0.235)
_Iregion_9	0.479	0.0371	0.516	-0.589***
	(0.386)	(0.249)	(0.457)	(0.197)
_Iregion_10	1.207***		0.775	
	(0.405)		(0.510)	
_Iregion_11	2.672***	0.0888	1.845***	0.809***
	(0.392)	(0.303)	(0.520)	(0.230)
_Iregion_12		-0.574**		-0.255
		(0.282)		(0.206)
Enterprise of services		0.224*		0.0704
		(0.127)		(0.102)
(Number of enterprise by region) *(poverty rate)		0.00170		-0.0249*
		(0.00161)		(0.0134)
Number of enterprises by region		-0.0100		0.0232***
		(0.00616)		(0.00529)
Trust to justice		-0.0537		-0.180*
		(0.113)		(0.0922)
Constant	2.485***	0.340	4.421**	-6.405***
	(0.584)	(1.347)	(1.731)	(1.189)
athrho	0.115		-0.121	
	(0.170)		(0.408)	
insigma	0.321***		0.366***	
	(0.0362)		(0.0501)	
rho	0.4742		-0,38058	
sigma	1.3783		1.442	
lambda	0.15751		-0,1738	
Wald test of indep eqsn (rh=0 Chi2 =36(0,000)			(rh=0 Chi2 =22,18(0,000)	
Observations	1364		1369	
Observations non censurées	393		324	
Wald chi2(25)	271		170	
Prob>chi2	0,0000		0 ,0000	
Log likehood	-1010		-1130	

Note: Minimum poverty rate at which the payment of gifts begins; 33,46% ; Maximum poverty rate at which the enterprise refuses corruption 63,04% ; turnover from which the company refuses corruption 24391 dollars (513 enterprises or 37,75%)."

Source": Our estimation

The results of this study also show that the incidence of corporate corruption increases when companies are convinced that the Cameroonian public institutions function poorly. Indeed, companies easily accept corruption and pay bribes/gift when they believe that the Cameroonian public administrations are corrupt. Indeed, in table iii, it is shown that this type of enterprise has 47.6% of chances to give a gift and 80.99% of chances to pay bribes. In contrast, private companies who trust in justice or enterprises who have complained to justice for a trade dispute are less willing to pay bribes and gifts to civil servants. In addition, when the administrative procedures are long, or when companies spend more time to pay the bills in public administration, the probability of paying bribes or gifts increases. In fact, a weak institution is fertile land for corruption to grow. Many studies have employed various indicators to come up with this conclusion. Damania et al. (2004), for example, have used the rule of law index of Kaufmann et al. (1999) that measures the extent to which economic agents abide by the rules of society, perceptions of the effectiveness and predictability of the judiciary, and the enforceability of contracts. Others (Brunetti and Weder, 2004; Ali and Isse, 2003; Herzfeld and Weiss, 2003; Park 2003; and Leite and Weidmann, 1999) use the index that reflects the degree to which the citizens of a country are willing to accept the established institutions to make and implement laws and adjudicate disputes. All studies mentioned conclude that a strong rule of law reduces corruption.

Conclusion

In this paper, I examined the determinants of corporate corruption in Cameroon. This way, I started by describing the manifestations of corruption in Cameroon. Then, I presented some results of theoretical and empirical research works to mark-out the path to the methodology. Heckman model permitted to identify, with data of the national institute of statistics of Cameroon, the determinants of corporate corruption in Cameroon. Thus, I find out that corporate corruption in Cameroon is caused by poverty and the weak institutions. However, it is also more rampant in poor regions and in certain regions rich in natural resources. The implications of economic policy of the study are numerous. Indeed, the government should fight against corporate corruption in poor communities and in localities rich in natural resources. It must particularly promote governance in the following public administrations: police, gendarmerie and taxes. It should also enhance its credibility by communicating its strategies to fight against corruption. Finally, it must simplify administrative procedures.

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