AMERICAN UNIVERSITY OF BEIRUT

CORRUPTION AND THE RULE OF LAW

by
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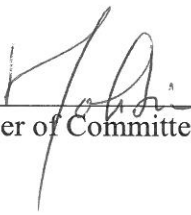

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AN ABSTRACT OF THE THESIS OF

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This work empirically tests the impact of corruption on democracy through the "Rule of Law" mechanism. We investigate if a specific indicator of Democracy, say the "Rule of Law" changes, when corruption changes. We test this effect by running an empirical model, using panel data on 63 countries from the world for the period 1996-2011. We perform an Instrumental variable estimation because of the endogeneity of corruption as a determinant of the "Rule of Law", with two approaches. We find that corruption is a significant determinant of the rule of law with the random effects approach. Corruption no longer has a significant impact on rule of law when we use fixed effects approach. Our implication is that anti-corruption policies are not effective strategies to induce a higher level of the rule of law and that random effects analysis is sometimes misleading.

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To My

Beloved Family

CHAPTER I

BACKGROUND OF THE STUDY

A. Motivation

This paper investigates the effect of corruption on democracy through the "Rule of Law" mechanism. This paper attempts to test the proposition that the presence of corruption harms the "Rule of Law". The aim is to look at the impact of corruption on one specific element of democracy, which is the Rule of Law. We are decomposing the impact of corruption on democracy to investigate whether one specific element of democracy, the Rule of law, is really influenced by corruption.

Both corruption and democracy are widespread and are the subjects of large literatures. The problem is that it is difficult to agree on a common definition and measurement of both corruption and democracy. Therefore, it is no surprise that the research has been largely descriptive rather than being statistical.

The literature on the effect of corruption on democracy is not extensive at all. Also, the literature is inconclusive on the effect of corruption on democracy. We therefore hope to investigate this matter by considering the "Rule of Law" mechanism.

Moreover, the statistical approaches in studying the effect of corruption on political regimes have been rather limited. Also, previous empirical studies examining the impact of corruption on democracy fail to address the endogeneity problem. That makes the question we attempt to answer of importance. We hope to work on an empirical model and examine the effect of corruption as a determinant of the "Rule of Law". Most of what has been done has treated democracy as the independent variable and looked at its effect on corruption.

B. Literature Review

This section accounts for what has been said about the subject. The first part covers the literature on corruption and GDP growth. The two subsections include the form of governance and regime type. The second part covers the literature on democracy and GDP growth. The third part presents the effect of corruption on democracy. The fourth part covers the impact of democracy on corruption depending on the regime type. The last part presents the literature on the effect of corruption on the attitude towards democracy.

The literature on corruption makes it clear there is not one clear definition of the term. Rose Ackerman (1975, 1978) defines corruption as the *"misuse of public power for private or political gain"*. Shleifer and Vishny (1993) define government corruption *"as the sale by government officials of government property for personal gain"*. Several researchers addressed the problem of corruption to be the result of the abuse of power given to a person.

As for Democracy, it is generally defined as the rule of the people by the people and for the people. People have the political right to elect their representatives freely and fairly. This free will of choice cannot be restricted or controlled for any reason. The "Rule of Law" is an important principal in democracies whereby all the private agents, public officials and individuals are under the law. The fundamental rights of citizens are dictated and protected by the law that delivers *"justice and equality before the law, accountability to the law, fairness in the application of the law"*… (United Nations Rule of Law 2004).

1. Effect of Corruption on GDP Growth

The relationship between development and democracy is of significant

importance in the literature. The modernization theory (Lipset 1959; Barro 1996; Przeworski *et al*. 2000; Papaioannou and Siourounis 2008) is an important part of this literature. The theory states that as countries modernize (higher GDP growth), they are more likely to become democratic. GDP growth is therefore one of the significant control variables that should be included when we regress democracy on corruption. It is therefore important to include the literature on the effect of GDP growth on democracy. Also we should include the literature on the effect of democracy on GDP growth given the existence of reverse causality between these two variables. Moreover, it is important to cover the literature on the impact of corruption on GDP growth, to determine to which extent corruption harms GDP growth and therefore harms democracy.

A lot has been said about the effect of corruption on economic growth. The misuse of authority for the private benefit of the individual discourages productive activities. Therefore the economy would suffer an inferior level of growth (Svensson 2005).

Shleifer and Vishny (1993) find a negative impact of corruption on growth whereby the official's decisions are not likely to serve the community. Tanzi and Davoodi (2000) find that corruption depresses growth through a misallocation of talents to unproductive activities.

Mauro (1995) also finds that corruption decreases growth by harming private investment. Mo (2001) finds that corruption decreases human capital and private investment, which lowers growth.

2. Effect of Corruption on GDP Growth Depending On the Form of Governance

The effect of corruption on growth has been examined in countries with

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different forms of governance. Méon and Sekkat (2005) adopt the common definition of corruption, the *"misuse of public power for private benefits"*. They use three categories to measure corruption. The first is an assessment of risk-rating agencies of the prevailing level of corruption. The second measure is based on surveys of individuals. The third measure uses indices that combine the first two categories. They find that corruption is reduced with good governance. The type of governance depends on institutional quality. To measure institutional quality Méon and Sekkat combine many political and economic indicators (government effectiveness, lack of violence, voice and accountability…) Meon and Weill (2010) classify countries based on the type of institutions prevailing (efficient or deficient). Technical efficiency is measured by testing how close the country's production is to the country's optimal production. In this setting, the effect of corruption is lower in the case of inefficient institutions.

Murphy, Shleifer and Vishny (1993) show that the consequences of corruption on development differ between centralized and decentralized systems in the sense that corruption is more harmful in decentralized systems.

On the other hand, some of the literature finds a positive effect of corruption on growth, as corruption simplifies trade by cutting delays and motivating workers (Leff 1964; Huntington 1968). Corruption can indeed be behind the rise in efficiency when offering services (Aidt 2003). According to Lui (1985), corruption can be beneficial for it accelerates procedures in bureaucracies.

3. Effect of Corruption on GDP Growth Depending On the Regime Type

In investigating the effect of corruption on growth, some studies also take into account the prevailing political regime. Indeed, the impact of corruption on GDP was examined by taking into account the level of freedom in the country. The main goal was

to prove that the consequences on GDP/cap of a decrease or increase in corruption differ across regimes.

According to Swaleheen and Stansel (2007), corruption is beneficial for growth in the case of democracies whereas; the influence is harmful if the indices of freedom are not high. Méndez and Sepúlveda (2006) divide the countries between free and not-free countries. They find that for free countries, corruption is positive at first then negative when it comes to growth. No major results were found for the second sample.

Rock (2007) illustrates that reducing corruption in autocracies increases growth more than decreasing corruption in democracies. Basically, the negative effect of corruption on growth in autocracies is larger and more harmful. These results are evidence against the idea that the association between corruption and growth in non-democracies is insignificant (Méndez and Sepúlveda 2006).

4. Effect of Democracy on GDP Growth

The effect of GDP growth on democracy is supported by the modernization theory (Lipset 1959, Przeworski *et al*. 2000, Papaioannou and Siourounis 2008). GDP growth is therefore one of the significant control variables that should be included when we regress democracy on corruption. It is also important to include the literature on the effect of democracy on GDP growth given the existence of reverse causality between these two variables. In this part, we present the literature on this direction of causality. That is the impact of democracy on GDP growth.

There is a vast literature on the effect of democracy on growth rate of GDP/cap. Democracy has no effect on growth according to Levine and Renelt (1992) and Alesina *et al.* (1996). Wacziarg and Tavares (2001) found that the effect of democracy on growth wasn't significant.

Papaioannou and Siourounis (2008); Rodrik and Wacziarg (2005); and Giavazzi and Tabellini (2005) find that democracy is conducive to growth.

Barro (1996), on the other hand, shows that growth decreases when associated with high levels of democracy and increases in the opposite case.

5. *Literature on the Effect of Corruption on Democracy*

When looking at the literature on democracy, corruption is consistently shown to be bad for the polity. Weyland (1998) discusses the reasons behind the increase of corruption under democracies in Latin America. He claims that this increase of corruption threatens democracies without specifying the link.

De Leon (1993), della Porta and Vannuci (1997, 1999), Elster (1989), Rose-Ackerman (1999), Thompson (1995) and Warren (2004) find that corruption, more specifically political corruption, is considered as a factor and a symptom of the failures in democracies. Warren (2004) finds that corruption harms democracy by breaking people's ability to influence collective decisions through voting.

There are limited cross-national studies and little empirical evidence that link corruption to democracy. Triesman (2000) tests that in the long run corruption decreases in democratic countries. However, he doesn't show that higher corruption weakens democracies. Other empirical work by Gingerich (2004) shows that corruption weakens democracy.

Empirical work by Nicolescu-Wagonner (2010) tests the negative effect of corruption on the democratization process using cross-national and time-series data. This negative impact is the stalling of the democratic consolidation process.

The consolidation phase of democracy is the third phase right after the fall of the authoritarian system and the transition to democracy. For the democracy to be

consolidated, political reforms targeting political institutions and their accountability need to be implemented. In this setting, political corruption restricts the implementation of these reforms. Wagonner defines the consolidated democracy as the phase during which *"fair and institutionalized elections, universalism and inclusivity, legitimacy, rule of law and interaction between the civil and political society"* take place. She aims to prove that corruption stalls the consolidation process of democracy by blocking the inclusion and harming accountability.

Corruption harms justice and freedom by excluding the individuals from any access to power that are exclusively in the hands of a number of political elites. Corruption negatively impacts the accountability and control on power.

Umutoniwabo (2012) finds that corruption has a dangerous impact on democratic governance in Central Africa. The research was conducted by the use of questionnaires, interviews and the researcher's observations. The author concludes that corruption can be dangerous for democratic governance.

Anderson and Tverdova (2003) use data from 16 new democracies from West and East Europe to prove that corruption harms legitimacy by violating the major principals of democracy such as accountability, equality and openness.

6. Effect of Democracy on Corruption Depending on Regime Type

Moreover, many studies examine the effect of democracies on corruption. Some find that corruption is more limited in autocracies. Other arguments emphasize the role of democratic institutions in controlling corruption. Rivera-Batiz (2002) focuses on the significance of democratic institutions in limiting corruption. Shen and Williamson (2005) show that democracies are beneficial in controlling corruption. That is due to political freedom and transparency in democracy. A similar result was obtained

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by Ali and Isse (2003). Triesman (2000) shows that the duration of democracy is relevant. He finds that corruption is controlled in a country that has been democratic for a continuous period. Triesman (2007) qualifies the result by stating that the level of democracy is what determines the extent of the inverse relationship between the two. Rose-Ackerman (1999), Schwartz (1999), Jamieson (2000) and Moran (2001) show that corruption decreases with civil liberties.

A wage argument indicates that corruption is reduced with the increase of wages due to democracies (Sandholtz and Koetzle 2000; Van Rijckeghem and Weder 2001). However, some illustrate that other variables such as income level (Paldam 2002) or degree of inequality (Uslaner 2008) can make democracy ineffective.

On the other hand, Ehrlich and Lui (1999) state that corruption is more restricted in autocracies than in democracies. Furthermore, Ades and Di Tella (1999) find that low levels of political and civil rights are linked to lower level of corruption. For Mohatdi and Roe (2003), corruption initially increases with democracy then decreases with higher levels.

In democracies, a representative's desire to be re-elected drives them to be more corrupt. In this setting, candidates try to gain public support by bribing the electorates for example. Also, candidates might alter their choices for funding. In other words, they become subject to pressure from funders (Rose Ackerman 1999). Even worse, transparency that accompanies democracy becomes nothing but a way to detect whom to bribe (Bac 2001).

However, the literature on corruption and democracy, or more generally, political regimes doesn't examine very carefully the causal effect of corruption on regime types.

The consequences of corruption on political, social and economic outcomes

could provide the incentive to demand change and therefore may provoke a potential alteration in the political regime. It is therefore interesting to examine its magnitude in affecting political regimes.

7. *Literature on the Effect of Corruption on the Attitude towards Democracy*

Seligson (2006) examines the relationship between corruption and the erosion of support for democracy. He uses a new direct measure of corruption rather than using "perception" of corruption. He adopts a survey approach and considers a measure of the corruption that is experienced by individuals instead of using an index of perception of corruption. He tests the impact of this corruption victimization measure on the legitimacy of the political system and proves that corruption indeed erodes the legitimacy of democracies.

Many authors however use an index of perception of the degree of corruption when testing the relationship between corruption and democracy. Morris (1991) studied the relationship between corruption and legitimacy in Mexico using survey data covering 3 Mexican cities and almost 700 respondents. He uses perception of corruption as a measure and finds that a high perception lowers trust in government, which harms legitimacy.

A study by Mishler and Rose (2001) that covers 10 Central and Eastern European countries and Russia shows that a higher perception of corruption lowers trust in democratic institutions. Anderson and Tverdova (2003) in their work that includes 16 countries, find that corruption decreases people's faith in their governments.

Camp, Coleman and Davis (2000) also use the perception of corruption rather than the experience with corrupt practices in their work that covers Costa Rica, Mexico and Chile. They find that corruption reduces the ability of opposition parties to

mobilize electoral support. Also Shin (1999) tests the relationship between corruption and system support for South Korea using a measure of perception of corruption. He finds that corruption reduces institutional trust in South Korea.

Canache and Allison (2003) consider the link between public opinion and political corruption in many countries in Latin America for 2 years (1995-1997). They adopt peoples' perception of corruption using the Transparency International index and individual opinion data using a survey.

They find that people are aware of the existence of corruption since the level indicated by the Transparency International index corresponds to the level perceived by the public. They also found that support for the political system and for the officials is eroded by the perception of corruption. However, they fail to find any evidence that perception of corruption erodes support for democracy.

Canache (2002) and Canache and Kulis-heck (1998) argue that the corruption of the political parties in Venezuela led to public outrage. The main outcome was the weakening of democracy. However, the bad economic performance of these political parties also weakened their power. That makes it hard to identify the real role of corruption in the weakening of democracy in Venezuela.

Della Porta (2000) and Della Porta and Meny (1996) run empirical studies to test the relationship between corruption and democracy. Della Porta uses the Transparency International index of the perception of corruption. The work covers 3 countries France, Italy and Germany for a period of almost 20 years between 1976 and 1995. To measure the confidence in government, the author uses the Euro barometer. The outcome was that satisfaction with democracy decreases with corruption.

Phar (2000) runs time-series regressions and concludes that the main predictor of the dissatisfaction with politics in Japan is the level of corruption in the main

newspaper. Moreover, Pharr (2000) proves empirically that corrupt public officials decrease confidence in democracy.

Chang and Chu (2006) test empirically whether the perception of corruption decreases peoples' trust in political institutions in the Asian democracies. Using data from the East Asia Barometer, they find that political corruption harms this trust.

Doig and Theobald (2000) conclude that corruption lowers trust in public institutions. However, their work that covered 4 countries was almost entirely descriptive due to the lack of statistical tests and the lack of data.

Bardhan (1997) claims that corruption harms citizens' trust in institutions because of the engagement of government officials in corrupt transactions for their private interest. There is an alternative literature presenting the positive effect of corruption. Huntington (1968) made a classic theoretical statement that corruption is necessary to achieve stable political development. Also, Becquart and Leclerq (1989) state that corruption is beneficial since it constitutes a way of redistributing public resources to include the excluded groups.

It is therefore obvious that the literature on the relationship between corruption and democracy is inconclusive. The argument that corruption has a positive effect on democracy by binding the government and the people together is based on theoretical evidence. While the argument that corruption harms democracy using statistical evidences is not extensive.

Previous works basically show that corruption violates trust in democratic institutions and erodes support for democracy. Also, corruption decreases confidence in democracy. Other works show that corruption reduces satisfaction from democracy. Corruption harms faith in governments and erodes legitimacy. Moreover, corruption harms democracy by breaking people's ability to influence collective decisions and

violating accountability. The proposition we attempt to test is therefore of some importance.

This chapter presents the motivation behind this work. It also presents the literature review including the general approaches adopted by people who attempted to answer questions in this subject and the main results. The following chapter describes the empirical strategy and the data

CHAPTER II

EMPIRICAL METHOLODY

The aim of the first chapter is to present the incentive behind this work. Moreover, it covers the techniques and the results completed in this subject. As for the next chapter, the purpose is to present the methodology in terms of data description, estimation strategy (main equation of the regression, the use of an instrument, the approaches adopted…). This chapter also covers the main findings and table reports of the results we get from this work.

In order to investigate the effect of corruption on democracy through the "Rule of Law" mechanism, we will use panel data (cross-country, time series data). The hypothesis that we attempt to test is whether corruption affects the "Rule of Law". Basically, we want to test if a specific indicator of Democracy, say the "Rule of Law" changes when corruption changes. To do so, we will run an empirical model using data on 63 countries from the world for the period 1996-2011. We will perform an Instrumental variable estimation because of the endogeneity of corruption as a determinant of the "Rule of Law", with two approaches. One approach using fixed effects, and another one using random effects.

A. Data and Measurement

Our dependent variable is "Rule of Law". The data on this indicator is available on WGI (World Governance Indicators) using the Economist Intelligence Unit indicator (EIU). Rescaling and combining many variables from 31 data sources creates the world governance aggregate indicators, one of which is the "Rule of Law". These

variables replicate *"the people's perception of governance"*. The variables also reflect *"governance perceptions by the public sector through its organizations, by the providers of information on commercial business and by non-governmental organizations"*.

The methodology adopted to obtain each of the six world governance indicators consists of standardizing the data into comparable units. Then, the aggregate indicator is constructed by taking the weighted average of the variables using different sources. This statistical method, entitled the Unobserved Components Model takes into consideration potential imprecisions by creating margins of errors when measuring governance.

Rule of Law indicator using EIU is scaled from zero (low) to one (high). "Rule of Law" is one factor of good Governance and measures the magnitude of compliance to the law and confidence in it. The Economist Intelligence Unit indicator covers individuals' perceptions of the *"Fairness of judicial process, the enforceability of contracts, the speediness of judicial process, respect for intellectual property rights protection…"*

As for corruption, we will adopt the Transparency International definition *"The abuse of entrusted power for private gain"* and its corruption perception index (CPI) as an indicator. This indicator is a perception of the level of corruption of the public sector of a given country. It is a composite indicator that uses different sources. Countries that are included in this index have a score out of 10. A score of zero means that the country faces a high level of corruption. Whereas a score of 10 means that the country is completely clean.

Since corruption is endogenous in a regression of the "Rule of Law", a simple Ordinary Least Squares (OLS) regression will not deliver consistent estimates. It is

therefore necessary to correct for this problem by using an instrumental variable approach. Specifically, performing the two-stage least squares regression (TSLS) is one way to correct the endogeneity problem by identifying exogenous variation in corruption. The instrument that we will use is *"Tariffs"*. It is a simple mean of the tariffs rates applied on all products (primary and manufactured products). The data on this variable is available from the World Bank.

When testing the impact of corruption on the Rule of Law, the main equation to run is:

Rule of Law$_{it}$= λ_0 + λ_1 Z_{it} + λ_3 Corruption$_{it}$ +v_i+w_t+u_{it}

Where i is country, t is year, v_i is a country fixed effect and w_t a time fixed effect. However, running a simple OLS on this equation gives biased and inconsistent results because of the endogeneity problem.

To be able to obtain consistent estimates using an Instrumental variable technique, we need for *"Tariffs"* to satisfy some conditions. First, tariffs need to be correlated with corruption (the endogenous variable). In other words, for tariffs to be a valid instrument, it should be relevant. Second, tariffs should not be directly correlated to the rule of law. Basically, it should be exogenous. In other words, it should not be correlated with the error term *u* of the main equation.

Tariffs are correlated to corruption, but not correlated to the disturbance term of Rule of Law. According to Ades and di Tella (1999), high tariffs decreases foreign competition and therefore decreases pressure on the domestic sector by discouraging imports. That increases corruption. There is thus a positive correlation between tariffs and corruption. A higher exposure to foreign competition through lower tariffs decreases corruption. Hall and Jones (1999) aim to determine the reason behind the differences in output per worker across countries. They find that the social infrastructure

prevailing in a country causes the differences in productivity and capital accumulation, which leads to differences in output per worker. The quality of institutions is one factor that reflects the level of social infrastructure in the country. They use many variables to instrument institutional quality. One of these instruments is the tariffs rate (which measures the openness of a country).

Wei (2000) finds that corruption is lower the more the country is open. The country's openness, measured in terms of shares of imports and exports of GDP, depends on many factors. Policy decisions in terms of level of tariffs are one of the factors that affect openness. The choice of the level of tariffs has a direct impact on corruption in the sense that higher levels of tariffs increase agents' payoffs from bribes, which causes more corruption.

Another argument (Gatti 2004) is a cost-benefit analysis between the benefits of an optimal diversified menu of tariffs versus its cost. When tariffs are very high, private and public sector actors prefer exchanging bribes rather than paying these high tariffs. Basically, high tariffs would increase corruption. Gatti finds that an undiversified level of tariffs rather that a differentiated menu limits corruption. That is because agents' ability to exploit the differences between tariffs is rather limited under an undiversified menu.

Sequeira (2013) finds that a decrease in the level of tariffs decreases bribe payments specifically made for tax evasion purposes. Even though corruption shifts into other forms, the overall impact is a decrease in the probability of bribe payment.

Nicolescu-Wagonner (2010) proves that the persistence of political corruption stalls the process of democratic consolidation by harming the inclusion and accountability mechanisms. She adopts the theories of Gatti (2004), Ades and di Tella (1999) and Thibault and Kelley's payoff matrix (1959) as arguments to support the

significant correlation between corruption and tariffs. She therefore uses tariffs as an instrument and proves that democracy and tariffs are not significantly correlated. To do that, she chooses countries that have significantly different democracies but share the same tariff range. Conversely, she selects countries from the same democratic range but with different ranges of tariffs. She shows, using Singapore as an example, that even when the level of tariffs remains unchanged, democracy does change (improves in this case).

These arguments show that *"Tariffs"* is a relevant instrument since it is correlated to corruption. *"Tariffs"* is therefore indirectly correlated to the "Rule of Law" through the endogenous variable, corruption. However, it is hard to claim a direct correlation between tariffs and the "Rule of Law". There are countries that have significantly different levels of tariffs but share the same level of "Rule of Law". Oppositely, there are countries that differ in terms of the "Rule of Law" but share the same level of tariffs. *"Tariffs"* is therefore considered as a valid instrument.

The Two-stage least squares technique involves running two regressions. In the first stage regression, the problematic variable (endogenous variable) corruption is regressed on the instrumental variable tariffs and other variables Z. In the second stage regression, the dependent variable is "Rule of Law" that is regressed on corruption as predicted in the first stage and other exogenous variables Z.

Therefore, the regression equations for this study are:

First-stage regression: *$Corruption_{it} = \beta 0 + \beta 1\ Z_{it} + \beta 2\ Tariffs_{it} + \varepsilon_{it}$*

Second-stage regression: *$Rule\ of\ Law_{it} = \eta 0 + \eta 1\ Z_{it} + \eta 3 Corruption^{*}_{it} + \varepsilon^{*}_{it}$*

The control variables Z in the regression of interest include economic indicators such as GDP per capita, and growth rate of GDP per capita in annual percentage, given that economic development affects democratization and therefore the

"Rule of Law". This is supported by the modernization theory (Lipset 1959; Przeworski *et al*. 2000; Papaioannou and Siourounis 2008). Gasioworski (1995) and Geddes (1999) demonstrate another argument that supports the necessity to include these variables. They prove that a decline in the economic growth leads to regime breakdown. These variables will be lagged to ensure that they are predetermined. The data on these variables is obtained from the World Bank's World Development Indicators (WDI).

Other than GDP per capita and growth rate of GDP per capita, we include Consumption as a percentage of GDP. The data on this variable is available from the World Bank. It is a measure of the overall consumption expenditures (private and government consumption). Moreover, we use the WDI to find data on Inflation (in annual percentage). We also include Investment as a percentage of GDP, also from WDI. This variable reports investment inflows from foreign investors for a specific country. Government spending (as a percentage of GDP) is another macro variable that we include in our regression. This variable covers the Government's consumption expenditure. The data is available from World Bank. Finally, we account for armed conflicts (internal and external) using a dummy variable taken from PRIO (Conflict site dataset 1989 – 2008).

B. Estimation Strategy

In the regression we run, all of these variables are lagged by one period. Only the instrumental variable, *Tariffs* is two periods lagged. The regressions include annual data on 63 countries, from 1996 to 2011. It is in lagged average form (not log form), where all the macro variables (GDP per capita, Growth of GDP per capita, Consumption/GDP, Government Spending/GDP, Investment/GDP and inflation) are one period lagged and in a 3-periods average form. For conflicts, it is not in average

form, but it is one period lagged. As for the instrument (Simple mean of applied tariffs rates on all products), it is in 3-period averages and two periods lagged. Rule of Law and CPI are in the same period (t). We use an Instrumental Variable, two-stage least squares estimation using both "Fixed effects" and "Random effects".

The intuition behind the "Fixed effects" approach is that each country has certain unique characteristics that don't vary over time and that we need to control for. This approach allows us to control for time-invariant variables and extract from the error term any fixed effects that could be correlated with our RHS variables.

When we run "Random effects" regressions, we assume that fixed country-specific characteristics are not correlated with other countries' characteristics that we have included on the right hand side, so we do not need to control for country-specific fixed effects.

Many authors use the efficient random effects analysis when departure from the consistent fixed effects approach is not warranted. Kalenborn and Lessman (2012) look at the combined effect of democracy and press freedom on corruption. They find a positive and significant effect of democracy supplemented by press freedom on corruption. These results are obtained using both cross-section regressions and panel evidence. However, when running a panel regression, the authors find significant results only when using random effects models. Thus, the interaction variable that reflects the joint impact of democracy and press freedom turns out to be insignificant in a panel regression using fixed effects. Rock (2007) tests the impact of the persistence of democracy on corruption using random effects analysis. He finds empirical evidence for the inverted U relationship between these variables using panel data covering the period 1996-2003. Mathura, Singhb (2011) aim to determine the significance of various factors that affect foreign investment in a country. To do so, the authors use cross-section, time

series data covering 29 countries for the period 1980-2000. The authors consider many determinants including corruption, democracy and the interaction of both variables. They find that democracy increases investment. Also, a lower level of corruption has a positive impact on investment. As for the interaction between democracy and corruption, the authors find that when controlling for corruption, a higher democracy level decreases investment inflows. The authors run a random effects Generalized least square regression given that the variation of corruption index with time for a given country is limited. Nicolescu-Wagonner (2010) uses the random effects approach to prove that the persistence of political corruption stalls the process of democratic consolidation. The author justifies not using the fixed effects approach with the fact that the variation of the level of democracy with time for a given country is limited.

CHAPTER III

RESULTS

A. Main Results and Interpretations

The following section shows the results we find from running a Generalized Least Squares model with both Random and Fixed effects. For ease of interpretation, we will use CPI*=10-CPI instead of using the Transparency International Corruption Perception Index. That is because CPI is inversed (As corruption increases, CPI decreases). We then show the results we get from running an instrumental variable two-stage least squares regression, using cross-country, time series data with both Fixed and Random effects. In both techniques, we control for years by adding dummy variables for each year from 1996 till 2011.

If we run Generalized Least squares model with "Random Effects", we get significant results for CPI*. Corruption has therefore a significant negative (at 1%) impact on Rule of Law. An increase of corruption by 1 unit decreases the Rule of Law by 0.0368 units. When we use "Fixed Effects", the coefficient of CPI* is still negative and significant at 1%. An increase of corruption by 1 unit decreases the Rule of Law by 0.0124 units. These results are found in Table 1. However, the Generalized Least Squares technique, with both fixed and random effects, lacks consistency. The results we get are biased, that is because we are ignoring the endogeneity problem between corruption and rule of law. We therefore need to use an Instrumental variable estimation to correct this issue.

Table 1. Generalized Least Squares estimation with both random and fixed effects

Dependent variable: Rule of Law	(1)	(2)
VARIABLES	GLS RANDOM EFFECTS	GLS FIXED EFFECTS
CPI*	-0.0368***	-0.0124***
	(0.00278)	(0.00290)
ConflictT1	-0.0310***	-0.0229**
	(0.0109)	(0.00995)
AverageInflationT1	-0.000282***	-0.000338***
	(9.07e-05)	(8.15e-05)
AverageInvT1	0.000626	0.00121*
	(0.000699)	(0.000637)
AverageConsuT1	0.000918	0.00327***
	(0.000746)	(0.000788)
AverageGovspenT1	0.00319**	-0.00402***
	(0.00143)	(0.00149)
AveragegdpT1	-1.15e-05	-4.37e-06
	(7.94e-06)	(7.79e-06)
AveragegrowthgdpT1	-0.00157	-0.00146
	(0.00107)	(0.000964)
Constant	0.656***	0.469***
	(0.0635)	(0.0661)
Observations	908	908
R-squared		0.101
Number of Country1	63	63

Standard errors in parentheses
The regressions include year fixed effects.
*** p<0.01, ** p<0.05, * p<0.1

When using "Random effects", the first stage regression shows that our instrument is relevant (lagged average of the simple mean of the tariffs rates applied on all products--with two periods lag and a three periods average). It has a positive significant (at the 1% level) coefficient, which goes in line with the theoretical explanations. As tariffs increase, CPI* increases. An increase in CPI* means an increase in corruption (since CPI*=10-CPI). The second stage regression shows that corruption has a significant effect on the Rule of Law. The coefficient of CPI* 0.0955 is negative and significant at 1%. So our instrumented corruption is significant with a coefficient of

-0.0955. Indeed, as CPI* increases by 1 unit, the Rule of Law decreases by 0.0955 units. Based on this result, we can say that corruption has a negative effect on the rule of law. In this setting, any decrease in the level of corruption succeeds at improving the rule of law by 0.0955 units. For example, if Tanzania decreases its level of corruption in 2000 by 1 unit (from CPI*=7.5 to 6.5), it succeeds at improving its rule of law from 0.41 to almost 0.51 to become like Senegal or Ghana.

For the "conflict" variable, the coefficient is negative but insignificant. The intuition is that, even though it fails to reach significance, it is still in the right direction. As conflicts increase, the rule of law deteriorates. As for "Consumption/GDP", it has a positive and significant coefficient of 0.00173. However, all the other independent variables are not significant.

When running fixed effects regressions, the first stage regression shows that our instrument is still relevant, only when we don't include dummies for years. It still has a positive coefficient that is significant at 5% level. We can say that as tariffs increase, corruption increases. However, when we include dummy variables for years, the first stage regression shows that our instrument barely fails to reach significance (p-value=11%). The results are found in Table 2.

The second stage regression with fixed effects shows that, the results we get are completely opposed to the random effects' results. Corruption has now an insignificant effect on the Rule of Law. The coefficient of CPI* is no longer negative. It is now 0.254. So our instrumented corruption is insignificant with a positive coefficient, which is completely opposed to the negative and significant result (1%) that we get using random effects. Indeed, as corruption increases by 1 unit (CPI* increases by one unit), the Rule of Law increases by 0.254 units. Based on this result, we can say that corruption has no significant effect on the rule of law. In this setting, any decrease in the

level of corruption fails at improving the rule of law.

Table 2. 1st stage results from the Instrumental Variables two-stage least squares
estimation with both Random and Fixed effects

Dependent variable: CPI*	(1)	(2)
VARIABLES	1st STAGE of the IV2SLS RANDOM EFFECTS	1st STAGE of the IV2SLS FIXED EFFECTS
AvUNWtarT2	0.0871***	0.0111
	(0.00924)	(0.0070)
ConflictT1	0.1910	-0.0379
	(0.1388)	(0.0901)
AverageInflationT1	0.0018*	0.0014**
	(0.0010)	(0.0006)
AverageInvT1	-0.0035	-0.0135***
	(0.0081)	(0.0051)
AverageConsuT1	0.0489***	-0.0118*
	(0.0073)	(0.00711)
AverageGovspenT1	-0.1584***	0.0303**
	(0.0155)	(0.0149)
AveragegdpT1	0.0001	-0.0002***
	(0.00008)	(0.00007)
AveragegrowthgdpT1	0.0159	0.0014
	(0.014)	(0.0093)
Constant	3.1880***	5.3033***
	(0.6250)	(0.5937)
Observations	789	789
Number of Country1	63	63

Standard errors in parentheses
The regressions include year fixed effects
*** p<0.01, ** p<0.05, * p<0.1

For the "conflict" variable, the coefficient is negative and insignificant of
0.000838. Basically, as conflicts increase the rule of law decreases. The coefficient of
the "Investment/GDP" variable 0.00474 is now positive rather than being negative with
random effects. Some of the variables that were insignificant with the random effects
approach are now significant. For example, "Inflation" variable is now significant with

a negative coefficient of 0.000651. "GDP per cap" and "Growth of GDP per cap" are

still insignificant, but now in the right direction with respectively positive coefficients

of4.87e-05 and 0.000444. These results are found in Table 3.

Table 3. Instrumental Variables two-stage least squares estimation with both Random and Fixed effects

Dependent variable: Rule of Law	(1)	(2)
VARIABLES	IV2SLS RANDOM EFFECTS	IV2SLS FIXED EFFECTS
CPI*	-0.0955***	0.254
	(0.00891)	(0.186)
ConflictT1	-0.0114	-0.000838
	(0.0120)	(0.0268)
AverageInflationT1	-0.000139	-0.000651**
	(9.20e-05)	(0.000328)
AverageInvT1	-0.000147	0.00474
	(0.000686)	(0.00295)
AverageConsuT1	0.00173**	0.00816**
	(0.000776)	(0.00319)
AverageGovspenT1	0.000550	-0.0132*
	(0.00211)	(0.00714)
AveragegdpT1	-4.26e-06	4.87e-05
	(7.33e-06)	(4.52e-05)
AveragegrowthgdpT1	-4.04e-05	0.000444
	(0.00122)	(0.00272)
Constant	0.925***	-1.071
	(0.0627)	(1.031)
Observations	789	789
Number of Country1	63	63

Standard errors in parentheses
*The regressions include year fixed effects.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Fixed effects estimates are based primarily on within country relations between

corruption and rule of law. So they are more relevant for policy analysis than the

estimates that ignore country specificities and are based on cross-country variation.

This fixed effects analysis allow us to question the importance of including anti-corruption policies as one of the key strategies to guarantee higher levels of the Rule of Law and therefore guarantee a better democracy. The work raises doubts about the importance of accounting for corruption when it comes to the "Rule of Law" and more generally, to "Democracy" considerations. It is therefore important to determine what is really driving the changes in both corruption and rule of law rather than using the results of a random effect analysis to falsely assign to corruption a causal effect on the rule of law.

B. Checking for Robustness

Our findings are obtained using data on 63 countries from 1996 to 2011. All our variables are in lagged average linear form (3 periods average, one period lag). Except for "conflict" variable, which was only one period lagged and not in average form. The instrument we use is the average of unweighted tariffs rates applied on all products (3 periods average, 2 periods lagged). The dependent variable Rule of Law and the endogenous variable CPI* are in the same period (t).

With "Random effects", we find that our instrument is relevant and in line with the theoretical analysis (from the first stage results, the coefficient of the instrument is positive and significant). From the second stage results, we find that corruption has a negative and significant impact on the Rule of Law (coefficient of CPI* is negative and significant). With "Fixed effects", we find that corruption has no longer a significant impact on the Rule of Law (coefficient of CPI* is insignificant).

For robustness purposes, we vary some of the regression' specifications. If we use as an instrument, the average of unweighted tariffs rates applied on all products (3 periods average, but one period lagged rather than two periods lagged), we find the

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same results.

If all our variables are in average linear form (3 periods average, but 2 periods lagged instead of one period lagged), while preserving the same instrument (average of unweighted tariffs with 3 periods average, 2 periods lagged), we have the same results. Also, with an instrument that is one period lagged, the results don't vary.

If we repeat our regression but we use average of weighted tariffs rates applied on all products (3 periods average, 1 periods lagged) as an instrument, we find the same results. Corruption is still insignificant with Fixed Effects, but the coefficient of CPI* is now negative.

Our regression in Log form rather than in linear form gives the same results (we now take the log form of all macro variables: investment, consumption, government spending, GDP per cap). Also, if we lag our instrument with one period and not two, in the log form, the results are similar. Corruption remains significant with Random effects and insignificant with Fixed Effects (but the coefficient of CPI* is negative). If we consider the Log form, with variables in a 3 periods average and 2 periods lagged, with the same instrument (average unweighted tariffs, 3 periods average, 2 periods lagged), we find identical results. Also, if we use as an instrument the average of weighted tariffs (with 3 periods average and 1 period lag), we have the same results. All of these results are found in Table 4.

Our findings are therefore preserved when we vary specifications in terms of the instrument we use (weighted/ unweighted tarrifs rates applied), of the form we use (Log/ linear), and the number of lags (one period/ two periods lag form). In all the cases we consider, we always find that corruption has a negative significant impact on the rule of law using "Random Effects" analysis and insignificant with "Fixed Effects".

Table 4. Robustness Check Results

VARIABLES	(1) IV2SLS-RE	(2) IV2SLS-FE	(3) IV2SLS -RE*	(4) IV2SLS-FE*	(5) IV2SLS-RE**	(6) IV2SLS-FE**	(7) IV2SLS RE	(8) IV2SLS FE
CPI*	-0.105***	0.349	-0.114***	0.605	-0.116***	-11.84	-0.129***	-0.986
	(0.00769)	(0.318)	(0.00546)	(0.820)	(0.00522)	(263.5)	(0.0180)	(5.306)
ConflictT1			-0.00551	-0.0339	-0.0120	0.565	0.00236	0.0274
			(0.0134)	(0.0761)	(0.0141)	(12.87)	(0.0198)	(0.224)
AverageInflationT1			2.79e-05	-0.000864	0.000246	0.000565	0.000247	0.000590
			(0.000134)	(0.000916)	(0.000163)	(0.0210)	(0.000215)	(0.00492)
AverageInvT1			-5.98e-05	0.0131			0.000987	-0.0174
			(0.000861)	(0.0162)			(0.00148)	(0.102)
AverageConsuT1			0.00284***	0.00765			0.00417***	-0.00176
			(0.000654)	(0.00727)			(0.00159)	(0.0324)
AverageGovspenT1			-0.00230	-0.0187			-0.00648	0.0186
			(0.00180)	(0.0219)			(0.00526)	(0.126)
AveragegdpT1			1.75e-05***	6.56e-05			2.31e-05***	-0.000141
			(6.29e-06)	(0.000113)			(7.90e-06)	(0.000722)
AveragegrowthgdpT1			0.00188	0.0113	0.00572***	-0.210	0.00516**	-0.0185
			(0.00163)	(0.0168)	(0.00198)	(4.664)	(0.00247)	(0.0995)
ConflictT2	-0.00261	-0.00587						
	(0.0131)	(0.0379)						
AverageInflationT2	-1.39e-06	-0.000730						
	(9.91e-05)	(0.000544)						
AverageInvT2	0.000405	0.00511						
	(0.000762)	(0.00388)						
AverageConsuT2	0.00206***	0.00718*						
	(0.000766)	(0.00384)						
AverageGovspenT2	-0.00133	-0.0224						
	(0.00199)	(0.0140)						
AveragegdpT2	1.78e-06	7.56e-05						
	(7.71e-06)	(7.91e-05)						
AveragegrowthgdpT2	6.77e-05	0.00573						
	(0.00126)	(0.00565)						
AverageloginvT1					0.00746	-4.033		
					(0.0106)	(90.24)		
AveragelogConsuT1					0.555***	-14.07		
					(0.111)	(327.2)		
AveragelogGovspenT1					-0.109**	-4.267		
					(0.0557)	(94.07)		
AverageloggdpT1					0.0116**	-4.057		
					(0.00495)	(91.54)		
averageloginvT2								
AveragelogConsuT2								
AveragelogGovspenT2								
AverageloggdpT2								
Constant	0.973***	-1.322	0.967***	-2.691	0.231	94.73	0.998***	5.330
	(0.0565)	(1.590)	(0.0451)	(4.164)	(0.169)	(2,121)	(0.0678)	(26.73)
Observations	785	785	847	847	764	764	846	846
Number of country1	62	62	63	63	62	62	63	63

	(9) IV2SLS RE	(10) IV2SLS FE	(11) IV2SLS RE	(12) IV2SLS FE	(13) IV 2SLS RE	(14) IV2SLS FE	(15) IV2SLS RE	(16) IV2SLS FE
	-0.121***	0.953	-0.121***	1.059	- 0.0718***	0.356	-0.112***	0.557
	(0.00561)	(1.863)	(0.00523)	(2.376)	(0.0175)	(0.447)	(0.00548)	(0.606)
	-0.0113	0.0104						
	(0.0144)	(0.0982)						
	0.000233	-0.000783						
	(0.000153)	(0.00126)						
	0.00570***	-0.000556						
	(0.00197)	(0.0102)						
			-0.0110	-0.0303	-0.0253*	-0.0298	-0.00549	-0.0384
			(0.0138)	(0.133)	(0.0150)	(0.0511)	(0.0130)	(0.0692)
			0.000417***	-0.000962	-0.000122	-0.000589	0.000104	-0.00122
			(0.000158)	(0.00199)	(0.000116)	(0.000590)	(0.000124)	(0.00114)
							0.000667	0.00555
							(0.000882)	(0.00567)
							0.00272***	0.00370
							(0.000652)	(0.00465)
							-0.00237	-0.0199
							(0.00177)	(0.0162)
							1.65e-05**	0.000110
							(6.73e-06)	(0.000133)
			0.00691***	0.0153	0.000129	0.00454	0.00198	0.00728
			(0.00198)	(0.0364)	(0.00128)	(0.00806)	(0.00151)	(0.00972)
	0.00477	0.291						
	(0.0110)	(0.544)						
	0.552***	3.505						
	(0.113)	(5.452)						
	-0.140**	-0.197						
	(0.0579)	(0.511)						
	0.0136***	0.409						
	(0.00529)	(0.727)						
			0.00678	0.336	0.00676	0.103		
			(0.0107)	(0.716)	(0.00927)	(0.108)		
			0.560***	2.232	-3.54e-05	0.680		
			(0.110)	(3.967)	(0.216)	(0.607)		
			-0.134**	-0.705	0.153	-0.138		
			(0.0555)	(1.353)	(0.109)	(0.177)		
			0.0153***	0.322	-0.00835	0.109		
			(0.00504)	(0.617)	(0.0104)	(0.0895)		
	0.297*	-10.83	0.268	-8.320	0.766***	-2.393	0.966***	-2.147
	(0.172)	(19.67)	(0.168)	(18.00)	(0.247)	(2.846)	(0.0447)	(2.819)
	709	709	712	712	731	731	806	806
	62	62	61	61	61	61	62	62

Standard errors in parentheses

*The regressions include year fixed effects.

*** p<0.01, ** p<0.05, * p<0.1

CHAPTER IV

CONCLUDING REMARKS AND LESSONS

Given that the literature on the effect of corruption on democracy is not extensive at all and that previous empirical work fails to address the endogeneity problem, we attempt to investigate this effect through the "Rule of Law" mechanism. This thesis tests the proposition that the presence of corruption has a negative impact on one specific element of Democracy, the "Rule of Law". Most of the literature treats democracy as the independent variable and looks at its effect on corruption. Also, the impact of corruption on one specific component of democracy, the rule of law, is absent from the literature. This thesis is therefore an important addition to the corruption and democracy literature, for it looks at the impact of corruption on democracy through a new mechanism, the rule of law.

In this work, we use an Instrumental Variable, two-stage least squares estimation since a Generalized Least Squares model induces biased and inconsistent results because of the endogeneity problem. We have a relevant instrument when we use the Instrumental Variable estimation with "Random effects". In this setting, corruption has a significant negative impact on the Rule of Law. In order to improve the rule of law, we should decrease the level of corruption. When we use the Instrumental Variable estimation with "Fixed effects" and include dummies for years, *"Tariffs"* is barely significant (p-value=11%). The results we get with fixed effects are opposite to the ones we get with random effects. Corruption no longer has a significant impact on the rule of law. When we look at the relation within countries, corruption is not a significant determinant of the rule of law. When we do not control for country-specific fixed

effects, we find that corruption is a significant determinant of the rule of law.

This fixed effects analysis allows us to raise doubts about the importance of including anti-corruption policies when we aim higher levels of the Rule of Law. Therefore, accounting for corruption cannot be adopted as a key strategy when it comes to the "Rule of Law" and more generally, to "Democracy" considerations.

This allows us to shed light on the fact that Random effects analysis can sometimes be misleading by falsely assigning to corruption a causal effect on the rule of law. If we base our analysis on cross-country variation and ignore country characteristics, corruption has a significant impact on the rule of law. However, for policy implications, we need to control for country characteristics by using the fixed effects approach. The insignificant results we get using this approach show that anti-corruption policies are not effective strategies to induce a higher level of the rule of law and to guarantee a better Democracy. It may be beneficial in further works to determine what is really driving the changes in both corruption and rule of law. It may be interesting to account for economic and other factors to test their significance in explaining the changes in both corruption and democracy. For example, we can account for development factors such as per capita income, poverty levels, and education… As for the other factors, we can account for the "Neighborhood effect" to test to which extent one country might have practices that are similar to its neighborhood in terms of corruption and democracy practices. We may also want to investigate the degree of "Collusion" between people in power and business leaders that might impact both corruption and democracy.

Corruption has no significant impact on one specific element of democracy, which is the Rule of Law. It may also be interesting in future research, to decompose the impact of corruption on democracy to investigate which element of democracy is

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really influenced by corruption. For example, it may be interesting to look at the impact of political corruption on "Free and Fair elections", which is another ideal element of Democracy. The aim would be to test whether this specific element of democracy, "People's political rights to elect their representatives freely and fairly" is influenced by corruption. The purpose of future research in this setting is to decompose the impact of corruption on democracy.

REFERENCES

Acemoglu, D., Johnson, S., Robinson, J.A. and Yared, P. (2008). "Income and Democracy." *American Economic Review.*

Assiotis A. and Sylwester, K. 2011. *Do the Effects of Corruption upon Growth Differ Between Democracies and Autocracies".* Wordpress, November.

Canache, D. and Allison, M. (2003). "Corrupted Perceptions: The Effect of Corruption on Political Support in Latin American Democracies". In 24th International Congress of the Latin American Studies Association, Dallas, Texas, March, pp. 27-29.

Chang, E.C. and Chu, Y.H. (2006). "Corruption and trust: exceptionalism in Asian democracies?" *Journal of Politics* 68(2): 259-271.

Gatti, R. 1999. *Corruption and trade tariffs, or a case for uniform tariffs.* World Bank Publications.

Hall, R.E. and Jones, C.I. (1999). "Why do some countries produce so much more output per worker than others?" The *Quarterly Journal Of Economics* 114(1): 83-116.

Kalenborn, C. and Lessmann, C. (2013). "The impact of democracy and press freedom on corruption: Conditionality matters". *Journal of Policy Modeling* 35(6): 857-886.

Kolstad, I. and Wiig, A. 2011. "Does democracy reduce corruption?" CMI Working Paper.

Larraín, F. and Tavares, J. 2000. "Can openness deter corruption?" Unpublished Working Paper, Pontifícia Universidad Católica, Santiago, Chile andCenter for International Development Harvard University, Universidade Nova, Lisbon, Portugal.

Mathur, A. and Singh, K. (2013). "Foreign direct investment, corruption and democracy". *Applied Economics* 45(8): 991-1002.

Méon, P.G. and Weill, L. (2010). "Is corruption an efficient grease?" *World Development* 38(3): 244-259.

Nicolescu-Waggonner, C. (2011). "The Negative Effect of Corruption on the Consolidation of Democracy"; available from http://www.democracy.uci.edu/ files/democracy/docs/conferences/grad/2011/The%20Negative%20Impact%20 of%20Corruption%20on%20the%20Consolidation%20of%20Democracy-

%20Cristina%20Nicolescu%20Waggonner.pdf; Internet; accessed 20 March 2014.

PRIO Website; available from http://www.prio.no/Data/Armed-Conflict/?id=348; Internet; accessed 20 March 2014.

Rock, M.T. August 2007. "Corruption and Democracy." United Nations Department of Economic and Social Affairs.

Saha, Shrabani and Campbell, Neil. 2007. "Studies of the Effect of Democracy on Corruption." Prepared for the 36th Australian Conference of Economists 'Economics of Corruption Session' Tasmania, Australia (24-26 September).

Seligson, M.A. (2002). "The impact of corruption on regime legitimacy: A comparative study of four Latin American countries". *The journal of Politics* 64(02): 408-433.

Sequeira, S. (2013). "Displacing corruption: evidence from a tariff liberalization program". London School of Economics, Uk.

Sung, Hung-En. (2004). "Democracy and Political Corruption: A Cross-National Comparison." *Crime Law & Social Change.*

Treisman, D. (2000). "The causes of corruption: a cross-national study*". Journal of public economics* 76(3): 399-457.

Umutoniwawo, Robert. 2012. "Impact of Corruption on Democratic Governance in Africa. The Case of Central Africa." International Conference on Democratic Governance: Challenges in Africa and Asia.

Venard, Bertrand. (2003). "Institutions, Corruption and Sustainable Development." *Economics Bulletin* 33(4).

Warren, M.E. (April 2004). "The Meaning of Corruption in Democracies", *American Journal of Political Science.*

World Bank. World Bank indicator; available from http://data.worldbank.org/indicator; Internet; accessed 20 March 2014.