

Corruption, Democracy And Bureaucracy: Empirical Evidence From Developing Countries

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The aim of this paper is to empirically test a model that links non-economic factors such as democracy and bureaucracy to corruption in a cross section of 68 developing countries. By using Ordinary Least Squares (OLS) and Weighted Least Squares (WLS) methods, the empirical findings of this paper suggest that Transparency International's Corruption Perception Index (CPI) is negatively associated with democracy and positively associated with bureaucracy.

INTRODUCTION

Corruption is a universal problem. It occurs in all nations, "both developed and developing, in the public and private sectors, as well as in non-profit and charitable organizations"(Myint,2000:33). Although corruption exists in all countries, regardless of levels of social and economic development, it is very common in developing countries. "Corruption is regarded as a way of life in Nigeria; in Sierra Leone they talk about a culture of corruption; and in Sudan corruption is counted as the fifth factor of production" (Hwedie and Hwedie,2000:40). Developing countries and transitional economies are more prone to be effected by corruption for a variety of reasons, including:

- The widespread poverty and low levels of public sector salaries.
- Lack of any risk spreading mechanisms such as insurance and a well-developed labor market.
- Opportunities presented by complex, poorly defined, constantly changing and inadequately circulated rules and regulations;
- Lack of properly established laws and principles, or code of conduct applicable to public officials and almost total absence of institutional framework charged with enforcing them;

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Lack of watch-dog agencies supplying information on which detection, investigation and enforcement is based namely, accountants, investigative reporters, and press being weak (Gray and Kaufmann,1998: 9).

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Corruption is generally defined as “the abuse of public roles (office) or resources for private gain” (Johnston,1998:89). Public roles or office can be abused for private benefit in many ways.

When an official accepts, or extorts a bribe public office is abused.

It is also abused when private agents actively offers bribes to circumvent public policies and processes for competitive advantage and profit. Public office can also be abused for personal gain even if no bribery occurs, through patronage and nepotism, the theft of state assets, or the diversion of state revenues (World Bank,1997: 8).

Corruption takes many forms including: bribery, extortion, fraud, embezzlement, nepotism, cronyism, insider trading, appropriation of public assets and property for private use, and influence peddling.

In general, corruption is most likely to occur where public and private sectors meet. In other words it occurs where public officials have a direct responsibility for the provision of a public service or application of specific regulations (Ackerman,1997:31). According to Klitgaard corruption will tend to emerge when an organization or a public official has monopoly power over a good or service which generates rent, has the discretionary power to decide who will receive it, and is not accountable (Klitgaard,1988:75).

Corruption's roots are grounded in a country's social and cultural history, political and economic development, bureaucratic traditions and policies. Tanzi (1998) argues that there are direct and indirect factors that promote corruption. Direct factors includes regulations and authorizations, taxation, spending decisions, provision of goods and services at below market prices and financing political parties. Quality of bureaucracy, level of public sector wages, penalty systems, institutional controls, transparency of rules, laws and processes, examples by leadership are indirect factors that promote corruption.

This paper investigates the relationship between corruption, bureaucracy and democracy, in a cross section of 68 developing countries. In this paper two hypotheses are proposed and tested. Firstly, corruption is negatively correlated with democracy. Secondly, corruption is positively correlated with bureaucracy.

The organization of paper is as follows. Section II presents selected literature review on corruption, democracy and bureaucracy. Section III, presents methodology, data sources and model used in empirical analysis. Section IV, discusses the regression results. Section V concludes.

II. CORRUPTION, DEMOCRACY AND BUREAUCRACY RELATIONSHIP

A) Corruption and Democracy

Is there a relationship between corruption and democracy? Are democratic countries less corrupt than undemocratic ones? In recent years there has been considerable research about corruption and democracy nexus.

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Treisman used Transparency International's corruption perception index as the main dependent variable in his models finds that current degree of democracy in a country does not make any difference to how corrupt a country. What matters according to him, is whether or not a country has been democratic for decades (Treisman, 2000:439).

Paldam finds that there is a negative relation between corruption and the level of democracy. In other words corruption will decrease with increasing levels of democracy. He also argues that "there is a strong interactions with patterns of transition for both variables, so independent effect of democracy is dubious" (Paldam,1999:18).

Ruzindana argues that "corruption is an impediment to democracy because it subverts the democratic process of elections, government administration, law enforcement, and the judiciary" (Ruzindana,1997:138). Eigen notes that "corruption gives rise to oligarchy and it allows leaders to cling to power while resisting governmental reform, curbing personal freedom, and abusing basic human rights"(Eigen,1996:160). Corruption distorts two basic norms of democracy equality (corruption leads to special access and influence) and openness (Della Porta and Pizzorno,1996:74). Theobald claims that:

Corruption is anti democratic in two senses. Firstly, if corruption is the primary form of political influence then by definition only the wealthy and the well connected have it. Secondly, corrupt regimes are invariably ones in which basic democratic rights are minimal (Theobald,1990:130).

When Transparency International's Corruption Perception Index (CPI) and other corruption indices are examined we can see that countries with more political rights and civil liberties have less corruption than countries with fewer political rights and civil liberties. What makes democratic nations to have low levels of corruption?

Firstly, democratic regimes possess effective democratic governance system, rule of law, accountability, transparency and access whereas undemocratic regimes do not (Brinkerhoff,1999:5). According to Johnston;

Competition and accepted rules of accountability make it difficult for any person or group to dominate politics or the economy and clear

distinctions between politics and economy prevents worst sorts of exploitation of each by the other. Politics and the economy are broadly participatory, and vitality of each aids development in the other (Johnston,1997:18).

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Secondly, democratic regimes embraces leaders who has political will to address corruption and creates the environment in which civil organizations can deal with corruption and support anti corruption activities (Brinkerhoff,1999:5). In democratic and open societies due to the greater civic engagements, revealing corrupt officials is higher than less democratic and closed societies. Furthermore, in democratic societies free elections enables citizens to vote corrupt leaders out of public office, and political competition for public office leads competitors to investigate and report the incumbent's abuses of public office. Moreover, freedom of press and association enables journalists and civil society to expose abuses in public sector (Amudsen et al.,2000:83). Shleifer and Vishny notes that:

Countries with more political competition have stronger public pressure against corruption—through laws, democratic elections and even independent press—and so are more likely to use government organizations that contain rather than maximize corruption proceeds (Shleifer and Vishny, 1993:610).

From the arguments above we can propose the following:

Hypothesis 1: *Democracy is negatively associated with corruption. The lower the level of democracy, the higher the level of corruption in a country.*

B) Corruption and Bureaucracy

Bureaucracy simply means rule by officials. Early organization theorist such as Max Weber argued that bureaucracy would increase fairness and minimize favoritism and public corruption. Weber also claimed that bureaucracy is the most efficient administrative structure for the rational pursuit of organizational goals (Roth and Wittich,1978:987). However, the expanding role of state activity which has resulted in an expanding bureaucracy with increasing discretionary power which is abused for personal benefit contributed to the bureaucratic corruption in developing countries (Hope,1985:4). Increasing government intervention in the socio-economic sphere has lead to an increased number of cumbersome regulations. In many developing countries “opening a shop and keeping it open, borrowing money, investing, driving a car, building a house, engaging in foreign trade, getting a passport, going abroad require specific documents or authorizations” (Tanzi,1998:10). To do the activities mentioned above several government offices must authorize the activity and several public officials must be contacted. These “excessive regulations and authorizations coupled with greater administrative

discretion, provide opportunities for corruption since the regulation can be used to frustrate the public and the result in bribery to avoid such frustrations" (Hope, 1985:4). Thus we can propose the following hypothesis:

Hypothesis 2: *Bureaucracy is positively associated with corruption. The higher the level of bureaucracy, the higher the level of corruption.*

III. DATA, METHODOLOGY AND THE MODEL

The dependent variable of the study is Transparency International's (TI) annual index of "Corruption Perception Index (CPI)", for 1999, 2000. Transparency International, which is a non-governmental organization based in Berlin, publishes annually the Corruption Perception Index (CPI) of countries. CPI is a "poll of polls", indicating impressions of business people, local population of relevant countries and risk analysts who have been surveyed. For example the 1999 CPI is based on 17 different polls and surveys carried on by 10 different organizations not TI itself. The index ranks nations on a scale from 10 to 0. A score of 10 represents minimum corruption, while 0 indicates maximum corruption.

Government effectiveness index that prepared by Kaufmann, Kraay and Lobaton (for the year 1997-1998) is used as a proxy for bureaucracy. It measures, red tape, institutional rigidities that hinder bureaucratic efficiency, bureaucratic quality and bureaucratic delays. The index ranks countries on a scale from -2.5 to 2.5. A score of -2.5 indicates the highest level of bureaucracy, while 2.5 represents the lowest level of bureaucracy.

For democracy variable Freedom House's 1998 civil and political freedom index is used. Freedom House ranks governments for the level of political rights and civil liberties permitted and protected. This index measures transparency (media reform, freedom of information) and accountability (the degree to which citizens are allowed to express their opinion through protest and the ballot box). Freedom index ranges from 1 (full democracy) to 7 (no democracy).

In estimating the relationship between corruption, democracy and bureaucracy, it is important to control for other determinants of corruption level, to ensure that estimated coefficient capture the effect of democracy and bureaucracy on corruption. I included a number of control variables that are standard in the cross-country empirical literature on corruption. Secondary school enrollment rate (for the year 1995), rule of law, ethnic fractionalization, legal origin are used as control variables. Secondary school enrollment rate data is taken from World Bank internet data base. Data related to ethnic fractionalization and legal origin are taken from La Porta et al.. Data related to rule of law is taken from Kaufmann et al.. The list of countries is indicated in Appendix I. Descriptive statistics are reported in Appendix II.

In this study I will not take into consideration any causal relationship between corruption and the explanatory variables used in the model. So, variables that are related with corruption will be described without establishing causality

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In order to investigate relationship between corruption, democracy and bureaucracy, the method of ordinary least squares (OLS) and weighted least squares (WLS) methods are employed. The explanatory variables and their expected signs are indicated in Table 1.

Table 1. The Explanatory Variables and Their Expected Signs

Explanatory Variables : Definitions	Expected Signs
R (Rule of Law)	+
B (Bureaucracy)	+
D (Democracy)	-
SSER (Secondary School Enrollment Rate) (% net)	+
EFR (Ethnic Fractionalization)	-
Dummy (Legal Origin: English)	?
Dummy (Legal Origin: French)	?

The models used in this paper can be specified as follows:

$$CPI=f(R,B,D,SSER,EFR,D_{Eng},D_{Fren}) \quad (1)$$

The mathematical expression of the basic model is as follows:

$$CPI = \alpha + \beta_1 \text{ Democracy} + \beta_2 \text{ Bureaucracy} + \mu \quad (1a)$$

The mathematical expression of the extended model is as follows:

$$CPI = \alpha + \beta_1 \text{ Rule of Law} + \beta_2 \text{ Bureaucracy} + \beta_3 \text{ Democracy} + \beta_4 \text{ Secondary School Enrolment Rate} + \beta_5 \text{ Ethnic Fractionalization} + \beta_6 \text{ Legal Origin (Eng,Fren)} + \mu \quad (1b)$$

IV. REGRESSION RESULTS

The empirical analysis of this paper tests whether a link exists between corruption, democracy and bureaucracy. Results of models explaining the relationship between corruption, democracy and bureaucracy across 68 developing countries are given in Table 2, Table 3 and Table 4 respectively. Table 2 contains the results of the basic model that is run by OLS. Table 3 and Table 4 reports the results of extended model that are run by OLS and WLS respectively.

Table 2 presents the results of the estimation of equation (1a) by OLS method. Both democracy and bureaucracy variables have the expected sign and statistically significant at the 5 % level in all regressions. The point estimate suggest that a 1

point increase (less democracy) in democracy index is associated with a decrease (more corruption) in corruption index by 0.040 (Reg TI 1999). The point estimate suggest that a 1 point increase (less bureaucracy) in bureaucracy index is associated with a increase (less corruption) in corruption index by 1.505 (Reg TI 1999).

Table 3 reports the results of the estimation of equation (1b) by OLS method. Both democracy and bureaucracy variables have the expected signs and statistically significant. The point estimate suggest that a 1 point increase (less democracy) in democracy index is associated with a decrease (more corruption) in corruption index by 0.0948 (Reg TI 2000, model-1). The point estimate suggest that a 1 point increase (less bureaucracy) in bureaucracy index is associated with a increase (less corruption) in corruption index by 1.241 (Reg TI 2000, model-1). All the control variables have expected signs except secondary school enrollment rate. The F- test is significant at 5% level for all models.

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Table 2. Effect of Bureaucracy and Democracy on Corruption Basic Model (OLS)

Variable	Reg TI 99	Reg TI 2000	Reg TI Avg (1999, 2000)
Intercept	4.309 (17.461)***	4.201 (17.325)***	4.255 (17.929)***
Democracy	-0.040 (-2.434)***	-0.0679 (-2.001)**	-0.0759 (-2.288)**
Bureaucracy	1.505 (7.546)***	1.631 (8.321)***	1.568 (8.175)***
Adjusted R2	0.59	0.61	0.62
F statistic	49.054	54.557	54.938
# Obser.	68	68	68

Numbers in parentheses are t ratios. ** and *** denote significance at the 5% and 1% level respectively.

Table 3. Effect of Bureaucracy and Democracy on Corruption (OLS)

Variable	Reg TI 99		Reg TI 2000		Reg TI Avg (1999, 2000)	
	Model-1	Model-2	Model-1	Model-2	Model-1	Model-2
Intercept	4.667	5.269	5.083	5.546	4.875	5.407
	(7.82)***	(8.482)***	(9.238)***	(9.674)***	(8.691)***	(9.248)***
R	0.61	0.586	0.448	0.479	0.551	0.532
	(2.311)***	(2.084)**	(1.991)*	(1.846)*	(2.206)**	(2.012)**
B	1.014	1.052	1.241	1.255	1.128	1.154
	(3.061)***	(3.005)***	(4.063)***	(3.882)***	(3.621)***	(3.500)***
D	-0.0768	-0.0934	-0.0948	-0.108	-0.0858	-0.101
	(-1.934)*	(-2.371)***	(-2.588)***	(-2.981)***	(-2.298)***	(-2.721)***
SSER	-0.0462	-0.0891	-0.0909	-0.125	-0.06862	-0.107
	-0.656	(-1.288)	(-1.399)	(-1.965)*	(-1.035)	(-1.648)
EFR	-0.845	-0.653	-0.931	-0.754	-0.888	-0.703
	(-1.765)*	(-1.418)	(-2.111)**	(-1.774)*	(-1.974)*	-1.623
D _{English}	0.556		0.459		0.507	
	(1.813)*		(1.624)		(1.761)*	
D _{French}		-0.332		-0.237		-0.284
		(-1.348)		(-1.041)		-1.226
Adjusted R ²	0.64	0.62	0.70	0.69	0.68	0.67
F statistic	14.991	14.267	19.393	18.458	17.768	16.877
# Obser.	68	68	68	68	68	68

Numbers in parentheses are heteroscedasticity consistent t ratios. *, ** and *** denote significance at the 10%, 5% and 1% level respectively.

In Table 4, models are run by WLS, "weighting cases by the inverse of the variance of ratings for that country in the surveys used by TI to construct the index. The point of using WLS is to place greater emphasis on those cases on which the different surveys gave more similar ratings" (Treisman, 2000: 416).

Table 4 reports the results of the estimation of equation (1b) by WLS method. Both democracy and bureaucracy variables have the expected signs and statistically significant in all models. The point estimate suggest that a 1 point increase (less democracy) in democracy index is associated with a decrease (more corruption) in corruption index by 0.073 (Reg TI 2000, model-2). The point estimate suggest that a 1 point increase (less bureaucracy) in bureaucracy index is associated with an increase (less corruption) in corruption index by 0.979 (Reg TI 2000, model-2). All

the control variables have expected signs except secondary school enrolment rate. The F-test is significant at 5% level for all models.

Empirical evidence of the basic model and extended model confirm the two hypotheses proposed in Section II, namely corruption is negatively associated with democracy and positively associated with bureaucracy.

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Table 4. Effect of Bureaucracy and Democracy on Corruption (WLS)

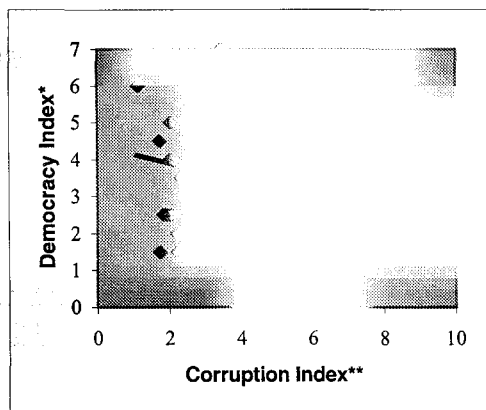
Variable	Reg TI 1999		Reg TI 2000	
	Model-1	Model-2	Model-1	Model-2
Intercept	4.492 (7.492)***	5.068 (8.152)***	4.377 (8.385)***	4.749 (8.878)***
R	0.616 (2.301)***	0.590 (2.089)**	0.555 (2.349)**	0.564 (2.260)**
B	0.966 (2.903)***	0.996 (2.852)***	1.001 (3.535)***	0.979 (3.332)***
D	-0.0682 (-1.735)*	-0.0845 (-2.167)***	-0.0617 (-1.874)*	-0.073 (-2.210)**
SSER	-0.0325 -0.453	-0.0720 (-1.028)	-0.0353 (-0.545)	-0.063 (-1.020)
EFR	-0.872 (-1.829)*	-0.698 (-1.527)	-0.799 (-1.964)*	-0.656 (-1.678)*
DEnglish	0.522 (1.721)*		0.369 (1.416)	
DFrench		-0.328 (-1.344)		-0.195 (-0.925)
Adjusted R2	0.63	0.62	0.70	0.69
F statistic	14.645	14.080	19.712	19.002
# Obser.	68	68	68	68

Numbers in parentheses are heteroscedasticity consistent t ratios. *, ** and *** denote significance at the 10%, 5% and 1% level respectively.

The association between corruption and democracy is illustrated in Figure 1. The downward-sloping trend line indicates that more corrupt countries tend to have less democracy. The bivariate correlation between corruption perception index and democracy index is -0.51. (Appendix III).

The relation between corruption and bureaucracy is depicted in Figure 2. The upward-sloping trend line shows that more corrupt countries tend to have more bureaucracy. The bivariate correlation between corruption index and bureaucracy index is 0.76. (Appendix III).

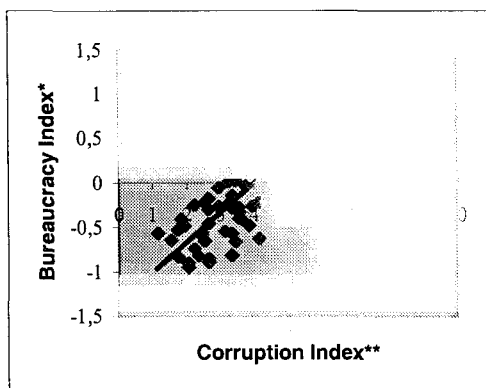
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* A high score in the democracy index indicates a low level of democracy

** A high score in the corruption index indicates a low level of corruption

Figure 1. Corruption and Democracy



* A high score in the bureaucracy index indicates a low level bureaucracy

** A high score in the corruption index indicates a low level of corruption

Figure 2. Corruption and Bureaucracy

V. CONCLUSION

This study, by using cross sectional data for the sample of 68 developing countries, has shown that Transparency International's Corruption Perception Index (CPI) is negatively associated with democracy and positively associated with bureaucracy. Empirical evidence of this paper suggests that more corrupt countries tend to have less democracy and more bureaucracy.

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The primary policy recommendation of this paper is that, in order to reduce corruption in developing countries public sector reforms that aimed to eliminate bureaucracy and policies to enhance democracy are the crucial components of an anti-corruption strategy. Moreover, policies that aimed to enhance competition in economy, politics, government transparency and accountability are necessary to reduce corruption and power abuse in developing countries.

Appendix I. Country List

Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Botswana, Bolivia, Brazil, Bulgaria, Cameroon, Chile, China Colombia, Costa Rica, Cote d'Ivoire, Croatia, Czech Republic, Ecuador, Egypt, El Salvador, Estonia, Ghana, Guatemala, Honduras, Hungary, India, Indonesia, Jamaica, Jordan, Kenya, Latvia, Lithuania, Malawi, Malaysia, Mauritius, Mexico, Moldova, Morocco, Mozambique, Nicaragua, Nigeria, Pakistan, Paraguay, Peru, Philippines, Poland, Romania, Russia, Senegal, Slovak Republic, Slovenia, South Africa, Taiwan, Tanzania, Thailand, Tunisia, Turkey, Uganda, Ukraine, Uruguay, Venezuela, Vietnam, Yugoslavia, Zambia, Zimbabwe.

Appendix II. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std.Dev
CPI 1999	68	1.10	6.90	3.4603	1.2524
CPI 2000	68	1.10	7.40	3.4338	1.2857
Bureaucracy	68	-1.32	1.29	-0.1742	0.5522
Rule of Law	68	-1.22	1.28	-0.1407	0.6211
Democracy	68	1.50	7	3.5441	1.5277
Ethnic Fractionalization	54	0	0.89	0.3851	0.3171
Sec. Sc. Enr. Rate	55	0.90	9.80	4.9400	2.5117
Legal Origin (British)	66	0	1	0.2576	0.4407
Legal Origin (French)	66	0	1	0.4394	0.5001

Appendix III. Correlation Matrix

	1	2	3	4	5	6	7	8	9
1.CPI 1999	1								
2.CPI 2000	0.95	1							
3.Bureaucracy	0.76	0.78	1						
4.Rule of Law	0.74	0.75	0.77	1					
5.Democracy	-0.51	-0.49	-0.45	-0.44	1				
6.Ethnic Fractionalization	-0.20	-0.24	-0.27	-0.14	0.28	1			
7.Sec. Sc. Enr. Rate	0.26	0.24	0.36	0.19	-0.51	-0.61	1		
8.Legal Origin (British)	-0.03	-0.05	-0.22	-0.03	0.09	0.49	-0.55	1	
9.Legal Origin (French)	0.02	0.04	0.19	-0.09	0.04	-0.22	-0.02	-0.52	1

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REFERENCES

- ACKERMAN, Susan R. (1999), *Corruption and Government: Causes, Consequences, and Reform*, Cambridge: Cambridge University Press, UK.
- ACKERMAN, Susan R. (1997), "The political Economy of Corruption" *Corruption and the Global Economy*, (Ed), Kimberly Ann Elliot, Institute for International Economics, Washington D.C.
- BRINKERHOFF, W. Derick, (1999), "Identifying and Assessing Political Will or Anti-Corruption Efforts" *Working Paper*, No.13, A Publication of USAID's Implementing Policy Change Project.
- DELLA PORTA, Donatella, PIZZORNO, Alessandro (1996), *The Business Politicians: Reflections from a Study of Political Corruption*, (Ed), Michael Levi and David Nelken, The Corruption of Politics and the Politics of Corruption, Oxford: Blackwell.
- EIGEN, Peter, (1996), "Combating Corruption Around the World", *Journal of Democracy*, Vol.7, No.1, 158-168.
- FREEDOM HOUSE, "Freedom in the World 1997-1998", <http://www.freedomhouse.org>.
- GRAY, Cherly W., KAUFMANN, Daniel (1998), "Corruption and Development," *Finance and Development*, IMF, March 1998.
- HOPE, Kempe R., (1985) "Politics Bureaucratic Corruption and Maladministration in the Third World" *International Review of Administrative Sciences*, Vol.51, No.1, 1-6.
- HUSTED, Bryan W. (1999), "Wealth, Culture, and Corruption," *Journal of International Business Studies*, Vol 30, No 2, 339-360.
- JOHNSTON, Michael,(1998) "Fighting Systemic Corruption: Social Foundations for Institutional Reform", (Ed) , ROBINSON, Mark, *Corruption and Development*. Frank Cass Publisher , London
- KAUFMANN, D., A. Kraay and P. Zoido - Lobaton, (1999), "Governance Matters", *World Bank*

Policy Research Working Paper 2196.

- KAUFMANN, Dani, Aart KRAAY, Pablo ZOIDO-LOBATON, (1999), "Aggregating Governance Indicators", *World Bank Policy Research Working Paper* 2195, 1999.
- KLITGAARD, Robert, (1988), *Controlling Corruption*, Berkeley: University of California Press, Paperback Edition. **217**
- LA PORTA, Rafael, Florencio Lopez-de SILANES, Andrei SHELEIFER, Robert Vishny, (2000), "The Quality of Government," *The Journal of Law, Economics and Organizations*, Vol.15, No:1, 222-279.
- LAMBSDORFF, Johann G. (1999), "Corruption in Empirical Research - A Review," *Transparency International Working Paper*, Berlin.
- MAURO, Paolo (1997), "The Effects of Corruption on Growth, Investment, and Government Expenditure: A Cross Country Analysis", ELLIOT, Kimberly A. (Ed), *Corruption in the Global Economy*, Institute for International Economics, Washington, USA, 83-107.
- MAURO, Paolo, (1995), "Corruption and Growth," *Quarterly Journal of Economics*, Vol 110, No 3, 681-712.
- OSEI-HWENDIE, Bertha Z., Kwaku OSEI - HWENDIE, (2000), "The Political, Economic, and Cultural Bases of Corruption in Africa", (Ed), HOPE, Kempe R. and, CHIKULO Bornwell C., *Corruption and Development in Africa : Lessons from Country Case-Studies*, Macmillan Press Ltd, London.
- PALDAM, Martin (1999), "The Big Pattern of Corruption: Economics, Culture, and Seesaw Dynamics", *Working Paper No.11*, Center for Dynamic Modeling in Economics, Department of Economics, University of Aarhus, Denmark.
- ROTH, Guenther, WITTICH, Claus (1978), *Max Weber: Economy and Society Volume II*, Berkeley: University of California Press.
- SHLEIFER, Andrei, VISHNY Robert W. (1993), "Corruption," *Quarterly Journal of Economics*, Vol 108, No 3, 599-617.
- TANZI, Vito (1998), "Corruption Around the World: Causes, Consequences, Scope, and Cures," *IMF Working Paper*, WP/98/63, International Monetary Fund, Washington.
- THEOBALD, Robin (1990), *Corruption, Development and Underdevelopment*, Durham: Duke University Press.
- TRANSPARENCY INTERNATIONAL, "The Corruption Perception Index, 1999, 2000", <http://>.
- TREISMAN, Daniel (2000), "The Causes of Corruption: A Cross National Study," *Journal of Public Economics*, Vol 76, 399-457.
- WORLD BANK, Country Data: <http://www.devdata.worldbank.org/data-quary/>
- WORLD BANK, *Helping Countries Control Corruption: The Role of the World Bank*, Washington D.C., 1997.