

DOES CORRUPTION IMPROVE EFFICIENCY? SOME NEW RESULTS FROM THE WORLD BANK SURVEY (1996)

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ABSTRACT: This Study examines leff's claim that corruption improves efficiency by avoiding cumbersome and lengthy government procedures in less developed countries. Using three different measures of corruption from the World Bank Survey, the study concludes that corruption does not improve government's efficiency for the sample of 54 less developed countries after controlling other variables. Thus, government instead of selling their inefficient units should adopt meaningful policies to combat corruption.

1. INTRODUCTION

Corruption plays a destructive role in the progress and development of any society. Countries around the globe are facing the problem of corruption, albeit in different capacity. The topic of corruption has received immense attention during the late 1990s when a stream of systematic empirical studies has emerged to ascertain its causes and its effects. Moreover, the debate on the beneficial and detrimental effects of corruption gets central position in the empirical literature. One body of theoretical literature on the effects of corruption demonstrates that corruption improves efficiency and leads to economic growth by avoiding cumbersome and lengthy government procedures. Nathaniel H. Leff (1964) first gave this idea. Although the current empirical literature on the effects of corruption has vehemently and unambiguously demonstrated that corruption retards economic growth, studies looking at the impact of corruption on the efficacy of the provision of public services to the people in less developed countries are missing. The purpose of this paper is therefore to examine this corruption-efficiency puzzle.

The study is organized as follows. Section II reviews the theoretical and empirical literature. Section III describes data sources and methodology of this empirical investigation. Section IV presents the empirical results and last section summarizes the empirical results.

2. LITERATURE REVIEW

One argument in the body of theoretical literature on the effects of corruption claimed there could be positive effects of corruption on economic growth,² However, a second group of scholars rebutted the contention that corruption has benefits for economic growth.³ This latter group took the position that corruption is unequivocally inimical to economic growth. Current empirical economic literature on the effects of corruption generally argues that corruption has significant, deleterious effects on economic growth.⁴

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Mauro (1995) using subjective indices of corruption assembled by Business International (BI) provides empirical evidence that corruption lowers investment and economic growth. He finds that corruption lowers private investment and economic growth even in sub samples of countries in which bureaucratic regulations are very cumbersome. Using different institutional variables from International Country Risk Guide (ICRG) and Business Environment Risk Index (BERI), Knack and Keefer (1995) come up with broadly similar results. They show that institutional variables⁵ have a significant direct effect on growth in addition to the indirect effect through investment.

Mauro's (1995) analysis, however, does not distinguish between different forms of corruption. He implicitly assumed the impact of all types of corruption on growth is same. Wedeman (1997) analyses the effects of corruption on growth by categorizing corruption into three categories; looting, rent-scraping and dividend-collecting. Looting creates capital outflow because of insecurity, whereas rent scraping distorts the allocation of capital towards rent seeking sector. Contrary to both looting and rent scraping, dividend collecting gives incentives to corrupt officials to encourage domestic enterprise to invest and prosper in order to share their profits. The author then gives a comparative analysis of corruption and growth in three economies; Zaire, South Korea, and Philippines. The study concludes that the effect of corruption on growth will depend on the method the corrupt monies are extracted and how they are disposed.

Corruption may also affect the composition of government expenditure. In order to receive bribe with fewer chances of detection, corrupt officials alter spending allocation. Mauro (1997) finds a negative and significant relationship between corruption and the share of government expenditure on education in total spending because expenditure in education is not susceptible to corruption. Moreover, expenditures on the construction of hospital buildings and on medical equipment are more prone to corruption than the payment made to doctors and nurses. However, the data does not support the hypothesis that corruption leads to high capital expenditures (Mauro 1997).

More importantly, the claim that corruption serves the role of speed money was also rejected. Kaufmann and Wie (1999) presented arguments against the positive effect of corruption. They formulated a model where they have shown that corruption reduces bureaucratic delays only when these delays are exogenous. They showed that bureaucrats intentionally create hurdles what they call "harassment" in order to receive more bribes. They supported their views by using empirical analysis. They have used three different sources, two global competitiveness report, and world development report, for data on bribery and various measure of harassment.⁶ Their results show that bribery does not serve as speed money as documented in Leff (1964) and Huntington (1968). They also found that large firms or firms with foreign participation spend less time

² Leff (1964), Huntington (1968), Myrdal (1968), and Tanzi (1994).

³ Alam (1990), Murphy, Shliefer, and Vishny (1991), Rose Ackerman (1997), Kaufmann and wei (1999)

⁴ Mauro (1995), Tanzi, and Hamid (1997)

⁵ The study uses different measures of institutional quality and the security of property and contractual rights such as bureaucratic quality, corruption, risk of expropriation and risk of repudiation.

with government officials to settle any transaction. Thus foreign firms have advantage to overcome government regulations more easily than domestic firms.

Surprisingly the current cross section empirical literature on the effects of corruption has not tested Leff's claim that corruption improves government's efficiency in delivering services. This study will attempt to test this hypothesis using data on government's efficiency in delivering services and various measures of corruption from the World Bank survey (1996) and Transparency International.

3. DATA DESCRIPTION AND METHODOLOGY

In this study four different indices have been used to measure the perception of corruption, three from the World Bank survey⁷ and one from the Transparency International. Question 12n of section III of the questionnaire (survey) represents the index of total corruption. The question is as follows: "Please judge on a six point scale (1-6) how problematic corruption is for doing business". An index of 1 means negligible corruption, while an index of 6 means high corruption. Question 14 of section IV of the questionnaire (survey) represents the index of bribery. The question is as follows: "It is common for firms in my line of business to have to pay some irregular "additional payments" to get things done. Is this statement true?" Six answers listed afterwards are "always", "mostly", "frequently", "sometimes", "seldom", and "never". Similar to question 14, question 16 of the same section represents the index of unorganized bribery. The question is as follows: "Even if a firm has to make an "additional payment" it always has to fear that it will be asked for more, e.g. by another official. Is this statement true?" Six answers "always", "mostly", "frequently", "sometimes", "seldom", and "never" are listed at the end of the question. For each country the replies to the 6 categories are aggregated, yielding categorical data on bribery and unorganized bribery.

Question 25 of section V measures the perception of overall efficiency of the government in delivering services. The question is as follows: "How would you generally rate the efficiency of government in delivering services? Six answers "very efficient", "efficient", "mostly efficient", "mostly inefficient", "inefficient", and "very inefficient" are listed at the end of the question. For each country the replies to the 6 categories are aggregated, yielding categorical data on overall efficiency of the government.

After re-scaling all original indices from a 1 (high) to 6(low) scale to a 1 (low) to 6(high) scale, I have converted all corruption indices and the index of overall efficiency from a 1 (low) to 6(high) scale to a 0 to 10 scale. An index of 0 means negligible corruption (and very efficient government), while an index of 10 means high corruption (and very inefficient government).

The share of total imports in GDP measures the level of foreign competition in the country. The data on share of imports in GDP are for 1996 and are taken from World Development Indicators. The data on GDP growth is taken

They have used several measures of bureaucratic harassment such as the time spent by managers with bureaucrats, unpredictability, cost of corruption, and measure of regulation. For detail of these measures see Kaufmann and Wie (1999) page 7. ⁷ See World Bank Survey (1996).

from the World Development Indicator for 1996. The data on literacy rate is taken from the human development report for 1997.

Following model will be used to examine the impact of corruption on government's efficiency after controlling other factors such as measure of foreign competition, level of education, GDP growth, etc.

$$EI_{i,t} = \alpha + B_{i,t} PC + \psi_{i,t} X_{i,t} + \varepsilon_{i,t}$$

EI is the efficiency index; PC is the measure of corruption; X is a vector of controlled variables and ε is the error term. The model is estimated using ordinary least square method. Each model is corrected for heteroskedasticity.

4. EMPIRICAL RESULTS

The results are presented in table 1. The coefficients of all variables have expected sign except for the literacy rate.

Table # 1

Dependent Variable: Efficiency Index:

Independent Variables	I	II	III	IV
Constant	0.73 (0.59)	2.87 (2.58)**	2.47 (2.24)**	3.06 (2.50)**
GDP Growth	-0.08 (-3.33)***	-0.074 (-2.76)***	-0.07 (-2.56)**	-0.07 (-2.13)**
Literacy Rate	0.02 (-2.98)***	0.03 (2.96)***	0.03 (3.32)***	0.02 (2.02)*
Dummy for African Countries	0.72 (2.35)**	1.19 (3.20)***	1.23 (3.47)***	0.62 (1.90)*
Import	-0.004 (-0.89)	-0.01 (-1.63)#	-0.01 (-1.52)#	-0.005 (-0.53)
Total Corruption	0.58 (3.94)***			
Bribery		0.27 (2.72)***		
Unorganized Bribery			0.33 (3.05)***	
TI Corruption Index				0.29 (2.78)***
Adjusted R Squared	0.42	0.31	0.33	0.27
Number of Observations	54	54	54	35

15% level of significance * 10% level of significance, ** 5% level of significance, *** 1% level of significance

Results are adjusted for heteroskedasticity. Figures in parenthesis are t-values. The data on all variables are for 1996 except literacy rate that covers the period of 1997.

Results show that corruption does not improve government's efficiency in delivering services after controlling GDP growth, measure of foreign competition, literacy rate and a dummy for African countries. The coefficients of all corruption indices range from 0.27 to 0.58 showing a one unit increase in corruption index would at least bring efficiency down by quarter of a point. Thus, Leff's claim that corruption improves government efficiency in delivering services is rejected for the sample of 54 developing countries. However, this direct relationship between government efficiency and various corruption indices from the World Bank survey may be misleading as they reflect the perception of the same group of respondents. To tackle this problem I have estimated the same model by using corruption index from Transparency International and found similar results. The results also demonstrate that high GDP growth rate increases government efficiency whereas the level of foreign competition decreases government efficiency. Finally, the coefficient of dummy for Africa is positive and significant in all cases suggesting the fact that in African societies, the governments are inefficient with high level of corruption.

5. CONCLUSIONS

This study evaluates Leff's claim that corruption improves efficiency of the government in delivering services by using data from the World Bank Survey (1996). Using four different indices of corruption the study finds that corruption accentuates government's inefficiency in delivering services after controlling GDP growth, level of foreign competition, and literacy rate. The regression results must be considered with caution because the indices of bribery are individuals' perceptions about corruption. Moreover, the indices of bribery used in this study do not capture corruption caused by multinational agencies. The future research should investigate the role of the government to circumvent corruption caused by these multinational organizations. Moreover, future research should also examine the relationship between corruption (bribery) and government efficiency at various threshold levels of government regulations. One important policy prescription that can be derived from this analysis is that government should, instead of privatizing its inefficient units, adopt policies that mitigate corruption.

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