

Why is The Effect Corruption on Economic Growth Less Harmful in Some Developing Countries Than in Others?

Running title: **Administrative Corruption and Economic Growth**

M. Taghavi², H. Nikoomaram², Ms. S. Tootian³

¹Department of economic, Science and Research Branch, Islamic Azad University (IAU), Tehran, Iran

²Department of Business Management, Science and Research Branch, Islamic Azad University (IAU), Tehran, Iran

³(Ph.D Student)Department of Public Management, Science and Research Branch, Islamic Azad University (IAU), Tehran, Iran

ABSTRACT

We studied the impact corruption on the economic growth that we know why is the effect corruption on economic growth less harmful in some developing countries than in others? Thus we compared ECO member countries and OPEC member countries. This article is dealing with the relationship between corruption and economic growth of ECO member countries and OPEC member countries and why is the effect corruption on economic growth less harmful in some developing countries than in others? The time period under consideration is 2003-2008. The results of research based on Panel data approach indicate a reverse and significant relation effect between corruption and economic growth of ECO member countries and OPEC member countries, the impact of the corruption on economic growth is longer in developing non oil countries.

KEY WORDS: Corruption, Administrative corruption, Economic growth, ECO, OPEC.

INTRODUCTION

For many years, economists have been trying to discover the factors effecting economic. the traditional models of growth, countries and even technologies were supposed to be equal. At the second stage, entering other variables such as "human capital", "rate of development of financial sector" and "the nature and quality of macro economic policies" in different countries, economists tried to minimize the unexplained residuals. At the third stage, researchers began to concentrate their attention on "non-economic factors" which were effecting on growth. Attention to uneconomic factors was explaining another root for the heterogeneous. Conditions of countries (Sharif Azadeh, 2003).

In this area, other broad studies were made by economists and considerable results were obtained. Subjects such as corruption in administrative bodies, quality of bureaucracy and issues like that were new variables which entered into the literature of economic growth at this stage.

-Alam believes that administrative corruption is a deviation from standards, norms and modern bureaucracy measures (Alam, 1989).

-Some of the researchers believe that administrative corruption is an instrument to deviate people from duties or performances which result from their formal duties and activities related to political and economic issues (Okogbule, 2006). In the views of Tanzi, (1998), the factors effecting administrative corruption in the public sector are divided into two parts of direct and indirect ones.

1) Direct factors: The factors in which governments have a direct role including: government regulations and authorities, tax regulations, decision making related to government expenditures, supply of goods and services below the market price and decisions which are in the interests of parties or supplying them financially.

2) Indirect factors: Including bureaucracy quality, level of wages of public sectors, punishment system, institutional controls, rules transparency, rules and procedures and models of leaders' behaviors (Tanzi, 1998).

Some of the researchers believe that there is corruption everywhere but the type of corruption and factors effecting on it are not the same everywhere (Rodriguez, 2005). The viewpoint of the impact of administrative corruption on economic growth: The viewpoint of the first group: They believe that administrative corruption will cause the increase of economic growth. Among the views of this group, the following are presented:

Bayley (1966) states: Administrative corruption either in form of bribe and percentage or in form of payment in the side of bribers can lead to the increase of resource distribution in the direction of investment. He adds that the transfer of rare resources through corruption on behalf of ordinary people to a group who are relatively expert and have more information on the grounds of economic growth and perspectives for the creation of wealth can increase investment and wealth production which in turn will bring about economic growth. He argues that in countries where there is a considerable data asymmetry, consequently as a result of this indefinite state, risk of investment is relatively high. So the public staff and authorities who have more data on economic conditions as compared with the public will make a considerable increase in the creation of wealth and real investment through bribe. In addition to these specific economic problems, the future investor should notice his own political environment. So, administrative corruption can help investors to have more control on the political process and interfering government activities in order to minimize the negative impacts of uncertainty and political stability on investment. Also he puts that administrative corruption is a factor for the increase of political participation of communities, groups and individuals who used to be in the margin historically or deprived (Bayley, 1966).

Leff (1964) states that administrative corruption can serve two important and controversial goals. First, administrative corruption can be used to correct and improve relationships between private sector and public authorities and add to the abilities of contribution of these two groups in the formation and materialization of public policy. Secondly, administrative corruption can help the public and social to convert into supporters of plans of wealth and welfare creation being designed by private sector. It can create opportunities in which governmental plans and regulations may not have negative impacts on useful activities of private sector (Leff, 1964). The viewpoint of the Second Group: They believe that administrative corruption is negative and important obstacle for the economic growth and modernization. Bardhan (1997) states that administrative corruption is an important obstacle in the path of economic growth which takes place through various channels. In an environment where there is an administrative corruption, rent (using special advantages) is more profitable as compared with production work and power of intellects is allocated inappropriately. Financial motivations might make gifted and educated people involve in rent rather than contribution in an economic job and this will bring about the reduction of economic growth rate of the country. On the other side, in such kind of environments, businessmen and merchants know that before starting any thing, they should pay bribe and consider this amount as a kind of tax (of course of the damaging type). So, as this job is done in a hidden form, it is always possible that the receiver of bribe does not perform his commitments and these issues might make investors disappointed and reduce the economic growth rate accordingly. Administrative corruption will make interference in international commerce, investment flow, and forcing citizens not to trust their governing system and disrespect it. It also prevents from new inventions and innovations in various areas which reduces economic growth (Bardhan, 1997). Mauro (1995) studied the impacts of corruption on GPP in 16 countries (1960-1985). The results of this systematic study show that there is a standard deviation in the index of corruption. Also the combination of government costs is under the corruption considerably. This study shows that corruption tends to a direction in which force people ignore education and health in sectors and components of society. This will have a damaging impact on the economic growth in long term (Mauro, 1995). Tanzi and Davoodi (1997) did a quantitative study in collaboration with the World Bank. In that article, the impact of corruption was studied within the format of four assumptions on variables of public investment, government income, operational costs and maintaining public capitals and public investment quality. The results of the study indicates the followings: Corruption at high level is convergent with public investment at a large scale. Corruption at high level is convergent with the low income of government.

Corruption may cause the reduction of government incomes in particular if it acts in the direction of tax evasion, inappropriate tax exemption or weakness of tax management system.

As the opportunity for corruption and bribe is created more effectively in new investments rather than administration of existing infrastructural facilities and opportunity for bribe is created through encouraging new public investment, so that corruption can lead to the reduction of allocation of resources.

-Assuming other conditions are fixed, corruption at high level is convergent with low allocation of sources to supply operational costs and maintaining basic investments. -With the assumption of fixation of other conditions, there is a convergence between corruption at high level and low quality of basic investments.

In general, they have explained the following results on corruption:

-Corruption will increase the amount of investment and the expenditures of government may be retouching by a high ranking official due to bribe.

-Corruption will make public costs deviate from being spent on education and health issues.
 -Corruption tends towards reduction of income tax and benefit because corruption reduces the ability of government to collect taxes and tariff (Tanzi and Davoodi, 1997).

Usman (2008) did his studies aiming at identification of the impact of corruption on the economic growth in Nigeria for 1986-2007. He entered variables such as physical, human capitals and government costs and finally concluded that corruption has a negative impact on economic growth. Also corruption has a negative effect on human and physical capitals but corruption has a positive effect on governmental costs, i.e. with the expansion of costs and size of government, corruption would increase and thus they concluded that the impact of corruption on the economic growth of Nigeria is in direct and indirect forms (Usman, 2008).

Some of the researchers including Lin and Nedman (2002), Vicente (2009) and Aslksen (2007) came to this conclusion in their researches that the countries which have a high rate of oil and mineral materials, there are more corruption and economic growth is less and the reason is the quality of their democratic institutions (Holder, 2009)

MATERIAL AND METHODS

Countries under Investigation

In order to estimate the regression model, the data related to economic and non-economic variables affecting economic growth of countries have been used as presented in Table 1 and 2. We choice them because all countries are member of ECO or member of OPEC. In Table (1) and (2), countries under investigation in this research are presented in terms of income groups according to the World Bank ranking (2008).

Table 1.List of Countries under Investigation in the Research (ECO)

Income group	Country
Low income	Pakistan
High medium income	Turkey
Low income	Kazakhstan
Low income	Turkmenistan
Low income	Uzbekistan
Low income	Kyrgyzstan
Low income	Azerbaijan

Table 2. List of Countries under Investigation in the Research (OPEC)

Income group	Country
Low medium income	I.R. of Iran
Low income	Indonesia
Low income	Nigeria
Low medium income	Algeria
high medium income	Venezuela, R.B.
high medium income	Saudi Arabia
Low income	Libya
high income	Kuwait
high income	Qatar
high income	United Arab Emirates

RESEARCH METHOD

This research with regard to its nature is an applied research. In this research data and necessary information have been collected and analyzed based on correlation model. data related to corruption (independent variable) being taken from the internet site of Transparency Organization determine the index of corruption and rate of administrative corruption. Some of the forms of corruption from the viewpoint of these institutions are: asking for additional amount and bribe when issuing permit for exports or imports, determining tax, obtaining loan and issues like taking side, paying attention to relatives, delivering jobs to acquaintances.

Also data related to the economic growth (dependent variable), capital assets and labor force (dependent variable) were collected through internet site of World Bank.

REGRESSION ANALYSIS

Base Model

In order to estimate the production function in ECO member countries and OPEC member countries, we used econometric method and regression. Based on this model, the impact corruption on

the economic growth was fitted and then the proper model was estimated in Form of the following linear regression:

$$Y = \alpha_0 + \alpha_1 C(-4) + \alpha_2 K + \alpha_3 L$$

$$Y = \alpha_0 + \alpha_1 C(-6) + \alpha_2 K + \alpha_3 L$$

Y= Economic growth of in ECO member countries and OPEC member countries.

C= corruption in ECO member countries and OPEC member countries.

K= fixed capital in ECO member countries and OPEC member countries.

L=Growth of labor force in ECO member countries and OPEC member countries.

a=width from origin.

ai=Coefficient of independent variable.

Estimation of corruption in ECO member countries and OPEC member countries.

$$Y = -8/42C(-4) + .36K + .12L + .19\alpha$$

$$Y = -1.4C(-6) + .4 K + .16L - 6.8\alpha$$

The data were analyzed using views economic software. P Values of 0/05 were considered indicative of a statistically significant difference.

RESULTS AND DISSCUSSION

We studied the impact corruption on the economic growth that we know why is the effect corruption on economic growth less harmful in some developing countries than in others? Thus we compared ECO member countries and OPEC member countries. The results of the analysis are presented in table(4-5).

Using Table No.4, it is observed that t-statistic of corruption is (3.18) at the level of $p=(0/05)$ significant. So, the hypothesis H_0 that indicates the lack of relation between corruption and economic growth at the confidence level of 95% is rejected. So, our research hypothesis is confirmed. With a closer look, it is observed that the coefficient of corruption is estimated to be -8.4 which means if other conditions being unchanged, if there is a one percent increase in the indexes of corruption, then in average we will expect to have -8.4 percent reduction in the economic growth rate in the following four period. For the capital, $t=(3.7)$ which confirms the significance of the coefficient of capital at the level of $p=(0/05)$. So the hypothesis of H_0 that there is no relation between economic growth of ECO member countries and capital assets is rejected at the confidence level of 95%. Thus our research hypothesis is confirmed. Having a closer look, it becomes clear that the coefficient is estimated to be 0/36 and this means that, if other things are constant one percent increase in the capital asset of, in ECO member countries. On average we will expect an increase in .36 percent rate economic growth in those countries.

The t-statistic for growth of labor force (4.6) is at the level $p=(0/05)$ which confirms the significance of the coefficient of growth of labor force. So the hypothesis of H_0 which indicates the lack of link between growth of labor force of ECO member countries. at the level of 95% certainty is rejected. So our research hypothesis is confirmed. Having a more precise observation, it is learned that the coefficient of growth of labor force is estimated to be .12 which means if other things are constant, and a one percent increase in growth of labor force, on average we will expect an increase in .12 percent rate economic growth in those countries.

Using Table No.5, it is observed that t-statistic of corruption is (6.39) at the level of $p=(0/05)$ significant. So, the hypothesis H_0 that indicates the lack of relation between corruption and economic growth at the confidence level of 95% is rejected. So, our research hypothesis is confirmed. With a closer look, it is observed that the coefficient of corruption is estimated to be -1.4 which means if other conditions being unchanged, if there is a one percent increase in the indexes of corruption, then in average we will expect to have -1.4 percent reduction in the economic growth rate in the following six period.

For the capital, $t=(3.2)$ which confirms the significance of the coefficient of capital at the level of $p=(0/05)$. So the hypothesis of H_0 that there is no relation between economic growth of OPEC member countries and capital assets is rejected at the confidence level of 95%. Thus our research hypothesis is confirmed. Having a closer look, it becomes clear that the coefficient is estimated to be 0/4 and this means that, if other things are constant one percent increase in the capital asset of, in OPEC member countries. on average we will expect an increase in 0/4 percent rate economic growth in those countries.

DISCUSSION

Based on the results of the present research : the high level of corruption has caused the inefficient position of the governmental policies and will bring about the reduction of output of investment and consequently the reduction of economic growth. By the way, corruption can move the investment and economic activities from its productive form towards rent (a lucrative privilege) and underground activities and breeds terrifying organizations. The expanded and pervasive corruption is one of the signs of the weakness of sovereignty and the weak performance of sovereignty can reduce directly the trend of economic growth and development.

In this area, With regard to two groups of different views on the impact of administrative corruption on economic growth which have been presented, the results of our research indicate that the impact of administrative corruption on the economic growth of OPEC member countries and ECO member countries is non-functional and damaging and is convergent with the second group like: Lin and Nedman (2002), Vicente (2009) and Ashhsen (2007).

But the impact of the corruption in oil producing countries such as OPEC countries is long term than ECO member countries. In fact the results of research indicated that corruption does not interrupt the economy at the same moment, but with a six year pause, it has influence on the growth. Perhaps one of its reasons is that the corruption makes unjust distribution of income and removes its damaging impact in the short term but it has unfavorable impacts on the economic growth in long term.

Despite the views of the first group who considers corruption as functional and useful, They believe that administrative corruption will cause the increase of economic growth like: Bayley (1966), (Leff, 1964).

Conclusion

We studied the impact of the administrative corruption on economic growth of member countries of OPEC and ECO. The results of research with the panel data indicate that: administrative corruption in member countries of OPEC and member countries of ECO has a reverse and meaningful relation with their rate of economic growth.

The impact of the corruption in oil producing countries such as OPEC countries is long term than countries, so our research hypothesis is confirmed. In fact the results of research indicated that corruption does not interrupt the economy at the same moment, but with a six year pause, it has influence on the growth. Perhaps one of its reasons is that the corruption makes unjust distribution of income and removes its damaging impact in the short term but it has unfavorable impacts on the economic growth in long term.

Table4. Descriptive statistics of the research for ECO member countries

Variable	Coefficient	Std. Error	t-Statistic	Prob
K	.36	2.6	3.7	0.0003
Log C(-4)	-8.42	.09 0	-3.18	0.0 008
L	.12 0	.027 0	4.6	0.00 1
a	.19 0	0.06	.06	0.95
0.90	$R^2 =$	F=98.9 P=0.000	D-W=1.97	

Correlation is meaningful in95% level of confidence

Table 5. Descriptive statistics of the research for OPEC member countries

Variable	Coefficient	Std .Error	t-Statistic	Prob
K	4.	.04	9.7	.000 0
C(-6)	-1.4	.22 0	-6.3	.000 0
L	.16 0	.02 0	6.7	0.000
α	6.8	1.2	-5.3	.000 0
$R^2 = 0.91$		F=48.3 P=0.000	D-W=1.42	

Correlation is meaningful in95% level of confidence

REFERENCES

- Aguilera, R.V. and Vdera, A.K. 2008 . The dark side of authority: antecedents, mechanisms, and outcomes of organizational corruption. J. Business Ethics 77(4), 431-49.

- Alam, M.S., 1989. Anatomy of Corruption: An approach to the political Economy of under development. *Amer. J. Economics and Sociology* 48(4), 441 -56 .
- Bardhan, P. , 1997. Corruption and Political Development: A Review of Issues. *J. Economic Literature* 35(3), 1320-46.
- Bayley , D.H., 1966. The Effects of Corruption in Developing Countries . *National western political* 19 (4) , 719-32.
- Holder R., 2009. Natural resource , democracy and corruption. *Euro . J. Economic Review* 1(10), 4.
- Leff , H.,1964. Economic Development Theory Bureaucratic Corruption . *American Behavioral Scientist* 8(2), 8-14.
- Mauro, P., 1997. The Effect of corruption on Growth, Investment and Government Expenditure: A cross country Analysis. *Corruption and Global economy. J. public Economics* 69(2), 126-159.
- Neeman , Z. and M.D, Simhon , 2008. Corruption and openness. *J. Economic Analysis and policy* 1(8), 106.
- Okogbule, N.S., 2006. An appraisal of the legal and institutional frame work for combating corruption in Nigeria. *J. Financial Crime* 13(1), 92-106.
- Rodriguez, P. Uhlynbbrk, K. and L. Edema , 2005. Government corruption and the Entry strategies of multinationals. *Academy of management review* 30(2), 383-386.
- Tanzi, U, 1998. Corruption Around the world: causes, consequences, Scope, and Cures. Available: bank.org. *International Monetary Fund Washington DC* 9(8), 63.
- Vicente, P.C., 2009. Challenges and opportunities for resource rich economies. *Oxcarre Research. Paper* 2008-2005
- Usman, S, 2009. Corruption and Economic Growth in Nigeria. *J. Mpra Economic Freedom* 13(1), 1-20.