Comparing Impact of Administrative Corruption on Economic Growth in Developing Countries

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ABSTRACT: In the initial models of economic growth, economic factors entered in to models but in the following models, non-economic factors entered in to models. Many broad studies were done on this subject by the economists, and already considerable results were obtained. Subjects such as corruption in the administrative bodies were new variables entering the literature of economic growth at that stage. In this area, we studied the impact of administrative corruption on the economic growth of ECO member countries and OPEC member countries. The paper presents a comparative study on oil producing developing countries and non-oil producing developing countries for the period of 2003-2008. All ECO member countries with the exception of Iran, Iraq and Afghanistan and also OPEC member countries are included in this study . The results of research based on Panel data approach indicate a reverse and significant relation effect between administrative corruption and economic growth of ECO member countries and OPEC member countries.

INTRODUCTION

Corruption has exited in almost all human societies throughout the history of mankind. In other words, there is no country in the world that has not experienced administrative corruption (Mukum, 2002). Alam (1989), believes that administrative corruption is a deviation from standards, norms , and modern bureaucracy measures. Soon (2006) has defined corruption as a type of non-transparent and illegal activity which might be done overtly or covertly 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).

According to the views of Nay, administrative corruption is the deviation from regular duties of a governmental official for the sake of family and social interests, gaining financial incomes or specific type of influence for personal issues (Mukum, 2002). Reviewing the existing definitions of administrative corruption, it can be concluded that in all definitions, corruption is a transfer of interests between the public and private sectors in which the pubic interests are directed towards private interests.

Mauro (1998), believes that the roots of corruption in the public sectors are commercial restrictions, subsidies low wages of public sector, natural resources reservoirs, sociological factors and the scope of interference of government in undertaking affairs. He adds that to the extent that undertaking duties are under the control of government grounds will be paved for the emergence and expansion of corruption (Mauro, 1998).

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Aguilera and Vdera (2008) think that administrative corruption results from the organizational corruption when individuals use the organizational power to achieve personal objectives.

The Viewpoint of the Impact of Administrative Corruption on Economic Growth

The viewpoint of the researchers who are of the belief that the administrative corruption will lead to the economic growth is given in the following section.

Bayley (1966) states: Administrative corruption either in form of bribe and percentage or inform 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 gain more control on the political process and interfere 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) has also stated that administrative corruption serves the cause of economic growth in two important and controversial areas. 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 a 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 a negative and important obstacle against the cause of the economic growth and modernization.

Bardhan (1997) states that administrative corruption is an important obstacle on 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 anything, 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; consequently, citizens do not trust their governing system and disrespect it. It also prevents new inventions and innovations in various areas which reduces economic growth (Bardhan, 1997).

Literature Review

Ackerman (1996) studies the economic impacts of corruption and argues that corruption reinforces the efficiency. The first reason for this claim is that if corruption merely causes the transfer of economic rent from one person to a governmental official, it can not interfere in the economic short term efficiency. He also learned that corruption makes the problem of poverty worse through following channels:
- The poor will receive a lower level of social services.
- The poor may pay a higher tax and receive fewer services.
Vito Tanzi and Hamid Davoodi (1997) did a quantitative study- in collaboration with the World Bank in through

regression analysis method-on the impact of corruption within the format of four assumed variables of public investment, government income, operational costs and maintaining public capitals and public investment quality. The result 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.

Usman (2008) aims 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 Aslhsen (2007) came to the conclusion 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).

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. The following countries are either the members of Economic Cooperation Organization (ECO) or Organization Of the Petroleum Exporting Countries (OPEC).

In table 1and 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

In this research data and necessary information have been collected and analyzed based on correlation. Data related to administrative corruption (independent variable) being taken from the internet site of Transparency Organization to 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 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 of administrative 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=Administrative 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 administrative corruption in ECO member countries and OPEC member countries:

$$Y = -8.42C(-4) + 0.36K + 0.12L + 0.19\alpha$$

$$Y = -1.4C(-6) + 0.4K + 0.16L - 6.8\alpha$$

RESULTS AND DISSCUSSION

Using table 3, it is observed that t-statistics of corruption is (3.18) at the level of p=(0.05) significant. So, the hypothesis H0 that indicates the lack of relationship between administrative corruption and economic growth at the confidence level of 95% is rejected. So, our research hypothesis is confirmed.

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 H0 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 a 36% increase in the rate of 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 H0 which indicates the lack of link between growths 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 0.12 which means if other things are constant, and a one percent increase in growth of labor force, on average we will expect a 12% increase in the rate of economic growth in those countries.

Using table 4, it is observed that t-statistic of corruption is (6.39) at the level of p= (0.05) significant. So, the hypothesis H0 that indicates the lack of relation between administrative 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 administrative 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= (9.7) which confirms the significance of the coefficient of capital at the level of p= (0.05). So the hypothesis of H0 that there is no relation between economic growth of OPEC member countries and capital assets is rejected at the

Table 3: ECO member countries

Variable	Coefficient	Std. Error	t- Statistic	Prob
K	0.36	2.6	3.7	0.0003
Log C(-4)	-8.42	0.09	-3.18	0.0008
L	0.12	0.027	4.6	0.0001
a	0.19	0.06	0.06	0.95
R^2 = 0.90		F= 98.9 P= 0.00		D-W=1.97

Table 4: OPEC member countries

Variable	Coefficient	Std .Error	t- Statistic	Prob
K	0.4	0.04	9.7	0.000
C(-6)	-1.4	0.22	-6.3	0.000
L	0.16	0.02	6.7	0.000
α	6.8	1.2	-5.3	0.000
R^2 =0.91		F= 48.3 P= 0.000		D-W=1.42

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 a 4% increase in the rate of economic growth in those countries.

The t-statistic for Growth of labor force (6.7) is at the level p= (0.05) which confirms the significance of the coefficient of growth of labor force. So the hypothesis of H0 which indicates the lack of link between growths of labor force of OPEC 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 0.6 which means if other things are constant, and a one percent increase in growth of labor force, on average we will expect a 6% increase in the rate of economic growth in those countries.

CONCLUSION

Corruption or any misuse of governmental power for personal benefits is a phenomenon prevailing in administrative and political systems of different countries. This results from different factors. Some of the most important factors of it includes: over-interference of government in economy, inappropriate administrative system, excessive bureaucracy and complexity, governmental and private monopolies, expansion of rent, non-transparent regulations, weak management, unequal distribution of incomes, interference of high-ranking politicians and governmental authorities, lack of accountability of government and different issues like this which provides a ground bed for the expansion of corruption at micro level (administrative corruption) and macro (political corruption) level. This paper will firstly define factors influencing corruption. Then, presenting some models, and based on panel data approach, it will study the effect of administrative corruption on economic growth of ECO member countries and OPEC member countries within last five years (2003-2008). According to the results, there is a reverse and meaningful relation

between administrative corruption and economic growth in OPEC member countries and ECO member countries. Furthermore, there is a direct and significant relation between capital assets and work forces of OPEC member countries and ECO member countries with their economic growth.

In fact, the results of research in the first sample (ECO member countries) indicate that corruption in that very moment does not interrupt economy but it will have an impact on the growth with a four pause, i.e. in the following four years. However, in the second model (OPEC countries), it indicates that corruption like ECO member countries does not interrupt the economy at the same moment (immediately) but it has also impact on growth with a many-year pause that in OPEC countries, the impact of the corruption on economic growth is longer but the index of impact is less than non-oil producing countries. So, we may reason that in oil producing countries due to incomes resulting from oil, the damaging impacts of corruption is cleared in the short term and in long term, it gives rise to the unjust distribution of income and have unfavorable impacts on economic growth. In general, in developing countries, corruption makes unjust distribution of income and cleans its impact in short term but it has unfavorable impacts on the economic growth of those countries in long term. In oil producing developing countries, this impact shows itself later.

With regard to two groups of different views on the impact of corruption on economic growth which presented (corruption is useful or harmful), the results of our research shows that the impact of administrative corruption on the economic growth in ECO member countries and OPEC member countries is non-functional and damaging and is convergent with the views of the second group. Opposite to the views of the first group who considers corruption as something functional and useful for the economic growth, in ECO member countries and OPEC member countries, the impact of corruption on their economic growth is harmful.

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