

THE IMPACT OF CORRUPTION ON ECONOMIC GROWTH IN SAARC COUNTRIES

*Ahmad Tisman Pasha**

Adeel Akhtar[†]

Ahmad Waleed[‡]

Abstract

The corruption is the issue that is frequently perceived as unfavorable to economic growth. This study addresses the econometric shortcomings of the literature and provides an estimate the impact of corruption on economic growth rates over the years 1995-2014. This research reports the econometric limitations of the literature and offers an evaluation of corruption impact on the economic growth rates over the years 1995-2014. The research is showed with a regression on a sample of 5-member countries of South Asian Association for Regional Cooperation (SAARC) and four variables (Corruption, Foreign Direct Investment, Government Expenditure, Population Growth). The models of study are built on the endogenous growth theory to analyze the relationships. Outcomes using economic freedom index (EFI) shows that corruption has a negative impact of economic growth in the SARRC countries.

Keywords: SAARC, Corruption, Economic Growth

Introduction

Recently, the topic of anti-corruption has been a top priority of the institutional reform agenda for development in various countries, including those in Asia. Corruption is viewed as a key obstruction to economic development (Ivanyna et al., 2016). Corruption is an expensive phenomenon for individuals, organizations, the public sector and the economy in general (Anh, Minh, & Tran-Nam, 2016).

* Lecturer, Dept. of I.T. Bahauddin Zakariya University, Multan, Pakistan

† Lecturer, Dept. of Commerce. Bahauddin Zakariya University, Multan.

‡ M.Phil. Scholar, National College of Business Administration & Economics, Multan

For the last decade, many scholars have studied and evaluated the effects of corruption in multiple countries, especially regarding the influence of “corruption” on “economic growth”. However, this matter is still up for debate in terms of ethical and economic implications. Mauro (1995) indicates that corruption negatively impacts investment, therefore negatively affecting the economic growth. This conclusion is supported by Brunetti, Kisunko, and Weder (1998); Choe et. al (2013). Webster and Babcock (1963) describe “corruption” as “inducement [as of a public official] by means of improper considerations [as bribery] to commit a violation of duty.” “Corruption” is describe by Bardhan (1997) as “the use of public office for private gains”. Shleifer and Vishny (1993) specify is as the “sale by government officials of government property for personal gain,” while Pope (1997) defines it as “the misuse of public power for private benefit.” Sandholtz and Koetzle (2000) agreed with this opinion and stated “corruption” as an “exchange of either goods or services by government employees (bureaucrats) in return for some inducement and involving an element of impropriety”. The misuse of public rule is not only for one’s private gain, but also for the assistance of a party, tribe, class, family, or friends.

Several studies have examined the nexus between corruption and economic growth. But few researchers claim that corruption is beneficial for the economic growth of nations. Bardhan (1997) points to cases where corruption has had consequences for the promotion of economic development in Europe and America. Beck and Maher (1986) and Lien (1986) argue that corruption induces more efficient provisions of government services. Leys (1965) and Huntington (2006) also highlight that “corruption” has a positive influence on “economic growth” by lessening obstacles from administrative procedures, owing to a lack of transparency from the judicial system. From this viewpoint, corruption acts as a lubricant that smoothes processes, especially for a bureaucratic model, and therefore, increases the effectiveness of an economy by reducing barricades to

investment and economic growth. The existing literature on corruption has pointed out that corruption is ineffective, as it generates waste as a result of its effect on production and consumption (Mauro, 1998; Rose-Ackerman, 1999).

This study tries to bridge the gap in the observed literature by studying the connection among “corruption” and “economic growth” in the SAARC nations. Levels of corruption are high in these countries. This study will help researchers, policy makers, and practitioners question whether corruption has acted as the “sand” that prevents the region from reaching its full economic potential, or as the “grease” that facilitates economic growth in the region. This article will focus on SAARC Countries between 1995 and 2014.

Literature Review

The previous literature claims that corruption is the important ‘grease’ that runs the bureaucratic wheels of a country. Ehrlich and Lui (1999), supporters of the “functionalist theory,” declare that “corruption” can be publicly beneficial and increase “economic growth through” numerous practices.

In some developing nations where the government officials are uninterested in doing their jobs, corruption occasionally works as “grease” for the wheels of the economy. Corruption helps industrialists avoid heavyweight, inflexible rules and evade expensive postponements while putting them ahead in slow-moving queues for public service (Bardhan, 1997; Huntington, 1968; Leff, 1964).

Lui (1985) conducted research based on an “equilibrium queuing model of bribery” and demonstrates how corruption supports “socially optimal outcomes” by diminishing the waiting expenditure tangled in queues. Explicitly, bureaucrats don’t purposely advocate departmental postponement to gather kickbacks. Instead, bureaucrats are often interested in accelerating service when

kickbacks are permitted.

The opposing view is that corruption obstructs development as the speed of economic action decelerates by applying adverse externalities via its long-lasting impact in the process. This contradictory view claims that dishonesty among public management and investors are harmful to whole financial success as it unpleasantly disturbs the value and amount of investments (sands-the-wheels). Shleifer and Vishny (1993) pointed out that “corruption is more distortionary than taxation and responsible for raising the cost of doing business, which in turn impedes economic growth.” Brunetti et al. (1998) conducted research using the Lucas type model and stated that “corruption” has an adverse but insignificant effect on “economic growth”. In a situation with a less active administration and with weak regulations of law, corruption is extra destructive to the economy. Expanding upon the efforts of Mauro (1998) and using the International Country Risk Guide index of corruption in a cross-sectional study, Rahman et al. (2000) discovered that “corruption” has a significant adverse influence on the “per capita GDP” of Bangladesh.

Furthermore, empirical results of Pellegrini and Gerlagh (2004) concluded that “corruption” significantly disturbs “economic growth” and “income” over time. Because a low level of economic growth leads to a high level of corruption, a high level of corruption leads to a low level of economic growth. Lambsdorff (2007) and Murphy et al. (1993) stated that a higher level of corruption reduces the speed of economic growth.

In a meta-analysis, Ugur (2014) maintained the evidence of a negative association mid corruption and per capita income. Finally, Saha and Gounder (2013) reported sign of the negative effects of “corruption” on “economic growth” by means of a polynomial regression in a cross-country situation.

However, the negative relation between corruption and economic development is not constantly obvious in pragmatic studies. Some east Asian countries, like China, Indonesia, Korea, Thailand and Japan, have achieved a strong GDP growth rate in spite of high perceived levels of corruption (Rock & Bonnett, 2004).

Méndez and Sepúlveda (2006) observed the impact of “corruption” on nations’ “economic growth” in the long run. Researchers find sign of a non-monotonic connection among economic growth and corruption. The results show that the growth maximizing level of corruption is significantly greater than zero, with corruption advantageous for economic growth at low levels of corruption, and damaging at high levels of corruption. Murshed et al. (2015), in a recent cross-country panel regression analysis, provided evidence of an insignificant negative connection between “corruption” and “economic growth” for a set 86 developed and developing countries between 1995-2012.

The above argument leads us to conclude that the previous literature on the connection among “corruption” and “economic growth” is unclear. Many studies find a significant negative result of “corruption” on “economic growth” while others indicate mixed results, depending on different countries with different institutional frameworks.

There is insufficient evidence to discuss the association between corruption and GDP exclusively in SAARC counties. This is first study wholly focused on SAARC countries.

Data and Methodology

To examine the association among “economic growth” and “corruption”, panel regression investigation is applied for particular SAARC nations. Panel data is used in this study because of its advantages over pure time series data and pure cross-sectional data.

Variables and Data Sources

Data collected from 5 countries in the SAARC between 1995 and 2014 from reliable websites such as Economic Freedom of the World, United Nations Conference on Trade and Development (UNCTAD) and World Bank. Appendix 1.

The Dependent Variable

Economic Growth

As stated by the World Bank (2004), “economic growth” is “quantitative change or expansion in a country’s economy”. Furthermore, the World Bank (2004) argues that “economic growth is conventionally measured as the percentage increase in gross domestic product (GDP) or gross national product (GNP) during one year”. As indicated in the research of Nafziger (2006), economic growth is the increase in a country’s per capita output. The following data of economic growth was collected from the World Bank (World Bank, 2016).

The Independent Variables

Corruption

The most widely disseminated and used measure of “corruption” is the “Economic Freedom Index” (EFI). The ‘Economic Freedom Index (EFI) is a broadly-used measure created by The Heritage Foundation, covering data for different sample sizes since 1995. The Heritage Foundation jury ranks over 186 nations on a measure from 0 to 100, with 0 indicative of the most corrupt countries with 100 determining the completely spotless ones.

Foreign Direct Investment (FDI)

Recent literature has emphasized the positive effect of “FDI” on “economic growth” (Jyun-Yi & Chih-Chiang, 2008; Mehic, Silajdzic, & Babic-Hodovic, 2013; Sbia, Shahbaz, & Hamdi, 2014). The World

Bank defines “FDI net inflows” as “the value of inward direct investment made by non-resident investors in the reporting economy” (World Bank, 2016).

Government Expenditure

Government expenditure has a significant impact on economic growth, mainly when the government is spending on public infrastructure (Bose, Haque, & Osborn, 2007; Ormaechea & Morozumi, 2013). The data Government expenditure was extracted from World Bank (World Bank, 2016).

Population Growth

Economic growth of a country is harmfully affected by rise in population; this consequence has been demonstrated by several empirical studies (Barro, 2004; Sachs, 2008). The data of this variable was collected from the official website of the World Bank (World Bank, 2016).

Table 1: Descriptive statistics

	Minimum	Maximum	Mean	Std. Dev.
GDP	205.75	3852.88	857.29	708.95
EFI	40.90	66.00	54.03	4.70
FDI	-6647983.90	43406277076.00	3754122563.60	8824142771.80
GE	4.63	17.61	9.44	2.77
POP	0.56	2.52	1.52	0.55

Statistics are obtained from UNCTAD and World Bank

Where: GDP (GDP Growth Per Capita), EFI (Economic Freedom Index), FDI (foreign direct investment), GE (Government Expenditure) and POP (Population).

Table 2: Correlation matrix among the variables

	GDP	EFI	FDI	GE	POP
GDP	1	.429**	0.181	0.189	-.473**
EFI	.429**	1	0.001	.405**	-.440**
FDI	0.181	0.001	1	0.195	-0.045
GE	0.189	.405**	0.195	1	-0.159
POP	-.473**	-.440**	-0.045	-0.159	1

** . Correlation is significant at the 0.01 level (2-tailed).

With the aim of inspecting the connection between corruption and economic growth, a Pearson correlation was performed. The consequences of the examination are displayed in Table 2. There is a positive and significant association among GDP and corruption (EFI). Population (POP) has a significant negative correlation with GDP. Another important variable of the research is FDI and its positive correlation with GDP, because P value is less 0.05. The rest of the control variables (FDI and GE) have a positive and insignificant correlation with all profitability ratios.

Econometric Model and Methodology

This study empirically studies the influences of “corruption” on “economic growth” in a set of SAARC countries. For examination, a panel data of (1995-2014) twenty years is drawn from five SAARC countries, which delivers overall 100 observations.

There are three methods available in the panel data model: common constant model, fixed effects model (FEM), and random effects model (REM). The Hausman specification test helps determine whether REM or FEM is suitable for this study.

A panel technique is comparatively suitable. Eviews 9 has been used for this purpose. The FEM and the REM are shown in Equation [1], and Equation [2] respectively.

$$GDP_{it} = \beta_1 EFI_{it} + \beta_2 FDI_{it} + \beta_3 GE_{it} + \beta_4 POP_{it} + \mu_{i,t} \quad [1]$$

$$GDP_{it} = \alpha + \beta_1 EFI_{it} + \beta_2 FDI_{it} + \beta_3 GE_{it} + \beta_4 POP_{it} + \lambda_i + \mu_{i,t} \quad [2]$$

In Equation [1], Where α_i captures the individual specific effect and $\mu_{i,t}$ represents the remaining error terms that isn't explained. In Equation [2], Where λ_i represents the variation of the constant for each country, that varies across country but constant across time and $\mu_{i,t}$, error term that varies across both country and time.

The P-value of hausman test is less than 0.05. The consequence of the Hausman's test specifies that the FEM is more suitable than the REM to describe the impact. The operation of the FEM is more reliable because FEM does not involve a statement of no correlation among the country-specific effects (Baltagi, 2005; Stock & Watson, 2003).

The table indicates the values of the coefficients for the FEM. From the FEM results, corruption (EFI) and economic growth (GDP) are statistically negative but significant at 5% significance level. The results stated that one unit of increase corruption level results in a development declination of approximately 0.81 percentage points. This study concludes that corruption (EFI) has an inverse impact on GDP. This is consistent with the outcomes of (Ertimi, Dowa, Albisht, & Oqab, 2016; Peev & Mueller, 2012). The results totally disagree with the results of Huntington (2006) and Hee et al. (2016). Therefore, corruption is more likely to be "sand-the wheel" rather than "grease-the-wheel" in the SAARC countries. Statistics prove that anti-corruption rules would decrease redundant corruption costs and have a positive result on economic growth.

Table 3: Panel Data Estimates

Dependent Variable: GDP per capita (GDP)	
VARIABLES	FIXED EFFECTS
CONSTANT	6561.893 (0.0000)
EFI	-81.31696 (0.0002)
FDI	3.50E-08 (0.0001)
GE	-90.57220 (0.0053)
POP	-386.3683 (0.0209)
R Square	0.593477
Adj. R Square	0.557738
S.E. of regression	471.4704
F-statistic	16.60617
Prob. (F-statistic)	0.000000
Hausman Test	63.08 (0.0000)

In table 3, the fixed effect analysis provides information regarding the FDI on GDP. The results display a positive but significant bond among FDI and GDP. The results of regression analysis support the results of Mehic et al. (2013) and Sbia et al. (2014). Government expenditure variable gains statistically significant and negative. This interprets government expenditure as a negative effect on growth in

SAARC nations. The results of regression analysis support the results of Ormaechea and Morozumi (2013) and Bose et al. (2007). The results displayed in Table 3 show that population (POP) in this study has a significant negative association with economic growth at the significance level of 1%.

Conclusion

As a contribution to the small but growing evidence of the effect of corruption on economic growth, this study reflects the effect of corruption on economic growth in SAARC countries. This study is focusing on examining the relationship between corruption and economic growth in 5 selected SAARC nations, namely Bangladesh, India, Nepal, Pakistan, and Sri Lanka. In this research, we apply the fresh research model introduced by Ertimi et al. (2016) to explore the results of corruption on economic growth. The data set includes variables for 5 countries for the years 1995 – 2014. The panel data was used to inspect the relation between corruption and economic growth. The FEM was applied to examine the relation. Differing from the results of several earlier studies, we found that the rate of corruption negatively affects the economic growth of countries. This study delivers strong support to our baseline results that corruption “acts as sand in the wheel” that significantly hinders economic activities in SAARC countries.

In terms of policy implication, corruption has a negative impact on economic growth. Furthermore, a reduction in corruption level is followed by an enhancement in the competence of bureaucratic systems. Hence, bribe-combating activities are essential; for example, a legal framework that is vibrant, reliable and equal for all economic segments. Moreover, governmental organizations can decrease corruption by offering incentives for positive points like morality, instead of only paying attention to reducing negative points like immorality.

References

- Anh, N. N., Minh, N. N., & Tran-Nam, B. (2016). Corruption and economic growth, with a focus on Vietnam. *Crime, Law and Social Change*, 1-18.
- Baltagi, B. (2005). *Econometric Analysis of Panel Data 3rd Edition* England JW & Sons.
- Bank, W. (2016). World Development Indicators. Retrieved from <http://data.worldbank.org/indicator>
- Bardhan, P. (1997). Corruption and development: a review of issues. *Journal of economic literature*, 35(3), 1320-1346.
- Barro, R. J. (2004). *Economic Growth*: Cambridge, Ma: MIT Press.
- Beck, P. J., & Maher, M. W. (1986). A comparison of bribery and bidding in thin markets. *Economics letters*, 20(1), 1-5.
- Bose, N., Haque, M. E., & Osborn, D. R. (2007). Public expenditure and economic growth: a disaggregated analysis for developing countries. *The Manchester School*, 75(5), 533-556.
- Brunetti, A., Kisunko, G., & Weder, B. (1998). Credibility of rules and economic growth: Evidence from a worldwide survey of the private sector. *The World Bank Economic Review*, 12(3), 353-384.
- Choe, C., Dzhumashev, R., Islam, A., & Khan, Z. H. (2013). The effect of informal networks on corruption in education: evidence from the household survey data in Bangladesh. *The Journal of Development Studies*, 49(2), 238-250.
- Ehrlich, I., & Lui, F. T. (1999). Bureaucratic corruption and endogenous economic growth. *Journal of Political Economy*, 107(S6), S270-S293.

- Ertimi, B. E., Dowa, A., Albisht, E. M., & Oqab, B. A. (2016). The Impact of Corruption on Economic Growth in OIC Countries. *International Journal of Economics and Finance*, 8(9), 91.
- Hee, O. C., Cheng, T. Y., Yaw, C. C., Gee, W. V., Kamaludin, S. M., & Prabhakaran, J. R. (2016). The Influence of Human Resource Management Practices on Career Satisfaction: Evidence from Malaysia. *International Review of Management and Marketing*, 6(3).
- Huntington, S. P. (1968). The bases of accommodation. *Foreign Affairs*, 46(4), 642-656.
- Huntington, S. P. (2006). *Political order in changing societies*: Yale University Press.
- Ivanyna, M., Moumouras, A., & Rangazas, P. (2016). The Culture of Corruption, Tax Evasion, and Economic Growth. *Economic Inquiry*, 54(1), 520-542.
- Jyun-Yi, W., & Chih-Chiang, H. (2008). Does foreign direct investment promote economic growth? Evidence from a threshold regression analysis. *Economics Bulletin*, 15(12), 1-10.
- Lambsdorff, J. G. (2007). *The institutional economics of corruption and reform: theory, evidence and policy*: Cambridge University Press.
- Leff, N. H. (1964). Economic development through bureaucratic corruption. *American behavioral scientist*, 8(3), 8-14.
- Leys, C. (1965). What is the Problem about Corruption? *The Journal of Modern African Studies*, 3(2), 215-230.
- Lien, D.-H. D. (1986). A note on competitive bribery games. *Economics letters*, 22(4), 337-341.
- Lui, F. T. (1985). An equilibrium queuing model of bribery. *Journal of political economy*, 93(4), 760-781.

- Mauro, P. (1995). Corruption and growth. *The quarterly journal of economics*, 110(3), 681-712.
- Mauro, P. (1998). Corruption and the composition of government expenditure. *Journal of Public economics*, 69(2), 263-279.
- Mehic, E., Silajdzic, S., & Babic-Hodovic, V. (2013). The impact of FDI on economic growth: Some evidence from Southeast Europe. *Emerging Markets Finance and Trade*, 49(sup1), 5-20.
- Méndez, F., & Sepúlveda, F. (2006). Corruption, growth and political regimes: Cross country evidence. *European Journal of Political Economy*, 22(1), 82-98.
- Murshed, S., Badiuzzaman, M., & Pulok, M. H. (2015). Revisiting the role of the resource curse in shaping institutions and growth. *ISS Working Paper Series/General Series*, 605(605), 1-28.
- Ormaechea, M. S. A., & Morozumi, A. (2013). *Can a government enhance long-run growth by changing the composition of public expenditure?* : International Monetary Fund.
- Peev, E., & Mueller, D. C. (2012). Democracy, economic freedom and growth in transition economies. *Kyklos*, 65(3), 371-407.
- Pellegrini, L., & Gerlagh, R. (2004). Corruption's effect on growth and its transmission channels. *Kyklos*, 57(3), 429-456.
- Pope, J. (1997). *Transparency International source book*: Transparency International.
- Rahman, A., Kisunko, G., & Kapoor, K. (2000). *Estimating the effects of corruption: implications for Bangladesh* (Vol. 2479): World Bank Publications.
- Rock, M. T., & Bonnett, H. (2004). The comparative politics of corruption: accounting for the East Asian paradox in empirical studies of corruption, growth and investment. *World Development*, 32(6), 999-1017.

- Rose-Ackerman, S. (1999). Political corruption and democracy. *Conn. J. Int'l L.*, 14, 363.
- Sachs, J. (2008). *Common wealth: Economics for a crowded planet*: Penguin.
- Saha, S., & Gounder, R. (2013). Corruption and economic development nexus: Variations across income levels in a non-linear framework. *Economic Modelling*, 31, 70-79.
- Sandholtz, W., & Koetzle, W. (2000). Accounting for corruption: Economic structure, democracy, and trade. *International studies quarterly*, 44(1), 31-50.
- Sbia, R., Shahbaz, M., & Hamdi, H. (2014). A contribution of foreign direct investment, clean energy, trade openness, carbon emissions and economic growth to energy demand in UAE. *Economic Modelling*, 36, 191-197.
- Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3), 599-617. doi:10.2307/2118402
- Stock, J., & Watson, M. (2003). *Introduction to Econometrics*, Addison Wesley. New York.
- Ugur, M. (2014). Corruption's Direct Effects on Per-Capita Income Growth: A Meta-Analysis. *Journal of Economic Surveys*, 28(3), 472-490.
- Webster, & Babcock, P. (1963). *Webster's Third New International Dictionary of the English Language Unabridged: A-K*: Merriam.

APPENDIX: 1

Sample Countries
Bangladesh
India
Nepal
Pakistan
Sri Lanka