

The Relationship between Governance and Economic Development in Asia

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Abstract

The purpose of this paper is to examine the long-run relationship between governance and economic development for a selected panel of 25 Asian countries over a period of 17 years (2002-2018). Human Development Index is used for economic development along with Financial Development (FD), Gross Capital Investment, and Government Expenditures as other external factors. A hypothesis is tested through Panel Ordinary Least Square, Fixed Effects, and Random Effects models to find out the nexus between governance and economic development. Pedroni co-integration test is also applied to find the long-run association, and confirmed the co-integration relationship. The findings suggested that human development based on economic development with effective and public governance is the need of time for Asia. The study also recommended that financial development, governance reforms, and human development are necessary to ensure effective governance.

Keywords: Governance, Economic development, Panel data, Asian countries

JEL Qualification: H11, O11, C33, O53

1. Introduction

In recent years, the objective of development policy decisions is the need for effective and good governance, and reforms to achieve economic development. Starting in the late 1980s, studies began to analyze and delve deeper into the role of governance in economic development. Such studies not only analyzed the impact of institutional effectiveness of governments on economic development, but also discussed the impacts of different types of governance structures (Han et al., 2014).

There are two types of governance approaches, market-enhancing, and growth-enhancing. The first type increases the government's capacities to ensure an efficient market, while the second type of governance suggested that the market will remain low till the development is attained. Market-enhancing governance is

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led by liberal economists, while growth-enhancing governance is led by heterodox institutional economists (Khan, 2007).

In a broader sense, governance is like a leader to motivate its citizens, legal authority to order rules and collective actions, a facilitator, resource provider, and enabler to increase capacity to get goods and services and to protect the environment for civil society (WB PRSP Approach, 2002). Governance means the government's ability to enforce rules and to provide services (Fukuyama, 2013). There are four aspects of governance:

- Political Regimes: included legitimacy, liberties, and political contestability.
- Economic Management: means efficient bureaucracy, accountable decision-making procedures, improved provision of public services, and avoiding delays and distortions.
- Economic Policy: Designing, formulation, and implementation of appropriate economic policies. "One size fits all" policies are not considered.
- Legal and Judicial Framework: Regulation and mediation of government with the private sector and civil society (Quibria, 2006).

With the passage of time, the meaning of governance has also changed. Governance is now considered to be a process of coordination and continuing interaction among the institutions. A country has so many deficiencies due to imperfect markets and these deficiencies can be compensated by effective governance (Keping, 2018).

In the 1950s, the main objective of the governments was to achieve economic growth at all costs. Economic development is a long run process in which the national income of a country rises over time and under this process per capita income also increases (Meier and Baldwin, 1957). Development was earlier conceptualized as bringing a structural change in the economy of a country but now development is also conceived as a long-run process of expanding the choices of people (UNDP, 1990). There are five main schools of thought about development:

- Capital as economic development, measured by economic growth.
- Quality of growth as combating poverty, reducing inequality, reducing unemployment, etc.
- Human Development as economic development
- Green growth, a combination of growth and human development.
- Resilience growth Sagarik, D., 2019).

According to World Bank, “Economic development is a provision of quality lives to people. It is not only growth but also human development that is related to health, education, and environment” (World Bank, the Levin Institute, 2016).

GDP is a flow variable that shows the expenditures but it does not have any record about stocks (lost property) and human capital development. In previous studies, Gross Domestic Product (GDP) is used as a proxy of economic development (Olson et al., 2000; Cooray, 2009; Tan, 2006, Dasgupta, 2010; Bota-Avrn et al., 2018; and Mira and Hammadache, 2017).

In Asia, there is high economic growth along with inequality and economic prosperity at social and environmental costs. The development reduces unemployment but it is also a reality, that there exists more than 40% of workers who live in either high, moderate, or near poverty (ESCAP Survey 2020). A high-level political forum at United Nations Organization (UNO) is established to overcome the weaknesses of structural transformation and strengthen governance with the contribution of civil society as an organization (Spotlight Report, 2019).

Previous studies empirically proved causal relationship in one direction like governance-to-economic development but in the other direction economic development-to-governance is not proved (Kraay and Kaufmann, 2002; Bota-avram, 2018). So, this study changed the proxy of economic development and used the Human Development Index (HDI) as a proxy for economic development. It is analyzed that HDI was the only measure of human development in the sense of economic development in national income accounting in 1990 (Hickel, 2020).

The main objective of this paper is to find the links between governance and economic development and to explore that effective governance matters to enhance economic development in Asia.

This paper is divided into seven parts. Part two presents a brief review of the literature, part three discusses the theoretical framework and econometric models, and part four presents the methodology. Variables and data are presented in part five, results and discussion in part six, and conclusion and policy implications are discussed in part seven.

2. Literature Review

Some studies examined the relationship between governance and economic development. Olson et al., (2000) presented two points of view of growth, neo-classical and beyond neo-classical. In Neoclassical, output level was determined by inputs and exogenously given technology while in another view, new growth theory emphasized “externalities” effect of investment on “knowledge”. Both are agreed

on the importance of governance as “Convergence” and “catch up” growth that is successful with the support of strong institutions in low-income economies. GDP is used as a dependent variable and governance as an explanatory variable, and governance is measured by the growth of capital stock and labor and subjectively by the International Country Risk Guide (ICRG). Findings showed that economic performance and productivity tended high in those countries which have strong institutions and impressive economic policies.

Kraay and Kaufmann, (2002) proposed an empirical strategy in which two cause-effect relationships were confirmed. Results show that income per capita is high due to good governance. The results showed that there was no “virtuous cycle”, and “a causal relationship” between quality governance and income per capita growth, where good governance depends on growth. A survey of citizens and Polls of experts were conducted to collect data from 175 countries for the years 2000-01. To measure governance level, six aggregate governance indicators were selected among several. Findings showed that effective and good governance was essential for growth and development but growth cannot bring good governance automatically, it is a long-term process and has some administrative problems. This negative feedback was called the “State Capture” indicator. Growth has zero or negative impact on governance due to the influential elite class, with reducing benefits of private businesses and deteriorating overall governance.

Khan (2007) examined and explained the two types of governance, market-enhanced or divergent and growth-enhanced or convergent, and their relationship with growth. The first type is important for the increase in capacities, ensuring market efficiency, resource allocation, and reducing transaction cost, while, the second type is important to accelerate the capital formation and increase productivity growth as the evidence from East-Asian countries, since last five decades. During the 1960s and 1970s, with import substitution policies, it is showing the poor performance of market-enhancing governance and now reforms are required while growth-enhancing governance is so complicated. Knack-IRIS indices and Kaufman data set both are used to test the importance of market-enhanced governance for the period 1990-2003. Capacity creation through technological development and change, and high returns from investment have been the main arguments of the growth-enhancing governance literature (1960-2000). Findings showed that market-enhanced governance may deliver better than growth-enhanced governance. China and India have growth-enhanced governance while Latin America is on market-based governance. So, the economic performance of countries revealed that the importance of governance is necessary

than types of governance. Governance reforms should be suggested such as structural changes in politics, institutions, and society ensuring long-term growth.

Rajkumar and Swaroop (2008) studied the relationship between Government spending and its consequences and governance especially in budgetary allocation on health and basic education. Governance is examined by two indicators i.e. corruption level and level of bureaucracy. Data was used for selected three years 1990, 1997, 2003 for health expenditure's impact on child mortality with 228 observations of 91 countries and education expenditure's impact on education failure with 101 observations of 57 countries. Results showed not only the increase in the public expenditures reduce child mortality but also the efficacy of expenditure positively related to good governance in rich countries. A high mortality rate is found in poor countries. An increase in the share of public expenditure on education to GDP lowered the education failure rate and hypothetically proved due to quality governance especially in rich countries while high education failure is in poor countries. Low efficiency of spending had many reasons like substitutability between public and private expenditures in poor countries.

Cooray, (2009) investigated the relationship between governance and economic growth. It was a cross-sectional study and data was collected for 71 developed and developing countries for 1996-2003. Economic growth is measured by the share of consumption and investment to GDP, net secondary enrolment ratio, credit/GDP, and governance quality is measured by composite governance index. Findings indicated that an increase in government expenditures showed an improvement in governance. It also concluded that improved governance enhanced economic growth.

Han et al., (2014) used average Worldwide Governance Indicators (WGIs) to check whether above-average governance in countries leads to higher development compared to countries that have below-average or deficit-governance, as in the case of many countries of Asia, EU-Middle income, Latin America, OECD high income, MENA, and Sub-Saharan countries. GDP per capita is used as a dependent and WGI as an independent variable and the GMM technique is used to estimate this relationship. Findings show that the impact of governance on growth is important to consider. Low-income countries required governance reforms.

In 2008, the Organization of Economic Cooperation and Development (OECD) and European countries established a new initiative "beyond GDP" and in 2009, European Commission issued formally "GDP and beyond: Measuring

Progress in Changing World “ (EU Commission, 2009) transition occurred a shift in political, social and economic as Post-GDP World replacing Globalization to Regionalization. In 2015, new Sustainable Development Goals (SDGs) were prepared by United Nations for a new development paradigm. There are three main factors to redesign global governance such as economic contraction, climate change, and energy. Energy costs shrink the economic activities, climate change makes possible the use of renewable energy and business activities refocus on new profits (Fioramonti, 2016).

Mira and Hammadache (2017) analyzed the institutional conditions and economic development relationship in 45 MENA countries through a comparative analysis of the previous studies (Khan, 2007; Kraay and Kaufmann; and Knack, 2002). These studies show a strong relationship between governance and GDP growth rates and also exposed that good governance is the tool for economic development.

Awan et al., (2018) examined the relationship among economic growth, governance, and corruption for the panel data of selected SAARC countries (1996-2014). It concluded that the relationship between governance and economic growth is positive while economic growth was negatively affected by corruption. The education index had also proved a significant predictor of economic growth.

Liu et al., (2018) investigated the relationship between governance and economic development in China. This study established a new comprehensive Governance Index system of 3-dimensions such as Government capacity, marketization, and rule of law of provincial governance. Panel data used for regional provinces for the period 2001-2015 divided into two sub-periods: 2001-2007 and 2008-2015. Fixed effects and random effects models are used. The first result showed that better governance means strong institutions and improved science and technology have a positive impact on economic growth. Second, results showed that governance has a diminishing marginal effect. Third, economic development is different in different provinces, so the impact of governance is also different in different regions of China. Azam (2022) also investigated that the governance affect the economic development for the panel of 14 Latin American countries over 2002-2018.

3. Theoretical Framework

3.1 Model 1

There is a correlation and causal relationship between governance (Gov) and economic development (ED) as presented in previous literature (Olsan et al.,

1998; Cooray, 2009; Liu et al., 2018; and Mira and Hammadache, 2017) and it is one direction like governance-to-economic development.

ED is the function of financial development (FD). ED and FD are positively related (Bist, 2018), while a negative relationship between ED and FD is also found in developing countries (Puatwoe and Piabuo, 2017). Gross Capital Formation (GKF) and ED have a positive relationship (Mankiw et al., 1992).

ED is also the function of government expenditures (G). Theoretically, it is proved a positive relationship between them, but few studies found a negative and significant impact, due to the rising fiscal deficit and debt financing (Onifade et al., 2020). The relationship between government spending and ED also depend on institutional quality (Khan, et al, 2020). So, a complete function we get,

$$ED = f(Gov, FD, GKF, G) \quad (1)$$

An empirical model for panel data analysis is

$$ED = \alpha_0 + \alpha_1 Gov_{it} + \alpha_2 FD_{it} + \alpha_3 GKF_{it} + \alpha_4 G_{it} + \epsilon_{1it} \quad (2)$$

3.2 Model 2

The other side, i.e. economic development-to-governance also exists, but it is yet not proved empirically, (Kraay and Kaufmann, 2002; Bota-Avram, 2018).

Gross Domestic Product (GDP) is used as the proxy of economic development which is not a suitable proxy variable. This study used Human Development Index (HDI) as the proxy of economic development. Financial development (FD) is the function of governance (Gov) and it is positive (Sayilir et al., 2018). Gross Capital Formation (GKF) is associated with governance positively (Iheonu, 2019), while a high-interest rate implies a negative impact through the crowding-out effect. Government expenditures (G) and governance are positively related but it also implies to increase in monetary expenditures and hurts governance through inflation. So, a complete economic model, we get

$$Gov = f(ED, FD, GKF, G) \quad (3)$$

The empirical model for panel data analysis is

$$Gov = \beta_0 + \beta_1 ED_{it} + \beta_2 FD_{it} + \beta_3 GKF_{it} + \beta_4 G_{it} + \epsilon_{2it} \quad (4)$$

4. Methodology

The study employed a cross-country database of 25 countries of Asia for 17 years from 2002 to 2018. Some tests and estimation techniques are adopted to estimate the causal relationship.

Initially, to check the integration order of the data, panel unit root tests including Levin-Lin-Chu, Im-Pesaran-Shin and Augmented Dickey-Fuller tests are applied. In the empirical literature, cointegration techniques are applied to test the long run relationship among the variables. Panel Cointegration test allows some possible heterogeneity among each member of the panel (Pedroni, 1997).

OLS is an estimation method to find out the unknown parameters of linear regression. The Fixed Effects Model refers to a model which fixes the group means and arranges the different intercept between cross-section and individuals because intercept cannot vary over time and it is time-invariant. It is an estimator to remove the unobserved effect α_i which affects the estimation models, inevitably. The Random Effects Model arrange the different intercept with the error term of the cross-section to eliminate the heteroskedasticity. In REM, the error term is interconnected between cross-section and time series.

5. Data

Data is collected from World Development Indicators (WDI) except Human Development Index (HDI) that is collected from the United Nations Development Program (UNDP) database for 2002-2018 for the panel of 25 countries i.e. Nepal, Bangladesh, Bhutan, India, Vietnam, Philippines, Cambodia, Pakistan, Mongolia, Kyrgyzstan, Srilanka, China, Malaysia, Iraq, Jordan, Lebanon, Japan, Singapore, Hong Kong, Israel, Saudi Arabia, Qatar, Oman, Kuwait, South Korea.

Governance is the power to manage the economic and social resources for the development of a society (WB, 1992). It is a key component for effective economic policies and also important for the environment and equity. Good governance is the mixture of capacity and efficiency, accountability, transparency, and information (World Bank Report, 1992; Kraay et al., 2010).

We have selected the six “Aggregate Governance Indicators” developed by World Bank and updated annually since 2002, to measure the governance quality such as Voice and Accountability, Political Stability and Absence of Violence, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. Many studies used these indicators to find out the quality of governance. (Kraay and Kaufmann, 2002; Zarsky and Tay, 2002; Khan, 2007; Han et al., 2014; Awan et al., 2018). According to these studies, quality governance has been positively related to economic and sustainable development.

This study used an unweighted average of these six indicators due to the high correlation between them (Bota-Avram, 2018).

The human development index (HDI) is used to measure economic development. It has three dimensions: health, education, and quality of life/standard of living. Health dimension consists of life expectancy at birth, education dimension consists of average schooling and expected years of schooling, and living standard consists of Gross National Income (GNI) per capita (average purchasing power of people). HDI is a measure to identify the main issue of the countries and it is a key measure of well-being.

Financial development is the development of the financial sector that is the combination of financial institutions, financial instruments, and financial markets. Gross Capital Formation (GKF) is an increase in the fixed assets of private and public investment in a country with the net changes in inventories level that is the stock of goods. Expenditures of government formerly called general government. consumption on goods and services, compensation of government employees, and security but excluding military services' expenditure.

5.1 Descriptive Statistics

Table 1 presents the descriptive statistics for 25 selected Asian countries from 2002 to 2018. Gov denotes the average value of six indicators of governance, HDI measured as economic development (ED), and FD, GKI, and G are control variables. The considerable thing is the negative value of the mean of governance that shows the poor and ineffective governance in Asian countries. The mean value for ED is 0.7165 and S.D is 0.1284 (max=0.939, min=0.453) showing that economic development in Asian countries is relatively strong as measured by HDI. The mean value for governance is -0.676780 and S.D is 0.7766 (max=1.636, min=1.895) showing that governance is poor in Asia.

Table 1: Descriptive Statistics

	Mean	Median	Std. D	Maximum	Minimum
ED	0.7165	0.7250	0.1284	0.9390	0.4530
Gov	-0.6767	-0.2008	0.7766	1.6366	-1.8950
FD	68.6813	54.2816	48.1716	233.2110	1.1200
GKF	27.9688	26.1613	9.8269	69.5274	9.3417
G	14.1527	13.4950	5.6593	30.0000	3.4600

5.2 Correlation Matrix

Table 2: Correlation Matrix

Variables	ED	Gov	FD	GKF	G
ED	1.0000				
Gov	0.7739	1.0000			
FD	0.6258	0.6766	1.0000		
GKF	-0.1294	0.0718	0.0423	1.0000	
G	0.3937	0.1584	-0.0236	0.0456	1.0000

In this section, we examine the correlation among the variables. Table 2 presents the correlation matrix. The correlation matrix is used to check the relationship among variables. It could be observed that variables show a positive, negative, weak, and strong relationship with the dependent variable. Precisely, it could be seen that governance and economic development have a strong and positive correlation while financial development and government spending are positively correlated. Gross capital formation has a negative correlation with economic development.

5.3 Graphical Analysis

Here we present an average trend of governance and economic development in Asia (2002-2018).

Figure 1: Average Trend of the Average of Six Indicators of Governance in Asia.

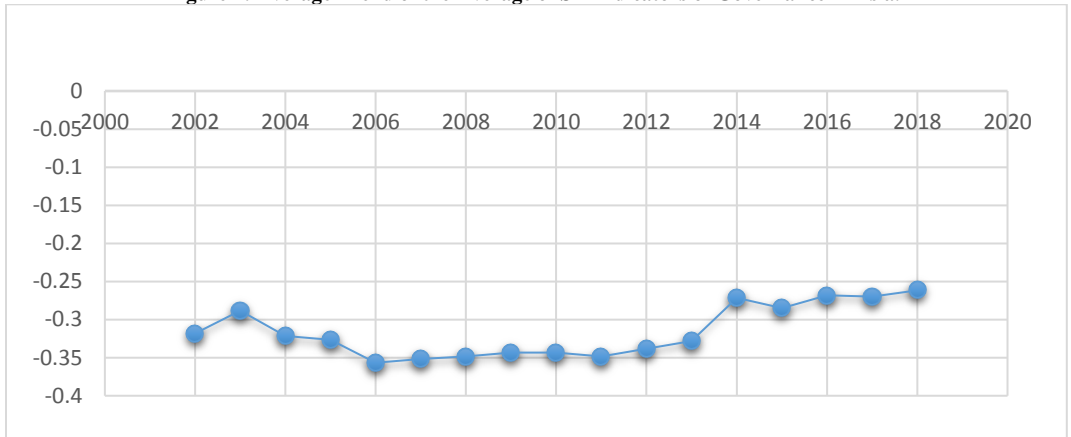


Figure 1 shows an average trend of the average of six indicators of governance in Asia. This shows a very critical situation of governance in Asia.

Figure 2: Average Trend of Economic Development(ED) measured by (HDI) in Asia

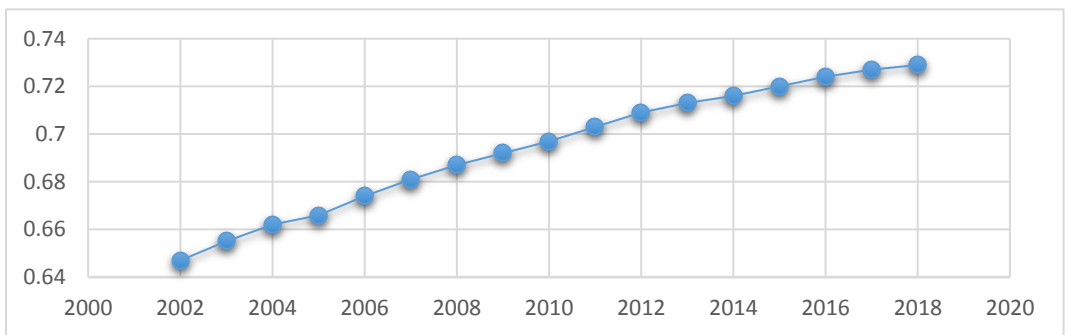


Figure 2 shows an average trend of economic development as measured by the human development index (HDI) in Asia. This shows an increasing trend in economic development during 2002-2018.

6. Results and Discussions

6.1 Panel Unit-root Test

In the first step, a panel unit-root test is conducted to inquire about the stationarity. The results show that variables are stationary at 1st difference (Table 3).

Table 3: Result of Panel-unit root Test

Methods Variables	Levin-Lin Stat / Prob	Pesara-Shi Stat / Prob	ADF Fisher Stat / Prob	PP-Fisher Stat / Prob	Decision
Gov	-6.51*** (0.00)	-7.62*** (0.00)	149.25*** (0.00)	322.94*** (0.00)	I(1)
ED	-4.95*** (0.00)	-4.25*** (0.00)	102.59*** (0.00)	188.27*** (0.00)	I(1)
FD	-5.17*** (0.00)	-4.80*** (0.00)	102.72*** (0.00)	174.16*** (0.00)	I(1)
GKF	-6.90*** (0.00)	-6.75*** (0.00)	134.43*** (0.00)	244.54*** (0.00)	I(1)
G	-9.19*** (0.00)	-7.64*** (0.00)	152.63*** (0.00)	290.51*** (0.00)	I(1)

*** Denotes the rejection of the null hypothesis at a 1% level of significance.

6.2 Cointegration Test

The main objective of this study is to find out the long run relationship between governance, economic development. The Pedroni residual cointegration test is applied to check the cointegration among the variables.

Table 4 presents the cointegration among the variables used in Model 1 with the assumption of deterministic trend and intercept. The above model is also verified with Kao Test and showed cointegration at p-value < 0.01. It shows governance, economic development, and control variables like financial development, gross investment capital, and govt. spending has a long run relationship internally and they move in the same direction over time.

Table 4: Result of Pedroni co-integration test

Alternative Hypothesis: Common AR Coefficients (Within-Dimension)				
	Statistics	Prob	Weighted Stat	Prob
Panel v-Stat	31.4692	0.0000	17.3268	0.0000
Panelrho-Stat	3.8590	0.9999	4.1806	1.0000
Panel pp-Stat	-2.3905	0.0084	-2.2903	0.0110
PanelADFSa	1.0208	0.8463	-0.3790	0.3523
Alternative Hypothesis: Individual AR Coefficients (Between-Dimension)				
	Statistics	Prob		
Grouprho-Stat	5.9492	1.0000		

Group pp-Stat	-4.8828	0.0000
GroupADFSta	-0.4826	0.3147

6.3 Outcomes of Panel OLS, FEM, and REM

6.3.1 Model 1

Table 5 shows the result of Model 1, establishing a relationship between governance and economic development using the OLS, FEM, and REM. Governance has a positive and significant impact on economic development as presented in previous literature. This study is used the human development index (HDI) as an economic development proxy.

Specifically, OLS results show that a unit increase in governance leads to a 0.0925 units increase in economic development. Financial development (FD) and government expenditure (G) has a positive and significant impact on economic development as in previous study (Bist, 2018). One unit increase in FD leads to a 0.0007 increase in economic development and one unit increase in G leads to a 0.0072 increase in economic development. While gross capital formation (GKF) has a negative but significant impact on economic development as one unit increase in GKF leads to a 0.0026 unit decrease in economic development. Theoretically, it has the traditional assumption of positive causality between growth and capital formation, but empirically it is inconclusive. When we use the term development not only growth then it is linked to “jobless growth” and for the positive impact of GKF (Mankiw et al., 1992). Another study’s findings (Mehrra and Musai, 2013) showed that growth is the actual driver of the investment, not the investment is. The findings of Mckinnon (2010) showed a negative relationship between investment and economic growth, especially in developing countries.

FEM results show that governance has a positive and significant impact on development. One unit increase in governance leads to an increase in 0.0488 units increase in economic development. FD and GKF have a positive and significant impact on economic development. Results show a negative but significant impact of G on development as one unit increase in G leads to 0.0006 units decrease in development. Barro’s theory states that when economic activity generates with real capital, G increases the growth in the early stage but after the steady-state, it hurts growth due to the crowding-out effect (Barro, 1981). Govt spending is also linked to fiscal deficit too, especially in developing countries.

REM results show that governance has also a positive and significant impact on development. One unit increase in governance leads to 0.0581 units increase in

development. FD and GKF have a positive and significant impact on development as one unit increase in FD and GKF lead to 0.0012 and 0.0008 units increase in economic development, respectively.

Table 5: Results of OLS, FEM, and REM (Model 1)

Dependent Variable: Economic Development			
Variables	OLS	FEM	REM
Gov	0.0925*** (0.0000)	0.0488*** (0.0000)	0.0581*** (0.0000)
FD	0.0007*** (0.0000)	0.0012*** (0.0000)	0.0012*** (0.0000)
GKF	-0.0026*** (0.0000)	0.0009*** (0.0000)	0.0008*** (0.0010)
G	0.0073*** (0.0000)	-0.0006 (0.2768)	2.13E-05 (0.9697)
C	0.6439*** (0.0000)	0.6230*** (0.0000)	0.6197*** (0.0000)
R-square	0.7488	0.9705	0.4855
N	424	424	424

*, ** and *** denote significance at the 10%, 5%, and 1% level respectively.

6.3.2 Model 2

The main objective of our study is to confirm this side relationship that economic development-to-governance empirically. Table 6 shows the positive relationship between economic development and governance.

OLS results show that a one-unit increase in economic development leads to a 4.2019 units increase in governance. FD and GKF have also a positive and significant impact on governance (Sayilir et al., 2018; Iheonu, 2019). One unit increase in FD leads to 0.0037 units increase and one unit increase in GKF leads to a 0.0124 unit increase in governance. Govt expenditures have a negative but significant impact on governance, as one unit increase in G leads to a 0.0160 unit decrease in governance.

Table 6: Results of OLS, FEM, and REM (Model 2)

Dependent Variable: Governance			
Variables	OLS	FEM	REM
ED	4.2019*** (0.0000)	1.1602*** (0.0000)	1.3981*** (0.0000)
FD	0.0037*** (0.0000)	-2.03E-05 (0.9665)	5.31E-05 (0.9102)
GKF	0.0124*** (0.0000)	-0.0024*** (0.0000)	-0.0027*** (0.0000)
G	-0.0160*** (0.0000)	-0.0043*** (0.0000)	-0.0042*** (0.0000)
C	-3.4653*** (0.0000)	-0.7799*** (0.0000)	-0.9478*** (0.0000)
R-square	0.6877	0.9808	0.1213
N	424	424	424

*, ** and *** denote significance at the 10%, 5%, and 1% levels respectively

FEM results show the positive and significant impact of development on governance and one unit increase in development leads to a 1.1602 units increase in governance. GKF has a negative but significant impact on governance as one unit increase in development leads to a 0.0024 unit decrease in governance. FD and GKF have an insignificant impact on governance. REM results show the positive and significant impact as one unit increase in development leads to a 1.3981 units increase in governance. GKF has a negative but significant impact on governance.

7. Conclusion

This study explores the relationship between governance, and economic development using Panel OLS, FEM, and REM techniques for selected Asian countries for the period 2002-2018. Empirical evidence shows that governance has a significant and positive impact on economic development, and economic development on the other hand also has a significant impact on governance. Results also show that if economic development implies human development then it also affects sustainable development and governance significantly. It is a surprising and different result, as implied in previous studies because human development is considered economic development, not GDP growth only.

In the 1990s, the direction of the thinking changed very little regarding the working of economies and the role of governance. In the present era, the focus of economists has shifted from quantitative measures of accounting to qualitative measures of social policies. Human Development Index (HDI) and Governance were introduced as the main anchors of the economy. HDI is a statistical tool and its main objective is to develop social and economic outcomes and overall achievement of the society but ignored the ecological efficacy and environmental protection. There is a correlation and causal relationship between governance and economic development, as it is presented in the previous literature (Olsan et al., 1998; Cooray, 2009; Liu et al., 2018; and Mira and Hammadache, 2017), and the direction which is usually studied is from governance-to-economic development, but the other direction has usually been ignored in empirical studies i.e. from economic development-to-governance, (Kraay and Kaufmann, 2002; and Bota-Avram, 2018). Growth has zero or negative impact on governance due to the influential elite class, with reducing benefits of private businesses and deteriorating overall governance (Kraay and Kaufmann, 2002).

There is a need to design such policies in which society should be involved to save the environment and to achieve sustainable development along with economic development. Financial development (FD) and government expenditures

(G) have a positive and significant impact on economic development, as shown in a previous study (Bist, 2018). Financial development and capital also have a positive and significant impact on governance which is consistent with the literature (Sayilir et al., 2018; Iheonu, 2019). Government expenditures have a negative impact on governance due to increasing budget deficit and rising debt financing.

Public policies should be required to maximize the returns from government expenditures without any fiscal deficit and environmental degradation. Improved infrastructure and favorable eco-environment technology should be made possible through effective and fair governance for the positive impact of investment on economic growth. The study also recommends that financial development, governance reforms and human development are necessary to ensure effective governance in Asian countries.

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