DEMOCRACY, POLITICAL STABILITY AND ECONOMIC GROWTH: A PANEL DATA ANALYSIS OF SELECTED ASIAN COUNTRIES

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ABSTRACT

There are rare studies that have estimated the relationship between political capital and the economic growth of Asian countries. The primary objective of this study is to explore the straight and subsidiary effect of the political variables on the economic development of selected Asian developing countries. Furthermore, the study attempts to explore the direct consequences of democracy, stable governance, and government effectiveness on the GDP growth of selected Asian countries. The study also examines the indirect effect of political freedom, government stability, and governance efficiency on economic growth through intervening variables. This study was carried out from 2002 to 2019 for selected Asian countries. There are multiple dimensions of political capital, but the current study uses joint proxies, distinguishing it from the literature. The role of political capital in determining the economic growth of selected Asian developing countries is the major agenda of this study. Panel Fixed Effect and Random Effect techniques are used to determine the effect of political variables on economic growth, while the Hausman test is applied as a diagnostic measure to decide the appropriateness of Fixed Effect and Random Effect models. The results found positive direct and indirect effects of the entire political variables except for economic freedom, which negatively affects economic growth for selected Asian developing countries. The current study suggested that democracy can play a pivoting role in the economic growth of selected countries if they maintain political stability and reduce non-developmental expenditures.

INTRODUCTION

The concept of economic development is broader than economic growth (Samarasinghe, 2018). Economic development possesses the role of political capital and the growth determining factors: human capital and physical capital. Economic development is when an economy's economic (quantitative) and non-economic (qualitative) variables increase over time. Economic variables show increment in the GDP, investment, and FDI, etc. The qualitative variables include the economy's political, social, institutional, and governance structure reforms. In comparison, economic growth is only concerned with the increase of the national income, while economic development emphasizes the equitable distribution of income among the various group of people in any economy.

Now a days, many studies in literature intend to explore the effect of political capital on economic development, including the role of institutional quality, the longevity of governance, and political stability. Research in the field of economic development is increasingly engaged with questions of the political economy of how political choices, institutional structures, and forms of governance influence the economic choices made by governments and citizens. In order to make a cross-country comparison of growth, human and physical capital are insufficient by ignoring the role of political capital. Studies were more concerned with economic growth in the past, but researchers' intentions moved

toward economic development due to increasing regional inequalities and disparities. Economic growth explains an increase in the number of goods and services produced per head of the population over a period in a country. Some economists translate economic growth as a process whereby an economy's economic variables (quantitative) increase over a short period of time. Human and physical capital are used to conduct domestic growth analysis. Whenever there is a need to investigate cross-country analysis, these proxies are insufficient by ignoring the role of political capital (Acemoglu et al., 2014). Three major determinants of growth are further divided into their proxies, as shown in Figure 1.

The role of politics is a more important determinant of economic development than the rest of the other growth determining factors (Abeyasinghe, 2004). The political capital of the economy includes many dimensions: the role of governance, political regimes, economic freedom, political instability, the role of institutions, etc. All mentioned dimensions of political capital are further classified into subgroups. Political regimes are divided into two dimensions democracy and autocracy, while proxies for political institutions are regulatory, property rights, and macroeconomic institutions (Hall and Jones, 1999). Governance is the exercise of economic, political, and administrative authorities to solve state issues (Kaufmann et al., 2009) discovered that

governance possesses six dimensions: which include; (1) Stability of governance, (2) Efficiency of governance, (3) Combat of dishonesty, (4)Law and order, (5)Audit and freedom and (6)Government regulation.
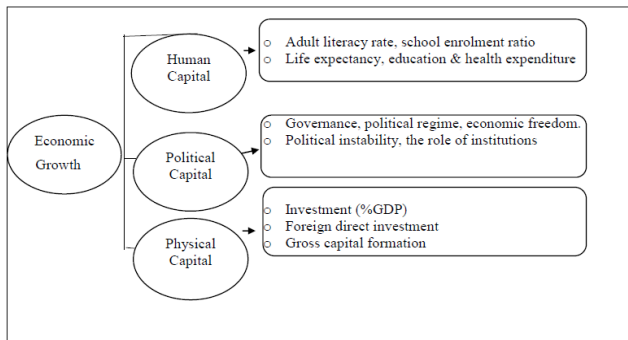

Figure 1. Economic Growth Proxies; Source: Author's own capturing.

Economic freedom refers to the overall freedom of economic agents in the decision-making process of economic activities. Economic freedom is a market economy in which the government has limited interventions (Heritage Index, 1995). It possesses eight proxies to measure its effect on economic growth: liberty in trade, freedom of budgetary policy, financial liberty, investment, liberty in real estate, and government spending's liberty to reduce exploitation. In a democratic government, power is shifted up to each region of the state, so it is assumed that it will minimize the problem of regional disparities and income inequalities. The democratic regime promotes property rights, health, and educational expenditures, further enhancing economic growth. Political stability is the key determinant in examining the pace of economic development because it is directly connected with capital inflow. If the country faces an unstable political regime, it will discourage saving because the public prefers spending. The demand for fixed capital also reduces, negatively impacting gross capital formation. In this trend, two essential variables are saving and investment unfavorably affected by political instability (Feng, 1997). China has more economic growth with a single-party government, while India has low growth even with a multi-party government due to political instability.

According to Mahmood (2009), the classical school of economists is highly concerned with physical capital, while modern economists emphasize the political regime's role in economic growth. However, this is a very complex assignment to explore a relationship. The non-democratic and unconstitutional political situation brought unreliable and inefficient strategic planning, creating a major hurdle in economic development. Many political economists researched this agenda, but it is still unambiguous. It is a natural philosophy that democracy increases the confidence and interest of citizens to work honestly and improve the country's income distribution. Democracy does not provide a guarantee to execute efficient policy-making due to ignorance and illiteracy. In developing countries, it is very important to establish the role of the political economy in growth because there is a need to improve culture, living standards, medical treatment, educational structure, employment opportunities, etc.

Figure 2 explains the role of the political system, which generates the atmosphere to promote economic development, social reforms, and administrative qualities. Economic freedom is considered an important variable in determining economic growth because it promotes specialization in the country. Economic freedom affects human and physical capital, enhancing

economic growth (Abeyasinghe, 2004). Finally, it can be considered that the market economy can stimulate economic growth by promoting specialization and minimizing the role of government initiatives. Economic freedom provides an environment of competition in economic activities to be utilized as an explanatory measure of emerging economies' economic development. According to neoclassical economists, the market is considered efficient when the transaction cost is zero, so government intervention is required when people face higher transaction costs. The effectiveness of a government measures the competency of all governance indicators. If a government works efficiently, it promotes the economy's productivity by declining transportation expenditures. Numerous studies argued that political variables like democracy, government effectiveness, political stability, and economic freedom create a background for significant productivity by promoting capital formation. The literature also argues that governmental capital has an optimistic effect on the economic growth of developing countries via human capital, physical capital, and government public expenditures (Nguyen et al., 2018).
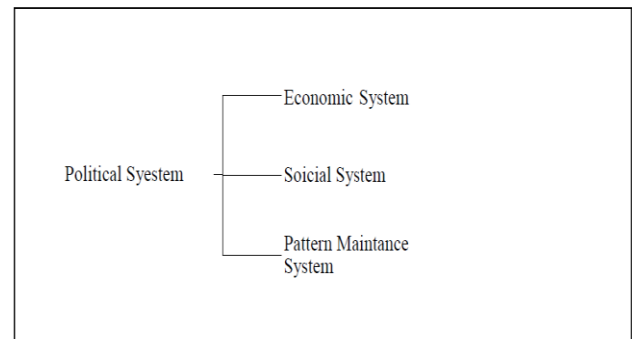

Figure 2. Political System; Sources: Abeyasinghe (2004).

Significance of the Study
The past studies emphasized the direct effect of the political variables on growth, but in addition to the literature, the current study explored both direct and indirect effects through health expenditures, gross capital formation, and government final consumption expenditures for the period 2002 to 2019. Past studies have paid less attention to Asian countries, while this study focuses on selected Asian countries. Many studies in the literature investigated the influence of a single political variable on the GDP growth rate. In addition, the current literature study uses four proxies of the political variable; (1) Democracy, (2) Political stability, (3) Government effectiveness, and (4) Economic freedom. Many researchers added proxies of political variables in the growth models and explained their relationship with economic growth by looking at the sign and values of coefficients called the direct effect model. Acemoglu et al. (2014), Lakhan et al. (2015), Masaki and Van de Walle (2015), and Zghidi (2017) confirmed the direct effect of political variables. The political variables may indirectly affect economic growth by influencing several important institutions, further enhancing the development pace. These institutions are; Well-established rules for real estate, Fair agreement execution, A minimum gap of statistics, and the stability of the environment for macroeconomic variables.

The indirect effect of political capital through human capital and physical capital is more important than the direct effect, Abeyasinghe (2004), Baum and Lake (2003), Feng (1997), Helliwell (1992) and Nosier and El-Karamani (2018) emphasized on the indirect effects of political freedom, stable governance,

market economy, quality of government decision making. The significance of this study is that it examined both the straight and indirect effects of institutional variables on economic growth. Most of the revisions in the literature used well-developed democratic countries in the newly democratized world, which built the problem of bias. The main thing differentiating the current study from the literature is that the analysis is carried out for developing Asian countries.
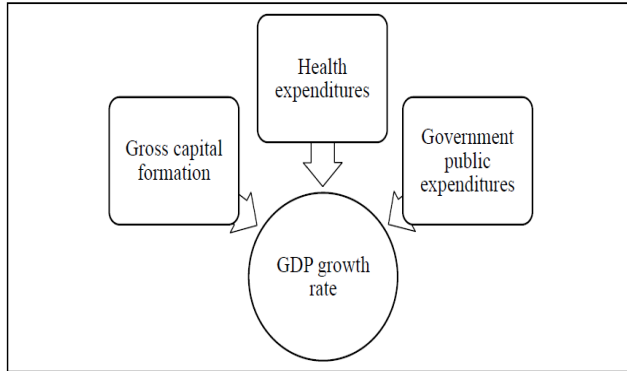

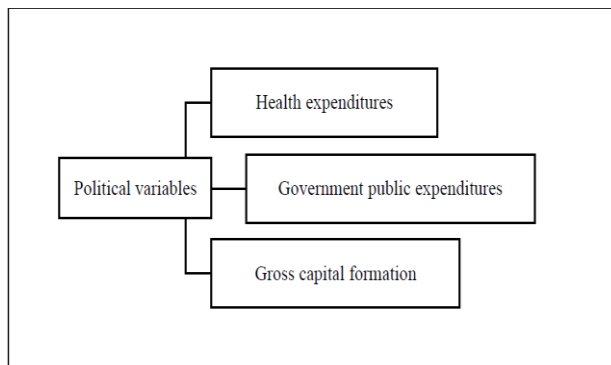Figure 3. Indirect Effect Model; Source: Abeyasinghe (2004).

Figure 4. Political Variables; Sources: Abeyasinghe (2004).

Figure 3 describes the channel of indirect effect, while Figure 4 demonstrates different political variables. The existing research concludes that the impact of democracy on economic growth is positive (Acemoglu et al., 2014; Lakhan et al., 2015; Mahmood, 2009; Qureshi and Ahmed, 2015; Zghidi, 2017) and also has a weak negative effect on economic growth (Barro, 1996). Moreover, government effectiveness and economic growth are positively associated (Bayar, 2016), and economic freedom has a negative influence on economic growth (Mahmood, 2009; Santhirasegaram, 2007), whereas political stability is positively related to economic growth (Zghidi, 2017).

Objectives of the Study
In the literature, rare studies estimate the relationship between political capital and the economic growth of Asian countries. The study's primary objective is to explore the straight and subsidiary effect of the political variables on the economic development of selected Asian developing countries.
Further secondary objectives are; (1) to explore the direct consequences of democracy, stable governance, and government effectiveness on the GDP growth of selected countries, (2) to examine the indirect effect of political freedom, government stability, and governance efficiency on economic growth through intervening variables and (3) to provide suggestions for enhancing the role of institutions in economic growth.

Hypotheses of the Study
The models used in the study are the addition of the neoclassical growth model explained by Barro (1996) in his study "political freedom and economic growth". The given models assumed that political institutions could play a vital role in determining economic growth by providing a stable environment, property rights, justice, and the rule of law. Human capital and physical capital can be affected by political stability. That is why proxies of political variables are added to the neoclassical growth model. The following hypotheses are considered in the analysis.
H_o1: Democracy positively affects the GDP growth of selected Asian developing economies.
H_o2: Stability of governance has a positive effect on GDP growth rate.
H_o3: The market economy has a proportional effect on GDP growth.
H_o4: The government's public expenditures have a positive effect on GDP growth.
H_o5: Political variables have a positive indirect effect on economic growth.

METHODOLOGY
Five econometric models are used in the study to explore the effect of political capital on the economic growth of the selected Asian developing economies.

Background Model
$$G_{rit} = \alpha_0 + \alpha_1 D_{it} + \alpha_2 PS_{it} + \alpha_3 EF_{it} + \alpha_4 GE_{it} + \mu_{it} \tag{1}$$
Acemoglu, Naidu, Restrepo, & Robinson (2014) developed the above model, which is being used to achieve the current objectives. Where, in Eq. (1), α_0=intercept, D=democracy, α_1=slope coefficient of democracy, PS= political stability, α_2=slope coefficient of political stability, EF=economic freedom, α_3=slope coefficient of economic freedom, GE=government effectiveness, α_4=slope coefficient of government effectiveness, μ_t =error term. The study's background model contains political variables' effect on economic growth.

Overall Model
$$G_{rit} = \alpha_0 + \alpha_1 D_{it} + \alpha_2 PS_{it} + \alpha_3 EF_{it} + \alpha_4 GE_{it} + \alpha_5 HE_{it}$$
$$+ \alpha_6 GCF_{it} + \alpha_7 GFC_{it} + \mu_{it} \tag{2}$$
α_0=intercept, D=democracy, α_1=slope coefficient of democracy, PS= political stability, α_2=slope coefficient of political stability, EF=economic freedom, α_3=slope coefficient of economic freedom, GE=government effectiveness, α_4=slope coefficient of government effectiveness, HE=health expenditures, α_5=coefficient of health expenditure, GCF=gross capital formation, α_6= coefficient of gross capital formation, GFC=government consumption expenditures, α_7=slope of GFC and μ_t=error term.
The overall model examines the effect of political variables along with the macroeconomic variables on the GDP growth rate of selected Asian developing economies.

Auxiliary Regression Models
In order to examine the indirect effect of institutional capital on GDP growth, the study uses three auxiliary regression models in which independent variables of the overall model were kept as dependent variables. These regressions were developed by Acemoglu, Naidu, Restrepo, & Robinson (2014).

Health Expenditures Model
This model uses health expenditures as a proxy for human capital. This is the first auxiliary regression model which inspected the

subsidiary effect of political variables on economic growth through health expenditures.

$$HE_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 PS_{it} + \beta_3 EF_{it} + \beta_4 GE_{it} + \mu_{it} \quad (3)$$

Gross Capital Formation Model
This is the second auxiliary model used to investigate the indirect effect of political variables on economic growth through physical capital.

$$GCF_{it} = \delta_0 + \delta_1 D_{it} + \delta_2 PS_{it} + \delta_3 EF_{it} + \delta_4 GE_{it} + \mu_{it} \quad (4)$$

Government Final Consumption Expenditures Model
The last auxiliary regression model uses government public expenditures as a dependent variable to analyze the effect of political freedom, stable governance, economic freedom, and institutional efficiency on GDP growth.

$$GCE_{it} = \varphi_0 + \varphi_1 D_{it} + \varphi_2 PS_{it} + \varphi_3 EF_{it} + \varphi_4 GE_{it} + \mu_{it} \quad (5)$$

The panel data analysis of 12 South and South East Asian developing countries employed in the study. Due to the unavailability of data, some countries of the selected region were ignored in the paper. The duration of the data is started from 2002 to 2019. The study uses data on political variables taken from different indices, which used the investigators' current scores of the economies. So in order to maintain the robustness of the results study did not include data from 2020 and 2021, which were not properly compiled due to COVID-19.

Variable Description
This section includes information about the variables used in the study. The current study uses three dimensions of the political variables, the role of institutions, political regime, and economic freedom. The proxy variable for institutions are political stability and government effectiveness, and for democracy, polity two is used in the study. Each variable of the study is described separately in Appendix A. The other control variables are macroeconomic variables used to examine convergence and the indirect effect of political capital on economic growth.
1. Gross domestic production (GDP growth in LCU)
2. Government health expenditures
3. Gross capital formation
4. Government final consumption expenditures

The GDP growth rate is taken as a dependent variable to estimate the contribution of institutional and macroeconomic variables in determining economic development. Health expenditures are used as alternative human resources, while gross capital formation is used as a proxy of physical capital. The theoretical perspective of democracy provides information that democratic governments focus more on current expenditures in order to maintain their position. Due to that reason, the study also investigated the effect of political variables through this channel.

Sources of Data
The above Table 1 shows data sources of the entire political variables. These sources contain data on the world economy, including developing and developed nations. There are three basic econometric techniques for the analysis of panel data. Panel OLS is used when the intercept and slope coefficient of all countries are homogenous. If heterogeneity exists in the parameters of the econometric models, the panel FE and panel RE methodologies are preferred over panel OLS. The current study chooses panel FE and RE because South and south East Asian region are heterogeneous in socioeconomic and political characteristics. This study includes the developing countries of the South and South East Asian region in which Afghanistan, Nepal, Maldives, Myanmar, and Timor are excluded due to the unavailability of data.

Table 1. Sources of data.

Variables	Duration	Source	Country
PS	2002-2019	WGI	200
D	2002-2019	Polity IV	167
GE	2002-2019	WGI	200
EF	2002-2019	Heritage index	186
GCF	2002-2019	WDI	More than 190
GFCE	2002-2019	WDI	More than 190
GDP	2002-2019	WDI	More than 190

Note. Authors' own calculations.

Random Effects Model
The Random Effect model assumes the intercept and slope coefficient values of the cross sections are different not due to regional differences but rather due to the randomness of the samples (Stock & Watson, 2008). The Random Effect model tackles the problem of missing countries.

$$y_{it} = \alpha + \beta X_{it} + v_{it}$$
$$v_{it} = \varepsilon_{it} + e_{it}$$

α = Intercept/Mean/Average value of selected countries

ε_{it} = randomness

e_{it} = error term

$$GDPit = a_0 + \beta 1 Dit + Vit$$
$$GDPit = \theta_0 + \beta 2 PSit + Vit$$
$$GDPit = \vartheta_0 + \beta 3 EFit + Vit$$
$$GDPit = \delta_0 + \beta 4 GEit + Vit$$

a_0=Intercept included the effect of economic freedom, political stability, and government effectiveness.
θ_0=Intercept included the effect of economic freedom, democracy, and government effectiveness.
ϑ_0=Intercept included the effect of democracy, political stability, and government effectiveness.
δ_0=Intercept included the effect of democracy, economic freedom, and political stability.
The error term is divided into two parts: one part is the overall error term of the model, while the other is due to missing countries. The assumption of simple OLS violated because the model's error term is not completely random, so the Random Effect model used makes the error term random. The Random Effect model uses the Generalized Least Square method (GLS), which transforms the error term into entirely random and also solves the problem of autocorrelation and heteroscedasticity.

Fixed Effects Model
The Fixed Effect model explains all variations in the intercept and slope of the selected cross sections held due to socio, economic, cultural, and political dissimilarities among the countries (Stock & Watson, 2008). The purpose of the FE model is to escape the problem of endogeneity which shows a correlation between the dependent and independent variables (political variables). The FE model possesses three methods to tackle the problem of heterogeneity:

1. Within Group Fixed Effect
2. First Indifference Fixed Effect
3. Least Square Dummy Variable FE (LSDV)

The major property of the FE model is to find separate intercepts of entire cross sections, so for that purpose, it creates dummy variables for all selected countries. To investigate the effect of omitted cross-sections on the dependent variable (GDP per capita) Least Square Dummy Variable is more applicable.

$$Y_{it} = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + \varepsilon_t$$
$$Y_{it} = \alpha_0 + \beta_1 X_{it} + \varepsilon_t$$

Y_{it} = Dependent variable
X_{it} = Independent variables (Political + macroeconomic)
α_0 = Intercept of cross sections which fixed the unobserved heterogeneities
Z_{it} = Time invariant heterogeneities of unobserved cross-sections

Hausman Test

In order to choose which econometric technique, Fixed Effects or Random Effects, is more suitable for estimating models, the Hausman test is applied (Stock & Watson, 2008). The null and alternative hypotheses of the Hausman test are given below:

Null hypothesis
H_0: Random Effect model is more efficient
H_1: Fixed Effect model is preferred

The probability value of the Hausman test was used for selecting between RE and FE models. If the probability value of the HM test is more than 0.05, then the null hypothesis should be accepted, and the Random Effect model should be considered more appropriate.

RESULTS AND DISCUSSION

The first section of results and discussion describes the descriptive statistics which are given below in Table 2. Second section is about the results of direct effect models, and third section contains the Hausman test results. Fourth section discusses the results of the background model, and fifth section is about the overall model results. Section sixth gives results about the indirect effect models, while seventh is about the results of the health expenditure model. Section eight is about the results of the gross capital formation model, and section ninth consists of the results of the government consumption expenditure model.

Direct Effect Models

The direct effect models of the study involve background and overall model, which examines the direct impact of the governance variables on economic growth. The results of these models are given below:

Results of the Hausman Test

Hausman test is applied to determine which econometric technique, Fixed Effect or Random Effect, is appropriate for the given models.

According to the Hausman test results shown in Table 3, the Random effects technique is preferred for background, overall, and health expenditures models. For two indirect models that include gross capital formation and government final consumption expenditures, the Fixed Effects technique is better than Random Effects.

Table 3 shows that the probability value of the Hausman test for the background model is 0.84, which is greater than 5 percent; hence, the RE model is more appropriate than the FE technique. For the overall and health expenditures models, HM test probability values are 0.29 and 0.60, which are also greater than 5%, and the null hypothesis is accepted. The probability values of the Hausman test for gross capital formation and final government consumption expenditures are 0.0001 and 0.015 percent, so the null hypothesis of the test is rejected.

Results of Background Model

Table 4 contain the results of the background model in which GDP growth rate is a dependent variable, and there are four independent political variables. This model identifies the effect of only political variables without considering macroeconomic variables.

Table 2. Descriptive statistics.

Variable	GDP	D	PS	GE	EF	HE	GCE	GCF
Mean	51680.22	3.61	-0.97	-0.64	55.10	0.71	9.91	16.95
Maximum	61885.36	7.00	-0.40	-0.38	57.90	1.35	11.73	24.34
Minimum	29065.02	-5.00	-2.25	-0.82	51.90	0.48	5.02	14.12
Std. Dev.	7404.39	4.29	0.37	0.15	1.46	0.22	1.74	2.40
Observations	228	228	228	228	228	228	228	228

Note. Author own calculations.

Table 3. Statistics of the Hausman test.

Models	Probability Value	Random Effects	Fixed Effects
Background Model	0.82	Preferred	-
Over All Model	0.29	Preferred	-
Health Expenditures Model	0.60	Preferred	-
Gross Capital Formation Model	0.00001	-	Preferred
Government Consumption Expenditures Model	0.015	-	Preferred

Note. Authors' own calculations.

Table 4. Regressions estimates of background model: (LNGDP as dependent variable)-(Random effects model).

Variables	Coefficient	Standard Error	T-value	P-value
EF	0.025439	0.005227	4.866574	0.0000
GE	0.469830	0.111617	4.209290	0.0000
LD	0.009143	0.004635	1.972486	0.0499
PS	0.103519	0.046565	2.223115	0.0273

Note. Author's own calculations. Constant = (11.05), R-Squared = (0.55), Probability F = (0.0000), F-statistics = (19.41).

The results of the background model are discussed in Table 4. The background model found that the results of the entire variables are identical to the hypotheses of the study. All political variables, including the level of political freedom, stable governance, market economy, and efficiency of government institutions, exert a positive and significant effect on the GDP per capita. The value of the adjusted R-squared is 0.55, which expresses that 55 percent variations in the model occur due to four independent variables. The overall significance of the model is also robust, which is measured through F-Statistics. The findings of the current study are in line with Abeyasinghe (2004), Nosier and El-Karamani (2018), Qureshi and Ahmed (2015), and Zghidi (2017). The two important political variables, political freedom and stability, have proportional and robust consequences on GDP growth at a five percent significance level. Across all political variables in the background model, political stability and government effectiveness have a more strong effect on growth. The low value of the coefficient of democracy is not showing that it has less contribution to growth, although improving the democratic structure of the countries can become a pivoting element of economic growth.

Results of the Overall Model

The overall model results are provided in Table 5, which indicates that the coefficients of the political variables are almost similar as calculated in the direct effect model except for political stability, which has a value of 0.1229. The overall model also includes macroeconomic variables with political capital to address the convergence problem. Health expenditures and gross capital formation both positively affect economic growth and are significant at 5%. The government's public consumption expenditures have a negative effect on growth. The results are that if developing countries increase the gross capital formation, it will increase the national income and reduce foreign dependence. Gross capital formation is the key determinant of economic growth for developing countries. Results show that the countries investing more in GDP relatively have more pace of development. According to the result of the current study, if a democratic government increases health expenditures that will lead to more productivity of labor and higher economic growth.

Indirect Effect Models

The results of indirect models are mentioned below.

Results of the Health Expenditures Model

Expenditure model findings are explained in Table 6. This model explains the effect of political variables on health expenditures. Economic freedom has a negative effect on health expenditures. The democratic regime has a direct relationship with health expenditures and claims that with improvement in the score of

polity two, the health expenditures will increase. Political stability and government effectiveness also have a progressive and robust effect on expenditures. If the score of political stability and government effectiveness increases, health expenditures will rise. All the political variables are significant at 5 percent. The adjusted R-squared of the model is 0.72, which justifies that 72 percent of variations in the model occur due to selected independent variables. In this model, political stability's effect on health expenditures is relatively stronger than other political variables. The infrastructure for health departments is very expensive, so it needs special attention from the government. So as compared to autocracies, democratic governments spend more on health facilities to satisfy the mandate of the electorates (Blum et al., 2021). The result of the current study is more significant than the literature because the study uses multiple variables of governance to avoid the endogeneity problem. The results explain that the democratic government of developing countries emphasizes health expenditures and spends extra than the dictatorship.

Results of the Gross Capital Formation Model

Table 7 illustrates the findings of the capital formation model. All political variables positively affect gross capital formation except economic freedom, which is inversely correlated. All variables are significant at five percent and have a minimum level of standard error. The coefficient of democracy is more significant than other variables in this model, which states that if polity two is enhanced by 1 unit, it will boost gross capital formation. The result in the table is evident that if the political stability of the developing economies increases, it improves GDP per capita. The political institutions, including democratic government, political stability, and effectiveness of the governance, are major variables that can become obstacles or boosters of gross capital formation, confirmed by the study's results.

Results of Government Consumption Expenditures Model

This is the last intervening model of the study in which political variables affect economic growth through government public expenditures. The results of Table 8 demonstrate that democratic and non-interventionist both have unfavorable effects on growth by encouraging public expenditures. If the countries improve the effectiveness of all departments, it will encourage government public expenditures, which further has a sound effect on economic growth. The democratic government always backs the interest group to maintain their vote and support. For this purpose, they spend more on non-productive projects leading to spur economic growth. It does not mean that democracy always hinders economic growth through consumption expenditures. It can be improved by providing social welfare to the entire public, not only interest groups.

Table 5. Regressions estimates of overall model: (LNGDP As dependent variable)-(Random effects model).

Variables	Coefficient	Standard Error	T-value	P-value
EF	0.015621	0.005702	2.739348	0.0067
GE	0.355828	0.111786	3.183120	0.0017
LD	0.009207	0.004488	2.051546	0.0415
PS	0.122958	0.045965	2.675036	0.0081
HE	0.280851	0.072240	3.887723	0.0001
GFC	-0.021299	0.011342	-1.877910	0.0618
GCF	0.005878	0.002975	1.975913	0.0495

Note: Author's own calculations, Constant = (11.25), R-Squared = (0.59), Probability F = (0.0000), F-statistics = (13.41).

Table 6. Regressions Estimates of Human Capital Model: (Health Expenditures as Dependent Variable) (Random Effects Model).

Variables	Coefficient	Standard Error	T-value	P-value
EF	-0.299814	0.064641	-4.638130	0.0000
GE	0.027192	0.005786	4.699465	0.0000
LD	0.109480	0.040061	2.732849	0.0068
PS	0.502616	0.110309	4.556446	0.0000

Note. Author's own calculations, Constant = (1.42), R-Squared = (0.72), Probability F = (0.0000), F-statistics = (22.71).

Table 7. Regressions estimates of physical capital model: (Gross capital formation as dependent variable)-(Fixed effects model).

Variables	Coefficient	Standard Error	T-value	P-value
EF	-0.103043	0.035724	-2.884429	0.0044
GE	2.913370	0.650860	4.476187	0.0000
LD	4.207256	0.378409	11.11826	0.0000
PS	0.979354	0.454090	2.156742	0.0322

Note. Author's own calculations, Constant = (21.42), R-Squared = (0.83), Probability F = (0.0000), F-statistics = (72.11).

Table 8. Regressions estimates of GFC model: (Government final consumption expenditures as dependent variable)-(Fixed effects model).

Variables	Coefficient	Standard Error	T-value	P-value
EF	0.027062	0.020180	1.341007	0.1814
GE	1.342802	0.425514	3.155719	0.0018
LD	0.064871	0.028382	2.285652	0.0233
PS	-1.874706	0.503414	-3.723988	0.0003

Note. Author own calculations, Constant = (8.12), R-Squared = (0.94), Probability F = (0.0000), F-statistics = (26.11).

In sum, the results found the positive direct and indirect effect of the entire political variable except for economic freedom, which has a negative indirect effect on economic growth for selected Asian developing countries. Our results are similar to these studies (Abeyasinghe, 2004; Acemoglu et al., 2014; Barro, 1996; Bayar, 2016; Lakhan et al., 2015; Mahmood, 2009; Qureshi and Ahmed, 2015; Santhirasegaram, 2007; Zghidi, 2017), the results of our study are similar to the studies mentioned above because these countries also used the sample of less developed countries. So, developing economies face almost the same situations, and policies' effect on the growth of an economy is approximately the same.

CONCLUSION AND POLICY IMPLICATIONS

The 21st century of Asian countries is nominated by the instability of the political and economic structure of the states. The researchers' common argument is that a stable political regime is necessary for economic growth. In order to examine the straight and inverse effect of political freedom and political stability on the economic growth of developing Asian countries, the study used four dimensions of political capital. All political variables were added to the Solow sawan model, and the study found that political capital has a significant role in the determination of economic growth. The study found strong evidence that all political variables, democracy, political stability, government effectiveness, and economic freedom positively affect economic growth. In the series of macroeconomic variables, government public expenditures negatively affect growth, while health expenditures and gross capital formation have a positive effect. Human and physical capital are central indirect channels through which political variables affect economic growth. Entire political variables have a positive and significant indirect effect on growth. Once a government becomes more stable and effective, it discourages non-developmental expenditures. The strength of the current study is that it considers both the direct and indirect effects of multiple dimensions of political capital.

The current study suggested that political variables have positive effects on economic growth, so there is a need for government intentions toward democracy and political stability. The study also recommended that indirect channels of democracy and other political variables are more important than direct effects because these channels further create an environment for economic growth. The study found little backing for the view that democratic regimes might be an obstacle to economic growth by encouraging non-developmental expenditures due to the intervention of interest groups. So the role of democracy in economic growth can also be positive through this channel by decreasing public expenditures.

Although the study has the advantage of including the effects of direct and indirect channels of political capital, the weakness of the study is that it does not capture all intervening variables which may be considered important to GDP growth. The other flaw of the study is that it ignores some Asian developing countries due to the unavailability of data.

REFERENCES

Abeyasinghe, R., 2004. Democracy, political stability, and developing country growth: Theory and evidence. John wesley powell student research conference (pp.1-2). Honors Project: Illinois Wesleyan University. https://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1752&context=jwprc.

Acemoglu, D., Gallego, F., Robinson, J.A., 2014. Institutions, human capital and development. NBER working paper no. 19933. Available at https://www.nber.org/papers/w19933.

Alesina, A., Özler, S., Roubini, N., Swagel, P., 1996. Political instability and economic growth. J. Econ. Growth 1, 189–211.

Barro, R.J., 1996. Democracy and growth. J. Econ. Growth 1, 1–27.

Baum, M.A., Lake, D.A., 2003. The political economy of growth: democracy and human capital. Am. J. Pol. Sci. 47, 333–347.

Bayar, Y., 2016. Public governance and economic growth in the transitional economies of the European Union. Transylvanian Rev. Adm. Sci. 12, 5–18.

Blum, J., Dorn, F., Heuer, A., 2021. Political institutions and health expenditure. Int. Tax Public Financ. 28, 323–363.

Corovei, E.A., Socol, A., 2019. The Impact of Political Stability on Economic Growth in European Union. Ovidius Univ. Ann. Econ. Sci. Ser. 19, 8–14.

Diamond, L., 2002. Thinking about hybrid regimes. J. Democr. 13, 21.

Feng, Y., 1997. Democracy, political stability and economic growth. Br. J. Polit. Sci. 27, 391–418.

Hall, R.E., Jones, C.I., 1999. Why do some countries produce so much more output per worker than others? Q. J. Econ. 114, 83–116.

Hanke, S.H., Walters, S.J.K., 1997. Economic freedom, prosperity, and equality: a survey. Cato J. 17, 117.

Helliwell, J.F., 1994. Empirical linkages between democracy and economic growth. Br. J. Polit. Sci. 24, 225–248.

Kaufmann, D., Kraay, A., Mastruzzi, M., 2009. Governance matters VIII: Aggregate and individual governance indicators, 1996-2008. World Bank policy research working paper no. 4978. Available at https://papers.ssrn.com/sol3/papers.cfm?Abstract_id=1424591.

Kaufmann, D., Kraay, A., Mastruzzi, M., 2011. The worldwide governance indicators: Methodology and analytical issues1. Hague J. rule law 3, 220–246.

Lakhan, G.R., Ali, S., Sultan, A., 2015. The Economic Effects of Democracy in Pakistan: An Empirircal Analysis. Int. Res. J. Soc. Sci. 4, 14–18.

Mahmood, K., 2009. Democracy, economic freedom and growth: A case study of Pakistan. (Doctoral dissertation):Bahauddin Zakariya University, Multan.

Masaki, T., Van de Walle, N., 2015. The impact of democracy on economic growth in sub-Saharan Africa, 1982-2012. WIDER working paper no. 057. Available at https://www.econstor.eu/handle/10419/96313.

Nguyen, C.P., Su, T.D., Nguyen, T.V.H., 2018. Institutional quality and economic growth: The case of emerging economies. Theor. Econ. Lett. 8, 1943.

Nosier, S., El-Karamani, A., 2018. The indirect effect of democracy on economic growth in the MENA region (1990–2015). Economies 6, 61-72.

Qureshi, M.G., Ahmed, E., 2015. The Inter-Linkages between Democracy and Per Capita GDP Growth: A Cross Country Analysis. Res. J. Soc. Sci. 4. 42-56.

Samarasinghe, T., 2018. Impact of governance on economic growth. MPRA working paper no. 89834. Available at https://mpra.ub.uni-muenchen.de/89834/1/MPRA_paper_89834.pdf.

Santhirasegaram, S., 2007. The impact of democratic and economic freedom on economic growth in developing countries: pooled cross country data evidence. J. Appl. Sci. 7, 1484–1489.

Zghidi, N., 2017. Do political stability and democracy increase national growth? Evidence from African countries using the GMM method. J. Glob. Econ. 5, 242-263.

Appendix A

Political Regime

There are two dimensions of the political regime used in literature one is a democracy, and the other is autocracy. The study used democracy as a proxy for political regime, Diamond (2002) provided the best definition of democracy which is " a political system which provides fair elections and constitutional replacement of the government, ensuring human rights and the rule of law for entire population equally". The proxy for democracy is polity two, which is extracted from the democracy index. The range of the Polity IV data set is -10 to +10. There will be a perfect democratic system if the score of data is +10, while -10 shows a pure autocratic (dictatorship) system in the country. If the score of polity 2 lies between -10 and +10, then it shows the movement of the system towards dictatorship as well in democratic regime.

Political Stability

Political stability explains how to keep the sustenance of the government body without any legal or illegal (unconstitutional) changes (Alesina et., 1996). This variable was included in the research because it provided a fruitful environment for domestic and foreign investment by controlling wars, terrorism, strikes, and conflicts in the state (Corovei and Socol, 2019). The data on political stability is taken from WGI, which has values of -2.5 to +2.5. If any country scored +2.5, it would be strongly stable, while -2.5 expresses strong instability in the state's boundaries.

Economic Freedom

Economic freedom is defined as the economy should be a market economy and less government intervention in economic activities (Piątek et al., 2013). The study incorporated the economic freedom variable because it has been considered an important variable of welfare by the classical school of thought. Economic freedom has many dimensions, but most studies used secure property rights, freedom of domestic and international agreement, and freedom of investment (Hanke and Walters, 1997). There are many sources of economic freedom data, but the heritage foundation provided a heritage index with more validity. The heritage foundation is an American think tank that started the collection of data in February 1973. The score of the heritage index has a value among 0 to 100 in which 0 states there is no freedom while 100 is considered strong economic freedom. The range of the data is, 50-54 mostly unfree, 65-69 moderately free, 70-74 mostly free, and 75-100 free.

Government Effectiveness

The effectiveness of government possesses efficiency and agility of the bureaucracy, the capability of civil services, equal access to public services, regulation of law and order, and strong investigation for corruption (Kaufmann et al., 2011).If the government works effectively, it will encourage economic growth by reducing the cost of transportation and improving human and physical capital (Abeyasinghe, 2004).The data on government effectiveness also take from WGI, which ranges from -2.5 to +2.5. If the value of government effectiveness is +2.5, it shows strong effectiveness, while -2.5 shows strong government deficiency.