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Role of Institutions and Economic Growth in Asian Countries

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Abstract

For the past two decades, researchers have been focusing on the most important question related to economic growth, that is, what actually determines the growth of nations. In many empirical studies, geography, human capital, physical capital, trade integration, population and information technology have been found to be the major contributors to the development of economies[4]. But recently empirical research has started focusing on the role played by 'institutions'. Therefore, development is no longer viewed as an outcome of capital accumulation but as a process of organizational change. However in growth literature this finding can be something new but economists acknowledge the supremacy of such organizations i.e. economies can be prosperous if they are free from government interventions.Thus role of institutions has been an important point of focus for economists for the past two decades. This study aims to examine the relationship among these institutions and economic growth in Asian countries. Study covers the time period from 1995-2010. Fixed effect model has been applied. Results show that financial and legal institutions *inter alia* are more effective in increasing the economic growth as compared to other formal and informal institutions. We conclude from our findings that enforcement of sound financial and legal system can help to increase economic development.

Key Words: Institutions, Financial Markets, Legal system, Economic Development, Formal Institutions, Informal Institutions, Legal institutions, Financial Institutions, Property Rights

1. Introduction

From the past two decades, researchers are focusing on the most important question that what actually determines the growth of nations. Some studies showed that geography, human capital, physical capital, trade integration, population and information technology have been the major contributors to the development of economies[5]. But recently these growth empirical research have started focusing on to the role played by 'institutions'. Therefore today it can be said that development is no longer viewed as an outcome of capital accumulation but as a process of organizational change. However in growth literature this finding can be something new but economists acknowledge the supremacy of such organizations or in more sophisticated language 'institutions' since 1776, when Adam Smith introduced the idea of Laissez faire economy or in other words that economies can be prosperous if these are free from government interventions. But empirically to find the relationship between institutions and economic growth, the first initiative was taken by Douglas North. In 1990 he declared that 'institutions matters' and then others also started focusing on this link. Following this, the World Bank also promoted this slogan through its report in 2002 titled as 'Building Institutions for Markets.' After this paradigm shift, one of the development economists Gerard Ronald declared in 2004 that 'we are all institutionalists now.

However still a question remained unanswered, that is, what institutions actually are? From economists point of view it is a disparate set of factors that range from social norms to values and all the way to property rights and complex organizations such as corporations and agencies of the states (Haggard, 2004; Williamson 1975, 1985). North (1990) defined institutions as 'any form of constraint that human beings devise to shape human interaction.' Mary M. Shirley also defined the institutions in the same way as described by North 'humanly devised constraints that structure human interaction' including formal constraints such as constitutions and laws and informal constraints, such as norms, conventions and self-imposed codes of conduct (North 1990, p. 3).' Moreover in recent literature Ronald (2004) developed a typology that distinguishes between 'slow-moving institutions' (like culture)

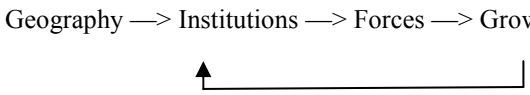
[4] Temple (1999) for references to the relevant empirical growth studies.
[5] See the survey by conducted by Temple (1999) for references to the relevant empirical growth studies.

and fast moving institutions" (like legal rules and organizations).

2.Literature Review

Rodrik (2000) argues that it is difficult to say that which institutions matter. But according to him democracy is the most effective way to develop better institutions. A large literature is there to find a relationship between these two important variables but ambiguity is still here. Democracies show high growth rates as compared to autocracies, but on average they don't outperform them. Such uncertainty may be due to the nature of formal institutions of democracies. Like whether it is parliamentary or presidential, has a unicameral or bicameral legislature, delineates large or small districts, has strong or weak political parties, uses proportional representation or winner-takes-all, or puts a short or long time limit on terms of presidents and legislators. These complexities are hard to measure in a way that lends itself to cross country comparisons. Measurement is further complicated when laws don't reflect practice, which is more likely in countries with underdeveloped institutions.

Acemoglu (2001) found in his study that the two fundamental root causes of the difference in the prosperity levels of developed and developing countries are geography and institutions. He also discussed that geographic hypothesis is not the primary cause of development. There is a correlation between geography and prosperity but this correlation does not prove any causation. While the institutions hypothesis showed a remarkable change in fortunes of the countries of the world. Moreover there arise a question, whether institutions are primary cause of growth or endogenous. Neo-Institutionalists following North consider them the primary cause of economic development. Some are of the view that geography is logically prior to everything else. Another problem which arises related to the institutions is, whether these are endogenous in nature or not? Endogeneity means when consequences reproduce the original causes. If institutions shape development but development affects institutions, then institutions are endogenous with regard to their consequences. This mechanism need not be functionalist: it need not be that institutions are chosen with a view toward their consequences, nor that only those institutions that promote development survive. The invariant background conditions, 'geography,' determine the initial institutions, which give rise to a particular patterns and rhythms of development, which in turn shapes the evolution of institutions. To return to the primacy claim with which we began, let us complicate this picture by introducing what in the Marxist language would be 'forces of production' and in the neoclassical language 'physical or human capital accumulation and technological change'. This can be shown schematically as[6]:



From here it can be seen that institutions determine the supply of factors and the technologies that exploit them, so that these can only be the 'proximate' cause. But institutions are still caused by something else, not only by the invariant background conditions but also by the wealth they generate.

Richard and Talbott (2001) also observed a highly significant relationship between different institutions and gross national income per capita from 1995 through 1999. Property rights, black market activity (seen as a proxy for enforcement of rules) and regulation have the strongest effect on per capita income; the first positive and the other two, negative. They used 14 different institutional variables. But all of them did not show significant results. However their findings showed that economic growth is strongly positive related to political rights, civil liberties, freedom of the press and government expenditures but negatively with inflation and trade barriers.

Rodrick (2003) explained three important reasons of the differences in the average incomes of the rich and poor countries. And these are geography, international trade and institutions. He called these three factors as the 'deep determinants of income'. According to his view, to sustain the development of an economy, there must be three types of institutions which might be called as: market regulating, market stabilizing and market legitimizing.

Jutting (2003) reviewed the existing evidence on the link between institutions and development outcomes. In particular, it has addressed the question of the impact of institutions on selected outcome variables such as growth, natural resource conservation and market development. While there is an emerging amount of cross-sectional and country studies addressing these issues, the review identifies three important ideas. First, in several of the reviewed studies, a clear concept of what institutions mean in this specific context is missing. The applied

[6] see Rodrik, Subramanian, and Trebbi (1998)

definition ranges from the narrow perspective of rules and norms to a far broader definition including aspects such as the political systems and organisations. Second, studies addressing the impact of institutions in a country case study setting often lack an analytical framework. This study proposes an analytical framework that differentiates between exogenous and endogenous variables and takes into account other variables also determining the outcome. Third, one finds in the existing literature a lack of studies offering precise policy recommendations. In particular, policy recommendations in cross-country growth studies are often rather blurred. This paper addresses the important question of the impact of institutions on development outcomes. Although a consensus that institutions "matter" has now emerged, the causality of the various links and channels of influence between the institutional set-up and development outcomes is not well understood. A thorough assessment of the impact of institutions is however necessary if one wants to evaluate alternative institutional arrangements against the status quo.

Glaeser, Porta, Lopez-de-Silanes, and Shleifer (2004) revisited the debate over whether political institutions cause economic growth, or whether, alternatively, growth and human capital accumulation lead to institutional improvement. They found that most indicators of institutional quality used to establish the proposition that institutions cause growth are constructed to be conceptually unsuitable for that purpose. They also find that some of the instrumental variable techniques used in the literature are flawed. Basic OLS results, as well as a variety of additional evidence suggest that human capital is a more basic source of growth than are the institutions, secondly poor countries get out of poverty through good policies, often pursued by dictators, and lastly subsequently improve their political institutions. Moreover they suggested that countries that emerge from poverty accumulate human and physical capital under dictatorships, and then, once they become richer, are increasingly likely to improve their institutions. According to their findings, institutions have only a second order effect on economic performance. The first order effect comes from human and social capital, which shape both institutional and productive capacities of a society.

Pande and Udry (2005) proved that long-run growth is faster in countries that have higher quality contracting institutions, better law enforcement, increased protection of private property rights, improved central government bureaucracy, smoother operating formal sector financial markets, increased levels of democracy, and higher levels of trust. They also focused that understanding the channels of influence, and why such extreme variation in institutional quality persists are research questions of central importance.

Chinn and Ito (2005) extended their own work focusing on the links between capital account liberalization, legal and institutional development, and financial development, especially that in equity markets. Using panel data approach, they found the relationship between several dimensions of the financial sector and economic development. Their empirical results suggested that a higher level of financial openness contributes to the development of equity markets only if a threshold level of general legal systems and institutions is attained, which is more prevalent among emerging market countries. Among emerging market countries, a higher level of bureaucratic quality and law and order, as well as the lower levels of corruption, increases the effect of financial opening in fostering the development of equity markets. Their findings also showed that the development in the banking sector is a precondition for equity market development, and that the developments in these two types of financial markets have synergistic effects.

Foa (2008) used a new set of social institutional indices compiled using over 200 indicators drawn from a set of 25 available sources, to further the work in this field. He tried to represent an evidence between social institutions and broader aspects of human development. Norms of equality and non-discrimination against women are found to have significant independent effects upon aggregate health outcomes, even after controlling for other relevant factors. Meanwhile, interpersonal trust and norms of non-discrimination against ethnic, religious and caste minorities are to found to be proximate determinants of economic growth, while countries with higher civic engagement, and stronger norms of equality and fairness toward women, are found to achieve significantly higher levels of income per capita in the long-run, even after controlling for the quality of formal institutions or governance. The results suggest therefore that social institutions are not simply an 'effect' of economic processes, but a constitutive factor in human and economic outcomes.

Bosker and Garretsen(2008) explained cross-country income differences by focusing on the deep determinants of economic development, especially institutions and geography. Based on a sample of 147 countries, the findings of the study showed that economic growth is not much related to a country's absolute geography, in terms of for instance its climate, but its relative geography in terms of its institutions that matters for economic development. Not only country's own institutions, institutions in neighboring countries turn out to be relevant as well. Following

the seminal work by Rodrik et al. (2004) their study also helped to make a conclusion that a country's institutions are always significant in explaining cross-country differences in GDP per capita. They also explained that absolute geography (when measured by a country's distance to the equator) can have only an indirect impact on GDP per capita because that mechanism works in way that through institutions that this idea of geography matters.

Haggard, MacIntyre, and Tiede(2008) found that formal institutions are important, but, particularly in developing countries, informal institutional arrangements play a significant part as well. These considerations lead us to caution against an exaggerated confidence in the ability of development assistance to implant new institutions for the rule of law.

Siddiqui and Ahmed (2009) found a strong link between institutional quality and economic growth. They developed three different measures of institutional quality and found them positively related with growth. Moreover their analysis indicated among various measures, anti-rent seeking technologies impact growth considerable more than the risk reducing technologies. A similar conclusion is reached by Acemoglu and Johnson (2005) who attempted to distinguish between anti-rent seeking institutions and risk-reducing institutions, as they termed them as 'property rights' and 'contracting' institutions respectively. They found strong support for the importance of anti-rent seeking institutions on economic outcome but in contrast, indicated that the role of risk reducing institutions is more limited. The reason they give to this fact is, in absence of formal risk reducing institutions – contracting institutions, the gap is filled by private alternative institutional arrangement.

Sawyer(2010) built the relationship between these two variables through total factor productivity and economic growth in Latin America. After reviewing the literature on the determinants of economic growth in Latin America, he attributed that slow growth of total factor productivity (TFP) as the primary cause of their slow economic growth. And that slow growth TFP was linked to the quality of institutions in the region. For measuring institutional quality data has been taken from *Doing Business* data, and the scores for Rule of Law and Regulatory Quality were taken from the *Governance Matters* data.

Commander and Nikoloski (2010) tried to find out the importance of institutions for economic performance. The first concerned whether the type of political system, and its associated institutions, tends to affect performance. This was addressed using several sets of country level measures of political institutions and through use of leading edge GMM estimation. The second concerned the impact of institutions connected to the investment and business environment on the performance of countries, irrespective of their political configuration. In the case of political institutions, none of the explanatory variables was significant.. Among the strongest elements of the modern economists' canon is that financial sector development has a significant impact on economic growth. A generation ago, economists like Goldsmith (1969)1 and McKinnon (1973) began to draw attention to the benefits of financial structure development and financial liberalization. Goldsmith, for example, found a positive relationship between economic growth and financial development using a comparative approach with data for thirty-five countries over the period from 1860 to 1963.

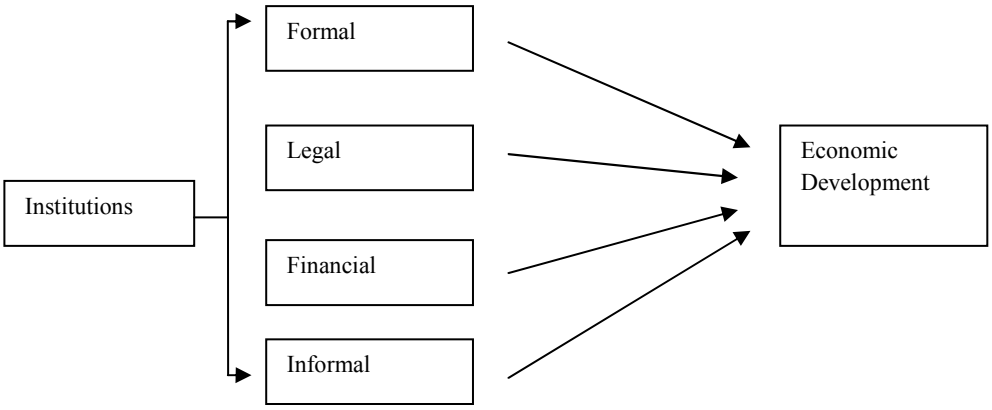
Betancourt and Bensyishay (2010) recently showed a link between institutions and growth through the direct role of civil liberties and level of economic activity. They took data from Freedom House and disaggregated the civil liberties index and found that the sub category related to property rights institutions explains long term economic growth very well. Betancourt (2004) suggested in one of his study that institutions related to property rights may be better indicators of a government's long-term commitment to the rule of law. Following North (1990) and Olson (2000), they found that the dominance of the rule of law can be taken as an important determinant of long-term economic growth or development.

Massa (2011) developed for the first time the relationship between development of Financial Institutions (DFIs) and economic growth. She made the use of Generalized Method of Moments (GMM) technique for panel data analyses, and examined the relationship between the investments of a selected sample of multilateral DFIs (EIB, EBRD and IFC) and economic growth for a sample of 101 countries in the period 1986-2009. The results suggested that such multilateral DFIs are playing a positive and significant role in promoting economic growth in recipient countries, with a stronger impact in lower-income countries than in higher-income countries. Massa also found that a 10% increase in multilateral DFIs' investment commitments may increase growth by 1.3% in lower-income countries, and by 0.9% in higher-income countries.

3.Theoretical Framework:

In this study the role of different institutions will be analyzed on the development of Asian economies.

This can be shown as:



From this schematic diagram we see that role of four types of institutions have been checked. Formal institutions are basically formed through political process. These include presidential or parliamentary type of institutions. Such institutions help us to know that whether democracy or dictatorship is contributing to growth. Informal institutions means norms, traditions and culture of the society (North (1990)). Which shows that what type of constraints a society has imposed on itself. For example caste systems, man-oriented thinking etc. or in other words how much a society is liberal or conservative. Such trends either restrict or facilitate the growth pace. More a society is open and liberal, more are the chances for it to grow and flourish and vice versa. Financial institutions include monetary and banking institutions. Monetary institutions means stock exchange markets, capital market, bond markets etc. These markets and banking sectors help to provide credit and loans to the investors and skilled people. If such institutions are properly developed then a sound base for economic development will be available. And legal institutions are formed through property rights and rule of law. Such property right ownership and legal system encourages investors to come and invest in an economy. So in a way, property right system secures the rights of businessmen which ultimately helps to invite them in home nation.

4.Methodology and Data Sources:

In this study an attempt has been made to see the effect of different institutions on to the economic development of Asian countries. In this analysis, only selected Asian nations have been included on the basis of data availability for different variables. The time period of the study is from 1995-2010. Before 1995 most of the data related to institutions is not available, therefore this time span has been chosen. Several institutional variables along with economic variables have been used. To analyze the impact of independent variables upon dependent variable, fixed effects panel model has been applied. Thus the following regression will be estimated:

$$\mathbf{Y= f (X_i , . . . , X_n, e)}$$

Where Y is showing GDP per capita measuring economic development and X's are the proxy for economic and institutional variables. 'e' is error term.

For cross-section regression analysis the model will be as:

$$\mathbf{Y= f (X, M, CPI, P, PRLS, POLR, CIVL, MARKCAC, GNE, DOMBAN, U) + \varepsilon}$$

The panel model uses both time series and cross section data. The model can be estimated with both fixed effects and random effects. The fixed effects incorporating time and individual country effects is:

$$\mathbf{Y_{it} = \alpha_0 + \alpha_1 + \gamma_t + \beta x_{it} + \varepsilon_{it}}$$

This model has overall constant term 'α_0' as well as a group effect for each country 'α_1' and time effect for each

period (t).

4.1.Variables and their Description:

The table 1 shows the definition for all variables used in the analysis;

Insert Table 1 here

Political rights and Civil liberties are used as a proxy for formal (political) and informal (norms and culture) institutions into cross-country regression as used by Barro and Lee (1994), by Sala-i-Martin (1997) and de Melo *et al*. (1997) in growth and convergence regressions. Many studies have found evidence of a positive correlation between growth and various indices of freedoms. In a study of growth in 115 countries over the period 1960-1980, Scully (1992) found that countries with high levels of political, civil and economic liberties grew at three times the rate, and were two and a half times as efficient at transforming inputs into national outputs as countries where these liberties are circumscribed. Interestingly, Scully also observed that income is more equally distributed in countries with high levels of political, civil, and economic liberty.

The ratings of the data published by Freedom House are as follows: scores between 1 and 2.5 are given to countries that are considered to be 'free'; indices between 3 and 5.5 indicate 'partly free' countries, while scores between 5.5 and 7 describe countries that are 'not free'. These scores have been interpreted as proxies for institutional development – the smaller the value of index and the more freedom a country enjoys, the more developed its institutions should be. Moreover civil liberties which have been used as the proxy for informal institutions also shows a strong correlation with free market indicators as compared political rights. This can be due to the reason that civil liberties include the rights of individuals to open their private businesses without the undue influence of government. These also include things such as freedom of employment, freedom to choose your vocation, right to form civic and business organizations (e.g. trade organizations and unions).[7]

Stock market capitalization and domestic credit provided by banks has been used as the indicator of financial institutions which means that if more capitalization process is going on and businessman have an easy excess to get loans from commercial banks for opening up of their business then it means financial sector is strong. And if such is the case then theory says that there should be growth in the economy. Levine and Zervos (1998) also proved that banking and stock market development are good predictors of economic development. For legal institutions, property rights freedom has been used as proxy. It ranges from 1 - 10. Lowest values show that there is less economic freedom and highest show the maximum economic freedom. Do Soto (2000) proved that in the absence of property rights, economic performance can be badly affected. Therefore according to his findings that economic growth requires efficient legal system and well defined property rights.

5.Estimation Results:

In this section estimation results have been shown using fixed effects model of regression. Three different models have been made to see the effects of various institutions and economic variables in the economic development of a nation. First model contains the effect of economic variables on the economic development of the Asian nations. While the second model incorporates the effect of financial institutions along with other economic variables and the third model capture the effect of formal and informal institutions along with financial and banking institutions in the development of these economies. We see that model is a good fit showing that there is no problem of autocorrelation. Moreover Redundant Fixed Effects Tests for cross sections has been applied to see the validity of this model. Which confirms the right selection of the model. The table 2 given below shows the results of these models:

$$GDPP_{it} = \alpha_0 + \alpha_1 + \gamma_t + \beta_1 X_{it} + \beta_2 M_{it} + \beta_3 P_{it} + \beta_4 CPI_{it} + \beta_5 U_{it} + \beta_6 GNE_{it} + \beta_7 GDPP_{it-1} + \varepsilon_{it}$$

…… (Model 1)

$$GDPP_{it} = \alpha_0 + \alpha_1 + \gamma_t + \beta_1 P_{it} + \beta_2 CPI_{it} + \beta_3 U_{it} + \beta_4 GNE_{it} + \beta_5 GDPP_{it-1} + \beta_6 MARKCAC_{it-1}$$

$+\varepsilon_{it}$ ……. (Model 2)

[7] See, Shields, "Political Freedom and Economic Freedom"

$$GDPP_{it} = \alpha_0 + \alpha_1 + \gamma_t + \beta_1 MARKCAC_{it} + \beta_2 PRLS_{it} + \beta_3 POLR_{it} + \beta_4 CIVL_{it} + \beta_5 DOMBAN_{it} + \beta_6 GDPP_{it-1} + \varepsilon_{it} \ldots\ldots \quad \text{(Model 3)}$$

Insert Table 2 here

From this table, it can be seen that inflation, imports and unemployment are negatively associated with economic development while population, exports and government expenditure are showing positive contribution to the growth of the economy. Most importantly the growth in last year is positively and significantly related with current year economic performance in all three models. In the second model along with other economic variables, the role of financial institutions has been observed. And results show that economic development is positively and significantly related to the development of such monetary sectors. Other results are according to the theory but some of them are not significant. Third model incorporates the effects of all institutions in Asian economies. And results are significant again for financial development, property rights and legal system, and for banking sectors. From the results it can be seen that all institutions are positively contributing to the economic development of these economies except for the banking sector. These results are confirmed by Knack and Keefer (1995) who proved that effect of institutions remain persistent even after controlling for investment. But they also observed in their analysis that property right institutions matter a lot for the prosperity of economies. If these institutions are not working properly than their role can be crucial for the growth of economies. Moreover Boettke et al. (2008) proposed that for economic development, formulation of formal institutions should be based upon the informal rules in that economy. This was also proved by Williamson (2009) in his study based on the analysis between OECD and non-OECD countries. He observed that those countries having strong formal and informal institutions are more developed as compared to those which have only strong political institutions and weak informal institutions. The same notion has been proved by many other recent researchers: Anderson and Hill 1979; Benson 1989a, 1989b; Greif 1993; Greif et al. 1994; Knack and Keefer 1997; Pejovich 2003; Nenova and Harford 2004; Acemoglu and Johnson 2005; Leeson 2007a, 2007b, 2007c; Tabellini 2007; that informal institutions are contributing to the economic progress more than any other category of institutions.

6.Conclusions and Recommendations:

This study tried to explore how different dimensions of institutions affect the economic development in selected Asian nations. The Asian economies comprises 60% of the world population, living in 46 different states. China is the largest economy in this region and the second largest economy in the world. That selection of the nations in this study has been made on the basis of data availability of different economic and institutional variables. Time period has been taken from 1995-2010. The reason for the selection of this time span is that many institutional variables are not having annually data before 1995. Fixed effects panel regression model has been applied. As apparently it is thought that Asia is "institution-light" region but it is not. There are huge variety of institutions. some are "overarching" institutions like ASEAN (Association of South East Asian Nations), the Pacific Islands Forum, South Asian Association for Regional Cooperation, ASEAN Plus Three (the three being China, Japan and Korea), East Asia Summit, Asia-Europe Meeting and Asia-Pacific Economic Cooperation. Some are called "functional" institutions which are based on narrow technical agenda while few are "facilitating" institutions. But overall institutions governance issues are persistent over here in this region. Therefore such analysis has been performed to see the role of different institutions in the development of these economies. From the findings of the model it has been observed that unemployment, inflation, and imports are having negative impact on the economic performance of the nations while exports, population and government expenditure are positively contributing to the growth. Three models have been calculated. First model incorporated the effects of economic variables on the growth of these economies. Second model along with many other economic variables, included the effect of financial institutions. And the third model captured the effect of all formal, informal, legal and financial institutions and showed that all institutions are positively contributing to their development except banking sector. But results have been highly significant for financial development. Formal and informal institutions are also playing their role in increasing the economic development but their effect is not very significant. And these results are in line with Abdiweli and Crain (2002), who proved that political freedom and civil liberties are not systematically related to the growth if an economy. They proved that developed institutions may help to sustain the growth process but institutional development can only be considered as a precondition for growth but not the fundamental predictor for overall development. Actual growth rates are the results of many other variables. Therefore such results confirm that institutions matter but only in transition face, main important element in the development of economies is the right selection of policies. This is the same conclusion observed by Havrylyshyn

and van Roden (2000) and Rajasalu (2002).

On the basis of this analysis it can be seen that institutions are playing positive role in the economic development. Besides on relying typical formal and informal institutions, high growth can be achieved through the strong monetary and banking institutions. Therefore the need of hour is to explore different dimensions of institutions other than the slogan of democracies of political institutions because economists have observed that economic freedom is prior to political freedom(Freidman 2002, Bhagwati 2007). So if trade and financial institutions are working properly in a nation then it can ultimately lead to other political freedom. A big example of such case be seen in the case of China. Where there is no political freedom but due to economic freedom, it is achieving highest growth rate. Moreover at this time priority of Asia's policy should be improving the quality of institutions , and try to make an economic community which can motivate improvements in governance matters. Such communities can be formed through regional cooperation and integration.

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Table 1:

Variables	**Definition**	**Sources**
Y	GDP per capita, proxy for economic development	World Development Indicators (WDI)
X	Exports as a percentage of GDP	WDI
M	Imports as a percentage of GDP	WDI
CPI	Inflation	WDI
P	Population	WDI
U	Unemployment Rate	WDI
PRLS	Property Rights and Legal System, proxy for legal institutions	Economic Freedom of the World, Fraser Institute
POLR	Political Rights, proxy for formal institutions	Economic Freedom House
CIVL	Civil Liberty, proxy for informal institutions	Economic Freedom House
MARKCAC	Stock market capitalization as percentage of GDP, proxy for financial institutions	WDI
DOMBAN	Domestic credit provided by banks	WDI
GNE	Gross expenditure as percentage of GDP	WDI

Table 2:

Dependent Variable: GDP per capita

Variables	**Model 1**		**Model 2**		**Model 3**	
	Coefficient	**t-values**	**coefficient**	**t-values**	**coefficient**	**t-values**
CPI	-9.424	-2.746***	-7.157	2.801***		
P	2.97E-07	0.455	5.45E-07	0.762		
U	-5.528	-0.956	-3.329	-0.683		
GNE	20.023	1.174	7.173	1.284		
MARKCAC			1.372	3.085***	2.456	5.808***
GDPPP(-1)	0.946	17.314***	0.935	14.852***	0.915	18.941***
X	16.371	1.917**				
M	-8.003	-0.495				
PRLS					26.741	1.679*
CIVL					17.180	0.643
POLR					0.0713	0.099
DOMBAN					-6.164	-2.155***
Number of observations	154		154		154	
R-Square	0.98		0.99		0.99	
Durban Watson	1.69		1.77		1.64	

*** 1 percent level of significance, ** 5 percent level of significance, * 10 percent level of significance