Exploring Interlinks between Globalization and Governance: A Panel Data Evidence

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EXPLORING INTERLINKS BETWEEN GLOBALIZATION AND GOVERNANCE
A Panel Data Evidence

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Abstract. Globalization has always remained a fiery issue among academia and researchers due to lack of consensus on this subject. A potential unresolved issue about globalization is its impact on governance and quality of domestic institutions. The present study is an attempt to explore the relationship between globalization and governance in a panel of 91 countries covering time period from 1984 to 2011. Panel fixed effect model and Generalized Method of Moments (GMM) have been applied for the analysis. Results divulge that globalization has negative and statistically significant effect on governance. Thus, the present study recommends that globalization, if direly needed, must be espoused with a great caution. An effective and efficient liberalization policy is integral to reap benefits of globalization.

Keywords: Globalization, Governance, Panel fixed effect, GMM

JEL classification: C33, F60, G30, O50

I. INTRODUCTION

The term ‘Globalization’ has become popular in the everyday life since 1990s. Importance of state boundaries is reducing due to the process of globalization. But the global economy also needs institutions to deal with global polity. Globalization has emerged in a contrasting situation of a rapidly occurring change and consistent problems. Cross country transfer of information, ideas, technologies, goods, services, capital, finance and people have created interdependence among economies. This interdependence has created challenges for governments to control and regulate their economies. Economic integration, an indicator of globalization, has created the need for

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harmonization of national policies due to the emergence of interlinked markets and economies (Esty and Ivanova, 2003).

There are three major benefits of globalization: firstly, globalization enhances free market competition and forms an integrated market system which is beneficial for all, secondly, in recent era globalization is inevitable and, lastly, globalization can benefit the entire world including Third World economies by creating free democracies and free trade and business opportunities (Tjiptoherijanto, 2006). Globalization cogitates world as a unit with no socio-political and economic restraints. The objective of globalization is to create such an economic order which ensures efficient resource allocation and faster economic growth by enhancing competitiveness and efficiency. But the effects of globalization are different in developing and developed economies with major benefit going to the rich economies (Oduwaye, 2006). As Tjiptoherijanto (2006) claimed that impacts of globalization on industrial and developing countries especially in Asia and Africa are of different nature. Effects of globalization have been distributed unequally where poor economies are put into a disadvantageous place due to movement of low skilled labour and the creation of intellectual property rights (Griffin, 2003).

Globalization may not always result in beneficial impacts for everybody. Evidence can be found that globalization may generate either positive or negative aftermaths for different economies in the world. For example, increased competition creates efficiency and economies of scale leading to higher quantity and good quality products and boost living standards consequently. But sometimes free movement of factors of production can harm labour in some economies due to substitution of labour (Ibrahim, 2005). Academicians have two divergent views about the impacts of globalization; one point of view is that globalization is a beneficial tool for the whole world but second point of view blames globalization for the ever mounting gap between rich and poor nations and for all the unresolved issues of the world.

Regarding globalization a major unresolved issue is how to integrate globalization with governance. Globalization-Governance nexus is still a debate on which consensus is yet to be reached (Bonaglia *et al.*, 2001). Governance is relatively a new paradigm which has become popular in the last two decades involving three actors namely; government, civil society and business society. All the factors have their respective duties and functions to create good governance environment (Oduwaye, 2006). As per UNDP, governance is the exercise of economic, political and administrative authority to manage a country’s affairs at all levels. It comprises of mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences. The World Bank defines governance as the way power is exercised through a country's economic, political and social institutions. In present study, this has been measured by composite Inter Country Risk Guide (ICRG) index[1] as it covers the economic, political and social perspectives indicated by World Bank's definition of governance.

There exists literature on the relationship between economic development and globalization, and economic development and better governance, but the mechanism through which globalization affects governance and domestic institutions is not very much clear. Bonaglia *et al.* (2001) claimed that link of trade openness to domestic institutions is an important aspect of governance-globalization nexus. Domestic and international governance is facing new challenges in the face of globalization and these challenges are particularly more austere for the authoritarian political regimes. The pressure on the states to move towards globalization will necessitate the need to release authority and state monopoly over the provision of information, communication and to empower transnational organizations for making business decisions (Saich, 2000).

As the socioeconomic and political insinuations of globalization are very stanch, the debate on this topic is expected to go on for years. Every time when any meeting is held at World Trade Organization, IMF, or World Bank platforms, the discussion is divided into the cohorts and antagonists of globalization and consensus on the effects of globalization remains an unachievable task (Akhter, 2004). In the face of this uncertainty, this study is an attempt to lend an empirical support to this ongoing discussion in particular reference to its effects on governance and quality of institutions of economies, to understand why globalization should affect the quality of domestic institutions. Rest of the study follows the sequence as given: section II reviews literature on the globalization-governance nexus, section III explains the data, methodology, findings and discussion, and section IV

[1]The International Country Risk Guide (ICRG) rating comprises 22 variables in three subcategories of risk: political, financial, and economic. A separate index is created for each of the subcategories. The Political Risk Index is based on 100 points covering both political and social attributes, Financial Risk on 50 points, and Economic Risk on 50 points. The total points from the three indices are divided by two to produce the weights for inclusion in the composite country risk score. The composite scores, ranging from zero to 100, are then broken into categories from Very Low Risk (80 to 100 points) to Very High Risk (zero to 49.9 points). A very low risk can be considered as very good governance performance and *vice versa*.

concludes the study by suggesting policy implications based on the findings of the study.

II. LITERATURE REVIEW

Globalization governance nexus has gained fabulous importance in the recent years. Literature on the link between governance and globalization is not very much wide. It is tried to review some important studies on this link.

Qian and Roland (1996) stated that governments normally bailout those enterprises who fail to run themselves successfully. In this case, federal governments punish corrupt governments by enhancing competition through capital flight which consequently encourages discipline of regional governments. Some of the researchers argue that in global world, there is no restriction on the flow of capital and information, it is freely available to all, and it becomes necessary for governments to improve their governance structure (Obstfeld and Rogoff, 1998; Summers, 2000). Prakash and Hart (1999) noted that globalization reduces institutional impairments, develops political institutions and enhances the capacity of judiciary to sustain laws.

Rodrik (1999) constructed a model stating that the risk due to global markets can be insured with a large government sector. A large public sector covers a large magnitude of public and reduces their vulnerability to the external global shocks and this was verified empirically. Quality of bureaucracy was used as proxy for good governance and proved that rich and more liberalized economies also had good administrations. Moreover, it was proved that open economies were perceived to have lower corruption standards. On the basis of empirical results, it was claimed that the successful economies are in a better position to opt for optimal mix of governance and globalization. The study has the limitation that it only provides graphs displaying broad connections between these variables but the evidence on causality of variables is missing. Krugman (1999), Rodrik and Subramanian (2009) and Stiglitz (2010) claimed that globalization and especially globalization of capital may cause indiscipline and mis-governance due to providing wrong motivations to governments. Some studies also have been found on the link of trade openness and governance. Empirical literature on the linkage between trade openness and quality of institutions is much limited. Wei (2000) stated that more open economies devote more resources to build a good institution; that’s why their corruption level tends to be lower than less open economies.

Saich (2000) claimed that in 1980 when China started off on the way to globalization the process created political differentiation within China in terms of some sectors, industries and groups got privileges. The author discussed four major challenges to domestic governance that were identified by this study. First is the expansion of legal system for the accommodation of international trade and capital. Second, the reforms have also created new inequalities within the economies and this in the third place has created the issues about provision of public goods and services, and lastly the challenge to remain unbiased from traditional power base in accommodating the forces availing benefits from globalization. China made tremendous changes in its trade policies and institutional structures to tackle the challenges of globalization (foreign trade and investment) but inadequate implementation and lack of transparency reduced the efficiency of the system. As the country went on the path of free trade borders of special economic zones established for this particular purpose were broken down. A conflict among center and local governments also aroused due to unpredictable governance on unclear lines of power and prerogatives. Due to entry in WTO pressure on legal systems was supposed to increase even more for the resolution of economic issues and for ensuring transparency in transactions. Moreover, consensus between national and international policies was hardly expected to emerge.

Bonaglia *et al.* (2001) stated that productivity, technology and development have two way causal relationships. Globalization and governance both affect the level of development. Trade through international technology transfer, capital flows and migration can lend support to resource endowments and to the productivity of the countries. Moreover, good governance, quality institutions and developed civil society norms also improve the quality of the productive endowments. Here reverse causality also exists between good institutions and level of development of an economy. Recently interaction of governance and globalization impacting growth has emerged as a new debate on this particular issue. The authors using a large cross-country sample covering various statistics for the 1995-98 period measured government spending by dividing them according to their level of trade. They found more open countries to be having larger government sectors. They were of the view that if the countries are engaged highly in trade then they need a bigger public sector to ensure their markets from risks.

Islam and Montenegro (2002) used a sample of 104 countries to identify the determinants of institutional quality. The results they obtained showed that institutional quality was robustly depending on trade openness whereas inequality and ethnic diversity were not affecting the quality of institutions in the selected sample of countries. Hu and Chan (2002) claimed that globalization affects governance both at local and international level and influence the role of state and non-state institutions, but the focus on governance in reference to globalization is limited to the capitalist markets yet. They conducted a study on Pearl River Delta region of China by first reviewing literature on governance in context of development of the region and concluded that in the face of globalization, the region is in immense need of shift from government to governance.

Gilbert (2004) conducted a study using a panel data of 102 economies to explore the impact of globalization on economic growth and quality of institutions in two separate frameworks. Trade and openness policies both had strong impact on economic growth of the selected economies. In his second framework after controlling for the effect of institutional quality, he proved that in Sub Sahara Africa the impact of trade policies on economic growth was dependent on good governance. The authors suggested that in Sub Sahara Africa, economic development could not be achieved through globalization only because of the low institutional quality of these economies. Due to poor institutions the trade policies of these countries remain inefficient.

Akhter (2004) examined the effect of economic globalization on human development and argued that this relationship is supported and reconciled by level of corruption and economic freedom. They found economic globalization to be affecting economic freedom positively and corruption negatively; consequently corruption and economic freedom affect human development in negative and positive direction respectively. They further explored that with an increase in globalization firms and businesses felt that governments over controled their action with the use of different controls like tariffs, non-tariff barriers and exchange controls. Thus, the business community put pressures on government to open up the economy. However there also exist some groups in every economy who feel threatened due to opening of the economy which also pressurizes government to keep policy restraints intact. Thus, the government is trapped in a dilemma between liberalization and restriction. But normally governments liberalize their economies while keeping some sectors protected from the impacts of globalization. Thus, globalization leads to higher economic freedom. Moreover globalization also creates conducive environment for corruption by providing healthy environment suitable for corruption to public officials and businesses. Normally corruption occurs in economies with a weak checks and balance system of governance structure. Opening up of trade and greater liberalization assert governments to be more accountable and transparent (Akhter, 2004).

A study by IMF in 2005 also found that institutional transitions and quality of institutions were affected by trade openness. Relationship between trade openness and quality of economic institutions was robust in cross country regression but not in panel data sets. Ibrahim (2005) claims that widespread disparities among developed and developing countries make the globalization process to slow down via the tool of globalization and consequently reduce the development pace of underdeveloped economies. Trade liberalization fastens the industrialization process of developed economies and retards the growth of industry in developing economies. Globalization leads to formulation of such policies which benefit rich economies at the cost of poor countries and divide the labour in such a way that increases disparity among developed and developing countries industrialization process. Failure of underdeveloped countries to reap benefit from globalization lies in their incapacity to utilize resources fully.

Oduwaye (2006) claims that due to weak position of cities in terms of economy, infrastructure and institutions, globalization fails to benefit them. The practical effects of globalization phenomena embrace a wide range of issues at socioeconomic, geographical and political levels. As globalization is aimed at creating a new world order by integrating the world economies into one economy and want to convert them to a high value economy, therefore it needs a strong political structure, good governance and stable policies. Dreher *et al.* (2006) developed an index of economic, social and political integration and checked its impact on economic development of 123 countries from 1970-2000. The index of economic integration was found to be robustly related with economic development of the selected economies whereas political integration had no effect on development.

Levchenko (2007) proposed a model of international trade where difference in quality of institutions was modeled in the framework of incomplete contracts. They showed that difference in quality of institutions made developing economies less advantageous as compared to developed economies with good institutions. In these economies factor prices will diverge due to trade. At second place the authors tested empirically that whether quality of institutions affected trade flows or not and found institutions as a robust determinant of trade flows. Mishkin (2007) state that a better market discipline and good governance are suggested as major benefits of globalization.

Busse and Gröning (2008) using a large country sample studied the impact of trade openness on governance of the respective countries. They found that trade had impact on governance but its magnitude was smaller than the other political variables. The countries having very less score on governance scale experienced very minor impact of trade on their governance quality. Another important fact they explored was that countries exporting high resource intensive products like fuel and minerals failed to reap benefit from trade. The reason behind this is that governance quality will be deteriorated due to enhanced extraction and increased exports of resources. Inflation and economic growth had small impact on governance but educational attainment had a strong significant impact on governance in other tested determinants of governance by the study. They further explored that there were three channels through which trade liberalization affected governance structure of the economies. At first place the country learn from each other experiences and will adapt the successful institutions and regulatory framework. Secondly increased competition with world economies will require improvement in the domestic institutional structures because without this their business will go out of businesses.

Martinelli and Midttun (2010) analyzed the governance literature in a conceptual framework and filtered out a governance strategy consisting of three elements: First, a re-interpretation of Montesquieu's principle of checks and balances, which is applied to the interrelations between state, markets and civil society along with state institutions is required. Second, a flexible framework allowing joint effort to develop good governance should be developed. Third, open communications must be allowed for the constitution of important governance elements and lastly for global governance parallel governance models must be used by supporting one another.

Ju and Wei (2011) emphasized on two ways relationship between capital globalization and quality of domestic institutions. Trade according to many economists can affect the performance of the economies but this can be achieved with the help of complementary factors like physical and human capital, public infrastructure and governance.

Blouin *et al.* (2012) propose a framework for this by assuming that government's decision making power is normally dependent on a soft budget constraint. They stated that public policy normally support such projects which require little effort and are subject to budget overruns and consequently minimal productivity. Capital movement becomes cheaper due to the globalization of capital. In such cases globalization of capital can enhance the capital flight even more. This threat of capital flight may lead to decrease the actions taken by government. This standard view of the disciplining role of globalization states that in such a situation government is restrained to a limited range of actions for decision making. The impact of globalization on welfare works through the channel of incentive effect of good governance. But the authors state that the disciplining effects of capital globalization would only work when the economy is not vulnerable to random external shocks and is characterized by powerful economic fundamentals. But if the capital flight is frequently affected by random shocks in the global economy, then threat of capital flight will lead to over disciplines and mis-governance of the economy. Thus, globalization may lead governance on either way. In global world a shock in one economy affects investment in other economies directly and uncertainty in one country also lends uncertainty to others as well. Subject to global uncertainty globalization affects quality of bureaucratic governance negatively. Moreover this negative impact of globalization on governance is more adverse in countries with low state capacity of bureaucracy. The authors quoted the example of Mexican crisis of 1994 which is a clear example of uncertainty in international financial markets. They claimed that if an economy is characterized with weak institutions like Mexican's economy then the uncertain effects of globalization on governance will be more adverse.

III. MODEL SPECIFICATION AND RESULTS

In the present study, panel data has been used from 1984-2011; data has been collected from *World Development Indicators* (WDI), The Quality of Government Basic Dataset by University of Gothenburg and Database of Political Institutions (DPI) by Philip Keefer (2012). The general form of the empirical specification of the model used in present study can be written as:

$$Y_{it} = K_{it}\beta + W_i\,\alpha + \varepsilon_{it}$$

i = cross section dimension

t = time series dimension

Y_{it} = Governance in i^{th} cross section in t^{th} time period, explained variable represented by composite Inter Country Risk Guide (ICRG) index.

$K_{it}\beta$ = Matrix of independent variables (does not have intercept term) including globalization measured by KOF index of globalization.

$W_{it}\,\alpha$ = The heterogeneity or individual effects, keep in mind W_i has an intercept term and a set of country specific variables, that can be observed for example as religion, location, weather conditions, ethnicity or they might be unobservable, such as country specific characteristics, difference in skills or preferences and so on, if we assume all these country specific characteristics are observed and are constant, then this model will be like simple Classical Linear Regression Model and we can estimate it with simple Ordinary Least Square (OLS) but this is rare and often we face a complex situation when W_i is unobserved and have a correlation with K_{it}.

In such a case OLS estimator will give biased and inconsistent results because we were not able to model the unobserved effects, so our model suffers from the problem of omitted variables. Under fixed effect or least square dummy variables (LSDV) model, we overcome this problem with the help of dummy variables and we generate a dummy variable for each cross section to control the effect of country specific unobserved effects. This is reflected in differences in constant terms; now constant term will be a group-specific constant term. In the fixed effect model:

$$Y_{it} = K_{it}\beta + \alpha_i + \varepsilon_{it}$$

$\alpha_i = W_i\, \alpha$ has all those effects and it enumerates an estimable conditional mean. The Fixed Effect Model considers "α_i" to be country specific intercept in the regression model, it is worth mentioning that the term "Fixed" is used to denote the correlation of W_i and K_{it} and it does not mean that W_i is non-stochastic. If we assume that the unobserved country specific effects are not correlated with the included variables then this assumption takes us to the Random Effect Model which is based on the idea that if dummy variables, in fact represents the lack of knowledge about the true model then why not represent this ignorance in the disturbance term and this is the reason why random effect model is also called error component model, instead of treating intercept term to be country specific constant we assume it random and it can be formulated as:

$$\begin{aligned} Y_{it} &= K_{it}\beta + E[W_i\,\alpha] + \{W_i\,\alpha - E[W_i\,\alpha]\} + \varepsilon_{it} \\ &= K_{it}\beta + \alpha + \mu_i + \varepsilon_{it} \end{aligned}$$

The above model is having now composite error term which consists of two elements, one country specific error component and the other combined time series and cross section component. We may say that the main difference between Fixed and Random Effect is that whether the unobserved country specific effects are correlated with the independent variables in the model, whether these effects are random or not. Hausman test is used to determine whether fixed effect or random effect model is more appropriate for estimation purposes. Hausman test is based on the idea that under the null hypothesis we test, there is no correlation between omitted variables and independent variables and in such situation both OLS, LSDV (fixed effect) and FGLS (random effect) estimators are consistent, but OLS is inefficient due to the fact that they may not be constant both over time and space, whereas under the alternative, LSDV is consistent, but FGLS is not as there may be correlation between omitted variables and independent variables. Therefore, under the null hypothesis, the two estimates should not differ systematically.

Hausman test has been applied to test whether it is appropriate to use Fixed Effect Model or Random Effects Model for estimation**.** The results of Hausman test, in all specifications, show that the value of probability is 0.000 which is less than 5% level of significance (0.05) so we reject the null and conclude that the Fixed Effect Model estimation is more appropriate in all four (1, 2, 3, 4) specifications. Therefore, econometric models have been estimated by using Fixed Effect Model. There is most likely to be the presence of heteroskedasticity in panel data so this problem has been rectified by using the robust standard errors. Table 1 shows the results of fixed effect models with robust standard errors.

The results of all specifications show that globalization has negative and statistically significant effect on governance. It may be due to the fact that globalization may create challenges for domestic institutions to tackle international governance and leads to mis-governance by the governments. The result is consistent with the framework proposed by Blouin *et al.* (2012). In global world a shock in one economy affects investment in other economies directly and uncertainty in one country also lends uncertainty to others as well. Subject to global uncertainty globalization affects Quality of Bureaucratic Governance negatively. Saich (2000) presented a case of China, claimed that China had to face different challenges to its governance structure due to globalization like a need to enlarge its legal systems, creation of new inequalities within the economy (conflict among local and central governments also aroused), problem in provision of public goods and services and a challenge for authority to remain unbiased, and owing to inefficiency of government to tackle challenges proposed by globalization, domestic governance is affected badly. Rodrik (1999) stated that the risk due to global markets can be insured with a large government sector. But larger public sector can also increase the exploitation power of government

TABLE 1

Results of Fixed effect Models with Robust Standard Errors

	(1)	(2)	(3)	(4)

Globalization		–0.00758*** [0.000]	–0.0066*** [0.000]	–0.00671*** [0.000]	–0.00764*** [0.000]
Freedom of press		–0.0019** [0.053]	–0.0017** [0.061]	–0.00195** [0.036]	–0.00160*** [0.000]
Labour force Participation rate		0.0020 [0.654]	0.000162 [0.958]	–0.0000732 [0.981]	
Per capita income		–4.32 [0.172]	–3.75** [0.074]	–3.71** [0.081]	
Presidential system		–0.0487** [0.042]			
Regime type			0.0084 [0.533]		
Size of largest party				0.0484** [0.037]	
Property rights					0.00101*** [0.000]
Civil liberties					0.00752 [0.124]
Political rights					0.000084 [0.984]
FH status					007678 [0.430]
Constant		1.027*** [0.000]	1.057*** [0.000]	1.067*** [0.000]	1.0101*** [0.000]
Hausman test	Chi Sq. statistic	209.61***	414.82***	517.66***	442.40***
	Prob.	0.000	0.000	0.000	0.000

***, **, * show significance at 1, 5 and 10% level of significance respectively. In [ ] are P-values.

officials and may create malfunctioning in government institutions. Thus, globalization may generate negative effects on governance. Akhter (2004) states that globalization puts pressure (pressure comes from two opposite directions; firms pressurize to open up due to the fear of over control by government and while some groups who feel threatened due to globalization favour restriction) on governments and they are trapped in a dilemma of decision about opening up of economy. This can deteriorate the quality of policy regulation and efficiency of governments and may end up with negative effect on governance. Malpractices in Trade agreements between nations can also ruin their governance structure.

Freedom of press has negative sign and statistically significant in all specifications which is according to expectation. Freedom of press index ranges from 0 (most free) to 100 (least free), so if there is an increase in the score of index, governance will be badly affected because higher score of this index shows least freedom to press. We may say that Free Press plays the role of watchdog in the economy. Ahrend (2002) also gave similar findings, he proposes that freedom of press by enhancing monitoring capacity of society creates better checks and balance on bureaucrats and politicians and helps reducing corruption. Thus, higher is the freedom of press better will be the governance.

Labour Force Participation Rate has been used in three specifications as a proxy for human capital. As, if the people are having higher level of education and skills then they are most likely to participate in labour force. It was assumed to have positive effect on Governance as high qualified and skilled labour force is assumed to be familiar with their rights and obligations which can be helpful for making Governance better, but it is insignificant in all the specifications. Per capita income also has been used in first three speciation on the assumption that having higher level of income means no worries about subsistence level and not compelled to break rules and regulations to make their livelihood but here we find some opposite story as this variable is showing negative impact and significant as well in two specifications so we find some evidence for "Might is Right".

Presidential system has negative effect on governance which might be due to misuse of monarchy power and lack of checks and balances. In second specification Presidential system has been replaced by Regime Type (democratic = 1 and 0 = otherwise) the sign of Democratic Regime turned out positive which means democracy makes governance better, but it is statistically insignificant. In third specification Regime Type has been replaced by size of the Largest Democratic Party and it has positive sign and statistically significant as well, means that if there is Democracy and the size of the Largest Party is bigger, then it can make Governance better. This may be due to the reason that if the Size of The Largest Party is bigger enough to make the Government alone then it can perform in a better way, which may be due to the reason that in coalition Governments, coalition parties may hinder the performance of the leading party by rent seeking behaviour, unjust demands of power sharing of the coalition parties may detoriate the performance. Whereas if a single party is large enough to make government then it will have better Legislative power and can perform better. In the last specification, we incorporate Civil Liberties, Property Rights, Political Rights and Freedom Status (for description of these variables see Appendix) to have further insights but we find support only in case of Property Rights, better Property Rights are helpful for making governance better, while Civil Liberties, Political Rights and Freedom Status are having no significant impact on Governance.

We have also considered an extension to a dynamic model which can be written as:

$$Y_{it} = K_{it}\beta + \delta Y_{i,t-1} + C_i + \varepsilon_{it}$$

Because there can be a problem of "Endogenity" in the model as one of the regressors (per capita income) is also component of ICRG index, for this purpose the Generalized Method of Moments (GMM) estimators will be used in the analysis. In this context the estimators introduced by Holtz-Eakin, Newey and Rosen (1988), Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998) are increasingly popular. The Arellano-Bond (1991) GMM estimator is different GMM that treats the model as a system of equations, one for each time period; the equations differ only in their instrument/moment condition sets. The predetermined (correlated with past errors, but not with current and future errors) and endogenous (correlated with past and present errors, but not with future errors) variables in first differences are instrumented with suitable lags of their own levels. Strictly exogenous regressors (not correlated with errors in all temporal periods) as well as any other instruments can enter the instrument matrix in the conventional instrumental variables fashion; in first differences, with one column per instrument.

Whereas system GMM is the augmented version of GMM delineated in Arellano and Bover (1995) and fully developed in Blundell and Bond (1998) who enunciated the necessary assumptions for this augmented estimator. Lagged levels are often poor instruments for first differences, especially for variables that are close to a random walk. Thus, the original equations in levels can be added to the system, and the additional moment conditions could increase efficiency. In these equations, predetermined and endogenous variables in levels are instrumented with suitable lags of their own first differences. In the present study, system GMM developed by Blundell and Bond (1998) has been used for estimation purposes because of its superiority over difference GMM. Estimates are one step and one lag has been used as instruments, as David Roodman (2009) suggested that for a variable, *w*, that is not strictly exogenous, "lag 1 is valid".

TABLE 2

Dynamic Panel Data Estimation (System GMM)

	(1)	(2)	(3)	(4)
LICRG	0.91177*** [0.000]	.900619*** [0.000]	0.91237*** [0.000]	0.8766*** [0.000]
Globalization	–0.004703*** [0.000]	–0.003907*** [0.000]	–0.003657*** [0.000]	–0.00209*** [0.000]
Freedom of press	–0.001262*** [0.000]	–0.000475** [0.046]	–0.0007207*** [0.003]	–0.00069** [0.036]
Labour force participation rate	–0.0031417*** [0.004]	–0.0008407 [0.332]	–0.0015998* [0.052]	
Per capita income	5.6906*** [0.000]	5.0806*** [0.000]	4.3106*** [0.000]	
Presidential system	–0.0227673* [0.103]			
Regime type		0.017144** [0.014]		
Size of largest party			0.004389 [0.724]	
Property rights				0.00109*** [0.000]
Civil liberties				–0.0106** [0.013]
Political rights				–0.0046 [0.190]
FH status				0.000121 [0.989]
Constant	0.535013*** [0.000]	0.30636*** [0.000]	0.357775*** [0.000]	0.2117*** [0.000]

***, **, * show significance at 1, 5 and 10% level respectively. in [ ] are P-values.

The results of GMM are given in Table 2 which show almost similar results as by fixed effect model in Table 1. However, per capita income has different impact on governance under GMM estimation, so its impact is inconclusive in this study. Lag value of dependent variable is positive and significant in all specifications. It means current governance level depends upon governance level in the previous year. Institutions take a long time to develop, once they are established they will need a lot of time to change.

That's why lagged value of governance is significantly affecting current quality of institutions. Globalization has similar (negative) impact under GMM estimation as well, so we may confer that globalization has negative impact on economy-wise governance.

IV. CONCLUSION AND POLICY RECOMMENDATIONS

Globalization has always remained a hot issue among academia and researchers due to lack of consensus on this subject. A potential unresolved issue about globalization is its impact on governance. The present study has been an attempt to explore interlinks between globalization and governance and to lend empirical support to this discussion. Panel of 91 countries (for detail of countries included in the study see Appendix) covering time period from 1984 to 2011 has been used for analysis. Fixed effect model has been applied with robust standard errors to resolve the issue of heteroskedasticity. Results of all specifications show that globalization has negative and statistically significant effect on governance. This has been found consistent with the framework proposed by Blouin *et al.* (2012). Dynamic effects also have been considered in the model due to the possibility of the presence of endogeniety. The results of GMM also reveal that globalization has negative impact on governance; so we may confer that globalization has negative impact on economy wise governance. We recommend that globalization policy must be devised on rational lines. Globalization if direly needed must be adopted with a great caution. An effective and efficient liberalization policy is integral to reap benefit from globalization without harming institutional infrastructure of the country.

It is healthier to tersely discuss on the limitations of our study in the end. Firstly, the most significant of these limitations is that our study has used composite ICRG index as a proxy for governance which may not be perfect representative of the governance. Secondly, this study used the panel of 91 countries taken from different regions of the world, so the results represent the whole panel. Whereas the impact of globalization on governance may be different in different regions; for example, it may be positive in some regions particularly in developed regions and negative in developing regions, this can be further explored.

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APPENDIX

Region wise list of countries included in the study:

South Asia: Bangladesh, India, Pakistan.

East Asia and Pacific: Australia, Brunei, China, Indonesia, Japan, Malaysia, Myanmar, New Zealand, Philippines, Singapore.

Sub-Saharan Africa: Angola, Burkina Faso, Congo, Cote d'Ivoire, Gabon, Ghana, Guinea, Kenya, Liberia, Mali, Mozambique, Malawi, Sudan, Senegal, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

Middle East and North Africa: Algeria, Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates

Europe and Central Asia: Albania, Austria, Bulgaria, Belgium, Denmark, France, Finland, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Romania, Sweden, Switzerland, Spain, Turkey, United Kingdom.

Latin America and Caribbean: Argentina, Brazil, Bahamas, Chile, Colombia, Costa Rica, Ecuador, Dominican Republic, El Salvador, Guatemala, Guyana, Honduras, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Uruguay, Venezuela.

North America: Canada, United States of America.

DESCRIPTION OF VARIABLES

Civil Liberties

Civil liberties allow for the freedoms of expression and belief, associational and organizational rights, rule of law, and personal autonomy without interference from the state. The more specific list of rights considered vary over the years. Countries are graded between 1 (most free) and 7 (least free).

Political rights

Political rights enable people to participate freely in the political process, including the right to vote freely for distinct alternatives in legitimate elections, compete for public office, join political parties and organizations, and elect representatives who have a decisive impact on public policies and are accountable to the electorate. The specific list of rights considered varies over the years. Countries are graded between 1 (most free) and 7 (least free).

Property Rights

This factor scores the degree to which a country's laws protect private property rights and the degree to which its government enforces those laws. It also accounts for the possibility that private property will be expropriated. In addition, it analyzes the independence of the judiciary, the existence of corruption within the judiciary, and the ability of individuals and businesses to enforce contracts. The less certain the legal protection of property is and the greater the chances of government expropriation of property are, the higher a country's score is. The country's property rights score ranges from 0 and 100, where 100 represent the maximum degree of protection of property rights.

The press freedom

The press freedom index is computed by adding four (three) component ratings: Laws and regulations, Political pressures and controls, Economic Influences and Repressive actions (the latter is since 2001 not assessed as a separate component). The scale ranges from 0 (most free) to 100 (least free).

Size of Largest Party in Legislature (in Fractions)

Size of Largest Party in Legislature (in Fractions) **c**ounts the largest parties. Number of seats divided by the legislative assemblies. Total number of seats expressed in fractions. In countries with a two-chamber parliament the lower house is counted.

GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current US dollars.

Labour force participation rate is the proportion of the population ages 15 and older that is economically active: all people who supply labour for the production of goods and services during a specified period.

Regime Type

Equals 1 for democratic regime and 0 otherwise (variable modified)

Presidential Republic

Equals 1 if the country is a presidential republic and 0 otherwise (variable modified)

FH Status

Variable modified as, if free = 1, otherwise = 0

Governance

Represented by composite Inter Country Risk Guide (ICRG) index, it ranges from 0 to 100 and closer to 100 means very low level of risk which can be an indicator of good governance and if the value of the index is closer to zero it means very high level of risk which can be an indication of very poor governance.

Globalization

Measured by KOF index of globalization it ranges from 0 to 100 and closer to 100 means high level of globalization and *vice versa*.