PAK Publishing Group
Growing Knowledge for Future

Proceedings Book of 2nd ICBSSS, 2015, Dubai
Handbook on Business Strategy and Social Sciences
ISBN: 978-969-9952-01-2

De Jure or De Facto Institutions: An Analysis from Trade Policy Perspective

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ABSTRACT

Economic policies are basically the outcomes of the interaction between political actors and economic agents in any institutional infrastructure of a polity. Political powers in each government exert pressure on political and economic institutions to influence the public policy choices. Therefore it is well asserted now by political economists that economics and politics are intertwined. The present study also aims to make a connection between recent classifications of institutions i.e. *de jure* and *de facto* with trade policy formation and then the effect of such policies on the economic performance of developing nations. Earlier researchers remained confined to the role of formal or informal institutions in designing economic policies but now attention has been diverted towards more deep and refined institutional trajectory. The analysis is not only made collectively for whole panel of 83 developing nations rather political regime effects i.e. democracy and autocracy, have also been incorporated for drawing final conclusions. Using a time span from 1995-2013 and instrumental technique Generalized Methods of Moments (GMM), results show that both types of institutions are helping to perk up the Trade Policy-Growth nexus in these nations but effect of *de jure* institutions is more prominent in case of all model specifications. These findings help in making this recommendation that developing nations should try to observe strictly the involvement of bureaucracy in their political system, nature of the concentration of powers among opposition and ruling government, and the discretionary powers owned by political leaders for policy change.

1. Introduction

Institutions are the backbone of any political and economic system. It is well believed now that if in any system, institutional lapses exist then efforts for collective action among different political and economic agents will be vague because institutions designate powers to these different actors in any political system. It means each political system i.e. democracy and autocracy has its own institutional diversification. In both political regimes, political leaders desire to extract maximum benefits from these institutions or in other way round try to make amendments in the capacity of these institutions to exercise maximum political power in that specific regime. Now when question comes of political power by the exploration of past literature[1] these are of two types i.e. De jure and De facto political powers. The first one is related to the powers allocated to political leaders by formal/political institutions or through the constitutional arrangements. But the later one is linked to such powers which have not been assigned in any written or black and white form rather these are exercised by using some illegal sources, protests, offering bribery and forming lobbies etc. Both of these powers differ in their nature and intensity in both

[1] Acemoglu & Robinson (2006)

regimes i.e. democracy and autocracy. For example in case of democracy leaders and citizens have more de jure political powers defined by constitution and rule of majority. But in autocracy citizens and political leaders make more use of de facto political powers which means that in such nation every segment of the society wants to take control through any means either by using force or bringing revolution against the system. The use and distribution of these two types of powers predicts about the nature and design of de jure and de facto institutions of any political system. It is believed that if de jure institutions are working properly in any system then de facto institutions will also be improved and facilitating and similarly economic institutions as well because economic institutions are actually outcome of the interaction of these two institutions. The nature of economic policies will depend upon the net powers of both institutions. (Acemoglu & Robinson, 2006). This shows the importance of these two institutions in any political arena but these may vary with the passage of time due to political cycles. These political cycles are an important aspect of developing nations where neither democracy nor autocracy stays long. This brings shift in their political institutions and powers of both citizens and political leaders. Due to this reason, many times it has been observed that economic policies designed by the politicians and policy makers of these developing nations doesn't prove fruitful and this uncertainty of political tenure is becoming the major cause slow pace of economic growth in such nations. This reason of backwardness of these developing nations is actually the motivation behind this study. As trade is considered an engine of growth and a sector which can be helpful in removing the balance of payment deficit problems in nations by increasing its volume therefore World is focusing on various policy tools to liberalize this sector. Following the agenda proposed in Washington Consensus (1990), all developing nations tried to follow the policy of liberalization, privatization and policies of stabilization but unfortunately the results were not in accordance with the expectations and then a renowned political economist Rodrik (2000) presented its augmented Washington consensus agenda by putting emphasis more on institutions than policies for accelerating growth of nations. With the passage of time so much research work has been done for proving this nexus between institutions, policies and economic growth. But still gaps exist in literature which is related to the nature of various institutions in different political regimes and their effects on the policy and growth outcomes of these nations. This analysis has tried to fulfill this gap by relating a new stream of institutions with economic policy transformation in those nations which lacks institutional stability and durability and how this deficiency is affecting the credibility of their policies.

2. Literature Review

So far much theoretical and empirical work has been done on the importance of institutions for economic growth (North; 1996, Rodrik; 2002, Preziworski; 2004, Barro and Sala-I-Martin; 1995, Mauro; 1993, Keefer and Knack; 1995, La Porta et al.; 1998, Kaufmann et al.; 2000, Rodrik, et al.; 2004). But how these institutions exert pressures on policy makers in the policy making choice, this is very important question in present era because at present times we are observing that mostly economies are in the process of transition i.e. from autocracy to democracy. It means the nature of de jure and de facto powers are also changing in nations frequently which are ultimately affecting the outcomes of economic policies. Acemoglu, Jhonson and Robinson (2005, 2006) highlighted for the first time this aspect of institutional diversification and related it to the institutional persistence. They made the distinction between these two for understanding the evolvement of economic institutions in any political system. Moreover Pande and Udry (2005) also emphasized on this aspect that no matter we have designed the institutions but it's not necessary that these work according to the set rules. This discrepancy between the formally designed rules and factual working of these institutions create this differentiation of institutions in these two categories: De jure and De facto. De jure institutions are actually related to constitutional rules a nation has designed for its political system while de facto institutions are linked to the factual operation of these institutions. Naritomi, Soares & Assunção (2007) also made an attempt in this regard but focus was particularly on def facto institutions i.e. why de facto institutions vary time to under constant rules designed by de jure institutions of the same nation. Guisinger, A., & Singer (2010) linked the de jure and de facto commitments of any government related to exchange rates to see its impact on tackling inflation and concluded that if there exists divergence between de jure policy and de facto policy in a regime then still those economies will be having more ability to fight against inflation in which the actual policy (de facto) is more closer to the official one (de jure). Moreover the authors proved this hypothesis that democracy is more suitable in bringing this difference of two policies closer to each other.

This is the brief review of past studies which have been conducted to this aspect of institutions with which thie present analysis is dealing actually. But so far no effort has been made in the context of trade policy and the impact of these two types of institutions on the policy effects in developing economies. This study attempts to build this link between these dimensions of institutions and trade policy to observe its final impact on economic growth.

3. Objective

- To examine that how different political regimes affect their institutional capacity and how these institutions affects the policy outcome.

4. Hypothesis

H_1: Political regimes affect the performance of institutions and ultimately economic outcomes of economic policies.

$H_{1.1}$: De jure institutions affect more to Trade Policy-Growth nexus than De facto institutions.

$H_{1.2}$: Democracy has more strong de jure institutional impact than autocracy.

5. Methodology

5.1. Model Specification

The empirical model used in this study is as follows:

$$y_{i,t} = \alpha + \beta y_{i,t-1} + \gamma TP_{i,t} + \emptyset X_{i,t} + \varepsilon_{i,t}$$

Where $\boldsymbol{y_{i,t}}$is the GDP growth rate of economies and $\boldsymbol{y_{i,t}}$ is its lag value which shows that the model is dynamic in its nature. $\boldsymbol{TP_{i,t}}$ is referring to various measures of trade policy or it can be said that it's showing a set of proxies used for trade policy. $\boldsymbol{X_{i,t}}$ is the vector of control variables which include inflation, size of country, health, employment level, globalization and infrastructure. $\boldsymbol{\varepsilon_{i,t}}$is the overall error term with the assumption that with E($\boldsymbol{\varepsilon_{i,t}}$) = 0 for all i and t. Dynamic model has been used because of the reason put forward by many authors (Bond (2002); Roodman, (2009); and Baltagi, (2008) that in case of large N and small T such model specification helps in reducing panel bias. Moreover problem of endogeneity can easily be solved through dynamic models as compared to static model. And in our case trade policy has been used as the endogenous variable and its endogeneity has been aimed to capture through various institutional variables. That is the reason choice of dynamic model fits the data analysis. Moreover purpose of the study is to see both the short run and long run effect of trade policy variables on the economic performance of the country, such models help in achieving this objective as. First of all Pooled OLS estimation has performed but poolability test showed that it is not suitable to pool the dataset. Moreover, results also showed the presence of hetroskadasticity in the model due to heterogeneity in panel. To overcome this problem, panel fixed effect technique has been applied. But still serial correlation and hetroskadasticity is being found in post estimation results. To handle these two problems, System Generalized Methods of Moments (SGMM) technique has been considered because it is believed that it is an efficient estimator when data suffers from hetroskadasticity problem (Baum; 2003). Hausman test between OLS and GMM also confirms the validity of later technique. Moreover in political economy empirical literature, it has also been observed that dynamic panels usually have to face usually bias in estimation. Therefore SGMM is being suggested as the best remedy to be used for addressing this bias. This technique was originally presented by Holtz-Eakin et al. (1988). But with the passage of time, it got recognition by the name of Arellano and Bond (1991), Arellano and Bover (1995), and Blundell and Bond (1998). Moreover SGMM helps in handling those variables which have random walk (Bond; 2002) in their trend. And as the model specification used in this study includes mostly macroeconomic variables so that's why SGMM approach can be used with more precision. More over it has been observed that small panels can face downward bias (Baltagi; 2008, p. 154) in standard error estimates but this bias can be removed in SGMM using two step procedures with option "small" which will implement Windmeijer correction and generate more appropriate estimates. Moreover the pre-requisite for the validity of instruments requires that there must be first order autocorrelation (AR1) in first differenced residuals but not second order serial correlation (AR2) in errors. However lower and upper bound provided by lagged dependent variable in two models i.e. Pooled OLS and Fixed Effects can be helpful in deciding whether GMM estimation is valid or not. This criterion tells us that the value of lagged dependent variable estimated through GMM must fall in this bound of values.

$$LDV_{FE} < LDV_{GMM} < LDV_{OLS}$$

This coefficient of LDV also indicates the convergence of model but the condition is this that its value should be less than unity. All these points are required for the validation of GMM estimator. So far validity of entire instruments has been discussed by considering Hansen J-test but validity of additional instruments like in levels, differenced and IV instruments is also important. For this purpose Difference-in-Sargan/Hansen test has been proposed. It is also recognized as C-test (Baum, 2003). This test helps in evaluating the validity of subset of instruments in SGMM estimation or in other words a test for their exogeneity. Optimal number of instruments are obtained by using second lag (2 2). Joint significance test of model has been tested by F-Test. Its null hypothesis states that all explanatory variables are jointly equal to zero. All these requirements are being fulfilled in the estimation process of the model of this study.

6. Variables and Data Sources

Trade Measures	
MFN Tariff rate	It is taken as unweighted average of most favored nation tariff rates for all products. Source: World Bank.
Non-Tariff Barriers	It is a sub component extracted from of EFW Index under the Source: Economic Freedom Dataset 2013.
Regulatory Trade Barriers	It takes into account two important aspects: Non-Tariff barriers, and cost of importing and exporting. Source: Economic Freedom of the World 2013.
Black Market Premiums	It is also a component of EFW Index showing openness indicator. Source: Economic Freedom of the World 2013.
Freedom to Trade	It is composed of taxes on trade among nations, Regulatory trade barriers, Size of trade sector, Black market premiums Source: Economic Freedom Dataset 2013.
Trade (% of GDP)	It is defined as the sum of exports and imports of goods and services measured as a share of gross domestic product. Source: World Bank
KOF Restrictions	This covers the restrictions on trade and capital using hidden import restrictions, tariffs, and other taxes on international trade. Source; World Economic Forum's Global Competitiveness Report (various issues).
De jure Institutional Factors	
Political constraints	The measure of political constraints estimates the feasibility of policy change. Source: Henisz, W. J. (2002).
Durability of Political System	It measures the number of time a political regime changes frequently. Source: Polity IV (2013)
Bureaucracy	It is defined as regulation in chief executive recruitment. Source: Polity IV (2013).
Concentration of political powers in political parties	It includes both the concentration of powers with 'government' and 'opposition'. It is meseaured as the sum of the squared seat shares of all parties in the government and opposition. Source: DPI 2013.
De facto Institutional Factors	
Political Stability	It reports the number of chances a government will be destabilized by politically motivated actors. Source: World Governance Indicators by World Bank.
Rule of Law	It is measured by quality of contract enforcement, the working of police and courts, as well as the chances of committing crime and violence. Source: World Governance Indicators by World Bank.
Economic institutional Variables	
Legal System & Property Rights	It is one of the components extracted from EFW Index showing the Legal Structure and Security of Property Rights. Source: Economic Freedom Dataset 2012.
Financial Institutions	It is defined as domestic credit provided by the banking sector to various sectors. It has been used as the proxy for financial institutions in the analysis. Source: World Bank.
WTO	A dummy variable for the membership of WTO. "0" for non- member nations, "1" for member-nations. Source: World Trade Organization.
Dependent and Control Variables	
GDP Growth	It is annual percentage growth rate of GDP calculated at market prices at market prices using constant 2000 local currency unit. Source: World Bank. This has been used as dependent variable.

Continue

Health	For this purpose life expectancy at birth has been used as proxy. It shows number of years an infant would live if mortality conditions remain same from the time of birth till the end of life. Source: World Bank.
Size of Country	It is measured by total population of a country which includes all residents regardless of their citizenship. Its natural logarithm has been taken for final estimation. Source: World Bank.
Infrastructure	It is proxied by telephone lines. These include fixed telephone lines that help to connect the subscriber's terminal to the public telephone network Source: World Bank.
Employment	It is measured as employment to population ratio for the age 15 and above. Source: World Bank.
Inflation	Consumer price index has been used for measuring this variable. Source: World Bank.

7. Result Estimation

Now in this section the empirics have been found by using econometric model given above. Earlier no such empirical analysis has been conducted in this regard. Only detailed descriptive studies are available showing the situation of the restrictiveness of trade policy in developing nations. Few authors have tried to discuss only African nations with respect to the role of trade policies in their economic performance but those studies are completely belonging to discipline of economics not including the flavor of political economy of these nations. Giavazzi and Tabellini (2005) conducted a detailed study and found that trade reforms are often preceded by political or democratic reforms. Authors concluded that after 4 years of democracy in a nation, the probability of a nation to be open to international trade increases 30 percentage points more as compared to the time before democratization. But startling fact which these two authors also observed that even economic liberalization has a positive relationship with political liberalization but still it has been found that on average those nations which are in transitory process of democracy are not following significant accelerating growth rates and better economic policies. The question arises that why is it so? Giavazzi and Tabellini (2005) have answered it in a way that "sequence" matters in case of liberalizations and the sequence of reforms should be from economic to political side.

Now moving towards discussion, using first trade policy measure i.e. tariff rate policy, the effects of both types of institutions has been explored by using instrumental technique of Generalized Methods of Moments (GMM). Firstly ordinary Least Squares (OLS) and Fixed Effects (FE) models have been applied to check whether there is any need of using GMM or not. The diagnostics of both models prove the presence of hetroskadasticity which indicates the desirability of this technique. Moreover the Hausman Test between GMM and OLS has also been conducted and reported to examine whether there exists the problem of endogeneity of concerned variable and the results confirmed the alternative hypothesis of the test that GMM is more suitable than OLS technique. Controls are also being added in each model. These are health, size of country, infrastructure, employment and inflation. Results are not reported of these variables but can be provided on request. In each table *, ** and *** denote significance at the 10%, 5% and 1% level, respectively. Moreover in parentheses p-values have been reported. Now to see the effect of both types of institutions in both regimes, the whole panel has been converted in to two groups i.e. democratic nations and autocratic nations using the data set of Freedom House and transforming the nations into two categories according to this formula.

$$\Sigma\,(PR+CL)/2 \leq 3.5 \qquad \text{Democratic Nation}$$

$$\Sigma\,(PR+CL)/2 > 3.5 \qquad \text{Autocratic Nation}$$

Here PR and CR are related to political rights and civil liberty rights respectively.

In case of all models, slope dummy has been included in the baseline model along with original variable and all other control variables. From the table 1 it can be seen that for both types of political regimes, trade policy is having expected sign of coefficient. But for democracy the effect of de jure institutions is more and for autocracy the role of de facto institutions is prominent confirming the results of Acemoglu & Robinson (2005). More the nations with stronger impact of de jure institutions are showing larger effect of their economic institutions as well on Trade Policy-Growth analysis again supporting the argument made by Acemoglu & Robinson (2006). All diagnostics are again supporting the validity of the model.

Table-1. Models with Tariff Rate Policy

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure Institutions	*De facto* Institutions	Economic Institutions
Constant	2.1910 (0.141)	-38.794* (0.071)	-.2863 (0.637)	1.8797*** (0.002)	-4.5146*** (0.000)
GDPt-1	.4331*** (0.000)	.2831*** (0.000)	.3193*** (0.000)	.3710*** (0.000)	.3740*** (0.000)
Tariff*Demo	-.0364** (0.029)	.0046 (0.959)	-.1103*** (0.000)	-.0117*** (0.017)	-.0830*** (0.000)
Tariff	-.0103 (0.512)	-.0017 (0.932)	-.0238*** (0.000)	-.0537*** (0.000)	-.0361*** (0.000)
Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			220.77*** (0.000)	59.74*** (0.000)	185.78*** (0.000)
observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			77	75	71
F-test			21272.41	28048.79	10769.32
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.287	0.547	0.564
J-Test			0.305	0.176	0.189
C-Test					
GMM			0.997	0.967	0.993
IV			0.956	0.543	0.525

Now in Table 2, another restrictive measure of trade policy has been regressed on the economic growth to see its impact on different types of regimes under different institutional capacities. Again the sign of trade policy co efficient is predicted one i.e. negative impact on the growth of these economies. But the impact is higher when trade policy variable is instrumented with de jure political institutions for democracies and for autocracies model intertwined with de facto institutions are showing larger impact. The role of economic institutions in case of democracies is more prominent for Trade Policy – Growth analysis which is also confirming the importance of de jure political institutions in the formulation of better economic institutions.

Table-2. Models with Non- Tariff Barriers Trade Policy

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure institutions	*De facto* institutions	Economic Institutions
Constant	1.4576 (0.384)	-37.074* (0.098)	7.7666*** (0.000)	4.614*** (0.000)	-4.4547*** (0.000)
GDPt-1	.4378*** (0.000)	.2872*** (0.000)	.3402*** (0.000)	.3739*** (0.000)	.3757*** (0.000)
NTB*Demo	-.1250*** (0.001)	-.8345*** (0.009)	-.2328*** (0.000)	-.1279*** (0.000)	**-.2822**** (0.000)
NTB	.1618 (0.126)	.3764 (0.114)	-.7459*** (0.000)	-.7483*** (0.000)	**-.3822**** (0.000)
Controls	yes	yes	yes	yes	**yes**
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			176.07*** (0.000)	321.70*** (0.000)	14.34*** (0.000)
Observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			76	75	71
F-test			26340.16	39416.53	11838.81
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.382	0.417	0.344
					Continue

J-Test			0.255	0.237	0.143
C-Test					
GMM			0.978	0.991	0.985
IV			0.843	0.735	0.208

Similarly using Regulatory trade barriers in Table 3, the same results have been observed i.e. in case of democracy larger impact of de jure institutions and the impact of economic institutions gets stronger where de jure institutions have more control on policy making. This can be seen from the Table 1.3 given below.

Table-3. Models with Regulatory Trade Barriers

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure institutions	*De facto* institutions	Economic Institutions
Constant	2.875* (0.053)	-33.645 (0.116)	2.8820*** (0.000)	6.183*** (0.000)	5.8720*** (0.000)
GDPt-1	.4290*** (0.000)	.2818*** (0.000)	.3527*** (0.000)	.3842*** (0.000)	.4083*** (0.000)
Reg*Demo	-.0912*** (0.008)	.0027*** (0.992)	-.1337*** (0.000)	-.0689*** (0.000)	-.4052*** (0.000)
Reg	-.1650** (0.032)	-.2791* (0.092)	-.6939*** (0.000)	-.8386*** (0.000)	-.4842*** (0.000)
Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			325.94*** (0.000)	119.11*** (0.000)	21.52*** (0.000)
Observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			77	75	72
F-test			142920.24	20637.65	26405.89
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.247	0.675	0.561
J-Test			0.295	0.182	0.150
C-Test					
GMM			0.994	0.984	0.979
IV			0.943	0.430	0.532

In Table 4, market based measure (black market premium) of trade policy has been employed to see its role in the economic performance of these nations. Again in all models the sign of this variable is positive and significant as per the theoretical foundations. But here in this case the role of autocracy is more prominent for having the impact of this variable on economic growth. The reason is an autocratic always make the use of exchange rate policy to bring stability in its political regime. For example of fixed exchange rate in Middle East can be seen in this regard. But again the results are confirming that in autocracies de facto institutions plays more active role and for such economies the nation's economic institutions can give their best outcome only in case of more powerful de facto institutions.

Table-4. Models with Price Based Trade Policy

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure Institutions	*De facto* Institutions	Economic Institutions
Constant	-1.824 (0.275)	-37.620* (0.077)	3.7057*** (0.000)	-.7705 (0.374)	.5863 (0.741)
GDPt-1	.4146*** (0.000)	.2832*** (0.000)	.3430*** (0.000)	.3328*** (0.000)	.3694*** (0.000)
BMP*Demo	-.0807*** (0.000)	-.3885 (0.402)	-.0561*** (0.001)	-.0602*** (0.000)	-.0907*** (0.000)
BMP	.3777*** (0.000)	.2889*** (0.007)	.1885*** (0.000)	.3071*** (0.000)	.2289*** (0.000)
					Continue

Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			107.15*** (0.000)	392.17*** (0.000)	2681.00*** (0.000)
observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			77	75	71
F-test			107841.03	23808.90	19914.77
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.373	0.363	0.469
J-Test			0.272	0.247	0.149
C-Test					
GMM			0.999	0.999	0.998
IV			0.988	0.993	0.776

In case of outcome based measure of trade policy, the results have been reported in Table 5. The nature of the relationship is same as expected for both types of political regimes and again highlighting the supremacy of de jure institutions in democracies and de facto in case of autocracy. All diagnostics are supporting the model and validity of instruments.

Table-5. Models with Outcome based Trade Policy Measure

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure Institutions	*De facto* Institutions	Economic Institutions
Constant	1.399 (0.373)	-43.235** (0.042)	2.2781** (0.036)	.2795 (0.861)	-2.6427*** (0.004)
GDPt-1	.4234*** (0.000)	.2744*** (0.000)	.3696*** (0.000)	.3194*** (0.000)	.3998*** (0.000)
T/GDP*Demo	-.0049** (0.033)	.0370** (0.026)	.0057*** (0.008)	.0032*** (0.000)	.0152*** (0.006)
T/GDP	.0082*** (0.001)	.0245** (0.018)	.0334*** (0.000)	.0221*** (0.000)	.0417*** (0.000)
Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			299.34*** (0.000)	1189.04*** (0.000)	1279.33*** (0.000)
observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			77	75	71
F-test			5225.10	7528.70	4472.09
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.852	0.976	0.608
J-Test			0.348	0.329	0.170
C-Test					
GMM			0.999	0.999	0.987
IV			0.884	0.732	0.332

So far the impact of incidence based, outcome based and market based measures of trade policies has been evaluated for both types of regimes separately. Now another category of trade policy measure i.e. composite indices has been used for analyzing its impact on the growth of developing nations in the Table 6 and Table 7 given below. One of them is Free to trade and the second one is Kaufman Restriction Index of globalization. Free to Trade means the extent of openness in nations. Again same set of instruments has been used in different models. KOF restriction actually shows that how much a nation is lowering down its tariff, non tariff and capital controls on imports. More a nation is reducing its barriers, more it is open and globalized. In both case the expected sign is positive. The results are showing the same kind of relationship but in these both cases autocracy is showing more positive role for developing nations but again the impact of de jure institution are greater than de facto institutions. This dominance of political power is also contributing to their economic institutions as well. This can be seen from the

greater coefficient of trade policy variable in case of model when economic institutions of these nations have been used as an exogenous variable in case of trade policy. It simply means that the nations where de jure institutions are more powerful, their economic institutions also have high rate of performance in case of policy outcome.

Table-6. Models with Composite Index= Free to Trade Index

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure Institutions	*De facto* Institutions	Economic Institutions
Constant	2.9576** (0.047)	-49.466** (0.022)	-15.963*** (0.000)	-14.0825*** (0.000)	-21.729*** (0.000)
GDPt-1	.4287*** (0.000)	.2801*** (0.000)	.3359*** (0.000)	0.3536*** (0.000)	.3453*** (0.000)
FTD*Demo	-.0799*** (0.009)	1.7392*** (0.000)	-.2256*** (0.000)	-.1132*** (0.000)	-.6268*** (0.000)
FTD	-.1840 (0.016)	-.3564 (0.011)	2.6128*** (0.000)	2.0067*** (0.000)	2.1776*** (0.000)
Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			783.76*** (0.000)	63.85*** (0.000)	568.58*** (0.000)
observations	1494	1494	1494	1494	1494
Countries	83	83	83	83	83
Instruments			77	75	71
F-test			16676.80	34540.50	20104.32
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.583	0.433	0.744
J-Test			0.244	0.186	0.108
C-Test					
GMM			0.996	0.996	0.981
IV			0.939	0.825	0.673

Table-7. Models with Composite Index= KOF Restriction Index

Variables	**OLS**	**FE**	**SGMM-2**	**SGMM-2**	**SGMM-2**
			De jure Institutions	*De facto* Institutions	Economic Institutions
Constant	1.630 (0.295)	-31.334 (0.149)	2.8237*** (0.000)	2.7905*** (0.002)	-1.7907 (0.178)
GDPt-1	.4179*** (0.000)	.2825*** (0.000)	.3666*** (0.000)	.3676*** (0.000)	.3813*** (0.000)
KOF*Demo	-.0155*** (0.000)	-.0476* (0.085)	-.0249*** (0.000)	-.0152*** (0.000)	-.0440*** (0.000)
KOF	.0341*** (0.000)	.0387* (0.088)	.1265*** (0.000)	.0628*** (0.000)	.1634*** (0.000)
Controls	yes	yes	yes	yes	yes
Hausman test for OLS & GMM					
Chi 2 Prob>chi2			530.81*** (0.000)	251.09*** (0.000)	405.93*** (0.000)
observations	1456	1456	1456	1456	1456
Countries	81	81	81	81	81
Instruments			77	75	71
F-test			88379.61	46498.38	6417.76
AR(1)			(0.000)	(0.000)	(0.000)
AR(2)			0.728	0.661	0.944
J-Test			0.279	0.225	0.189
C-Test					
GMM			0.989	0.986	0.983
IV			0.771	0.536	0.333

8. Conclusion and Recommendations

This study is an attempt to observe the relationship between economic performance and different direct and indirect trade policy indicators through the prism of various institutional dimensions. Using the recent econometric instrumental technique SGMM to capture endogeniety of trade policy by institutional setup of nations, the results show that lower tariff and non-tariff barriers are resulting increased economic

growth which means that there is negative relationship between economic growth and trade liberalization process in case of developing countries confirming the results of study by Chalkual et al. (2013) that less restrictive trade policies result in high economic growth. From the results it can also be observed that under various political regimes, the institutions vary in their powers and capacities and due to this result in different economic performances as well. Moreover in almost all models supremacy of de jure institutions has been found over de facto institutions for developing nations to have better policy outcomes. Democracy has more chances to have strong de jure institutions due political party institutionalization and this is the reason that in case of all democratic nations the impact of such institutions is observed more in magnitude than autocracies. All these results confirm the main and both of the sub hypotheses of the study. Overall 21 econometric models have been run using STATA software for different categories of nations, and it is found in all cases that Trade Policy-Growth analysis is sensitive to the institutional diversification in different political regimes. This analysis supports the results of Rodrik et al. (2004), Segura-Cayuela (2006) and Eris et al. (2013) who blamed inefficient institutions even with open trade regimes for less efficient economic policies and concluded that institutions play more important role in determining trade policies. On the basis of these findings it is recommended that developing nations should try to focus more on the formation of formal political institutions for the better outcome of economic policies. If these institutions are having strict rules and regulations for political leaders then the accountability fear can restrict them for using malpractices which give rise to the discrepancy between de jure and de facto institutional workings. In this way contract enforcement will also be easily possible for traders and investor and these economies will prosper in better way. Therefore it is suggested that instead of emphasizing on governance directly, these nations should rather focus on the designing of such rules and laws in their constitutions which ultimately may become the cause of better and improved governance. And such type of amendments will also keep political leaders constrained for misusing their powers.

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