INSTITUTIONAL FACTORS AFFECT FOREIGN DIRECT INVESTMENT FLOWS

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ABSTRACT
The foreign direct investment (FDI) flow has brought a huge attention when comes to the overall economy condition for a country. Over the years, quality of institutional factor is always the first priority to investors. We proposed this study is to determine the impact of institutional factors toward FDI flow in poor countries. We have tested the relationship of institutional factors and FDI in 15 International Development Association (IDA)-supported countries ranging from year 2006-2013. We used Country Policy and Institutional Assessment (CPIA) Business Regulatory Environment Rating, CPIA Financial Sector Rating and CPIA Fiscal Policy Rating as independent variables while FDI as the dependent variable.
According to two-step System GMM model, we identified that CPIA Financial Sector Rating and CPIA Fiscal Policy Rating had significantly positive impacts on FDI. However, CPIA Business Regulatory Environment had an insignificant negative result. Thus, we concluded that government and policymakers should focus on creating a prudent fiscal policy and improve financial sector to obtain higher CPIA ratings and attracting FDI inflow.

Keyword: Business regulatory, CPIA Rating, Financial sector, fiscal policy, foreign direct investment

INTRODUCTION
Since the late 1990s, the economic development has been emphasized on institutional quality as a key factor of cross-country differences in both growth rates and income per capita. "Institution is defined as the humanly devised constraints or rules of the game that structure political, economic and social connection"- Tun, Azman and Law;(2012). Institution was a structure that bear a country's economy, it affected the security of property rights, prevalence of corruption, distorted or extractive policies. It also directly influenced the incentive of investment in basic institutional factors. For instance market size, productivity, and institutional development, labour expenses were imperative to generate FDI flows.
On the other hand, Foreign Direct Investment (FDI) has turned into the primary financial support to developing countries. During 1996 to 2006, trade of goods and services were globally went up by 8% while the net inflow of FDI increased by 19%. However, the benefits of FDI were not spread similarly across countries. Most of the FDI flow were between the rich countries regardless of the availability of cheaper labour in developing countries. The least developed countries attracted only 2% of all FDI, according to Buchanan, Le and Rishi; 2012.
Moreover, FDI related issues enlarged beyond liberalization of economies. After the financial crisis such as Asian financial crisis in 1997, many countries have began to enhance their institutional policies, arrangements and legislation in order to draw in FDI. In addition, economists have proved the significance of good quality domestic institutions may have impact

on growth rates and income per capita of cross counties.

Besides, based on the various empirical reviews which claimed a positive effect of institutional quality towards FDI flow, hence, economy was boosted when countries executed favourable policy and projects (Adhikary 2011, Azam 2010). For example, countries that incorporate in TPPA and One Belt One Road (OBOR) can actually brought down the trade barrier and attracted more FDI. Moreover, a report had also highlighted the importance of enabling institutional environment in obtaining the maximum benefits from FDI was remain important (OECD, 2002).

Structure of the institution was vital. A country might suffer losses or failed to attract FDI if the structure of the institution was not well-managed. For instance, structural institutional reforms took place in Russia. However, the yearly FDI flows to Russia remained below $3 billion, which is much less than China's monthly's FDI flow, (Buchanan, Le and Rishi; 2012). This was due to the flawed institutional infrastructure in Russia, thus led to a slowdown in economic and investment growth.

On the other hand, we have examined the impact of institutional factors such as Country Policy and Institutional Assessment (CPIA) variables and FDI. CPIA rated countries against a set of 16 criteria grouped in four clusters: (a) economic management; (b) structural policies; (c) policies for social inclusion and equity; and (d) public sector management and institutions.

Firstly, economic management characterized as administration of finance, income and consumption of a community, business organization or economy of a country. The example of economic management was macroeconomic management. Macroeconomic management was defined as the monitoring and formulation of macroeconomic policies which includes the issue that relating to investigation and projection of the four core macroeconomic sectors. For example, real sector, monetary sector, fiscal sector and external sector. Besides, there was subsequent policies in macroeconomic management, such as debt policy, regional integration and other relevant part of the procedure.

Macroeconomic management in real sector was a management that dealing with total output of a country, for instance, output in agricultural, industry and services sector. Additionally, macroeconomic management in the real sector attempted to reveal changes in these aggregates and to guide policymakers in pursuit the economic objectives and ways to approaches to the unforeseen changes in the economic condition.

On the other hand, the macroeconomic management in fiscal policy sector was to analyse the implications of public expenditure due to the public expenditure influenced both aggregate supply and aggregate demand. The greater part of this investigation helped government to provide an appropriate duty policy or a superior allocation of budget among the sectors or government institutions. Besides, macroeconomic management in fiscal policy likewise included with aggregate domestic income, aggregate grants and expenditure and net lending.

Aggregate domestic income was included all the non-repayable receipts aside from grants. In addition, aggregate grants were a sort of facilities or subsidies that provided by government to their citizens. It also be defined as the unrequited receipts from multilateral institutions and respective donors. Moreover, expenditure and net lending were referred to the public expenditure which represents the cost of government's spending in activities involved the adjustment of wages and salaries, interest payments, goods and services, subsidies and transfers and capital expenditures.

Secondly, structural policies referred to a set of economic policy reforms imposed on developing countries as a condition for requested loan. It made adjustments by referred to privatization and deregulation. Furthermore, a few implementation must be carry out by the countries before requesting loan from International Monetary Fund(IMF). For instance, government of a certain country is encourage to privatized their state owned industries and deregulation of markets in order to encourage market rivalry.

In addition, structural policy also comprised a program named Structural Adjustment Programme (SAP). SAP was a programme which offered loan from International Monetary Fund (IMF) to countries that experienced economic crisis. SAP also designed to reinforce country's foreign direct investment by eliminating the trade and investment regulations. Hence, it boosted up the foreign exchange earnings by emphasizing exports and reducing government deficits through cuts in government spending. Furthermore, SAP also acted as a programme to evaluate the institutional factors of a country through a few ways. It measured the abolishing food and subsidies of agricultural of a country in order to reduce the government expenditures. Besides, liberalization of trade and investment and high interest rates were taken into consideration by SAP in order to help country to generate more FDI. SAP likewise measured effect of the cutting of social programme in the areas of health, education and civil services of a country. Lastly, privatization of government-held enterprises as mentioned as above also be taken into account by SAP.

Thirdly, policies for social inclusion and equity were created to combat poverty and vulnerability by promoting labour market efficiency and social equality. For instance, gender equality, building human resources and social protection. As for gender equality, it was known as the sexual equality in labour market, education and society. Building human capital referred to the impact of national policies and private sector service on quality of health. Lastly, public sector management and institutions were managed by country itself and upgraded of the business processes of public enterprises. This included the incorporate with management of property rights, governance and corruption management of the public sector.

In this thesis, we have selected CPIA ratings as institutional factors. Next, countries were given ratings according to a scale of 1 to 6 for each of the 16 criteria. The scores of the institutional factor were depended on the performance in a given period of time, which was one year. Moreover, this thesis focused on how institutional factors influence FDI flows across countries.

As mentioned in the research background, most investors preferred investing in wealthy nation. Hence, it reduced the amount of FDI flow into the slowest growing nation or least developed country. According to Bonnie, Quan and Meenakshi (2011), the poorest and least developed nations were only managed to attract 2% of FDI. Thus, a question raised whether poor countries are able to attract FDI. In other word, we have discovered majority of the studies stated that institutional factors could affect FDI flow. However, some studies proved that FDI was insensitive to institutional factors. For instance, Daude and Fratzscher (2008) and Daude and Stein (2007) claimed that FDI was less sensitive to corruption, while Arbatli (2011) also proved that domestic conflict and political instability have no any influence to FDI flows. Thus, the impact of institutional factors toward FDI remained inconclusive.

This study was to examine the impact of institutional factors to FDI. Specifically, this study was conducted to examine the impact of CPIA Business Regulatory Environment Rating, CPIA

Financial Sector Rating and CPIA Fiscal Policy Rating towards FDI.

2. LITERATURE REVIEW

Law, Saini and Ibrahim (2013) has conducted tests to identify whether institutions threshold existed in financial development and growth with data from 85 countries ranging from year 1980 to 2008. The result has revealedthat significant institutions threshold did existed in the financial development-economic growth nexus. However, financial development has an insignificant effect on growth when institutional quality is below the threshold. The empirical results suggested thatlow quality institutions environment would hinder an economy from exploiting the benefits of financial development on economic growth.

Law and Demetriades (2006) has done a research to prove that openness and institutions are vital factors of financial development. The dataset of the study was collected from 43 developing countries between 1980 and 2001 via dynamic panel data techniques. The result has suggested that institutional quality is a robust and statistically significant determinant of financial development.

Christian and Marcel (2006) has identified that FDI inflow was not sensitive to institutional factors. However, portfolio investment is the most sensitive to the quality of institutions. The study was based on data from 77 developed and developing countries. According to these journals, we identified that impact of institutional factors on economies existed but it may vary from one country to another. The journals we reviewed only studied on developing and developed countries. Thus, the impact of institutional factors on FDI flow in developing and least developed countries remain unsure.

Chee and Nair (2010) has conducted a study to identify whether financial sector development is a significant prerequisite for FDI. Static Panel model has chosen to reveal the relationship between FDI, financial sector development and economic growth.Data were collected from 44 Asia and Oceania countries between 1996 and2005. The test result has shown that financial sector development was important for FDI to facilitate economic growth, especially for developing and under-developed economies. From this journal, we identified that financial sector has affected FDI flow. Thus, it was added into our estimation as it was important for developing and least developed countries.

Azam and Khan (2011) has carried out research on secondary data from 1981 to 2007 in Pakistan regarding the impact of public debt on FDI. The test results found that public debt hindered FDI flow into Pakistan. Thus, public debt have to be organized properly to exploit the maximum benefits of FDI in Pakistan. A study by Cleeve (2004) has proved the use of fiscal incentives to attract FDI was effective. The study was conducted based on data from 16 Sub-Saharan Africa (SSA) countries in year 1990-2000. The result revealed that tax concessions has a negative but significant relationship with FDI flows. Besides that, the study has highlighted that low level of corruption and FDI policies are important in attracting FDI into the countries. According to the journals, we identified that debt and tax management had influenced FDI inflow to developing and least developed countries as Pakistan and some Africa countries were supported by IDA. Thus, it was added into our estimation for further study.

Zhang (2007) has studied the result of business regulations on FDI with data from 12 source countries to 64 host countries in year 2000. The study has revealed a threshold effect in the

relationship between FDI inflows and regulatory cost. When a host country's regulatory costs are sufficiently low, a further drop in regulatory costs may not affect FDI, in fact, may even decrease FDI inflows. However, beyond some threshold, FDI inflows significantly rise as the regulatory costs fall. According to the journal, we identified that business regulation did impact on FDI flow. However, the journal we reviewed was a study on developing and developed countries. Thus, business regulation was taken into account for a further study to see whether it has impact on FDI flow in developing and least developed countries.

3. METHODOLOGY

This research studies the impact of institutional factors on foreign direct investment. The institutional factors we have chosen are CPIA business regulatory environment rating, CPIA financial sector rating and CPIA fiscal policy rating. All of these factors are rated from 1 to 6. Higher ratings can be obtained by a country with a policy and institutional framework that more strongly encourage growth and poverty reduction. Both CPIA fiscal policy rating and CPIA financial sector rating were categorized as criteria for economic management, while CPIA business regulatory environment rating were categorized as criteria for structural policies. These CPIA ratings reflected the performance of IDA-supported countries. Panel data of the selected countries are collected from World Bank Database and International Development Association (IDA). We have randomly pre-selected 20 developing countries and least developed countries where the sample period cover from 2006 to 2013 which provided the most complete information as compare to other period in each of the country. There will be 10 developing countries and 5 least developed countries that used to identify the impact of institutional factors toward FDI flow. The 15 selected countries are as follow:

D1 = Bolivia	D11 = Cambodia
D2 = Bosnia and Herzegovina	D12 = Mozambique
D3 = Ghana	D13 = Nepal
D4 = Honduras	D14 = Nigeria
D5 = India	D15 = Uganda
D6 = Pakistan	
D7 = Sri Lanka	
D8 = Vietnam	
D9 = Uzbekistan	
D10 = Zimbabwe	

3.1 Panel Data and Model

Panel data is used because, first, panel data was strongly accurate in inferencing the model parameters. Panel data usually contained more sample variability and degrees of freedom by differentiating with cross-sectional data which actually viewed as a panel with $T = 1$, or time series data which viewed as a panel $N = 1$. Hence, it enhanced the efficiency in estimating the econometric model. Second, panel data deliver a greater volume in capturing the complexity of human behaviour than a single cross-sectional data or time-series data. Thus, hypotheses that consisted of complicated behavioural can be constructed and investigated by using panel data. Third, panel data has simplified the statistical inference and computations in the economic model. Under an ordinary condition, people may expect the computation of panel data estimator was more complicated than a single-cross sectional or time series data. In contrast, panel data can actually rearrange the computation and inference in some specific situation. Fourth, panel data also controlled the impact of omitted variables in economic model. It was happened that some estimation was unable to be detected due to disregarding the effects of particular variables in the model specification which were correlated with the explanatory variables. It also contained statistics on both the intertemporal dynamics and individuality of the entities, this allowed one to manipulate the result of missing variables. In this case, intertemporal dynamics was introduced to describe the relationship between the variables in past, present and future events or conditions. Hence, the impact of omitted variables in economic model can be eliminated. Fifth, by learning the repeated cross section of observations, panel data was more qualified to use in examine the dynamics of change. (Gujarati & Porter 2009). The model is

$$lfdi_{it} = \beta_0 + \beta_1 CPIA02_{it} + \beta_2 CPIA07_{it} + \beta_3 CPIA08_{it} + \mu_{it}$$

where The dependent variable lfdi that we tested is logged foreign direct investment and the independent variables (X) that we test are CPIA02, CPIA07 and CPIA08 are business regulatory environment rating, financial sector and fiscal rating respectively. The symbol of β_0 is defined as constant and u_{it} is an error. The symbol of it defines that panel data that we run in this research.

Next, Phillip-Perron (PP) and Levin, Lin & Chu Test (LLC) test was carried out to identified the null hypothesis on a time series which integrated or order 1. In the view of Gujarati & Porter (2009), one approach to estimate a pool regression was to reduce the fixed effects in the model. Fixed Effect model (FE) investigated the connection between outcome variables and predictor within an entity. Each entity had its own individual characteristics that may or may not influence the predictor variables. In addition, FE assumed that the individual may have a few impacts or bias toward the predictor or outcome of the variables. In this case, manipulation or elimination must be carry out in order to bring down the impacts or bias that created by individual.

Furthermore, FE likewise removed the effect of time-variant characteristics in order for us to evaluate the net effect of the predictor on the outcome variables. The important assumption of FE model was time-invariant characteristics which are unique to the individual, and they should not to be correlated with other individual characteristics. Besides, each entity was not the same as each other, therefore the error term and constant of the entity should not be correlated with each other. However, if the error terms are correlated, then FE was no longer appropriate. This was because the inferences may not be correct and it might need to use random-effects model to investigate the relationship of the entities. The equation of fixed effects model is:

Yit = β1Xit + αi +uit

where αi (i=1….n) represent the unknown intercept of each entity. (*n* entity-specific intercepts.).Yit represent the dependent variable: i = entity and t = time and Xit represent one independent variable (IV). β1 represent the coefficient for that independent variable. Lastly, uit represent the error term in the model.

According to Oscar (2007), random effects include time invariant variables. Random effects assumed that the entity's error term was not correlated with independent variables which allowed for time invariant variables to play as role as explanatory variables. In random effects, individual characteristics that may or may not influence the independent variables have to be specified. Random effects allowed generalize the inferences beyond the sample used in the model. The equation was as follow:

Yit = βXit + α + uit + εit

Hausman test was a test used to determine the appropriate model between FEM and REM in which developed by Jerry Hausman in 1978. The null hypothesis in this test wasunique errors were not correlated with the independent variables. The rejection of null hypothesis means that REM was not suitable and the use FEM was better off.

Finally, the estimation used in this study was the Generalized Method of Moments (GMM) estimators proposed by Hansen (1982) and Hansen and Singleton (1982). Under this method, difference GMM and system GMM was used for the econometric analysis of dynamic economic relationships in panel data. GMM was used to account for serial correlation, heteroscedasticity and for solving any endogeneity problem.

4. FINDINGS

4.1 Panel Unit Root Test
Table 1 showed different results in LLC and PP test. At level form, the variables in LLC test was mostly significant at α=0.01 level. For instance, CPIA Business Regulatory Environment Rating and CPIA Financial Sector Rating. However, there was only one variable is not significant, which was CPIA Fiscal Policy Rating. Moreover, as for PP test in level form, only one variable was significant at α 0.01 level, which was CPIA Business Regulatory Environment Rating. The majority of the variables in PP test were insignificant.

Variables	Levin, Lin & Chu t*	PP - Fisher Chi-square

At first difference, all the variables in LLC test were significant at α 0.01 level. Moreover, as for PP test, the majority of the variables were significant at α 0.01 level, only one variable was significant at 0.05 level, which was CPIA Business Regulatory Environment Rating. In conclusion, we concluded that the variables that tested by Panel Unit Root Test in first difference were more accurate and significant.

Level		
CPIA Business Regulatory Environment Rating	-6.60542***	33.2546***
CPIA Financial Sector Rating	-4.46930***	18.8137
CPIA Fiscal Policy Rating	-1.19755	8.67792
First Difference		
CPIA Business Regulatory Environment Rating	-6.26263***	31.0051**
CPIA Financial Sector Rating	-9.37629***	60.1647***
CPIA Fiscal Policy Rating	-9.50967***	57.6797***

Table 1: Panel unit root test
*Note: *,** & *** represented the significant at 10%, 5% and 1% respectively.*

4.2 Static Panel Model and Dynamic Panel Model
The Table 2 showed the overall results we gathered throughout the study. In column (1), POLS estimation model showed that only CPIA08, CPIA fiscal policy rating was statically significant. CPIA07 in POLS had a negative coefficient which oppose to the result from the study by Chee and Nair (2010). In column (2) and (3), all variables in FE an RE models had positive coefficient. However, none of the variables were significant. Pooled regression assumed that the coefficients that include the intercept were the same for all the individuals. It was a major problem as it did not distinguish between the various countries. The individually that may exist among these countries were not considered in the model. Lastly, there were unobservable time effect in pooled regression which any specific event or incidents occur in different time. Thus, the model could estimate with random effect or fix effect.

Hausman test was carried out to determine which model was more appropriate for our study purpose. Rejecting the null hypothesis (Ho) in Hausman test implied that Fixed Effect Model (FEM) was preferable. If null hypothesis was not rejected, Random Effect Model (REM) was preferable. The probability value we have obtained is 0.8177. Thus, null hypothesis was not rejected and REM was preferable. The probability value we had obtained is 0.8177. Thus, null hypothesis was not rejected and REM was preferable.

Column (4) and (5) showed that result of Difference GMM and System GMM. In order to identify which GMM model was more suitable, Arellano-Bond test and Sargan test were used. The Arellano-Bond test for AR(1) in first difference and AR(2) had a null hypothesis of no autocorrelation and applied to the differenced residuals. The probability value was 0.151 and 0.299 respectively. Thus, failed to reject null hypothesis. As for the Sargan test of overidentifying restrictions, it had a null hypothesis of the instruments as a group were exogenous. The probability value obtained was 0.591. Thus, failed to reject null hypothesis. Hansen test of overidentifying restrictions hade probability value of 0.687. Thus, failed to reject H_0 too. Difference in Hansen/Sargan test between Difference GMM and System GMM was

conducted to test where the null hypothesis was lagged differences of the explanatory variables were uncorrelated with the residuals. The probability given was 0.89. Therefore, two-step system GMM was more significant as compared to two-step difference GMM. In System GMM, CPIA financial sector rating had positive coefficients and significant at 10%. On average, an increase of 1 unit of CPIA financial sector rating increased ln FDI by 0.59, holding other variables constant. This was consistent with the finding from Yen Li and Nair (2010).

As for CPIA fiscal policy rating, coefficient was positive and significant at 5%. On average, an increase of 1 unit of CPIA fiscal policy rating increased ln FDI by 0.39, holding other variables constant. Besides that, lagged 1 ln FDI had a positive coefficient and significant at 1%. On average, an increase of 1 unit of lagged 1 ln FDI led to an increase of ln FDI by 0.63, holding other variables constant. However, CPIA business regulatory environment rating had negative coefficient and p-value of 0.69. Thus, it was not significant.

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We concluded that CPIA financial sector rating and CPIA fiscal policy rating had significantly positive impact on FDI flow in IDA-supported countries. However, CPIA business regulatory environment rating had an insignificantly negative result. Besides that, we identified that the momentum effect of FDI flow existed in these countries.

DISCUSSION AND IMPLICATIONS
According to the previous results, CPIA financial sector rating had positive coefficients and significant at 10%. According to Yen Li and Nair (2010), financial sector development was important for FDI to contribute to economic growth. As a result, policymakers should focus on implementing beneficial policies to encourage financial sector development. As mentioned by

VARIABLES	(1) POLS	(2) FE	(3) RE	(4) DGMM	(5) SGMM
cpia02	0.4166	0.2558	0.2650	-0.3875	-0.0671
	(0.3003)	(0.3157)	(0.2955)	(0.8590)	(0.1683)
cpia07	-0.0095	0.3212	0.2934	0.3806	0.5912*
	(0.3164)	(0.2910)	(0.2772)	(0.5295)	(0.3407)
cpia08	0.7203***	0.1408	0.2192	0.7038	0.3922**
	(0.2132)	(0.2460)	(0.2292)	(1.0748)	(0.1996)
L.lfdi				0.7413*	0.6291***
				(0.4099)	(0.1977)
Constant	16.8505***	18.3299***	18.1146***		4.6849
	(1.0304)	(1.2495)	(1.2321)		(5.0659)

Observations	120	120	120	90	105
R-squared	0.1473	0.0370			
Number of country		15	15	15	15

Table 2: Pooled regression, Fixed Effect, Random Effect, Difference GMM System GMM
*Standard errors in parentheses, *** $p<0.01$, ** $p<0.05$, * $p<0$.*

Yen Li and Nair (2010), financial sector can be strengthen by implementing policies that develop human capital and maintain good governance in the sector.

The results had identified CPIA fiscal policy rating have a positive coefficient and significant at 5%. Prudent fiscal policy will have a positive impact on foreign direct investment inflow. An unwell-managed fiscal policy will lead to issues such as unsustainable public debt, fiscal cliff and declining in foreign direct investment inflow. According to Cleeve (2004), tax holidays were very important for attracting more FDI. Thus, policymakers should provide tax incentives in order to attract foreign direct investment.

Business regulatory rating was the only insignificant variable in the result. It was also the only variable which has a negative coefficient in the result. According to Zhang (2007), there was a threshold effect in the relationship between FDI and business regulations. Further regulatory-cost reductions below a certain threshold may have no effect or even a negative effect on FDI inflows. However, his study was based on data from developing and developed countries. Our result showed that business regulation has an insignificant impact on IDA-supported countries. This was probably because poor countries did not emphasise or focus on developing business regulation. They might only focus on fiscal and financial sector development.

From the result, we identified that lagged FDI had a positive relationship with FDI. This showed that the momentum effect existed. According to a study by Bellak, Leibrecht and Stehrer (2012), lagged FDI inward has a substantially positive impact on the current FDI. Besides that,

Cleeve (2004) has showed that FDI policies are found to be important determinants of FDI. Thus, policymakers should focus on implementing policies that attract FDI. For example, government and policymakers should reduce barriers to foreign direct investment and political risks.

Two-step System GMM estimation was conducted to identify the relationship between institutional factors and foreign direct investment in 15 IDA-supported countries ranging from year 2006 to 2013. Institutional factors used in the study were CPIA business regulatory environment rating, CPIA financial sector rating and CPIA fiscal policy rating rated by Country Policy and Institutional Assessment. According to the result, we had concluded that CPIA fiscal policy rating and CPIA financial sector rating have significantly determining foreign direct investment inflow in these countries. However, CPIA business regulatory environment rating showed an insignificantly negative result. Thus, government and policymakers should focus on creating a prudent fiscal policy and improve financial sector to obtain higher CPIA ratings and attracting FDI inflow.

REFERENCES

About LDCs. (n.d.). Retrieved from http://unohrlls.org/about-ldcs/

Augmented Dickey-Fuller (ADF) Test. (n.d.). Retrieved from https://www.rtmath.net/help/html/93a7b7b9-e3c3-4f19-8a57-49c3938d607d.htm

Azam, M., & Khan, A. U. (2011*). Impact of public debt on foreign direct investment in Pakistan: a quantitative approach.* Retrieved August 28, 2011, from http://www.elixirpublishers.com/articles/1350114202_38%20(2011)%204225-4227.pdf
Agnès, B., Maylis, C., & Thierry, M. (2005). *Institutional Determinants of Foreign Direct Investment. Institutional Determinants of Foreign Direct Investment*, 8-10. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.182.6961&rep=rep1&type=pdf

Azman-Saini, W., Baharumshah, A. Z., & Law, S. H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling,27*(5), 1079-1080. doi:10.1016/j.econmod.2010.04.001

Azam, M. (2010). An Empirical Analysis of the Impacts of Exports and Foreign Direct Investment on Economic Growth in South Asia, *Interdisciplinary Journal of Contemporary Research in Business*, 2(7)

Arbatli, E. (2011). Economic Policies and FDI Inflows to Emerging Market Economies. *IMF Working Papers,11*(192), 3-4. doi:10.5089/9781462306251.001

Alexander. N. (2010). The Country Policy and Institutional Assessment (CPIA) and Allocation of IDA Resources: Suggestions for Improvement to Benefit African Countries.*Journal of Development Finance International.* Retrieved from https://us.boell.org/sites/default/files/downloads/DFI_FINAL_Country_Policy_and_Institutional_Assessment.pdf

Arellano, M., & Bond, S. (1991). *Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations*. The review of economic studies, 58(2), 277-297.

Bellac, C., Leibrecht, M., &Stehrer, R. (2008). *Policies to attract Foreign Direct Investment: An industry-level analysis* (No. 019). FIW Research Reports.

Buchanan, B. G., Le, Q. V., & Rishi, M. (2012). Foreign direct investment and institutional quality: Some empirical evidence. *International Review of Financial Analysis,21*, 81-82. doi:10.1016/j.irfa.2011.10.001

CPIA policies for social inclusion or equity cluster average. (n.d.). Retrieved from https://www.indexmundi.com/facts/indicators/IQ.CPA.SOCI.XQ

CPIA Public Sector Management and Institutions Cluster Average. Retrieved from http://data.worldbank.org/indicator/IQ.CPA.PUBS.XQ

Country Policy and Institutional Assessment. Retrieved from http://www.gaportal.org/global-indicators/country-policy-and-institutional-assessment

Christopher, B. F., &Bornhorst, F. (2001). *LEVINLIN: Stata module to perform Levin-Lin-Chu panel unit root test*. Retrieved from https://ideas.repec.org/c/boc/bocode/s419702.html

Cheng, H. (n.d.). Panel Data Analysis - Advantages and Challenges. *SSRN Electronic Journal,* 3-6. doi:10.2139/ssrn.902657

Chee, Y. L., & Nair, M. (2010). *The impact of FDI and financial sector development on economic growth: Empirical evidence from Asia and Oceania*. International Journal of Economics and Finance, 2(2), 107.

Cleeve, E. (2008). *How effective are fiscal incentives to attract FDI to Sub-Saharan Africa?* The Journal of Developing Areas, 42(1), 135-153.

Desilva, S. (n.d.). *Panel Data Methods.* 3-4. Retrieved from http://inside.bard.edu/~desilva/econ329/paneldata.pdf

Definition of Regulation. (n.d.). Retrieved from http://www.businessdictionary.com/definition/regulation.html

Daude, C., & Stein, E. (2007). The Quality Of Institutions And Foreign Direct Investment. *Economics & Politics,19*(3), 317-319. doi:10.1111/j.1468-0343.2007.00318.x

Daude, C., &Fratzscher, M. (2008). The pecking order of cross-border investment. *Journal of International Economics,74*(1), 8-10. doi:10.1016/j.jinteco.2007.05.010

Foreign Direct Investment - FDI. (n.d.) Retrieved from http://www.investopedia.com/terms/f/fdi.asp

Financial Sector Rating. (n.d.). Retrieved from http://www.icra.in/rating.aspx?ck=Al1zZU0jCxnnNzwL5uegv1YHKOBowChUX0TYf/tdd3eG9k6ejnbZSZEl4uB2c8dI4r8Mu0VWrInIkwD8SgAp/2dNQry5TSIx8DXSbm90119011BsZ9v9UN60I0TPBQZQ1q7XJUE

FAN, J. P., MORCK, R., XU, L. X., & YEUNG, B. (2008*). Institutions and Foreign Direct Investment: China versus the Rest of the World.* 1-2. doi:10.1016/j.worlddev.2008.07.016

Foreign Direct Investment for Development - OECD. (2012). Retrieved from http://www.bing.com/cr?IG=D9FAE74A9B4941BD9D9C30FBBDD9F4CE&CID=3A55 E0798E8D6A852C88EA198F1D6B64&rd=1&h=wHZrdlKYGwCzznF5834SJWQw0U XGP9T2dTcIJCTb4_I&v=1&r=http%3a%2f%2fwww.oecd.org%2finvestment%2finvest mentfordevelopment%2f1959815.pdf&p=DevEx,5061.1

Gengenbach, C., Palm, F. C., &Urbain, J. (2009). Panel Unit Root Tests in the Presence of Cross-Sectional Dependencies: Comparison and Implications for Modelling. *Econometric Reviews,29*(2), 111-145. doi:10.1080/07474930903382125

Kurul, Z. (2016). Nonlinear relationship between institutional factors and FDI flows: Dynamic panel threshold analysis. *International Review of Economics & Finance,48*, 148-149. doi:10.1016/j.iref.2016.12.002

List of developing countries. (n.d.). Retrieved from http://www.iugg2015prague.com/list-of-developing-countries.htm

Law, S. H., Azman-Saini, W., & Ibrahim, M. H. (2013). *Institutional quality thresholds and the finance – Growth nexus.* Journal of Banking & Finance, 37(12), 5373-5381. doi:10.1016/j.jbankfin.2013.03.011

Law, S., &Demetriades, P. O. (n.d.). Openness, Institutions and Financial Development. *SSRN Electronic Journal*. doi:10.2139/ssrn.941387

Macroeconomic Management. (n.d.). Retrieved from http://www.minecofin.gov.rw/index.php?id=64

More on Unit Root Tests. (n.d). Retrieved from http://web.uconn.edu/cunningham/econ397/unitroots2.pdf

Nell, C., & Zimmermann, S. (2011). *Summary based on Chapter 12 of Baltagi: Panel Unit Root Tests.* 1-3. Retrieved from http://homepage.univie.ac.at/robert.kunst/pan2011_pres_nell.pdf

Newsom. (2015). *Distinguishing Between Random and Fixed: Variables, Effects, and Coefficients.* Retrieved from http://web.pdx.edu/~newsomj/mlrclass/ho_randfixd.pdf

Pooled Cross Sections and Panels. (n.d.). Retrieved from http://lipas.uwasa.fi/~bepa/Panels.pdf

Pettinger. (2012). *Structural Adjustment Definition.* Retrieved from http://www.economicshelp.org/blog/glossary/structural-adjustment/

Pooling cross sections over time. (n.d.). Retrieved from http://fmwww.bc.edu/ec-c/s2013/327/EC327.S2013.nn1.pdf

Schmidheiny, K. (2016). *Panel Data: Fixed and Random Effects.* Retrieved from http://schmidheiny.name/teaching/panel2up.pdf

Torres-Reyna, O. (2007). *Panel Data Analysis Fixed and Random Effects using Stata.* Retrieved from https://www.princeton.edu/~otorres/Panel101.pdf

Tun, Y., Azman-Saini, W., & Law, S. (2012). International Evidence on the link between Foreign Direct Investment and Institutional Quality. *Engineering Economics,23*(4), 379. doi:10.5755/j01.ee.23.4.2569

Unit Root Testing. (n.d.). Retrieved from https://estima.com/ecourse/samples/PanelSampleChapter.pdf

Unit Root Test. (n.d.). 111-112. Retrieved from https://faculty.washington.edu/ezivot/econ584/notes/unitroot.pdf

What is institution? definition and meaning. (n.d.). Retrieved from http://www.businessdictionary.com/definition/institution.html

What are Structural Adjustment Programmes (SAPs)? (n.d.). Retrieved from https://www.chebucto.ns.ca/Current/P7/bwi/cccsap.html

WEBER , M., & DIXIT, A. (n.d.). *Governance, Development, and Foreign Direct Investment*. 1. Retrieved from https://www.princeton.edu/~dixitak/home/WeberLectFinal.

Zhang, H. (2007). *Regulations, Business Taxes, and Foreign Direct Investment*.