Human Development in the Era of Globalization: An Asian Perspective

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Abstract

The main objective of this study is to empirically investigate the impact of globalization on human development in selected Asian countries from 1990 to 2016. After collection of data on all variables from different national and international sources, instrumental variable technique (two stage least square) was found to be the most appropriate technique for panel estimation and empirical investigation has been done for overall Asian countries along with above and below median HDI countries of Asia. Empirical investigation of globalization and human development indicates that trade openness is one of the best indicator for human development. ICT access is another criterion which can be used because in changing scenario of 21st century it is required here that for access to health and education facilities, everyone should have access to ICT for cheaper, easy and convenient access. Workers' remittances and FDI are significantly but negatively contributing in human development which is alarming situation for policy makers and academicians before taking decision regarding globalization.

Introduction

"People are the real wealth of any nation and every development strategy must be focused on enhancing their capabilities, achievements and freedoms" (UNDP, 2010).

In the era of 1950's, GDP per capita was generally used to measure human development in any nation but in late 1970's and early 1980's, it was recognized that only economic indicators are unable to measure the multidimensionality of human development. In this direction, UNDP introduced human development index (HDI) in their human development report (HDR) in 1990. In this report, it was considered that economic indicators cannot fully capture the essence of human development because human choices are infinite and change over time but three essential are required for everyone to lead healthy and long life, knowledge/awareness in terms of education and decent standard of living. If these basic requirements (education, health and decent standard of living) are not fulfilled then many other opportunities remain inaccessible to the masses.

The idea of human development index has been enlarged by the UNDP's Human Development Reports. In Human Development Report of 1995, it is stated that human development encompasses the distribution and production of goods along with extension and use of human capabilities. By encircling these concerns, human development goes ahead of them. It takes into consideration on all issues faced by a society e.g. economic growth, trade expansion, generation of employment, cultural and political values from the perspective of people. It thus focuses on expanding choices for human being with equal implications for developing and industrial countries (UNDP, 1995).

It is generally considered that human development is the most important aspect for the prosperity and sustained growth of any country. So this is appropriate time to empirically analyze the impact of globalization policies on human development, the real wealth of any nation. Globalization is a term used frequently but still there is no standardized definition exists and generally it is an increased level of interdependence among the nations by different ways which

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include, free flow of goods, services, technology, capital, labor and culture. It is like a buzzword in today's economy of the world and the degree to which different nations across the world should become liberalized remains an issue of debate. In most of the developing nations, globalization is taken as number of structural adjustment programs designed for enhancing efficiency, competitiveness and human well being. But there is threat that majority of the developing countries with rapid population growth have not sufficient buying capacity to enable them to buy imported food (Haq, 2002). On the other hand, South Asian economies have low level of reserves and facing the problem of external debt and leaving no room to ensure food security (Valdes and McCalla, 1999). In this regard, it is much worthwhile to investigate the impact of globalization on the human development of Asian region because many of the developing and developed countries opened up their border to follow the agenda of globalization. Reduction in the cost of production, economies of scale, transportation and communication costs, by lowering the barriers to the flows of goods, services, capital, knowledge and people across border (Stiglitz, 2006).

Trade liberalization is one of the important indicators of globalization and its impact on human well being is massive. Trade openness is considered as direct outcome of globalization and has gigantic effect on human development. Liberalization of trade is beneficial for people to enhance quality of life by lowering the prices of imports and some developing nations gain benefits as increase in their per capita income. Some countries (Malaysia, India, Thailand, Vietnam, South Korea, etc) have liberalized their economies in recent times and have experience of rapid growth and alleviation of poverty (Dollar, *et al.* 2001). It is also observed that those countries with lower tariff in 1980's grew more rapidly in the 1990's than those that didn't follow this strategy (Dollar, *et al*. 2001).

International migration is the part of globalization of the world economy and it is justified that this migration may determine the level of development of the source country (Beine *et al.* 2001). It is generally considered that migration from "South to North" contribute in world income distribution deterioration because majority of emigrants are skilled. Thus, the skilled labor emigration is considered as brain drain but this argument has been challenged by Docuier and Rapoport (2004), migration may also have some mix, negative and positive effects, such as skill outflow, schooling incentives, remittances and return migration after obtaining additional skills, which further leads to positively contribution in the economic development of the source country.

International Financial Institutions (IFI's) are of the view that most of the developing economies are struck in deficits and deterioration in almost all fields. In this severe condition, many of the developing economies start the process of economic globalization by trade expansion, provision of attractive environment for foreign investment, inflow of capital, technological innovations, market integration, which in turn will improve social and economic sector development. Therefore, it is generally advocated that economic liberalization has contributed in social development and standard of living of the developing nations across the world.

There are two schools of thought, globalization showed favorable impact on social and economic development (Guillen, 2001; Grennes, 2003; Rodrik et al., 2004; and Firebaugh & Brian, 2004), on the other hand, some studies (Petras & Henry, 2001; Smart, 2003; and Scholte, 2005) empirically verify adverse effect on inequalities, financial volatilities, and deterioration in the standard of living in developing countries. So, the focus of development and social scientists is that globalization should be designed in such a way that the human well being will be at the top priority across the world (UNDP, 1999).

Many of the developed, developing and least developed nations have considerably opened up their economies for external sector liberalization in terms of trade liberalization, foreign private

investment and financial sector reforms. As many of the Asian countries gone through the agenda of economic and financial liberalization and this is appropriate time to investigate the impact of this process of globalization on human development. Because every development policy should be viewed in terms of its impact on people, the centerpiece of development agenda. So, one part of this study tries to empirically investigate the impact of globalization strategies on human well being in Asian countries.

Literature Review

Kabamba (2008) discussed ICT transmission in Africa for rural poor which are captured in socio-economic context of individual communities. Globalization gives an opportunity for interchange of ideas and experiences across the world which includes online trainings, scholar and study visits, exchange of staff and international symposiums which are beneficial for professionals to learn from experiences of others. Globalization has provided the opportunities for collaborations and interchange of experiences across the world.

Sabi (2007) investigated social globalization by using cross section data of 150 nations. This study tried to explain four questions: Does social globalization play its role in promoting human well being? Is gender equality is the outcome of globalization? Does globalization reduce income inequality and is the impact of globalization is different on different income groups. Empirical findings of this study showed that social globalization is positively and significantly associated with gender equality and human well being. It was also found that the key reflection in recognition of any country's position in levels of human development is not associated to globalization for developing countries at low or middle income groups. Globalization perhaps is important for human development only after certain level of income growth. The results indicated that globalization worsens income inequality, but the relation does not hold when testing for different income levels.

OECD Report (2010) discussed about the rapid economic globalization and has significant change in world economy in previous decades. The good thing noted in this report is that a large number of firms, countries and other economic players participate in global economy and almost all have become inter-connected across borders. The result of globalization is in shape of efficient resource allocation, welfare effect, efficiency and higher productivity increase in wages and income, competitive environment and increased product quality and variety. In a nut shell, globalization process raises issues in many countries along with benefits and need of the day is to manage it efficiently and ensure its benefits those are widely distributed.

Osagie (2011) analyzed relationship of national economic system of the world economies through trade liberalization, foreign direct investment and flows of capital. Globalization is considered as irreversible and inevitable force in which individuals, organizations and governments are found to have a positive association of national economic systems through the growth in trade liberalization, foreign direct investment and flows of capital. Such linkages are found worldwide and globalization will introduce new process of production and innovations. In these creative activities not only technology is important, but people, communication and culture are also worthwhile. The main objective of this study is to investigate impact of globalization on HRD for Nigeria in two key areas namely, learning in organization’s workplace along with knowledge and technology. At the end, it was commented that globalization has helped to leapfrog Nigeria with the main aim of liberalization, from its position of squalor to affluence for an infinitesimal section of the populace. Globalization has not yet impacted positively on the vast majority of the Nigerian population. Perhaps, with time it might.

Molina & Mark (2009) analyzed the long term impact of migration on human development for Bolivia. This study found that twenty five years of rural-urban migration have transformed demographic profile of Bolivian society in which new middle third is bilingual, younger and well educated, with provision to social services more than in the past. Secondly, workers of urban sector make approximately four times as more wages as same workers in rural areas, by controlling impact of age, ethnicity, and education. At the end, human development is associated to an "urbanization dividend" that made provision of social services accessible for the first and second generation migrants during twenty-five year. On the basis of these findings, this study suggest that human development can be achieved by expansion of social services to the poorest of the poor in rural areas by breaking down gender based and indigenous people discrimination barriers in labor market.

Figini and Santarell (2006) discussed the problem relevant to defining and measuring of poverty and globalization by using panel data analysis by explicitly considering relative poverty and by conducting stability analysis with respect to data sources and different aspects of globalization. Empirical findings show that both openness of trade and government size seems to be associated with lower poverty levels. But, financial liberalization is not associated to more poverty. When the concern is with relative poverty, openness of trade does not affect it significantly, while weak evidence suggests that financial liberalization and policies aimed at reducing the public intervention in the economy are linked to high level of relative poverty.

Economides (2008) investigated transfers of foreign aid that disincentive to individuals and depress growth by promoting rent seeking as opposed to productive activities. This study develops a model of an emerging small open economy by distinguishing two effects from foreign aid as (i) a direct and positive effect, as higher foreign aid transfer allows the financing of infrastructure; and (ii) an indirect negative effect, as higher foreign aid transfer induce rent-seeking competition by self interested individuals. For empirical analysis of this model, a cross section of 75 aid recipients' countries has been selected and found that foreign aid has a direct and positive effect on economic growth, which is however significantly mitigated by the adverse and indirect effects of associated rent-seeking activities.

Tsai (2007) formulated a dialectical model which adopts globalization measures, for this purpose, three-wave panel data is used to empirically investigate direct and indirect effects of financial inflows with human face from 1980 to 2000. Random effect model has been used for empirical investigation and revealed the positive and significant impact of political globalization. The overall findings showed that social and economic globalization is unable and globalization index is found to generate favorable influence on an overall human well being. When the concern is with LDC's then globalization impact on human development was not as significant as in industrial countries. Different hypotheses about potential of globalization negatively affect through reducing state power and increasing societal instabilities. It was concluded that globalization identified by increased global flows and exchanges contributes rather than hampers progress in human development.

UNDP (2007) discussed the role of technological progress for sustainable development and economic growth in developing countries. It was explained that technological progress is contributing more effectively if it was included during the employment expansion and capacity development. It was also discussed that this process of capability to use and progress in techonologies is put in place, combined with technological innovations, through which suitable new technologies are formed to deliver new products to markets. On the basis of findings of this

study, it was recommended that developing countries can put in place and apply policies those are supportive of technological progress.

HDR (1999) explained that globalization is depressing many opportunities for human well being along with growth throughout world via trade openness, media expansion, technological innovations, FDI and ICT's. This report focused that the opportunities and strengths of globalization are much wider and is threat for human security, financial sector volatility, and insecurity in the area of economic, personal, political, community, income, health and culture. The crux of this report is on the reinvention of internal and external governance with human well being at their foundation.

Masson (2001) discussed that globalization is linked with raising the well being of the people and markets competitiveness and these factors performed efficiently than others. This study also focused that consumption and income inequalities/ volatilities are considered as result of globalization, but despite blaming it, there is a need to make formal and efficient safety nets, financial stability and coordination in international policy. MHHDC (2001) find out the favorable impact of globalization on economic growth and well being of humanity and all this depends on how the process is managed internally and externally.

Data, Models and Variables

This part of the study is going to discuss about models, variables and data sources. The main objective is to statistically and empirically investigate objectives of this study. In this regard, empirical analysis has been done in three perspectives. First part is going to highlight the issue of globalization and human development for overall Asian countries, for in-depth analysis of the objectives; selected countries have been divided into above and below median HDI countries. After analysis of these objectives, some control variables have been introduced to check stability and consistency of findings.

For this purpose, annual data has been utilized from 1990 to 2016 for variables given in below mentioned models for Asian countries. Countries have been divided in two groups on the basis of median value of HDI because median is the most appropriate technique for comparative purposes because it divides the sample in two equal parts. Above and below median HDI countries will be selected on the basis of HDI value of 2014 for each country and estimated median value of 40 selected Asian countries is 0.7177.

Major sources for data collection are International Financial Statistics of IMF (IFS), World Development Indicators of World Bank (WDI), International Country Risk Guide (ICRG) and International Labor Organization (ILO).

Only those countries have been selected for analysis where data is available and drop all countries where data was missing / unavailable. Data for 40 Asian countries (Appendix-I) is available for globalization and human development.

Following models will be estimated to investigate study objectives in Asian perspective.

$$HDI_{it} = \beta_0 + \beta_1 FDI_{it} + \beta_2 TOP_{it} + \beta_3 REMT_{it} + \beta_4 ICT_{it} + \mathcal{E}_{it}$$

Where:

HDI = Human Development Index of UNDP is used as proxy for Human Development

FDI = Foreign Direct Investment (Inflow) as % of GDP

TOP = Trade Openness is Total Value of Trade as % of GDP

REMT = Workers Remittances (Inflow) as % of GDP

ICT = Information and Communication Technologies Index is designed by assigning equal weights to four indicators of ICT as; fixed telephone subscription, cell phone subscription, fixed broadband internet subscription and internet users, its value lies from 0 to 100.

After estimation of globalization model, this study is going to check robustness of empirical analysis of this issue by introducing some control variables. Control variables have been used one by one. For this purpose, following control variables are introduced from different sectors, e.g. financial, private, real and social sector.

GFCF= Gross Fixed Capital Formation as % of GDP
M2= Supple of Money
MCAPT = Market Capitalization of listed companies as % of GDP
TAX = Tax Revenue Collection as % of GDP
ODA = Official Development Assistance/ Foreign Aid Per Capita
URBAN = Share of Urban Population as % of total population
POPU = Growth Rate of Population
G.CONS= Government Final Consumption Expenditures as % of GDP

After overall empirical analysis, data has been divided in two groups, group one is for those countries lies above median HDI and group two is for countries with below median HDI in Asia for the purpose of comparison. Empirical investigation on all selected panels has been done through appropriate technique discussed in section of methodology and on the basis of findings of this study, policy recommendations have been highlighted.

Instrumental Variable (IV)/ 2SLS

There are three common instances where the assumption of zero conditional mean may be violated in economic research: omitted-variable bias, endogeneity (simultaneous determination of regressors and response variables) and error in variables (measurement error in the regressor). Although these problems arise for different reasons in economic models, the solution to each is the same econometric tool: the instrumental variables (IV) with two stage least square (2SLS) estimator.

In this section we discuss the IV and two-stage least square (2SLS) estimators, identification and tests of overidentifying restrictions, and the generalization to generalized method of moments (GMM) estimators. The last portion of this section will consider testing for heteroskedasticity in the IV context, testing the relevance of instruments, and testing for endogeneity.

A variable is endogenous if it is correlated with the disturbance. In the model

$$Y = \beta_1 X_1 + \beta_2 X_2 + \ldots\ldots + \beta_k X_k + \mu$$

Xj is endogenous if $Cov\ [Xj,\ \mu] \neq 0$. Xj is exogenous if $Cov\ [X_j,\ \mu] = 0$. The OLS estimator will be consistent only if $Cov\ [X_j,\ \mu] = 0$, j = 1,2,... ,k. This zero-covariance assumption and our convention that x_i is a constant imply that E[u] = 0. Following Wooldridge (2002, 2006), we use the zero-conditional-mean assumption

$$E[\mu \mid X_1, X_2, \ldots\ldots, X_k] = 0$$

which is sufficient for the zero-covariance condition.

To derive consistent estimates of the model there is need to find an IV that satisfies two properties: the instrument used must be uncorrelated with error term but must be highly correlated with regressor. A variable that meets those two conditions is an IV or instrument for regressor that deals with the correlation of independent variable and the error term. Because we cannot observe error term and cannot directly test the assumption of zero correlation between instrument used and

error term and this is known as an orthogonality assumption. The IV estimator has an interesting special case. If the zero-conditional-mean assumption holds, each explanatory variable can serve as its own instrument.

Efficient GMM technique has the advantage of consistency when there is existence of heteroskedasticity and if heteroskedasticity is in fact not found then standard IV/2SLS is the appropriate technique for empirical investigation of the study variables. The usual Godfrey/Breusch-Pagan/Cook-Weisberg and White/Koenker tests are used to check the existence of heteroskedasticity in an estimated regression equation. Pagan and Hall (1983) designed test specifically for identifying the existence of heteroskedasticity in IV estimation and its relationship with other tests of heteroskedasticity.

Although there might be rationale to think about non-orthogonality between errors and regressors, the use of IV estimation to address this problem must be balanced against the inevitable loss of efficiency vis-a-vis OLS. At this point, it is very helpful to have a diagnostic test that whether or not OLS is inconsistent and IV or GMM is required. This can be done with Durbin-Wu-Hausman (DWH) test of the endogeneity of regressors.

Empirical Analysis of Globalization and Human Development

After compilation of data, descriptive analysis of all the variables has been discussed and on the basis of country characteristics and design of variables it is found that panel OLS is not appropriate technique. When we applied panel effect through fixed effect and random effect model then found problem of auto-correlation and hetroscedasticity. It was also found that panel fixed and random effects are unable to capture individual effect and unable to estimate consistent results. As discussed in methodological portion of this study, instrumental variable (two stage least square) is the most appropriate technique here for consistent findings in this case. For analysis of our findings, in the first step we checked impact of globalization on human development in 40 Asian countries. In second step, for in-depth analysis we divide selected countries in two groups. Group one consists of only those countries where HDI is above median and group two consist of Asian countries with below median HDI. For all three groups (overall, above and below median HDI countries) we estimate 9 different models to show that how globalization is impacting human development in selected 40 Asian countries along with above and below median countries. In Table 10, estimation shows that how globalization is effecting human well being along with different other control variables.

Table 1: Globalization and Human Development for Asian Countries

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
TOP	5.049 (0.000)	6.102 (0.000)	4.350 (0.000)	5.945 (0.000)	4.529 (0.000)	0.640 (0.091)	6.476 (0.000)	2.775 (0.018)	6.901 (0.000)
ICT	0.481 (0.000)	0.496 (0.000)	0.397 (0.000)	0.482 (0.000)	0.393 (0.000)	0.261 (0.000)	0.470 (0.000)	0.438 (0.000)	0.464 (0.000)
FDI	-0.914 (0.002)	-1.294 (0.000)	-0.993 (0.001)	-1.162 (0.000)	-0.966 (0.001)	-0.532 (0.003)	-1.227 (0.000)	-0.869 (0.002)	-1.276 (0.001)
REMT	-0.282 (0.000)	-0.229 (0.001)	-0.325 (0.000)	-0.304 (0.000)	-0.234 (0.000)	-0.192 (0.000)	-0.271 (0.000)	-0.280 (0.000)	-0.265 (0.000)
GFCF		0.328 (0.000)							
M2			0.066 (0.000)						
ODA				0.025 (0.000)					

PSC					0.075 (0.000)				
URBAN						0.381 (0.000)			
TAX							0.219 (0.000)		
MCAPT								0.039 (0.000)	
G.CONS									0.615 (0.000)
C	58.734	51.014	56.964	57.934	56.805	44.021	55.943	59.667	49.521
R-Square	0.389	0.337	0.424	0.351	0.430	0.773	0.341	0.417	0.404
DWH Test, p-value	0.002	0.000	0.001	0.000	0.001	0.003	0.000	0.004	0.005
F-Value	74.68	59.51	73.89	66.12	74.77	74.09	70.29	77.59	72.35
P-H Test, p-value	0.191	0.334	0.151	0.501	0.130	0.292	0.714	0.264	0.128

Note: *i) p-value is given in parenthesis and if p-value is less than 0.05 then coefficient is significant*
ii) DWH Test indicates Durbin-Wu-Hausman Test and here p-value indicated that if p-value is less than 0.05 then there is existence of endogeniety.
iii) F-value indicated Cragg-Donald Wald F statistic in which Staiger and Stock (1997) & Stock-Yogo (2005) suggested declaring that instruments used to be weak if the F-statistic value is less than ten (Stock, Wright and Yogo).
iv) P-H test is Pagen-Hall test for detection of hetroscedasticity in the data and if P-H Statistics p-value is less than 0.05 then it indicates existence of hetroscedasticity.

Table 1 gives comprehensive empirical findings of how and in which direction globalization is impacting on human development of selected Asian countries. For analysis, Model 1 is just focusing on globalization indicators and results shows that FDI and REMT are negatively and significantly contributing in human development, while trade openness and ICT are positively and significantly impacting on human development. The result of model 1 shows that trade openness is the best indicator for human development. ICT is the second best contributor in human development of Asian countries. But remittances are not contributing in human development and the main reason behind this is that remittances in Asian countries are mostly spent on imported goods, consumption and construction of houses, entertainment and very low portion of remittances spent on indicators of human development (education and health). Another reason behind this is that migrants of Asian countries are illiterate and unskilled/ semi-skilled and they have no awareness regarding expenditures. Empirical evidence of some previous literature on the impact of workers' remittances on poverty reduction and welfare is mixed. Chami et.al (2003) and IMF (2005) explained negative and no impact, respectively. The negative impact found in the former is based on 113 cross-countries study while the latter focuses on experience of 101 developing countries. In the same line Stahl (1982) found that remittances would not benefit the poor. It is generally perceived that workers remittances are not used for productive objectives and have a negative impact on receiving country because they are being wasted on consumption, pushing the reservation wage, fuelling speculative investment in real estate and dutch disease contributing in appreciation in real exchange rate, instead of investment in human development and poverty alleviation (Adams 2004; Adams and Page 2005 and Ozden and Schiff 2006).

Empirical analysis also showed that FDI is negatively impacting on human development, there are some literature which shows that FDI inflow leads to profit outflow from developing countries, secondly, trend of FDI is in infrastructure, construction, pharmaceutical industry, banking sector and telecommunication, developing countries are unable to convert FDI from profit

oriented sectors to sustainable sector like health and education. Epstein (1999) claims that countries those trying to attract FDI by providing subsidies and tax rebates can lead to substantial reduction of government revenues which could otherwise be used to invest in education and provision of other services. Lipsey, Purvis & Courant (1994); and Krugman, Obstfeld, (1997) argued that a distinctive feature of FDI is that it involved not only in transfer of resources but also the acquisition of control. In some cases the extension of control is the essential purpose of incoming foreign capital. This implicates a necessity to screen investments on economic as well as military and political grounds. Above empirics and literature proved that FDI inflow needs more thorough examination and decisions about policy towards FDI should not be simply straightforward.

On the basis of overall globalization results of this study, it is concluded here that trade openness is the best instrument used for human development. TOP helps the people of any country to enhance quality of life by lowering prices of imported goods along with keeping lower prices of substitutes for imported goods. Most of the developing countries reaped benefits in this issue as the GDP per capita of those countries increased drastically. This theme is even more applicable for South Korea, Malaysia, Thailand, India, Vietnam etc. Many of these nations have globalized their economies in recent past and have experienced faster growth, human development promotion and poverty alleviation (Dollar 2001). On average, those developing countries that lowered tariffs sharply in the 1980s grew more quickly in the 1990s than those did not (Dollar, *et al.* 2001). The poor may also be benefited significantly from removal of export taxes or prohibitions.

ICT access is another criterion which can be used because in changing scenario of 21st century it is required here that for access to health and education facilities, everyone should have access to ICT for cheaper, easy and convenient way (Ngwenyama et al., 2006, Oulton, 2002; Kuppusamy and Santhapparaj, 2005). Workers' remittances are not contributing in human development because remittances were spent on those activities which are not human development oriented. Here is a need to give awareness to migrants' families regarding importance of human development for their households, as well as for sustainable economic growth. As for as FDI is concerned, it is significant and negative in all 9 models which is alarming situation for Asian countries and policy makers should focus on the direction of FDI, its impact and how Asian countries can use FDI for human well being.

From model 2 to model 9, we have checked the impact of GFCF, M2, PSC, URBAN, TAX, ODA, MCAPT, and GCONS, individually in presence of globalization indicators. These 8 models again showed no change in globalization indicators, direction but intensity gets changed. Direction of all control variables are according to theory, e.g. GFCF, M2, PSC, URBAN, TAX, ODA, MCAPT, and GCONS, are positively and significantly contributing in human development.

At the end, some diagnostics are given to validate findings of this study and almost all shows that estimations are valid and strengthen study objectives theoretically and empirically. The main test applied on these models are DWH test for endogeniety and found existence of endogeniety. The solution of this problem is simply GMM or IV estimations and if there exist hetroscekdasticity then GMM is appropriate otherwise IV is consistent and efficient estimator. All models indicate absence of hetroscedasticity by applying Pagan-Hall test. At the end, validity of instruments is checked by F statistics and rule of thumb is that if F statistics value is greater than ten then instruments are strong. Almost all models F value indicates relevant and strong instruments used in this table.

Table 2: Globalization and HDI for Above Median Asian Countries

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
TOP	3.562 (0.001)	4.210 (0.001)	3.276 (0.002)	4.145 (0.000)	3.718 (0.001)	1.827 (0.014)	4.891 (0.000)	2.184 (0.027)	4.461 (0.000)
ICT	0.249 (0.000)	0.261 (0.000)	0.191 (0.000)	0.247 (0.000)	0.205 (0.000)	0.227 (0.000)	0.240 (0.000)	0.223 (0.000)	0.258 (0.000)
FDI	-0.909 (0.000)	-1.116 (0.000)	-1.084 (0.001)	-1.022 (0.000)	-1.055 (0.001)	-0.816 (0.000)	-1.173 (0.000)	-0.981 (0.002)	-1.044 (0.000)
REMT	-0.059 (0.528)	-0.033 (0.760)	-0.234 (0.014)	-0.103 (0.290)	-0.025 (0.792)	-0.159 (0.083)	-0.013 (0.903)	-0.011 (0.910)	0.019 (0.840)
GFCF		0.159 (0.000)							
M2			0.051 (0.000)						
ODA				0.020 (0.000)					
PSC					0.044 (0.000)				
URBAN						0.171 (0.000)			
TAX							0.134 (0.000)		
MCAPT								0.027 (0.000)	
G.CONS									0.151 (0.003)
C	71.927	68.008	70.594	71.156	70.351	61.221	70.010	72.583	68.628
Centered R2	0.253	0.104	0.253	0.201	0.230	0.403	0.496	0.237	0.167
DWH p-value	0.001	0.000	0.002	0.001	0.021	0.000	0.003	0.000	0.000
F-Value	26.23	18.84	25.72	24.99	27.06	24.90	22.98	24.80	32.31
P-H Test Stat p-value	0.489	0.776	0.514	0.735	0.491	0.298	0.646	0.443	0.350

Note: *i) p-value is given in parenthesis*
ii) DWH Test indicates Durbin-Wu-Hausman Test and here p-value indicated that if p-value is less than 0.05 then there is existence of endogeniety.
iii) F-value indicated Cragg-Donald Wald F statistic in which Staiger and Stock (1997) & Stock-Yogo (2005) suggested declaring that instruments used to be weak if the F-statistic value is less than ten (Stock, Wright and Yogo).
iv) P-H test is Pagen-Hall test for detection of hetroscedasticity in the data and if P-H Statistics p-value is less than 0.05 then it indicates existence of hetroscedasticity.

Table 1 gives detailed empirical findings with all aspects of 40 selected Asian countries. For in-depth analysis of study objectives, we divide the data in two groups, group one consist of all Asian countries with HDI lies above median and group two with countries having HDI below median. Table 2 shows detailed empirical findings of Asian countries with above median HDI or we may call these countries as high human development countries. The findings of 20 high HDI countries are much different from all Asian countries findings. Overall direction of findings remains the same but intensity and significance are highly affected.

Findings of TOP, ICT and FDI are consistent with Table 1 but findings of REMT are much different. In high HDI countries, TOP is major contributor of human development followed by ICT. FDI is negative and significant but REMT are insignificant. As Table 2 showed that there are

fewer amounts of remittances in high HDI countries and secondly it is not significantly contributing in human development.

From model 2 to 8, all control variables indicating consistent findings. To validate these findings, some diagnostics are given and almost all tests show that estimations are valid and strengthen study objectives theoretically and empirically. The main test applied on these models is DWH test for endogeniety and found existence of endogeniety. The solution of this problem is simply GMM or IV estimations and if there exist hetroscekdasticity then GMM is appropriate otherwise IV is consistent and efficient estimator. All models indicate absence of hetroscedasticity by applying Pagan-Hall test. At the end, validity of instruments is checked by F statistics and rule of thumb is that if F statistics value is greater than ten then instruments are strong. Almost all models F value indicates relevant and strong instruments used in this table.

Table 3: Globalization and HDI for Below Median Asian Countries

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
TOP	8.644 (0.000)	7.375 (0.001)	6.790 (0.000)	8.661 (0.000)	6.598 (0.001)	5.135 (0.000)	7.798 (0.000)	7.528 (0.000)	8.329 (0.000)
ICT	0.479 (0.000)	0.393 (0.000)	0.329 (0.000)	0.478 (0.000)	0.326 (0.000)	0.336 (0.000)	0.463 (0.000)	0.362 (0.000)	0.488 (0.000)
FDI	-0.892 (0.018)	-0.738 (0.034)	-0.212 (0.532)	-0.876 (0.041)	-0.326 (0.312)	-0.509 (0.077)	-0.938 (0.012)	-0.513 (0.115)	-1.108 (0.003)
REMT	0.012 (0.832)	0.088 (0.117)	0.006 (0.904)	0.013 (0.828)	0.043 (0.405)	-0.093 (0.041)	0.001 (0.985)	-0.047 (0.368)	0.061 (0.332)
GFCF		0.059 (0.000)							
M2			0.062 (0.000)						
ODA				-0.001 (0.920)					
PSC					0.077 (0.000)				
URBAN						0.304 (0.000)			
TAX							0.396 (0.000)		
MCAPT								0.084 (0.000)	
G.CONS									0.313 (0.001)
C	47.633	40.126	45.392	47.619	45.920	40.206	43.998	46.901	45.119
Centered R2	0.175	0.274	0.337	0.179	0.342	0.495	0.202	0.337	0.138
DWH p-value	0.000	0.001	0.099	0.002	0.049	0.011	0.002	0.014	0.001
F-Value	58.88	61.95	58.89	45.36	65.28	58.78	39.44	64.81	61.50
P-H Test Stat p-value	0.374	0.582	0.102	0.065	0.514	0.116	0.147	0.145	0.071

Note: *i) p-value is given in parenthesis*

ii) DWH Test indicates Durbin-Wu-Hausman Test and here p-value indicated that if p-value is less than 0.05 then there is existence of endogeniety.

iii) F-value indicated Cragg-Donald Wald F statistic in which Staiger and Stock (1997) & Stock-Yogo (2005) suggested declaring that instruments used to be weak if the F-statistic value is less than ten (Stock, Wright and Yogo).

iv) P-H test is Pagen-Hall test for detection of hetroscedasticity in the data and if P-H Statistics p-value is less than 0.05 then it indicates existence of hetroscedasticity.

Table 3 shows the impact of globalization on human development for sample of Asian countries with below median HDI. Table 1 gives findings of all Asian countries and Table 2 explain only countries with above median HDI. Here we have a strong comparative analysis among findings of Table 1, 2 and 3. It is noted here that there are slight changes in all samples. Table 3 shows empirical findings of below median countries and findings shows that TOP is the most important indicator and contributor of human development. ICT is the second most important variable which shows positive and significant contribution in human development.

FDI is negative in all models but some models shows significant values and some insignificant values. The unique thing is that remittances are negatively contributing in overall sample of Asian countries and in countries with above median HDI but remittances are positively contributing in countries with below median HDI. As our descriptive statistics showed that remittances is major source of financial inflow in countries with low level of HDI and they can spend it for the well being of their masses.

When we applied different control variables then it was also found that foreign aid is good for overall Asian countries but it is negatively contributing in countries with below median HDI. Literature suggested that foreign aid is good in countries where institutional quality is good and they manage it otherwise it is converted toward curse of foreign resources.

When we make a comparison of empirical findings of all three groups (overall, above and below median Asian countries) then it is confirmed that FDI is negatively contributing in human development. Literature support these findings in such a way that FDI push domestic investors to become more competitive, but if foreign firms are too disproportionately advantaged, domestic firms may find it impossible to compete, and the FDI may result in a loss of indigenous enterprise. Alternately, by heavily subsidizing foreign investors, a country may attract FDI in sectors in which it does not have a natural comparative advantage, thus encouraging inefficiency.

In addition, abundance of subsidies may lead toward vicious competition between LDC's to attract foreign investors, with little or no aggregate benefit to the world economy, and the resulting proverbial "race to the bottom" among developing countries. Even if not attracted through subsidies and incentives, FDI may not bring benefits to a country.

At the end, some diagnostics are given to validate findings of this study and almost all shows that estimations are valid and strengthen study objectives theoretically and empirically. The main test applied on these models is DWH test for endogeniety and found existence of endogeniety. The solution of this problem is simply GMM or IV estimations and if there exist hetroscekdasticity then GMM is appropriate otherwise IV is consistent and efficient estimator. All models indicate absence of hetroscedasticity by applying Pagan-Hall test. At the end, validity of instruments is checked by F statistics and rule of thumb is that if F statistics value is greater than ten then instruments are strong. Almost all models F value indicates relevant and strong instruments used in this table.

Conclusion

Almost every country is globalizing their economy by opening up its borders for trade, removing restrictions for foreign investment and technological innovations. So this study examined the impact of globalization on human well being in selected Asian countries. In this study, we use four variables for measuring globalization on the basis of available literature, that include, foreign direct investment (FDI), workers' remittances (REM), trade openness (TOP) and Information and Communication Techonologies (ICT). For in-depth analysis on this issue, we

have checked the impact of some important control variables (GFCF, M2, PSC, URBAN, TAX, ODA, MCAPT, and GCONS) along with globalization indicators, which is important strength of our study and contribution in the existing literature.

For indepth analysis of study objectives, empirical analysis is done in two steps. In first step, analysis of selected 40 Asian countries have been done and in second step, selected 40 Asian countries are distributed in two groups. Group one consists of only those countries where HDI is above median and group two consists of Asian countries with below median HDI. Same globalization and control variables are used for empirical investigation.

Empirical investigation of this study indicates that trade openness is one of the best instrument used for human development in Asian perspective. ICT access is another criterion which can be used because in changing scenario of 21st century it is required here that for access to health and education facilities, everyone should have access to ICT for cheaper, easy and convenient access. Workers' remittances and FDI are significantly and negatively contributing. The main reason behind this is the inflow of remittances is spent on those activities which are not human development oriented. Here is a need to give awareness to migrants' families regarding importance of human development for their households, as well as for sustainable economic growth. As for as FDI is concerned, it is significant and negative in all models which is alarming situation for Asian countries and policy makers should focus on the direction of FDI, its impact and how Asian countries can use FDI for human well being. Almost all investors wish to invest in those sectors where they earn maximum profit and when there exists institutional issues then focus diverted from human well being to non issue. So policy makers should convince foreign investors to invest on profit oriented projects along with human well being perspective.

For indepth analysis of globalization on human development, this study estimate some models by introducing control variables along with globalization model. This study utilized control variables from financial, fiscal, and socio-economic sector and found that in presence of control variables the direction and intensity of globalization indicators remain same in human development. So the overall findings are very consistent in almost all models and become helpful for policy design in Asian perspective. At the end of estimations, some diagnostics (DWH test, F statistics and P-H test) have been applied and almost all models are suitable in methodological perspectives.

On the basis of findings of this study, it requires to rethink on the economic issue of globalization from interdisciplinary perspectives, regarding its evolutions and new solutions. These are the latest research findings of this research and hopefully will attract academicians and professionals from various business and economics disciplines to tackle this issue and also brainstorm for new ideas.

On the basis of empirical analysis of this study, some policy implications have been highlighted:

- Trade openness has the direct and significant impact on human development and all countries should focus on minimizing trade barriers to become more globalized for the promotion of human development.
- ICT access is important variable because this leads toward easy access to social services and other indicators of human development. ICT access is also beneficial for implementation and evaluation purpose, especially in developing areas.
- The direction of FDI is alarming and not contributing in human well being. Policy makers should focus on human development oriented FDI by enhancing argument power with foreign investors.

- Workers' remittances are not productively used because recipient families are mostly uneducated/unskilled and government should announce some policies to ensure that remittances are spent in activities those are relevant to human development.

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Appendix-I

Sample of Selected 40 Asian Countries*	Above Median HDI Countries of Asia
1. Armania	1. Armania
2. Azerbaijan	2. Azerbaijan
3. Bangladesh	3. Behrain
4. Behrain	4. Brunai
5. Brunai	5. Cyprus
6. Cambodia	6. Hong Kong
7. China	7. Iran
8. Cyprus	8. Israel
9. Georgia	9. Japan
10. Hong Kong	10. Korea
11. India	11. Kazakstan
12. Indonesia	12. Kuwait
13. Iran	13. Lebanon
14. Israel	14. Oman
15. Japan	15. Malaysia
16. Jordan	16. Qatar
17. Kayrgystan	17. Saudi Arabia
18. Kazakstan	18. Turkey
19. Korea	19. Singapur
20. Kuwait	20. UAE
21. Laos	**Below Median HDI Asian Countries**
22. Lebanon	1. Bangladesh
23. Malaysia	2. Cambodia
24. Maldives	3. China
25. Mongolia	4. Georgia
26. Nepal	5. India
27. Oman	6. Indonesia
28. Pakistan	7. Jordan
29. Philipine	8. Kayrgystan
30. Qatar	9. Laos
31. Saudi Arabia	10. Maldives
32. Singapur	11. Mongolia
33. Srilanka	12. Nepal
34. Syria	13. Pakistan
35. Tajikstan	14. Philipine
36. Thailand	15. Srilanka
37. Turkey	16. Syria
38. UAE	17. Tajikstan
39. Vietnam	18. Thailand
40. Yemen	19. Vietnam
	20. Yemen

* This sample of selected 40 Asian countries is used for globalization and human development analysis