The Impact of Globalization on Socio Economic Structure: A Case Study of Selected Asian Countries

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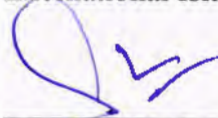
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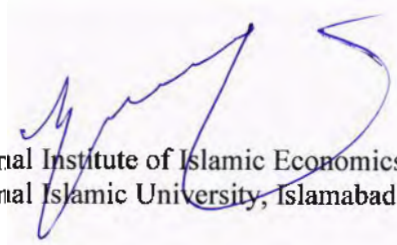International Islamic University, Islamabad

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Abstract

From the last few decades, globalization is one of the frequently discussed topic in economic literature, hence a large segment of economic literature investigated its effects on socio-economic structure. However, the empirical indications on the impacts of globalization on socio-economic structure is still inconclusive. Keeping in view the inconclusiveness, instead of using one or two proxies of socio-economic structure as found in the existing literature, in this study we developed a composite index of socio-economic structure (that is composed of six components, namely size of government, income inequality, female labor force participation, health, and education and urbanization rate) and investigated the effect of globalization on overall socio-economic structure of the sample countries. The empirical analysis has been carried out in case of 17 Asian economies covering the time period from 1991-2014. Considering nature of data set the empirical estimations has been carried out through GMM estimation technique. The findings of the study revealed that all three types of globalization (economic, social, political) have a positive impact on social structure of selected Asian countries. However, we found insights for the negative impact of economic globalization on socio-economic structure after proxy by FDI. In addition, no insights have been found on the relationship between trade openness (proxy of economic globalization) and socio-economic structure of the sample countries.

CHAPTER 1

Introduction

1.1. Background of the Study

World Bank (2000) defined globalization is the global circulation of goods, services, capital, information ideas and people. From the definition it is clear that globalization covers many aspects therefore different people give different meaning to globalization because of its different dimensions and perspectives. In fact globalization is diverse and multifaceted in nature includes; political, social and economic aspects that goes beyond the conventional economic indicators such as trade openness and capital flows across the borders. The KOF index[1] of globalization developed by Dreher (2006a) and Dreher et al. (2008) have become the most frequently used index of globalization since the last decade. In defining globalization they referred to Clark (2000:86), Clark defines globalization as a system of forming links among the actors at multi-continental distances, which is facilitated by a number of flows including ideas, people, capital ,information and goods. In recent decades the fast growing global economic, social and political integration has been observed which is mainly due to improvements in communication and information technology, technical progress and decreasing transportation costs. Hence, globalization has been the most frequently discussed topic from the past four decades and have great consequences to economic, social and environment of both developing and developed countries. Recently a

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[1] KOF is the acronym for German word " Konjunkturforschungsstelle".

number of empirical studies identify the fact that countries actively engaged in globalization have experience substantial changes in the economic and social fabric of their societies [UNDP (1999); Mittleman (2003)].In addition a number of studies have analyzed how globalization affect income inequality, population growth, gender discrimination in developing countries for instance, Gaston and Nelson (2004), Kentor (2001) and wood (1995) among others.

However, there is no common consensus among the economists about the impact of globalization on socio-economic structures. For instance, some studies argues that globalization increase income inequality [Borjas and Ramey (1994), Wood (1995); Freeman (1995); Sachs and Shatz (1996); Barro(2000); Cornia (2004); Mah (2003); Dreher and Gaston 2008; Gaston (2008)] whereas other argues that globalization reduce income inequality [Fieleke (1994); Edwards (1997); Wei and Wu(2001); Kentor(2001); Faustinoa and Vali (2011)].Similarly, empirical studies not come with same findings about globalization and gender inequality (e.g. Wood (1991) ; Gray et. al (2006); Cooray et. al (2012).

Health which is one of the important social indicators is also investigated in globalization perspective. However, most of the studies found positive impact of globalization on infant mortality and life expectancy [Romer (1989); Stark (2004); Deaton (2004); Owen and Wu (2004); Herzer (2015)]. Most of these studies explain the positive impact of technological diffusion prospective, as trade openness facilitates diffusion of modern technology across trading countries. Sharma and Ghani (2004) argue that along with trade foreign direct investment (FDI) also affect life expectancy positively. Some studies negate the positive effect of technological diffusion on health, with the negative effect of income distribution

[Bezuneh and yiheyis (2014); Dreher and Gaston (2008); Bergh and Nelson (2008); Blouin et al. (2009)].

Another indicator to examine socio economic change is size of government, in existing literature there are two contrast views about globalization and size of government relationship. On the one hand the Efficiency Hypothesis maintain the claim that competition among economies to attract foreign capital reduces taxes and size of government [Rodrik (1997), Alesina and Wacziarg (1998), Figlio and Blonigin (2001) and Garret and Mitchell (2001)]. On the other hand the Compensation Hypothesis claims that there is a political incentive to expand the public economy in response to globalization and that these may overshadow the constraints imposed by market integration. Voters demand government to provide more social protection, against the risks induced by globalization which results in increases the size of government. Some empirics accept this hypothesis [Hicks and swank (1992); Garret (1995, 2001); Quinine (1997); Rodrik (1998); Bretschgar and Hettich (2002)].

Before going in further detail defining social structure is an important and difficult task to deal with because there is no universal definition of socio-economic structure; the concept is widely used in many disciplines for example sociology, economics and the political science. On the macro scale, it is the system of socioeconomic stratification. The term "socio-economic structure" can be used as a description of facets of the organization of society (demographic structure, urban-rural structure, income structure). According to Bourguignon (2004) Size of government, the level of urbanization, education, health, labor force participation, and income inequality are some indicators that describe change in societies' economic and social structure. In this study, by using these six indicators, for the very first time in literature we have constructed an index of socio-economic structure. The lack of

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consensus in empirical literature on the effect the globalization motivates us to develop a composite index based on socio and economic variables and empirically investigate that how globalization affect socio-economic structure in selected Asian economies. Globalization started after World War II but accelerated in pacific Asia since mid-1980s. A number of international institutions established after World War II including World Bank (WB), International Monetary Fund (IMF) and General Agreement on Tariffs and Trade (GATT) have played major role in promoting free trade in place of protectionism in Asia. Empirical evidences suggested that globalization have also played a vital role in growth miracle of some Asian economies. Asian economies has been going through tremendous changes associated with global flow of goods and services, information, technology, ideas and people (World Bank,1993.) This transformation has happened relatively recently; for instance economic liberalization in china has begun in 1980s, establishment of democracy in South Korea has taken place in 1987, and after the fall of USSR and development of freer trade in 1990s.

1.2. Significance of the Study

Despite the fact that there is large and growing literature on this topic, however we believe that the lack of decisive evidence on the relationship between globalization and socio-economic structure warrants further investigation because

- Most of existing empirical studies capture the socio-economic structure with one or two components
- In this study we revisit the relationship, having constructed a comprehensive index of socio-economic structure

- It is very first study to analyze the impact of Globalization on the index of Socio-economic Structure.

1.3   Research Objective

The objective of this study is to analyze the impact of globalization on socio-economic structure of 17 non-oil producing Asian economies, hence, the study aims to extend the literature on following:

- To develop a composite index of socio-economic structure (SES).

- To investigate the impact of KOF globalization index, FDI and TO on socio-economic structure in selected Asian countries.

- To provide some policy suggestions in light of this study.

1.4   Research Question

- Does socio-economic structures explains globalization in selected Asian countries?

1.5   Research Hypothesis

- H1: Globalization cannot affect socio-economic structure.

1.6   Organization of Study

The study comprises into six chapters. Chapter one presents detailed introduction including background, objective and hypothesis of the study. In chapter two relevant review of literature on socio-economic structure and globalization is presented. Chapter three presents an overview of globalization of sample countries. Chapter 4 consists of methodology including theoretical framework, empirical model, data sources and construction of variables. Chapter

5 comprises estimation technique and interpretations of empirical findings. The study concludes with chapter 6, which provides conclusion, policy implications and insights about future research.

CHAPTER 2

Literature Review

Socio-economic structure index has six main components namely income inequality, female labor force participation, health, education, level of urbanization, size of government. Hence, this chapter of the study is devoted to review the existing literature that have linked these different components of socio-economic structure to globalization.

2.1. Globalization and Income Inequality

Several studies have examined the effect of globalization on income inequality, however, there is lack of unanimity on the effect of globalization on income inequality in both theoretical and empirical literature. For instance; Mah (2003) explicated the hypotheses concerning the impact of globalization on income distribution in Korea, by using trade openness and FDI as measure of globalization, the study used annual data covering the period 1975–1995. Findings of the study suggested that both trade openness and FDI have no significant effect on income distribution and concluded that globalization does not influence income distribution in Korea. Similarly, Bhandari (2007) carried out a comprehensive study that investigated the link between inward FDI and income inequality among the transitional countries during the period 1990 -2002. Using fixed effects, the study came up with the conclusion that an inward FDI stock does not affect overall income inequality. Whereas, Choi (2006) investigated the relationship between income inequality and FDI for 119 countries covering the period 1993 to 2002 and came up with the conclusion that income inequality raises with increased FDI stocks. Similarly, Faustino and Vali (2011) investigated

the correlation between income inequality in OECD countries and globalization measured as trade openness and foreign direct investment, for the period 1995-2007. In static analysis they came up with the findings that trade openness reduces inequality, whereas FDI is positively linked with inequality. In the dynamic analysis, controlled for endogeneity, they used GMM estimator and found that FDI effect on inequality is not significant. Further research, by Asterious et al. (2014), using trade openness, FDI and capital account variables as measure of globalization and exploring its impact on income inequality found that trade openness have equalizing effect while FDI and capital account openness are fostering inequality among the European countries. Their findings are based on the data of twenty seven European Union countries, for the year 1995-2009 by using panel techniques. Franco and Gerussi (2013) conducted a study of seventeen transitional countries to investigate the effect of TO and FDI on income distribution during the time period 1990-2006. The study came up with the conclusion that FDI have no significant effect on income distribution of these countries, where as TO plays significant role. Milhaylova (2015) carried out an empirical study for ten central and Eastern Europe countries, over the period 1990 to 2012, to investigate the impact of FDI on income inequality. The study explored the relationship by using fixed effects regression models and concluded that FDI plays significant role in affecting income inequality of host countries but its effect varies across countries depending upon their level of development. Furusawa and Konishi (2016) proposed a theoretical model and showed that in small countries, international trade exacerbates income inequality. In addition to FDI and trade openness as globalization proxies some of the empirical studies used broader measures, for instance; Zhou et al. (2011) carried out a study in which they have used Kearney's data and with the help of principal component analysis they developed

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two globalization indices and investigated their impact on income distribution of 60 transitional, developing and developed countries. They presented empirical evidence that globalization helps in reducing income inequality within countries, by regressing Gini coefficient of a country on each index, respectively, for all 60 test cases. Moreover, most of the recent studies on globalization are using multiple aspects of globalization, For instance, Dreher and Gaston (2008) used KOF globalization index covering economic, social and political aspect of globalization and analyzed its impact on income inequality of OECD countries over the time period1970 to 2000. They used two inequality measures namely wage inequality and household income inequality and found that in OECD countries overall globalization index has intensified inequality and there is no robust effect of globalization on income inequality of developing countries. In the dynamic analysis they found that economic globalization is insignificant, only social and political globalization have significant effect on inequality. Bergh and Nilsson (2010a) also examined the influence of globalization on income inequality of 79 countries for the period, 1970 to 2005, by using KOF index of globalization. The authors used linear panel data model as their baseline, estimated in five year averages and included fixed country and fixed period effects and came up with the findings that overall and social globalization rises income inequality while political and economic globalization are not statistically significant. In the dynamic analysis they found that overall and economic globalization increases income inequality while political and social globalization lack statistical significance. Along the same line Atif et al (2012) investigated impact of globalization (using KOF index) on income distribution, for the panel data of 68 developing countries, covering the time period 1990-2010. They came up with the same findings that globalization exacerbated income inequality in developing countries , they

further adds this relationship is not overarching, depending on the institutions and structure of each country the impact of globalization on income inequality can vary between the nations. In literature, empirics on effect of globalization on regional income inequality are also found, for instance; Ezcurra and Guez-Pose (2013) conducted a study of panel data set of 47 countries, covering the period 1990-2007 in which they investigated the impact of economic globalization (KOF index) on regional inequality. The study came up with the conclusion that there exist positive and statistically significant the relation between economic integration and regional disparities. Furthermore, the effect of globalization is greater in low and low-middle income countries. In addition to cross country analysis Wei and Wu (2001) conducted a study on effect of globalization on regional income inequality in China during 1988-1993 and concluded that trade openness has reduced urban-rural income inequality, when corrected for possible endogeneity the study findings reveal that their exist negative association between inequality and region's openness to trade. Upadhyay (2015) performed a qualitative analysis for accessing the impact of globalization on income inequality in India. The author used KOF index to measure globalization and concluded that after the globalization process started in India in 1991, income inequality has increased because distribution of income favors rich.

Some studies have also investigated the nexus between globalization and income inequality, for example; Ucal et al. (2016) in a time series study of turkey, covering the period 1970 - 2008, explore the relation between FDI and income inequality in short-run and long run. By applying ARDL approach the study came up with the conclusion that FDI is negatively and significantly associated with income inequality in short run and long run, hence decreasing income inequality in case of turkey.

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2.2. Globalization and Health

In the theoretical literature on globalization and health, some of the early studies are optimistic about the positive effect of globalization on health. Most of these studies justified their claims with the advancement of technology as a result of globalization. For instance, Romer (1989) argue that trade liberalization ease the interaction across the nations and thus enhance the flow of knowledge and growth which endorses better access to health facilities. Similarly, Woodward (2001) identified three direct channels through which globalization effect health, first, trade liberalization policies, second, international markets (effect on pharmaceutical prices, trade –related aspects of intellectual property rights) and finally is at population level (e-g across the countries transmission of infectious diseases, tobacco marketing etc.). Stark (2004) argue that openness improves education level which enhances the awareness of health among the people, hence improves life expectancy. Deaton (2004) argues that health improves as a result of closer interaction among the countries as openness facilitates the transmission of knowledge and health related expertise. Whereas Dollar (2001); Blouin et al. (2009) proposed opposite view that free trade is not good for health as it promotes income inequality, economic insecurity, wide availability of processed and unhealthier food , polluting the environment, moreover it promotes faster spread of infectious diseases. However, there is little empirical evidence supporting this assertion. Stevens et al. (2013) by using panel data set concluded that trade has positive effect on population health in lower-income countries. Very few number of studies are found in literature which have empirically examined the relationship between globalization and health, most of the studies found positive correlation between life expectancy (as health proxy) and different measures of globalization , for instance, Owen and Wu (2004) used country's openness to international

trade as globalization measure and examined its impact on number of health outcomes(infant mortality, life expectancy of females and life expectancy of males).The study used data set of 219 countries covering the time period 1960-1995(five year average data) and came up with the findings that increased openness is associated with lower infant mortality rate and higher life expectancies in developing countries, further more they found that the improvement in health status is attributed to knowledge spillover. Sharma and Ghani (2004) analyzed the impact of FDI on human development index for middle and lower middle income countries over the time period of 1975-1999. In the static analysis, the fixed effect model evident a positive correlation between FDI and HDI, indicating that FDI also plays a pertinent role in explicating heath status of middle and lower middle income countries. Using a broader measure of globalization, Bergh and Nilsson (2010b) examined the impact of KOF globalization index on life expectancy of developed and developing countries , by analyzing panel data for 92 selected countries over the period 1970-2005 they found that economic and overall globalization is positively correlated with life expectancy while political globalization was negatively related with life expectancy. Social globalization lack statistical significance. The author also found that for 47 low per capita income countries overall, social and economic globalization was positively correlated with life expectancy while Political globalization did not turned out to be significant statistically. Another comprehensive study by Rafat et al. (2013) examined the health and aspects of globalization relationship for developed countries. Using panel data estimation techniques, they found that for the developed countries, effect of economic globalization on life expectancy is negative but insignificant while political and social aspect of globalization have positive and statistically significant effect on life expectancy of developed countries. Herzer (2015) investigated the

long run impact of international trade on life expectancy of US economy by using cointegration technique on time series data covering the period 1960 to 2011.The author came up with the findings that trade has a positive and significant long run impact on life expectancy of US. Along the same lines Alam et al. (2015) examined long run impact of trade openness and FDI on the life expectancy of Pakistan, by using the data covering the period 1972 to 2013, the author applied unit root, VECM and Granger causality test and found that trade openness and FDI have a long run, positive and significant effect on the life expectancy. Moreover the authors suggested that in short run life expectancy is caused by trade openness and FDI. Another closely related study found in literature by Ling et al. (2015), investigated the long run impact of trade on life expectancy in Malaysia. The study used time series data for the years 1960 to 2014 and applied cointegration and granger causality test. The results of the study indicated that life expectancy is positively affected by trade and trade granger cause life expectancy. Herzer (2016) reexamined the long run relationship between international trade and health of population by using a panel of 74 countries, covering the time span 1960-2010. The author found that in the long run, health (measured as life expectancy and infant mortality) is positively and significantly affected by the trade openness. Furthermore, the effect is greater in lower developed countries and the result also showed that long-run causal relation is bi-directional, which indicates that increase in trade is cause as well as consequence of life expectancy. Very recent study by Novignon and Atakorah (2016) investigated the effect of trade openness on population health status of 42 Sub-Saharan African Counties during 1995-2013; by using fixed effect, random effect and generalized method of moments (GMM) models the study concluded that the trade openness has positive and significant effect on life expectancy.

2.3. Globalization and Female Labor Force Participation

Numerous time series and cross-national studies are found in literature which have investigated the effect of globalization in relation with female labor for participation (FLP), one of the early empirical study is done by Wood (1991), the study investigated the correlation between trade liberalization and demand for female labor using data set of 35 countries covering the period from 1990 to 1985 and found that the relative demand for female labor has increased by the trade liberalization in the developing countries. Similarly, Ozler (2000) used plant-level data for the time period 1983 to 1985 for Turkey and came up with the findings that female employment share in the manufacturing sector has increased with exports though the plants with high share of female employment, with the investment in machinery and technology lead to the fall in the relative employment of female. In addition the study found that expansion in female employment due to trade liberalization might be reversed as a result of technical progress. In another time series study, using the household level data of Turkey over the period 1988 and 1994, Baslevent et al. (2004) found a positive correlation between export orientation and women employment and participation. In similar lines, Pradhan (2006) investigated relationship between international trade and female employment for India. In the study the author used Indian industry and plant-level data for the year 2000, and found a positive relationship between TO and female employment, foreign technology transfers have negative effect on female employment and no impact of FDI on female employment was reported. In case of Indonesia, for instance, Seguino (2006) used aggregated data for Indonesia, covering the time period 1967 to 1999 and concluded that in agriculture sector, FDI has a positive effect on female employment but in manufacturing and hotel sector, FDI has negative effect. Bussmann (2009) in a panel study of

134 countries, investigated trade and FLP relationship, the study concluded that TO increases

FLP in developing countries. Moreover, in developed countries share of female employment

increases in service sector with openness, whereas in developing countries female

employment increases in industrial and agricultural jobs. Tejani and Milbergh (2010)

analyzed the effect of globalization (measured as trade liberalization) on female share of

employment in manufacturing, the author used data set of 60 middle income developing

countries and high-income developed countries covering the period 1985-2007, the study

came up with the findings that relative employment of female has increased in developing

countries but decreased in high income countries. Hyder and Behrman (2011) used historical

census data (1951-2010) for Pakistan and investigated the impact of TO on gender

differences in labor force participation rates in broad occupational categories in Pakistan. The

method used controls for average gender differences in these occupational categories and the

unobserved factors that affect male and female labor force participation rates equally. Results

indicate that increased international trade significantly reduces the gap between male and

female labor force participation in Pakistan. Gaddis and Pieters (2012) investigated the effect

of trade liberalization on female labor force participation in Brazil during 1987 -1994. The

study found that reductions in tariff are positively associated with the participation of women

in labor force and employment, after about a two year period. Furthermore, the study

highlighted the pull and push factors behind the increase in economic activity of females

which are employment flows across the sectors, particularly from agriculture and

manufacturing sector to trade and services, but also insecurity in labor market and male

unemployment. Using FDI and TO as measure of globalization, Maqsood and Samiullah

(2014) investigated the effect of globalization on FLP. The study used panel fixed effect and

random effect estimation technique for the data set of SAARC region over the period 1990-2010 and evident that FDI plays a key role on FLP decision making and effect of FDI on FLP is positive and significant while TO is negatively and significantly associated with FLP. Using panel data of 80 countries over the period 1980-2005, Cooray et al. (2012) analyzed the effect of globalization on Females participation. Trade/GDP and FDI/GDP are used as measure of globalization; according to the study findings both trade openness and FDI are negatively associated with female participation. Fischer (2014) analyzed the effect of informational and economic globalization on female employment, over the time period 1981 to 2008 in 30 OECD countries, according to the cross country analysis of study, informational aspect of globalization but not economic dimension accelerate the probability of female employment, however sub-national analysis revealed that economic globalization measured as trade openness increase female employment in general. Mujahid et al (2014) examined the nexus between broader measure of globalization (KOF globalization index) and female labor supply, over the time period 1980 to 2010 for Pakistan. The study applied ARDL bonds testing approach and concluded that female labour supply is increased by globalization, and there exist a long run relation between them.

2.4. Globalization and Urbanization

Compare to other aspects of social structure, empirical studies on globalization and urbanization are not so rich. However, recently one comprehensive study have been carried out by Candau and Dienesch (2013), which examine the effect of globalization on urbanization, by using a panel data set of Asian economies covering the period 1962-2010 and proposed a micro-founded measure of globalization based on theoretical model and

estimated a reduced form of urbanization that depends on trade integration, the study came up with the findings that a 1% increase in access to market brings about 0.56 % increase in urbanization rate in Asia and 0.44 % in the World. A cross-provincial panel data study of china by Shi et al. (2015) analyzed the relationship between globalization and china's urbanization from 2000 to 2010, results estimated through panel data regression concludes that differences in international trade, FDI and service exports contributed to urban expansions. The study evident a significant and persistent role of service exports in association with urban expansion in eastern northeastern and central china and these effects were becoming stronger over time. International trade also played pertinent role in central, eastern and northeastern china but its effect enfeebled during the time period under study, while the significant effect of FDI was reported only in central china and few eastern provinces.

2.5. Globalization and Size of Government

Two opposite views are found in received literature regarding the link between globalization and size of government (SOG). On the one hand the compensation hypothesis argued for positively link between globalization and size of government. On the other hand, the efficiency hypothesis that negatively associate SOG and globalization; in this association, Cameron (1978), for the very first time investigated the relationship between trade openness and SOG in 18 OECD countries. Based on correlation analysis over the year 1960-1975, the study concluded that there exist a positive correlation between trade openness and SOG. Following Cameron (1978), Ruggie (1982) found positive correlation between openness and SOG and developed a Compensation hypothesis that trade openness leads to increase in government size. Further research by Rodrik (1998) tested the hypothesis for 103 or 125 low

income and high income countries. The findings of the study supported the compensation hypothesis and found positive correlation between country's openness to trade and SOG. In a case of Pakistan, covering the period 1947-2009, Zakaria and Shakoor (2011) found that trade openness have positive and significant effect on SOG, the study found empirical support in favor of compensation hypothesis. Moreover, income, foreign debt and investment are among the other variables, identified as having positive effect on SOG. A number of empirical studies lend support for efficiency hypothesis. For instance, Gemmell (2007) conducted a panel study for OECD countries from the time period 1980-1997 and tested the hypothesis regarding the effect of globalization (TO and FDI) on SOG, the study found neither TO nor FDI effect SOG. Garret (1995) conducted a study to examine the relation between trade openness , capital account openness and government spending as percentage of GDP for 15 OECD countries over 1967-1990 and found no relation between TO and government spending whereas capital account openness (measured as restrictions on cross boarder financial flows) is negatively related with government spending. Burgoon (2001) came up with different finding when investigated relation between TO and government spending for 18 OECD countries , covering the time period 1961 to 1994 and 1980 to 1994 the study came up with the conclusion that there exist negative relation between TO and government spending . One of the recent study by Kaseb et al. (2014) investigated the relation between globalization and government size for average income countries, over the period 2000 to 2011, by estimating panel data regression the study concluded that capital liberalization (as measure of globalization) have negative and significant effect on SOG. Some other studies found in literature investigated nexus between trade openness and government size, For instance; Molana et al. (2004) investigated trade openness and SOG

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nexus in panel of 23 industrialized OECD countries over 1948-1998, by applying cointegration and causality method the study found no support for compensation hypothesis and concluded that in case of industrialized OECD countries there exist no long run relationship between trade openness and SOG. Along the same line, in a case study of turkey, using a cointegration approach, Aydogus and Topcu (2013) analyzed globalization and SOG nexus. The study used TO as measure of globalization, covering the period 1974-2011, using Engel and Granger co-integration approach the study concluded that in case of turkey their exist no long run relationship between trade openness and SOG, in addition the study fail to provide any causal support to compensation hypothesis. However, Lin et al. (2014) conducted an empirical study of small developing countries to investigate causal effect of trade openness on size of government, the study evident confirmed compensation hypothesis and concluded that 1 percent rise in trade openness brings about 1-2 percent points increase in government expenditure over GDP ratio on average. Among others are the studies investigated the relation between globalization and SOG by using broader index of globalization, for instance; Dreher (2005) investigated the association between globalization and government expenditure in case of 30 OECD countries ,covering the period 1970-2000 and found that there exist no relation between globalization and government expenditure. When Meinhard and Potrafke (2012) investigated the impact of index (KOF) of globalization on government expenditure; the study used annual panel dataset of 186 countries for the time period 1970 to 2004 and came up with the findings that globalization has increased the SOG around the world; social globalization has more pronounced and significant effect, especially in OECD countries. Effect of globalization vary across the regions, for instance, Adam and Sakyi (2012), analyzed 42 Sub-Saharan African countries by using panel data (five year

averages), covering the time period, 1970-2009. The study concluded that in Sub-Saharan Africa, economic globalization is positively and significantly associated with overall government spending while social and political globalization are negatively associated with that one.

2.6. Globalization and Education

Fors (2016) rigorously analyzed the impact of globalization on education. In this association he examined the relation between KOF index of globalization and primary school enrollment by using panel data analysis, according to the study findings ,economic globalization is weakly correlated with primary school enrollment whereas social globalization have very significant and robust effect on primary school enrollment, Furthermore, country group analysis of study indicated that economic globalization in association with primary school enrollment have positive and significant effect in Asia , Latin America and the Caribbean but negative and weak association is found for Eastern Europe region. Whereas, in case of social globalization and primary school enrollment association, positive and significant effect was found in Latin America, Middle East, the Caribbean and Africa.

Summary

From literature review it has been observed that a well-established literature have analyzed the impact of globalization on different components of SES and most of these studies have employed different measures of globalization. In existing literature globalization have captured with different proxies, for instance some studies used TO, and FDI as a measure of globalization, whereas other used broader dimensions of globalization, for instance KOF and Kearney Index of globalization. Overall, mix results are found in literature, some have found

positive relation between globalization and SES components, whereas other found no or even negative relationship between globalization and socio-economic structure. In this study we have constructed a composite index of SES to investigate the effect of globalization on socio-economic structure.

CHAPTER 3

Overview of Socio-Economic Indicators and Globalization in Sample Countries

This chapter is devoted to presents an overview of socio-economic indicators and globalization of the sample countries. The countries selected in the study are from three Asian regions, namely South Asia, East Asia and pacific, Central Asia and Eastern Europe. Hence; an overview of globalization and socio-economic indicators have been presented for these three regions separately. In this regard, section 1 of this chapter presents an overview of Globalization and indicators of socio-economic structure of the south Asian countries under consideration. The subsequent section presents an overview on globalization and socio-economic structure of sample countries from East Asia and Pacific and Central Asia and Eastern Europe respectively.

3.1. Globalization and Socio-Economic Indicators in South Asia

From South Asian region India, Pakistan, Bangladesh and Nepal are included in sample countries. In this section, an overview of globalization of sample countries is presented by using KOF index of globalization, the value of index ranges from 0 to 100. Lower value indicates lower level of globalization and higher values indicates higher level of globalization. Table 3.1 shows globalization and its different aspects in south Asia. Data presents in the table shows that globalization increased with time in selected South Asian sample countries. For instance, in case of Bangladesh it increased to 42 in 2014 from was 20 in 1990. Similar trend has been observed in other sample countries of the region. Among the

sample countries, India is most globalized country as overall, economic and political globalization values are 51, 41 and 90 respectively during 2014. India has started to open up its boundaries after 1991 which can be attributed to rapid increase in globalization. Whereas in case of social globalization, Pakistan is most socially globalized economy as SG in Pakistan is 36 during 2014, which is highest among the sample countries of the region. Data also indicates that Nepal is the least globalized economy among the sample economies of region as values of overall, economic and political globalization are lowest in the region.

Table 3.1: Globalization in South Asia

Country	Overall Globalization		Economic Globalization		Social Globalization		Political Globalization	
	1990	2014	1990	2014	1990	2014	1990	2014
India	30	51	19	41	8	30	73	90
Pakistan	33	50	26	40	15	36	67	88
Bangladesh	20	42	9	35	7	23	52	76
Nepal	22	40	12	30	11	26	49	71

Data Source: KOF Globalization Index

Table 3.2 shows the total life expectancy at birth, share of urban population as percent of total population and Gini index, in the four economies of South Asia. Life expectancy is highest in case of Bangladesh for the year 2014 compare to other selected economies of the region. In 1990, Life expectancy in Nepal was relatively low but over the time the country witnessed improved health status. In case of Pakistan Life expectancy was relatively high in 1990 but did not improved significantly over the time and by the end of 2014 it become

lowest (66 years) in the region (among sample countries).Over the last 25 years ,South Asian nations have experienced improved life expectancy rates

Table.3.1 Socio-Economic Indicators in South Asia

Country	Life Expectancy Rate		Urban Population		GINI Coefficient	
	1990	2014	1990	2014	1990	2012
India	57	68	26	32	30	33
Pakistan	60	66	31	38	34	30
Bangladesh	58	71	20	34	38	45
Nepal	54	69	9	18	36	32

Data Sources: World Bank, World Development Indicators, 2016 and UNU Wider,WIID3b

The tendency of urbanization rate in south Asia shows that over past 25 years level of urbanization has been increased in all sample countries and it is highest in Pakistan while in Nepal during 1990 only 9 percent of total population was living in urban areas which was the lowest rate in the region and by 2014 it reaches at 18 percent which is also lowest among the sample countries. As for as, income distribution is concern it becomes worse-off in case of India and Bangladesh. In case of India the GINI coefficient increased from 30 in 1990 to 33 in 2012, whereas in case of Bangladesh it increased 38 to 45. In case of Pakistan and Nepal income distribution has been improved. In case of Pakistan GINI coefficient decrease from 34 in 1990 to 30 in 2012, whereas in case of Nepal it decline from 36 in 1990 to 32 in 2012. Table 3.3 presents public expenditure as a proxy variable of size of government, female labor force participation and primary school enrolment of the selected South Asian economies. Figures presents in table 3.2 indicate that there is no significant change in public spending of

sample countries except Nepal over the last 24 years, in case of Nepal size of government has increased in the year 2014 relative to the year 1990. Female labor force participation as a percentage of total labor force indicates that the share of female labor has increased in the sample countries except India over the years.

Table 3.3 Socio-Economic Indicators in South Asia

	Public Expenditure		Female Labor Force Participation		Primary School Enrolment	
Country	1990	2014	1990	2014	1990	2012
India	101.37	102.97	27.50	24.17	92.77	114.05
Pakistan	107.83	106.47	12.67	22.57	55.96	92.123
Bangladesb	107.14	106.53	38.68	40.41	80.57	114.20
Nepal	111.13	129.59	48.24	50.58	117.75	135.25

Data Source: World Bank, World Development Indicators ,2016

The 4th column in table 3.2 presents primary school enrolment in sample countries of south Asian countries statistics shows that primary school enrolment has increased over the last 22 years, it is highest in Nepal and lowest in Pakistan among the sample countries of the region. A significant improvement in primary school enrolment can be attributed to the millennium goal of IMF and WB, i-e to achieve universal primary school attainment.

3.2. Globalization and Socio-economic indicators in East Asia and Pacific

The Countries selected from this region are Cambodia, China, Indonesia, Japan, Korea Rep., Malaysia, Philippines, Thailand and Vietnam. Table 3.8 shows the level of globalization in East Asia and Pacific. The table depicts that globalization has increasing trend in East Asia and Pacific, for instance overall globalization has increased in Cambodia from 22 in the year 1990 to 50 in 2014, same trend is followed by other sample countries of the region.

Table 3.8: Globalization in East Asia and Pacific

Country	Overall Globalization		Economic Globalization		Social Globalization		Political Globalization	
	1990	2014	1990	2014	1990	2014	1990	2014
Cambodia	22	50	35	65	10	28	22	66
China	36	60	24	49	21	53	56	84
Indonesia	34	57	35	59	10	34	65	87
Japan	46	67	44	50	38	68	59	89
Korea	41	64	40	59	39	52	46	90
Malaysia	56	79	66	81	44	73	58	83
Philippines	39	57	43	55	30	40	47	84
Thailand	36	71	37	70	30	63	43	79
Vietnam	24	49	32	66	10	30	34	55

Data Source: KOF Globalization Index

The data in the table indicates that in case of overall economic and social globalization in Malaysia is 79, 81 and 73, respectively, in the year 2014, which shows that Malaysia is overall highly globalized country in the region. Whereas value of political globalization is 90 in Korea during 2014, which is highest in the region indicating that Korea is most politically globalized country in the region. Table 3.8 also indicates that the value of overall globalization in Vietnam is 49 in 2014, which is lowest in the region indicating that Vietnam is the least globalized economy among the sample countries of this region.

Table 3.3 presents life expectancy rate, urban population and GINI coefficient among these selected economies of region. Table shows, among the selected sample of East Asia and pacific region, life expectancy has increasing with passage of time, it is highest in Japan over past 25 years. In case of Cambodia, Philippines and Indonesia, life expectancy rate is relatively low. Level of urbanization has risen in all selected economies except Philippines. Table 3.3 indicates that 77 percent of total population in Japan during 1980 was living in urban area which has increased to 93 percent by the end of 2014. Whereas, Cambodia is the country with lowest urbanization rate relative to other counterparts. GINI coefficient is showing mix trend in east Asia and pacific, in most of the selected countries income inequality has increased over the past 25 years, except Thailand, Philippines, Korea and Cambodia.

Table 3.3: Socio-Economic Indicators in East Asia and Pacific

Country	Life Expectancy rate		Urban Population		Gini coefficient	
	1990	2014	1990	2014	1990	2012
Cambodia	53	68	16	21	38	35
China	69	75	26	54	28	47
Indonesia	63	68	31	53	34	41
Japan	78	83	77	93	35	38
Korea	71	82	74	82	35	32
Malaysia	70	74	50	74	44	46
Philippines	65	68	49	44	47	44
Thailand	70	74	29	49	42	40
Vietnam	70	75	20	33	33	41

Data Sources: World Bank, World Development indicators,2016 and UNU Wider,WIID3b

Table 3.4 shows, among the sample countries of East Asia and Pacific except Indonesia and Japan, size of government (measured as gross national expenditure as percentage of GDP) has decreased in the year 2014 as compared to year 1990. The share of female labor force participation rate has increased in Korea rep., Japan, Malaysia and Philippine in the year 2015 relative to the year 1990. Overall share of female labor force participation is highest in Indonesia whereas, lowest in Malaysia, among the sample countries of the region. The indicator presented in table 3.4 is primary school enrollment which has increased in Cambodia, China, Japan, Malaysia and Vietnam during the year 2012 relative to the year 1990, for that rest of the sample countries among the region has declining trend.

Table 3.4: Socio-Economic Indicators in East Asia and Pacific

Country	Gross National Expenditure		Female Labor Force Participation		School Enrollment Primary (% gross)	
	1990	2014	1990	2014	1990	2012
Cambodia	114	104.38	51	49	110.96	124.50
China	97.80	97.25	45	43	118.12	127.85
Indonesia	98.40	100.75	38	37	116.27	108.52
Japan	99.09	103.109	40	42	101.64	102.30
Korea	100.99	94.74	39	41	105.95	100.45
Malaysia	97	90.23	34	36	92.69	101.4
Philippines	105.76	102.33	36	39	110.03	106.96
Thailand	107.51	93.39	47	45	98.82	95.82
Vietnam	109.23	96.72	48	48	103.41	104.91

Data Sources: World Bank, World Bank Indicators, 2016.

3.3 Globalization and Socio-economic indicators in Eastern Europe and Central Asia

Countries selected from this region include Azerbaijan, Armenia, Kazakhstan and Kyrgyzstan. Table 3.9 shows the level of globalization in the sample countries of Eastern Europe and Central Asia. Figures presents in the table indicates that globalization has increased with the passage of time in sample countries. For instance, in Armenia, Azerbaijan, Kazakhstan and Kyrgyzstan globalization has increased from 27, 24, 31 and 31 in the year

1990 to 59, 57, 60 and 55 respectively during 2014. Data presents in table 3.9 shows that Kazakhstan is most globalized (59) followed by Armenia which hold 59 score of overall globalization during 2014.

Table 3.9 Globalization in Eastern Europe and central Asia

Country	Overall Globalization 1990	Overall Globalization 2014	Economic Globalization 1990	Economic Globalization 2014	Social Globalization 1990	Social Globalization 2014	Political Globalization 1990	Political Globalization 2014
Armenia	27	59	51	69	19	44	6	67
Azerbaijan	24	57	31	61	27	51	11	60
Kazakhstan	31	60	52	68	26	43	11	53
Kyrgyzstan	31	55	38	62	41	40	8	66

Data Source: KOF Globalization Index

Table 3.5 shows that in Armenia, life expectancy have improved significantly, from 67 in 1990 to 74 in 2014 which is highest among the counterparts in region. However, Level of urbanization dropped over last 25 years in selected sample except Azerbaijan. The size of Gini coefficient trend among the sample countries indicates that income inequality has increased in case of Armenia and Kyrgyzstan remained almost same for Azerbaijan and for Kazakhstan income inequality has decreased, over last 22 years.

Table 3.5: Socio-Economic Indicators in Eastern Europe and Central Asia

Country	Life Expectancy rate 1990	Life Expectancy rate 2016	Urbanization Rate 1990	Urbanization Rate 2016	Gini Coefficient 1990	Gini Coefficient 2012

Country						
Armenia	67	74	67	63	29	38
Azerbaijan	64	70	54	54	34	34
Kazakhstan	68	71	56	53	29	28
Kyrgyzstan	68	70	38	36	30	37

Data Source: World bank, World Bank Indicators, 2016 and UNU Wider, WIID3b.

Table 3.6 shows trend of gross national expenditure, female labor force participation and primary school enrollment in sample counties of Eastern Europe and Asia.

Table 3.6: Socio-Economic Indicators in Eastern Europe and Central Asia

Country	Gross National Expenditure		Female Labor Force Participation		School Enrollment Primary (% gross)	
	1990	**2014**	**1990**	**2014**	**1990**	**2012**
Armenia	111.32	118.42	46	46	102.46	102.42
Azerbaijan	95.36	82.93	45	48	110.12	97.95
Kazakhstan	101	86.49	47	49	116	106.25
Kyrgyzstan	120.34	150.22	46	42	109	109

Data Source: World Bank, World Bank Indicators, 2016.

The table shows that size of government has increased in Armenia and Kyrgyzstan and declined in Azerbaijan and Kazakhstan over the last 24 years. Female labor force participation rate has increased in Azerbaijan and Kazakhstan, remained same in Armenia and declined in Kyrgyzstan during the year 2014 relative to 1990. It is highest in Kazakhstan among the sample countries of the region. Primary school enrolment has declined among the

sample countries of the region except Kyrgyzstan, for that it is highest during the year 2012 among the selected sample of region, and remained same in the year 1990 and 2012.

Methodology and Data

This chapter of the study presents theoretical framework, empirical model, estimation technique, sample and sample selection criteria. In addition, the chapter also provides, detailed discussion, on measurement of SES, GL and estimated model. First section of the chapter is devoted to discuss theoretical framework. Section 2 presents empirical model. Section 3 discusses construction and definition of variables. Section 4 presents sample selection criteria. Whereas 5 and 6 discusses summary statistics and estimation technique, respectively.

4.1 Theoretical Framework

This study is using several theoretical approaches within the general theme of globalization because a single theory cannot account for socio-economic outcome of globalization. We start from the Stolper and Samuelson (1941) model, which argued that relative abundant factor of production getting benefits from free trade, whereas scarce factor suffers. As developing countries developing countries are labor abundant countries, returns to labor rises as a result income inequality decreases. Some studies Wood (1995a), (1988b); Freeman (1995); Cornia (2004) linked globalization with social justice through income distribution.

Theoretical link globalization and FLP is based on Heckscher-Ohlin theory, which shows that the country's relatively scarce factor will gain and relatively abundant factor will lose

from freer trade.[2] The gender consequences of globalization arises, when globalization induced low skilled women labor to enter labor market while low income countries, gain a comparative advantage, in the production of low-skilled labor intensive goods. One of the optimistic views supported by Gaddis and Pieters (2012) about globalization is that it creates job opportunities in developing countries, in competitive international markets, international corporations hire cheaper female labor to reduce total cost, due to gender disparities, females in these countries prefer jobs in international corporations, hence increase their participations. Whereas Cooray et al. (2012) links globalization with reduced share of FLP. With openness, international corporations shapes highly competitive environment in developing countries. These economies, to compete these international corporations are required to improve their human capital, under these circumstances, women in developing countries incline to surge their educational skills, hence ,decline their labor participation.

The health consequences of globalization can be explained through a variety of channels, for instance globalization has been associated with knowledge spillover and technology specifically the one which is useful for the improvement of health outcomes, in this way globalization increase the flow of knowledge across the countries about the appropriate treatments of diseases and good practices [Romer (1989); Stark (2004); Deaton (2004); (Jamison et al (2001); Owen and Wu (2004)]. Whereas, Dollar(2001); Kawachi and Wamala (2006); Blouin et al.(2009) suggested adverse effect of globalization on health, through faster spread of infectious diseases (SARS and HIV), economic distress, environmental

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[2] In its simplest version, the HO-model of comparative advantage suggests that static efficiency gains from international specialization and exchange induce a structural change in production and reallocation of input factors towards those sectors that use a country's abundant factor most intensively. The Stolper-Samuelson theorem adds that this will lead to a rise in the real returns of the factor used intensively in the production of the expanding sector, while the other factor's remuneration declines (Winters 1991).

pollution, income inequality and handiness of unhealthier products such as alcohol, tobacco and canned foods.

Another aspect of socio-economic structure is the size of government, which can be seen on the base of two opposite hypothesis found in existing literature; one is "efficiency hypothesis" and the other is "Compensation hypothesis". According to efficiency hypothesis , role of government beyond minimal market friendly level (such as defense, property right protection, public goods provision) reduces trade competition of domestic producers, hence there is tradeoff between a welfare state and efficiency, in the era of globalization and internationalization the government have no choice, but to reduce its size hence, the greater openness leads to the smaller size of government [(Molana et al. (2004); Liberti (2007); Ram(2009); Aydogus and Topcu(2013)]. On the other hand according to the compensation hypothesis there are political incentives to expand the size of government in response to globalization, voter demands more social protection from the government against the risk of globalization which lead to increase in the size of government [Cameron(1978); Katzenstein (1985); Ruggie(1982) ; Rodrik (1998) ;Meinhard and Portrafkc(2012)].

4.2. Empirical Model

To analyze the hypothesis empirically the following base line model have been estimated

$$SES_{it} = \alpha_{it} + \beta SES_{it-1} + \eta' GL_{it} + \gamma' X_{it} + \mu_{it} \ldots \ldots \ldots \ldots \ldots \ldots \ldots . (1)$$

Whereas *SESit* is our dependent variable the index of socio-economic indicators in country i and period t. *GLit* presents globalization which is our variable of interest. *Xit* represents vector of control variables, and μ_{it} is error term.

4.3. Variables Definition and Construction

4.3.1. Dependent Variable

The dependent variable of study is an index of socio-economic structure (SES_{it}), which is composed of six components, namely size of government, income inequality, female labor force participation, health, education and urbanization rate [3] .All these components are indexed through Principal Component Analysis. This method is based on a fact that when different characteristics about a set the events are observed, the characteristics having more variation explains more variation in dependent variable as compared to the characteristic having lesser variation. Therefore, one of the major tasks is finding and assigning the weights to each of the concerned variable. Followed Ang (2010), we used percentage of variance as the weight, to compute the index; hence the composite index is defined as:

$$SES_i = W_1 X_{11} + W_2 X_{12} + W_3 X_{13} + \cdots \ldots \ldots \ldots \ldots \ldots + W_n X_{1n}$$

$$SES_i = \Sigma W_j X_{ij}$$

SES_i represents composite index for the ith observation, Wj represents weight assigned to jth indicator, and xij presents observation value after the scale bias elimination. Since the variables chosen for developing composite index are measured in different scales, it is necessary to convert the variables into a standard comparable unit to eliminate scale bias, in this regard we have used following method[4].

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[3] See appendix A.

[4] Normalization method that are based on standard deviation are preferred in the presence of extreme values.it is commonly used method because it converts all indicators to a common scale with an average of zero and standard deviation of one.

$$X_{ij} = \left(\frac{x_{ij} - x_{aj}}{\sigma_j}\right)$$

Where, X_{ij} presents scale free observation x_{ij} is original observation and x_{aj} represents mean of j indicator and σ_j is the standard deviation of j indicator.

4.3.2. Independent Variables

Globalization(GL_{it}) is our variable of interest in the study. What should be accurate globalization measure? It has remained a question of intense discussion, throughout the history. In past, several studies have used the index, to measure globalization, developed by Sachs and Warner (1995) but the quality of this index remained questionable as suggested by Rodriguez and Rodrik (2000), Rajan and Subramanian (2008) and Wacziarg and Welch (2008). Rodriguez and Rodrik (2000) have underlined the distinction between trade flows and trade policies. They argued that trade flows (imports and exports) are not necessarily determined by trade policies (tariffs, taxes and regulation) or liberalization. For a case, a reduction in tariff not necessarily brings higher trade flows because some other factors also have affect such as non-trade policies. The index developed by Sachs and Warner (1995) is unable to differentiate these non-trade policies which affect the level of imports and exports. Therefore more comprehensive, reliable and a high quality index have to replace this index. Moreover, a number of studies have used trade to GDP ratio as a measure of globalization; however several dimensions of globalization have also been lacked by this approach. In other words, the results which have been obtained by this approach (using trade to GDP ratio as a measurement of globalization) should have been interpreted with a considerable amount of bias because this simple measure does not account for several aspects of globalization.

Lindert and Wiliamsome (2001), in line with the same argument, stated that liberalization usually does not come alone. For instance, liberalization of domestic commodity markets, domestic factor market liberalization, and enforcement of better property rights typically takes place altogether. Furthermore, if we take the non-trade policies into consideration, it is possible; to claim that, those policies which are probably related with globalization may have their effect on SES. Therefore, globalization should be analyzed, not only through economic but as well as from social and political slant also.

In the light of above, information, as none of measures of globalization has been able to capture the term "globalization" with all its dimensions accurately, the need of an extensive and broad index as a measure of globalization have been suggested, by several authors .The selected measure of globalization for this study, is the index of globalization developed by Dreher (2006), which was latter improved in Dreher et al. (2008). Based on twenty three variables the KOF index of globalization covers three dimensions of globalization namely Economic, Social and Political aspects and each aspect of globalization is included, separately in this index. This index is updated yearly and it is openly available on web. One of the advantages of this index is that, it can be separately used to examine each dimension of globalization. It allows us, to understand the impact of globalization, on socio-economic structure for each dimension of globalization separately; Appendix B contains complete description of index. Along with KOF globalization index this study also employs two additional proxies of globalization; trade openness and foreign direct investment. Although trade openness and FDI are criticized as measure of globalization but still most of the existing empirical literature is using these two proxies to investigate the effect of globalization on SES, hence to compare our findings with existing empirical literature we are

using these two additional proxies. Trade openness is measured as trade to GDP ratio, data is taken from WDI. Whereas FDI is taken as foreign direct investment, net flows as percentage of GDP, data source is WDI.

Gross fixed capital formation as percentage of GDP is used as a proxy variable for physical capital; data is taken from WDI 2016. GDP per Capita is taken as ratio of GDP in constant 2005 US$ to total population. Data source of GDP per capita is WDI 2016. Unemployment is measured as the number of unemployed as percentage of total labor force, the data is taken from WDI of World Bank (2016).

4.4. Data and Data Sources

Panel data of 17 countries for the period 1991 to 2014 is used for empirical estimation. The key data sources of sample countries for variable under discussion are World Development Indicators (WDI) (World Bank), UNU wider, WIID3b and KOF index of globalization developed by Dreher (2008)

4.5. Sample Selection Criteria

Asian non-oil producing countries are included in sample, as in oil producing countries (OPC) one sector is dominant therefore; we have excluded OPC from the sample. Depending on the data availability we reduced our sample to 17 countries, these 17 countries are covering three Asian regions; south Asia, East Asia and pacific and third region is Europe and Central Asia.

Table 4.1 list of countries

Armenia	India	Kyrgyz.	Thailand
Azerbaijan	Indonesia	Malaysia	Vietnam
Bangladesh	Japan	Nepal	
Cambodia	Kazakhstan	Philippines	
China	Korea	Pakistan	

4.6. Summary Statistics of Variables under Consideration

Before the discussion of empirical findings, it is essential to present summary statistics of variables under consideration. Following table 4.2 presents summary statistics of the variables under discussion.

Table 4.2. Summary Statistics of Variables under Consideration

Variables	Obs.	Mean	Std. Dev.	Min.	Max
SES_{it}	408	0.0002	0.749	-2.325	2.309
OGL_{it}	408	49.039	12.483	21.4	81.176
EG_{it}	408	49.252	14.999	9.75	82.408
SG_{it}	408	37.040	15.573	7.55	76.802
PG_{it}	408	66.030	20.261	6.87	93.850
FDI_{it}	408	3.522	4.910	-2.757	45.149
TO_{it}	408	76.702	43.572	15.923	220.407
$PcGPC_{it}$	408	4352.28	8627.84	181.34	37595.18
CF_{it}	408	26.219	8.375	-0.690	57.990
UN_{it}	408	5.801	5.050	0.2	35.9

Summary statistics presented in table 4.2 shows that total number of observations are 408. The value of standard deviation shows dispersion or variation from the mean values. Low

standard deviation shows less dispersion of data points from the mean while high standard deviation values indicates that the data points are spread out over a large range of values from the mean value. *OGLit* is our variable of interest having its range from a minimum 21.4 to a maximum of 81.76 with a standard deviation 12.483. EG ranges from the 9 to 82 with standard deviation 14. The range of SG is between 7 and 76. Variable PG ranges from 6 to 93. FDI ranges from -2 to 45 percent as compared with GDP of selected Asian economies and TO average value is 76 percent shows trade as percentage of GDP. On average there is 5 percent unemployment in sample countries, with minimum value of 2 percent and maximum of 35. The lower values standard deviation of variables under this study indicates that our data have no problem of dispersion.

4.7. Estimation Techniques

Considering the limitations of static analysis, we have carried out dynamic analysis. The pooled OLS and fixed effects cannot accurately accord country's time invariant properties and most probably capture it in error term. Both unobserved country-specific effect and observation specific error are likely to be captured in fixed effect error term over time.

To estimate a dynamic panel model, the most efficient and suitable estimation technique is generalized method of moment (GMM). According to Roodman (2006) GMM developed by Arellano and Bond (1991) and Arellano and Bover (1995) is the estimation technique which is appropriate for dynamic model estimation. In this study case, considering the characteristics of variable under this study, GMM estimator as developed by Arellano and Bond (1991), specifically two step estimators, is found to be most suitable estimation technique. It is most widely used econometric technique for dynamic analysis, as GMM has

advantage over Maximum likelihood (ML).By using simulation, Arellano and Bond (1991) compared the performance of OLS, WG and GMM estimators and found that GMM estimators show the lowest bias and variance.

GMM estimation is efficient because it also take into account the serial correlation. In the presence of heteroskedasticity GMM provides efficient estimation than the simple 2SLS estimators (Mansoderbom, 2009).

Empirical Findings and Discussion

5.1. Results and Interpretation

As mentioned in introductory chapter that the core objective of our study is to explore the impact of globalization on socio-economic structure, therefore our results primarily focused on globalization and its different dimensions for 17 selected Asian countries. Table 5.4 presented the empirical findings of our proposed empirical model where, we regressed SES_{it} (Socio-economic Structure Index) on different proxies of globalization along with the set of control variables.

Results presents in table 5.4 shows that in Model_1 (column 2) the coefficient of overall globalization, which is our variable of interest, is positive (0.014) and statistically significant at 1 percent level of significance. The result indicate that globalization have a positive and significant impact on socio-economic structure in the sample countries. The reason behind positive association of globalization and SES can be justified as Gaddis and Pieters (2012) suggested that to reduce total cost in internationally competitive markets, international corporations bire cheap female labor, hence; internationalization results in increased female labor force participation. Secondly technology and knowledge spillover about appropriate treatment of diseases and good health practices has also attributed globalization to associate positively with health outcomes. Thirdly, positive association of globalization on SES can be justified on the ground of compensation hypothesis. Furthermore, one of the millennium

goals of IMF and WB is to attain primary universal education can also be linked with positive association of globalization and primary education.

Table 5.1 GMM Estimation, Dependent Variable is Index of Socio-Economic Structure (SES)

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
SES_{it-1}	0.6368*** (10.54)	0.662*** (13.14)	0.654*** (8.47)	0.652*** (9.08)	.7508*** (14.82)	.6901*** (7.88)
$PCgdp_{it}$	0.0001** (3.58)	0.0009** (2.51)	0.0001** (2.42)	0.0001** (3.54)	.0001** (2.80)	.00012** (3.10)
UN_{it}	0.0156** (3.54)	-----	0.009** (2.04)	0.0251*** (6.37)	.0190*** (3.93)	.0157** (3.44)
CF_{it}	0.0104*** (3.54)	0.0141*** (3.57)	0.011*** (3.24)	0.011*** (3.25)	.0193*** (7.89)	.0095*** (3.25)
OGL_{it}	0.014*** (4.68)	-----	------	--------	------	-------
EG_{it}	-----	0.012** (2.78)	-------	--------	-------	--------
SG_{it}	------	------	0.014*** (3.85)	--------	-------	-------
PG_{it}	------	-----	------	0.0100*** (3.54)	-------	-------
FDI_{it}	------	-----	------	------	-.0161*** (3.44)	-------
TO_{it}	-------	-----	-------	-----	--------	-.0005 (0.32)
Constant	-1.342*** (6.68)	-1.236*** (7.36)	-1.237*** (4.08)	-1.394*** (7.97)	-.888*** (4.35)	-.690*** (3.50)
No. of Obs.	374	374	374	374	374	374
No. of inst.	243	242	243	243	243	243
AR(1)	0.088	0.08	0.08	0.12	0.09	0.11
AR(2)	0.472	0.44	0.45	0.49	0.5	0.53
Sargan test	12.33	11.09	12.92	12.44	11.49	13.25
p-value	0.97	0.97	0.97	0.97	0.97	0.97

Note: *, ** and *** represents level of significance at 10%, 5% and 1% respectively. The value of t-statistics are in parenthesis. Equations are corrected for heteroscedasticity where required.

Our findings are in line with the previous studies which have investigated the impact of globalization on different components of SES index, for instance Dreher and Gaston (2008); Bergh and Neilson (2010a); Atif et al. (2012); Ezcurra and Guez-pose (2013) concluded that globalization and income inequality are positively correlated, moreover, Bergh and Nilsson (2010a) found positive association of globalization index with life expectancy. Among others Fors (2016) found that globalization is positively correlated with gross primary school enrolment. Mujahid et al. (2014) found positive association between globalization and female labour force participation. Meindhard and Potrafke (2012); Adam and Sakyi found the positive impact of globalization on size of government. Our result indicates that the effect of KOF globalization index on overall socio and economic indicators of sample countries is positive and significant.

In model 2 we have replaced overall globalization (OGL) with economic globalization (EG) which have positive sign (0.012) and statistically significant. Hence economic globalization plays a pertinent role in affecting socio-economic conditions of selected countries. Our findings are in line with some of the received empirical studies on the subject. For instance Fors (2016) came up with the conclusion that EG have significant positive effect on gross primary enrolment in Asia. Similarly, Bergh and Nilsson (2010b); Sapkota (2010); Meinhard and Potrafke (2012); Adam and Sakyi (2012) came up with same findings while analyzed the impact of economic globalization on socio-economic structure.

Social globalization (SG) and Political globalization (PG) in model 3 and 4 also have statistically significant and positive effect on SES; the coefficient of SG (0.014) is statistically significant at level of 1 percent. In model 4 the coefficient of PG (0.01) is significant at the level of 1 percent. Our findings are in line with the findings of Dreher and

Gaston (2008) found positive effect of SG and PG on income inequality; Rafat et al. (2013) found significant positive association between PG and life expectancy and SG and life expectancy. Meinhard and Potrafke (2012) investigated positive effect of SG and PG on size of government.

In model 5 FDI is used as another proxy of globalization to analyze its impact on SES, FDI is one of the component of economic globalization index but when we regressed FDI as proxy of globalization, the coefficient of FDI enters the model with negative sign (-0.016) and is statistically significant at 1 percent, which indicates that FDI is negatively associated with *SES*. The negative association between FDI and SES can be justified on the ground of efficiency hypothesis, whereas the reason behind negative association of FDI and FLP can be seen as to compete with international organization females in the host countries are inclined to surge their educational skills hence reduce their labor participation. Faster spread of infectious diseases, economic distress environmental pollution, handiness of unhealthier products, are some reasons that negatively associate FDI with health outcomes.

Our results are in line with previous empirical findings for instance Ucal et al. (2016) found negative effect of FDI on income inequality in short run and long run, among others; Seguino (2006);Pradan (2006); Cooray (2012) concluded negative effect of FDI on female employment. One of the justifications for negative coefficient of FDI in our study is that the negative effect of FDI on income inequality and FLP might have dominance on positive association of FDI with health, education and urbanization components of SES.

Trade openness (TO) is also used as one of the proxy of globalization. Results presented in model 6 shows that TO holds negative sign (-.0005) but is statistically insignificant. Our

findings are in line with some of the previous findings, for instance; Garret (1995) and Gemmell (2007) found no relation between trade openness and size of government in OECD countries. Moreover Molana et al. (2004) and Aydogus and Topcu found no long run relation between TO and SOG.

Table 5.1 shows that control variables, per capita GDP holds positive sign which is statistically significant in all specification. This may be due to reason that countries with high per capita income afford high living standard better health condition, improved health facilities and better access to education and knowledge spillover. There might be one more reason of this positive association, provided by Milhaylova (2015) that due to lower level of development increase in per capita GDP raises income inequality. Our result is empirically supported by some earlier work on SES components, for instance Faustino and Vali (2011); Milhaylova (2015); Bergh and Nilsson (2010a) found significant positive effect of per capita GDP on income inequality.

Unemployment (UN) enters in all models with positive sign that is statistically significant. The coefficient of unemployment variable in all the specifications indicates that it brings about 1 to 3 point change in SES of selected Asian economies. Positive association of unemployment is empirically in line with the findings of Faustino and Vali (2011).Similarly, physical capital which is another control variable of our study, is positive and significant in all the specification and the coefficient values indicates that it brings about one point change in the dependent variable, SES.

The system GMM estimator is consistent if there is no second order serial correlation in the residuals. The dynamic panel model using two-step estimates is valid if the estimator is

consistent and instruments are valid. The First order and second order serial correlation has also been tested by using AR1 and AR2 statistics as indicated by Arellano and Bond (1991). As the p-values of AR1 and AR2 statistics in table 5.4 is greater than 0.05 in all specifications indicates that the null hypothesis "no serial correlation" is not rejected. Hence, our dynamic model, using two steps estimates presents consistent estimates. To check the validity of instrumental variables we used Sargan test. In all specifications, P- value of Sargan test is greater than 0.05 , hence the null hypothesis "over identifying restrictions are valid" is not rejected, which indicates that instruments are valid in all the specifications.

CHAPTER 6

Conclusion and Policy Implications

As the key objective of the study is to investigate the impact of globalization. In this association, we have tried to investigate the impact of globalization multiple socio-economic dimensions including life expectancy, income inequality, and size of government, urbanization rate, and education. The empirical analyses have been carried out for seventeen Asian economies over the period 1991-2014. The dynamic model has been estimated through GMM estimation technique. Brief summarization of key the findings of the study are presented as follows.

The study findings revealed that overall globalization have a positive and significant impact on our dependent variable socio-economic structure. Similarly, empirical findings of the study indicate that like overall globalization, economic, social, and political globalization have a positive and significant impact on socio-economic structure of the selected Asian countries. The one key outcome that one can draw from these findings is that each type of globalization prove beneficial for the social economic structure of the selected Asian countries. The study findings also indicate that when we use FDI as a proxy of globalization it is negatively associated with socio-economic structure of the sample countries. The result illustrate that FDI degenerating the socio-economic structure of the sample countries. In all specifications the all our control variables enters with positive signs and significantly.

6.1. Policy Recommendations

Although study have some limitations, however based on study findings, we are offering some recommendations that may direct policy about globalization.

- As our findings indicate that globalization have a positive impact on socio-economic structure, hence it may be used as a policy tool to improve socio-economic structure of an economy.

- As along with economic globalization, social and political globalization have a positive impact on socio-economic structure, hence for the socio-economic fabrication policy makers should also considered social and political globalization while designing policies.

- It is also suggested that to improve overall socio-economic structure of sample countries, trade openness and FDI are not enough tools, the policy makers should consider broader aspects of globalization.

6.2. Limitations of the Study

Despite the fact that we have estimated the possible comprehensive empirical model in our study, however, there are still some limitations that can be tackled in future research. Due to time constriction, empirical analysis has been carried out for 17 non-oil producing Asian economies. The analysis should be carried out for larger sample and regional wise over the extended time period.

6.3. Future Research

Firstly, the study has not considered poverty in developing socio-economic index; hence, it should be suggested to consider the role of poverty while developing a comprehensive index of socio-economic structure index. Secondly, the study has not considered corruption while analyzing the relation between globalization and SES, therefore it should be suggested to consider corruption index while analyzing the relation in future research.

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APPENDIX

APPENDIX A

Socio-Economic Structure index

Variable name	Proxy	Data source
Income inequality	Gini coefficient	UNU Wider, WIID3b
Size of government	Gross national expenditure(% of total GDP)	World development indicators
Urbanization rate	Urban population (% of total)	World development indicators
Female labor force participation	Labor force, female(% of total labor force)	World development indicators
Health	Life expectancy at birth, total (years)	World development indicators
Education	School enrolment, primary(% gross)	World development indicators

APPENDIX B

2015 KOF Index of Globalization

Indices and Variables	Weights
A. Economic Globalization	**[36%]**
i) Actual Flows	(50%)
Trade (percent of GDP)	(22%)
Foreign Direct Investment, stocks (percent of GDP)	(27%)
Portfolio Investment (percent of GDP)	(24%)
Income Payments to Foreign Nationals (percent of GDP)	(27%)
ii) Restrictions	(50%)
Hidden Import Barriers	(24%)
Mean Tariff Rate	(28%)
Taxes on International Trade (percent of current revenue)	(26%)
Capital Account Restrictions	(23%)
B. Social Globalization	**[38%]**
i) Data on Personal Contact	(33%)
Telephone Traffic	(25%)
Transfers (percent of GDP)	(3%)
International Tourism	(26%)
Foreign Population (percent of total population)	(21%)
International letters (per capita)	(25%)
ii) Data on Information Flows	(35%)
Internet Users (per 1000 people)	(36%)
Television (per 1000 people)	(38%)
Trade in Newspapers (percent of GDP)	(26%)
iii) Data on Cultural Proximity	(32%)
Number of McDonald's Restaurants (per capita)	(44%)
Number of Ikea (per capita)	(44%)
Trade in books (percent of GDP)	(11%)
C. Political Globalization	**[26%]**
Embassies in Country	(25%)
Membership in International Organizations	(27%)
Participation in U.N. Security Council Missions	(22%)
International Treaties	(26%)

Source:

Dreher, Axel, 2006, Does Globalization Affect Growth?
· Empirical Evidence from a new Index, *Applied Economics* 38, 10: 1091-1110.

Updated in:

Dreher, Axcl; Noel Gaston and Pim Martens, 2008, *Measuring Globalization
- Gauging its Consequence*, New York: Springer.

Appendix C

Table 5.3 Socio-economic structures and globalization, 1991-2014, fixed effect

Variables	SES is taken as Dependent Variable
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
CONSTANT	-3.256 (14.025)***	-3.116 (12.834)***	-2.725 (13.209)***	-2.834 (11.180)***	-1.863 (8.266)***	-2.091 (8.979)***
$PCgdp_{it}$	0.0001 (4.125)***	0.0001 (5.864)***	0.0001 (5.045)***	0.0001 (5.540)***	0.0002 (9.920)***	0.0002 (8.928)***
UN_{it}	0.011 (0.735)	0.003 (0.217)	0.003 (0.207)	0.003 (1.194)	0.020 (1.105)	0.014 (0.801)
CF_{it}	0.0098 (2.034)***	0.011 (2.222)***	0.015 (3.333)***	0.013 (2.496)***	0.027 (4.437)***	0.019 (3.66)***
OG_{it}	.0504 (11.23)***	-----	-----	----	------	------
EG_{it}	----	0.043 (9.523)***	-----	----		
SG_{it}	----	----	0.048 (11.701)***	----		
PG_{it}	----	----	----	0.024 (7.165)***		
FDI_{it}	-----	-----			-0.016 (1.469)	
TR_{it}	-----	.-----				0.006 (3.576)***
No. of Countries	17	17	17	17	17	17
No. of Observations	408	408	408	408	408	408
R-square(within)	0.416	0.37	0.42	0.31	0.23	0.25
F-stat	13.812	11.52	14.51	8.98	5.80	6.48
Prob>f	0.00	0.000	0.00	0.000	0.000	0.000
D.W stat	0.405	0.408	0.433	0.33	0.305	0.333
Note; t value is in parenthesis *,** and *** shows level of significance at 10% ,5% and and 1% ,respectively.

SES is taken as Dependent Variable, Random Effect Estimates						
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
CONSTANT	-1.267 (7.46)***	-8.43 (5.32)***	-6.919 (4.92)***	-.9874 (5.61)***	-.3436 (2.53)***	-.5250 (3.50)***
$PCgdp_{it}$	-9.66e-06 (2.18)***	2.49e-06 (0.59)	-9.84e-06 (2.05)***	-2.02e-06 (0.46)	5.49e-06 (1.25)	7.88e-06 (1.80)
UN_{it}	0.0036 (0.05)	-0.0059 (0.81)	-0.0047 (0.66)	0.0166 (2.20)***	0.0036 (0.48)	0.0045 (0.62)
CF_{it}	0.0024 (0.57)	0.0080 (1.85)	0.0054 (1.26)	0.0062 (1.43)	0.0115 (2.50)***	0.0108 (2.46)***
OG_{it}	.0253 (8.10)***	-----	-----	----	------	------
EG_{it}	----	0.0135 (5.49)***	-----	----	------	------
SG_{it}	----	----	0.0167 (6.31)***	----	------	------
PG_{it}	----	----	----	0.0111 (5.49)***	------	------
FDI_{it}	-----	-----	-----	------	-0.0008 (0.11)	------
TR_{it}	-----	------	------	------	------	0.0023 (2.73)***
No. of Countries	17	17	17	17	17	17
No. of Observations	408	408	408	408	408	408
R-square(within)	0.37	0.29	0.36	0.25	0.04	0.10
Wald chi2	75.38	39.18	49.24	39	8.46	16
P>chi2	0.00	0.000	0.00	0.000	0.076	0.002

Note; t value is in parenthesis

*,** and *** shows level of significance at 10% ,5% and 1% ,respectively.

Appendix D

Weights assigned to SES

COUNTRY	LE	PE	FLP	UR	PRE	GIN
ARM	0.561	0.203	0.13	0.068	0.036	0.0005
AZE	0.637	0.2662	0.056	0.0349	0.0042	0.0017
BGD	0.7812	0.1113	0.0662	0.0301	0.0111	0.0001
CHN	0.7265	0.1519	0.0783	0.0277	0.0144	0.0013
IDN	0.5664	0.2928	0.0902	0.0333	0.0171	0.0003
IND	0.709	0.2283	0.0425	0.0143	0.0058	0.0001
JPN	0.7481	0.1488	0.0514	0.0366	0.0112	0.004
KAZ	0.5871	0.3033	0.048	0.0315	0.0187	0.0114
KGZ	0.4663	0.3132	0.1199	0.0668	0.0234	0.0103
KHM	0.6699	0.1869	0.0797	0.0417	0.0191	0.0027
KOR	0.6106	0.2454	0.0855	0.0486	0.0081	0.0019
MYS	0.6756	0.2593	0.0394	0.0167	0.0084	0.0007
NPL	0.7726	0.1743	0.0278	0.0193	0.0059	0.0001
PAK	0.716	0.1739	0.1017	0.0052	0.0023	0.0009
PHL	0.5976	0.2682	0.0937	0.0293	0.0091	0.0021
THA	0.4982	0.2073	0.1616	0.0938	0.0387	0.0004
VNM	0.5158	0.2159	0.1207	0.1028	0.0433	0.0015

Ordinary correlations:

	LE_ARM	PE_ARM	FLP_ARM	UR_ARM	PRE_ARM	GIN_ARM
LE_ARM	1.000000					
PE_ARM	-0.347458	1.000000				
FLP_ARM	-0.760443	0.298857	1.000000			
UR_ARM	-0.976612	0.263370	0.656224	1.000000		
PRE_ARM	0.589395	-0.263030	-0.686270	-0.612164	1.000000	
GIN_ARM	-0.060844	0.287035	0.399816	-0.044480	-0.271036	1.000000

	LE_AZE	PE_AZE	FLP_AZE	UR_AZE	PRE_AZE	GIN_AZE
LE_AZE	1.000000					
PE_AZE	-0.646519	1.000000				
FLP_AZE	0.986610	-0.658820	1.000000			
UR_AZE	0.520227	-0.689287	0.574131	1.000000		
PRE_AZE	-0.600757	0.118051	-0.543153	0.197779	1.000000	
GIN_AZE	-0.512954	0.836796	-0.539954	-0.889620	-0.037509	1.000000

	LE_BGD	PE_BGD	FLP_BGD	UR_BGD	PRE_BGD	GIN_BGD
LE_BGD	1.000000					
PE_BGD	0.483982	1.000000				
FLP_BGD	0.595104	0.573665	1.000000			
UR_BGD	0.974491	0.567983	0.757124	1.000000		
PRE_BGD	0.864576	0.474550	0.779965	0.918778	1.000000	
GIN_BGD	0.828917	0.634578	0.784076	0.886997	0.790349	1.000000

	LE_CHN	PE_CHN	FLP_CHN	UR_CHN	PRE_CHN	GIN_CHN
LE_CHN	1.000000					
PE_CHN	-0.296197	1.000000				
FLP_CHN	-0.754928	0.424106	1.000000			
UR_CHN	0.981968	-0.261939	-0.816514	1.000000		
PRE_CHN	0.672312	-0.161109	-0.782137	0.724523	1.000000	
GIN_CHN	0.935131	-0.366801	-0.768997	0.912187	0.676951	1.000000

	LE_IDN	PE_IDN	FLP_IDN	UR_IDN	PRE_IDN	GIN_IDN
LE_IDN	1.000000					
PE_IDN	0.112175	1.000000				
FLP_IDN	0.018740	0.489011	1.000000			
UR_IDN	0.997751	0.084749	-0.015898	1.000000		
PRE_IDN	-0.822643	-0.094675	0.189315	-0.833233	1.000000	
GIN_IDN	0.693594	0.648066	0.420581	0.674443	-0.534400	1.000000

	LE_IND	PE_IND	FLP_IND	UR_IND	PRE_IND	GIN_IND
LE_IND	1.000000					
PE_IND	0.784000	1.000000				
FLP_IND	-0.642324	-0.689477	1.000000			
UR_IND	0.989247	0.806432	-0.730665	1.000000		
PRE_IND	0.915294	0.794465	-0.552352	0.923986	1.000000	
GIN_IND	0.405282	0.199436	0.333528	0.332861	0.551005	1.000000

	LE_JPN	PE_JPN	FLP_JPN	UR_JPN	PRE_JPN	GIN_JPN
LE_JPN	1.000000					
PE_JPN	0.698152	1.000000				
FLP_JPN	0.868197	0.785150	1.000000			
UR_JPN	0.939071	0.714495	0.949897	1.000000		
PRE_JPN	0.523526	0.744374	0.620850	0.577231	1.000000	
GIN_JPN	0.822914	0.462136	0.606909	0.715584	0.274159	1.000000

	LE_KAZ	PE_KAZ	FLP_KAZ	UR_KAZ	PRE_KAZ	GIN_KAZ
LE_KAZ	1.000000					
PE_KAZ	-0.551416	1.000000				
FLP_KAZ	0.396471	-0.689773	1.000000			
UR_KAZ	-0.767674	0.817295	-0.767406	1.000000		
PRE_KAZ	0.216226	0.385351	-0.677668	0.257294	1.000000	
GIN_KAZ	-0.803419	0.478348	-0.226208	0.603671	-0.365362	1.000000

	LE_KGZ	PE_KGZ	FLP_KGZ	UR_KGZ	PRE_KGZ	GIN_KGZ
LE_KGZ	1.000000					
PE_KGZ	0.568046	1.000000				
FLP_KGZ	-0.594559	-0.651949	1.000000			
UR_KGZ	-0.334255	-0.363267	0.758765	1.000000		
PRE_KGZ	0.064928	0.187010	0.380261	0.738052	1.000000	
GIN_KGZ	-0.390475	-0.251827	0.175369	-0.253761	-0.266568	1.000000

	LE_KHM	PE_KHM	FLP_KHM	UR_KHM	PRE_KHM	GIN_KHM
LE_KHM	1.000000					
PE_KHM	-0.758360	1.000000				
FLP_KHM	-0.734467	0.499513	1.000000			
UR_KHM	0.961520	-0.633461	-0.715093	1.000000		
PRE_KHM	0.867799	-0.783890	-0.732277	0.783179	1.000000	
GIN_KHM	-0.217102	0.205976	-0.124692	-0.181852	0.049682	1.000000

	LE_KOR	PE_KOR	FLP_KOR	UR_KOR	PRE_KOR	GIN_KOR
LE_KOR	1.000000					
PE_KOR	-0.407419	1.000000				
FLP_KOR	0.951758	-0.241127	1.000000			
UR_KOR	0.953675	-0.442556	0.914367	1.000000		
PRE_KOR	-0.554553	0.349755	-0.644799	-0.690321	1.000000	
GIN_KOR	-0.291629	-0.453252	-0.373776	-0.330230	0.192246	1.000000

	LE_MYS	PE_MYS	FLP_MYS	UR_MYS	PRE_MYS	GIN_MYS
LE_MYS	1.000000					
PE_MYS	-0.555075	1.000000				
FLP_MYS	0.932201	-0.415377	1.000000			
UR_MYS	0.987567	-0.627551	0.919963	1.000000		
PRE_MYS	0.902850	-0.243730	0.880674	0.841318	1.000000	
GIN_MYS	-0.127958	0.672530	-0.040066	-0.207519	0.151001	1.000000

	LE_NPL	PE_NPL	FLP_NPL	UR_NPL	PRE_NPL	GIN_NPL
LE_NPL	1.000000					
PE_NPL	0.834110	1.000000				
FLP_NPL	0.926913	0.754612	1.000000			
UR_NPL	0.999034	0.827386	0.938217	1.000000		
PRE_NPL	0.793810	0.867673	0.706536	0.790630	1.000000	
GIN_NPL	-0.279675	-0.675514	-0.277386	-0.278144	-0.655645	1.000000

	LE_PAK	PE_PAK	FLP_PAK	UR_PAK	PRE_PAK	GIN_PAK
LE_PAK	1.000000					
PE_PAK	0.477855	1.000000				
FLP_PAK	0.947134	0.611232	1.000000			
UR_PAK	0.980573	0.540423	0.981457	1.000000		
PRE_PAK	0.977418	0.570374	0.978091	0.984927	1.000000	
GIN_PAK	-0.059313	-0.158350	0.038152	-0.026289	-0.067225	1.000000

	LE_PHL	PE_PHL	FLP_PHL	UR_PHL	PRE_PHL	GIN_PHL
LE_PHL	1.000000					
PE_PHL	-0.544532	1.000000				
FLP_PHL	0.953101	-0.419918	1.000000			
UR_PHL	-0.964362	0.609830	-0.898895	1.000000		
PRE_PHL	-0.339457	0.421865	-0.239850	0.463188	1.000000	
GIN_PHL	-0.088193	0.348320	-0.004076	0.280541	0.796639	1.000000

	LE_THA	PE_THA	FLP_THA	UR_THA	PRE_THA	GIN_THA
LE_THA	1.000000					
PE_THA	-0.323187	1.000000				
FLP_THA	0.157519	-0.291516	1.000000			
UR_THA	0.996007	-0.310992	0.121474	1.000000		
PRE_THA	0.015293	0.085963	0.257459	-0.026023	1.000000	
GIN_THA	-0.792667	0.364277	-0.321054	-0.797309	-0.069194	1.000000

	LE_VNM	PE_VNM	FLP_VNM	UR_VNM	PRE_VNM	GINI_VNM
LE_VNM	1.000000					
PE_VNM	-0.300026	1.000000				
FLP_VNM	0.239492	-0.295877	1.000000			
UR_VNM	0.967950	-0.344449	0.188675	1.000000		
PRE_VNM	-0.501790	-0.008301	0.063006	-0.465682	1.000000	
GINI_VNM	0.647092	-0.430691	0.298708	0.778759	-0.125927	1.000000