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#### **Abstract**

Social cohesion is not only desired for societal and political constancy but a prerequisite for sustainable economic growth and development as well. There are several factors which can mark social solidity. Current study employs the Least Squares Dummy Variables (LSDV) technique to discover the effect of globalization, diversity and income inequality on social cohesion. The analysis is conducted for several developed and developing economies, using panel data from 1990 to 2010. The results demonstrate that globalization has a substantial negative impact on social cohesion. Both diversity and Inclusiveness boost social cohesion however diversity is relatively more important in developed countries. Income inequality is also found to be detrimental for social cohesion particularly in developing countries where certain segment of population is already living below subsistence level.

**Keywords**: social cohesion, globalization, inequality, diversity, JEL classification: F6, D63, D7

#### Introduction

Social cohesion is often viewed as a political term or attractive slogan, which is used and militarized by policy-makers to capture a sense of idealized closeness within society (Bernard 1999). The multidimensional nature of the concept has resulted in a number of definitions which designate differences of content as uttered through the tagging of the dimensions of the impression. Jenson (1998) specified social cohesion in terms of belonging, inclusion, participation, recognition and legitimacy. Berger-Schmitt (2000:7) argue that "elements of a society's social cohesion form an integral part of the quality of life experienced by individuals – including perceived inequalities in the work-place, school or neighborhood – and that 'quality of life represents the common overarching policy goal with social cohesion as an important component to be addressed".

United Nations (2012) suggested social inclusion to consist of three constituents' social inclusion, social capital and social mobility. "Social inclusion refers to the degree to which all citizens can participate on equal footing in the economic, social and political life, including whether people are protected in times of need. Social capital refers to trust between people and in institutions and the sense of belonging to a society. Social mobility refers to equality of opportunity to get ahead". More cohesive societies are not only considered better places to live in but also ensure effective state management.

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Social Cohesion can impact economic growth through four different channels namely through reduced transaction costs, facilitating collective action, encouraging capital accumulation and by maximizing allocative efficiency. Empirical studies advocate a positive correlation between generalized social capital and economic growth (Knack and Keefer 1997). Pervaiz and Chaudhary (2015) also suggested that social cohesion enhances economic growth. Social cohesion gives rise to positive externalities in the form of providing, monitoring, and imposing the delivery of needed public goods such as infrastructure, schooling or health (Ostrom 1990). Lack of social cohesion constrains inclination to contribute to shared funds and public investments. Empirical evidence reveals that there is lack of provision of health care, education attainment and little access to roads in societies featured by ethnic and religious divide - both within countries (Alesina et al., 1999, Keefer and Khemani 2004), and between countries. (Alesina et al. 2004). Hence greater social cohesion makes it possible to allocate resources more efficiently. Lack of social cohesion leads to sub optimal outcomes and results in discrimination and exclusion of certain groups or individuals. Empirical literature submits inclusiveness and diversity as two important determinants of social cohesion. The proponents of diversity thesis consider diversity as a menace to social cohesion due to the fact that people may like to trust and mingle up only with people: who share certain characteristics with them i.e. belong to their caste or tribe, speak same language or have alike culture (McPherson et al., 2001). Similarly, the probability of antipathy increases with a rise in diversity or heterogeneity in a society (Quillian, 1995) and trust among people may remain low as it is at ease to cultivate customs of mutuality and confidence in the civilizations with racial and ethnic homogeneity (Alesina and La Ferrara, 2002, Miller, 1995; Messick and Kramer, 2001; 2002; Delhey and Newton 2005; Putnam, 2007).

Some studies however suggest that it is not diversity rather socioeconomic inclusiveness which is more important for social cohesion. It depends more upon circumstantial variables rather than diversity (Breton et al., 2004) as social relations may be influenced more by educational and income level (Tolsma et al., 2009) thus offsetting the damaging influences of diversity. Socioeconomic exclusion and deprivations usually outweighs ethno-linguistic diversity (Letki, 2008). Lack of social cohesion is more likely to be caused by socio-economic factors than by diversity (Gijsberts et al., 2012). Furthermore, diversity may even promote social cohesion as people with diverse backgrounds learn to live together in harmony with positive attitudes and having confidence in each other (Oliwer and Wong, 2003). Charitable work, confidence and communal help not only reduce ethnic diversity (Gijsberts et al., 2012) but also leads to increased social trust (Kazemipur, 2006).

In present era of globalization; Cultural, social, political and economic subtleties are constantly changing. Al-Rodhan and Stoudmann (2006) defines globalization as "Globalization is a process that encompasses the causes, course, and consequences of transnational and transcultural integration of human and non-human activities". Globalization may lead to both inequalities and immigration related diversity which are the major determinants of social cohesion. Globalization augments inequalities

(Meschi and Vivarelli, 2009; Pavcnik, 2011; Lindert and Williamson, 2003; Chossudovsky, 2016); Globalization may enhance both poverty and inequality (Kang-Kook, 2014). A major anxiety of opponents of globalization is that it reduces the role of the state or in other way it can be said that states where institutions are not strong, are not in a position to face the adjustment costs of globalization. The states where institutions are much stronger have the ability to channelize globalization for their own advantage. If there are no effective social policies for health, education and social security, there are more chances that benefits of globalization are not equally reaped. Strong policies are needed to protect the sick, elderly, to combat the social exclusion of minority groups and to protect the other vulnerable segments of the economy; it is to be ensured that the benefits of globalization are more equally distributed.so globalization may reduce social cohesion by increasing disparities, particularly in developing countries. Secondly globalization may reduce social cohesion by creating diversity due to immigration; as due to globalization there is increasing tendency of growing population of mixed ethnic, racial heritage due to the product of relationship between native population and immigrants. A large proportion of the children are the result of mixed partnerships (Platt, 2009). As the result of immigration there are people who differs each other in a number of ways and these differences can create both challenges and opportunities. Significant literature is emerging which is concerned about the immigrants, how they live and how space is shared between natives and migrant groups. An early example that considers the ethnic group spatial patterns is by (Owen, 1994). Recently (Simpson, 2009) estimated the trends towards segregation across different groups. Social cohesion is very essential for immigrants due to the fact that it defines their integration to new societies and cultures. The influences of immigration may be felt in different sectors like: jobs, education and housing, language and diet. So there is needed to ensure that the second generation migrant offspring enjoy the same life opportunities as their peers. If it does not happen smoothly and successfully, it may result in segregation, mistrust and grievance.

In order to comprehend the social impacts of immigration, immigrants in any locality can be surveyed about their level of trust on local resident as lack of trust may lead to fragmentation and division in society. New immigrants are usually reluctant in adopting values and culture of the native born population. The attitudes and conducts of the local population have an important bearing on integration outcomes for immigrants. The main literature in this regard is from political science and includes broad surveys of public attitudes towards immigration/immigrants (DCLG, 2010), Evans (2003) explains the factors which differentiate attitudes in particular segments of the public. The causes of underlying change in the social attitudes towards immigration, diversity and race explained by (Ford, 2008, 2011; Putnam, Clark and Fieldhouse, 2010). We may say that globalization may influence social cohesion either by creating diversity through immigration (it is more relevant to developed economies) or it may affect social cohesion through macroeconomic deprivations (this is more relevant to developing countries as developed countries are in a better position to use globalization to their own advantage.). It in in this context that current study

emphases both developing and developed economies. The study is organized as follows; A short summary of relevant literature is provided in section II, section III describes the model to be estimated, Section IV provides a brief description of variables, dataset used and methodology.. Section V and VI conclude the study and provide policy guidelines on the basis of findings of the research.

#### **Literature Review**

Social cohesion may be considered deeply rooted in history, culture and social norms Huntington (1996) concluded that culture largely influenced by religion is the cause of conflict of civilizations. Social control theory (Hirschi, 1969) concluded that social and cultural values outline the individual behavior and their interactions with other people. The level of trust among people belonging to different cultures and ethnic groups is low (Sampson et al., 1997) and hence there is a higher probability of conflict among people belong to different groups (Quillian (1995)). Religious connotations are also vital in determining social relationships. Park (2012) concluded an inverse association among religious connections and interracial attachment. Putnam (2007) found that ethnically diverse people are more likely to be isolated due to lack of social integration and connections.

Oliwer and Wong (2003) however suggested that people living in dissimilar settings are more likely be more tolerant and to have positive attitude towards others. (see Stolle et al 2008) Zimdars and Tampubolon (2012) concluded that diversity has a positive impact on trust. Staveren and Pervaiz (2015) investigated the impact of ethnic fractionalization on social cohesion and suggested that it is social exclusion which is the threat to social cohesion rather than diversity. Green et al. (2006) argued that inequality in access to education can be an important determinant of social cohesion and might lead lead to societal skirmish (Alesina and Perotti, 1996; Perotti, 1996). Vervoot et al. (2010) pointed out that it is not ethnic diversity rather ethnic concentrationwhich may harm social cohesion by creating strong intra-group relations and weakening inter-group relations.

Phan (2008) found that in case of Canada, racial diversity has no significant relation with social cohesion indicated by social trust. Bjornskov (2007) in his analysis did not find much support for association between ethnic dissimilarities and trust levels. Michalski et al (1997) highlighted the prospective glitches that various societies may have to face in relation to globalization. There might be different outcomes ranging from no change to a whole list of fundamental changes. The problems of the poorest American could deepen, unemployment in Europe may rise, Japan may find its lifelong employment and the seniority principle under rising pressure. While countries with high growth rates may generate auspicious atmosphere on the social front through gains from technological modernization, slackened markets, and improved economic situations.

Snower (1997) mentioned that how it might become hard to achieve higher economic performance and social cohesion simultaneously in next few years due to challenges

imposed by globalization after the removal of trade obstacles and huge foreign direct investment influx. One important outcome is that developed states are getting high comparative benefit in the manufacturing of skillful labor intensive products leading to a rise in demand for skilled labor force has in Europe and United States. This is leading to a persistent rise in wage inequalities in USA and rise in unemployment level of unskilled workers in Europe. These rising wage inequalities and escalating unemployment levels are increasing income inequalities and hence damaging social cohesion.

Hasan (2013) discussed and evaluated the policies adopted by Singapore in handling diversity and preserving social cohesion. The study particularly highlighted the role of targeted prosperity programs to assist the low income segment, constriction of migration guidelines and elevation of communal and cultural actions to enhance the mixing of immigrants in this regard. Hung (2014) advocated that authoritarian rule in Malaysia for decades has eroded the institutional foundation of the country. The study suggested various policy options to strengthen social cohesion including improving public confidence in state institutions; reformation of the schooling system; ensuring a more inclusive nationhood, and empowering non-Malay\Muslim indigenous public. Jiwei (2014) discussed various options to enhance inclusiveness and equalized access in PRC including fiscal transfers to local governments, improving budget making and management system, and reforming fragmented social programs.

Dheret (2014) analyzed the impact of Economic Crisis in Europe on social cohesion. The author suggested that in order to avoid the crisis there is need of such policies which can eliminate the divides among the society. It is argued that economic growth and welfare policies of the state have greater association with social cohesion. Hemerijck (2014) analyzed the impact of social investments on cohesiveness of the societies and highlighted resource constraint faced by countries in this regard. Graziano (2014) discussed that how being a member of European Union has affected social cohesion, employment situation and economic performance of Italy and suggests that the initial policies adopted by the new Rienzi government led to more "inclusive" direction, although with limitations.

Braun (2014) pointed out that civil participation can play a vital role in building up social capital keeping in view the government resource constraints. The change in notion of government responsibility and related changes in split of responsibilities in the "welfare mix" between Government, market, third sector and private households can have a significant impact on social cohesion. Demireva (2012) highlighted as to how a partnership between government and civil society can aid in handling diversity and adoption of different environments. Pervaiz et al (2013) analyzed the impact of social disparity and assortment on social cohesion. The findings suggested that social equality is relatively more important as compared to diversity in explaining social cohesion. Asghar et al (2015) investigated the influence of globalization on social cohesion in a panel of ninety-nine economies and concluded that globalization is the actual danger to social cohesion.

## **Model Specification**

This section explains the empirical specification of the model used to investigate the relationship between globalization, diversity, income inequality and social cohesion. As discussed earlier, there are several factors which may influence social cohesion i.e. diversity, income inequality, socioeconomic deprivations. However, in current era of rapid globalization cultural, social, political and economic dynamics are continuously changing but this factor has not been given due consideration in existing literature therefore we have included globalization in our model.

The fixed effect model used in current study is given as

$$Y_{it} = X_{it} \beta + Z_i \alpha + \varepsilon_{it}$$

Where i = cross section dimension, t = time series dimension

Yit = Social cohesion, which is the dependent variable and represents inter group cohesion in ith country at tth time.

 $X_{it} \beta = Matrix of regressors.$ 

 $Z_{it} \alpha$  = the heterogeneity or individual effects,

Zi in this model has an intercept term and it encompasses country specific variables, which may or may not be observable. In case all the country specific characteristics are constant, observable and unrelated with independent variables, it will be a simple Classical Linear Regression Model which can be estimated through simple Ordinary Least Square (OLS). On the other hand if country specific effects are unobservable, vary across space and correlated with regressors then simple OLS estimation will give biased and inconsistent results. In such a scenario it is more appropriate to use least square dummy variables (LSDV) technique or the fixed effect model. In this model a dummy variable is created for each country to capture country specific unobserved features. This effect is reflected in differences in intercept terms and intercept. The modified model can be written as

$$Y_{it} = X_{it} \beta + \alpha_i + \varepsilon_{it}$$
 [2]

The term  $\alpha i$  captures all those effects and computes the estimable conditional mean. Under the assumption of no correlation among country observed effects and regressors the error term will have two components i.e. country specific error and the combined time series and cross section error. This model would have a random intercept as follows:

$$Y_{it} = X_{it}\beta + E[Z_i\alpha] + \{Z_i\alpha - E[Z_i\alpha]\} + \varepsilon_{it}$$
  
=  $X_{it}\beta + \alpha + \mu_i + \varepsilon_{it}$  [3]

Current study has utilized Hausman test to check whether random effects or fixed effect model is better for estimation of the model.

## **Data and Variable Depiction**

Current study is based on Panel data (five-year average) ranging from 1990 to 2010 (1990, 1995, 2000, 2005, and 2010). Main sources of data are world development indicators (WDI), data base of International Institute of Social Studies (Indices of Social Development), The Quality of Government Basic Dataset by University of Gothenburg, and the standardized world income inequality data base (SWIID Version.5). Following are various variables used in present study:

## **Intergroup Cohesion**

Inter group cohesion is the dependent variable. Data on inter group cohesion is collected from Indices of Social Development. It is an index constructed by using the matching percentiles methodology. The index has several components like: Level of civil disorder, Level of internal conflict, Risk of terrorism, Level of ethnic tensions, Level of religious tensions, level of minority agitation in the society, level of discernment against minorities, inequalities between minorities in the society, number of events reported regarding violent riots and guerrilla activity etc. [for further details see Foa and Tanner (2012)].

**Globalization** The study utilizes KOF index developed by Dreher (2006) to measure the level of globalization. Globalization may improve social cohesion only if it leads to a broader and equitable access to economic and social opportunities mitigate disparities and obliterates poverty.

## **Inclusion of minorities**

Inclusion of Minorities Index provides an assessment of how minorities are treated in a society. This index highlights that if there is general partiality amid managers, administrators, and other members of the society in the allocation of jobs, benefits regarding particular social groups, the level of discrimination against susceptible groups such as native peoples, nomads, expatriates, or lower caste groups. Inclusion of minorities is used to incorporate the dimension of Inclusiveness. Data on the said index is collected from International Institute of Social Studies.

**Linguistic diversity:** it is measured by the likelihood that if two individuals who are randomly selected from a given country belong to diverse linguistic groups. The index of linguistic diversity ranges between 0 and 1, where a higher value shows greater diversity and vice versa. Linguistic diversity has positive implications for social

cohesion if individuals in a society are open-minded and refined enough to live together in a peaceable manner.

**Religious diversity:** It is measured by the likelihood that if two individuals who are randomly selected from a given country belong to diverse religious groups. This index of religious diversity also lies between 0 and 1, where a higher value shows greater diversity and vice versa. The data on religious diversity is taken from The Quality of Government Basic Dataset by University of Gothenburg. Absence of religious harmony and lack of respect for each other's beliefs can lead to serious conflicts and clashes in a country.

**Ethnic diversity** is measured by the likelihood that if two randomly selected individuals from a given country belongs to different ethnic groups. The index of ethnic diversity lies between 0 and 1, where a higher value shows greater diversity and vice versa. The data on religious diversity is taken from The Quality of Government Basic Dataset by University of Gothenburg. Ethnic diversity can have positive or negative implications for social cohesion. Ethnic diversity can be a threat to social consistency if various groups are not willing to accept and respect each other's diverse values.

**Income Inequality** Gini coefficient is used to measure income inequality which ranges from 0 to 100. A zero value indicates that there is perfect equal distribution of income and a value of hundred indicates that there is perfect inequality in distribution of income. A higher level of income inequality can lead to weakening of the social fiber and can damage social cohesion in a country. Data on Gini coefficient is collected from the standardized world income inequality data base (SWIID).

**GDP** is the Gross domestic product is used to measure affluence in the society. An increase in GDP is anticipated to augment social cohesion in the economy as it will result in greater well-being and less deprivation. An increase in overall well-being means greater life satisfaction and lower level of bitterness for each other. Hence higher GDP is expected to enhance social cohesion. Data on GDP is collected from world development indicators (WDI).

**Education**: Average year of schooling is used as a measure of education level and data in this regard is collected from Barro and Lee (2013). A higher level of education is expected to enhance social inclusion by bestowing and empowering individuals with, not only, higher negotiation and conflict resolution skills but also by making them more conscious and enlightened of their moral, social and legal obligations towards betterment and amelioration of the society.

**Economic globalization** the level of economic globalization is measured through an index encompassing the extent of international movements through volume of trade, foreign direct investment and portfolio investments. Data on globalization index and

data is collected from the Quality of Government Basic Dataset. Economic globalization can have positive or negative implications for social cohesion depending upon the net effect of advantages grasped and damages experienced.

**Social globalization** is measured by an index ranging between 0 and 100. The components of this index include: worldwide individual links, information flows and cultural vicinity. The extent of social globalization can have inferences for social cohesion depending on the net outcome of the advantages grasped or damages endured.

## **Empirical Results**

The results of empirical analysis are summarized in Table 1 and 2 below.

**Table.1 Results of LSDV Model for Developed Countries** (Dependent variable: inter group cohesion.)

		140			D 1 111000C		cropea c	ountiles (	Dependent				·	
		1	2	3	4	5	6	7	8	9	10	11	12	13
Overa Globaliza		00355** (0.057)			00355** (0.057)			00355*** (0.042)			0063*** (0.035)	0063*** (0.035)	0063*** (0.035)	0089*** (0.008)
Globaliza	ation	(0.037)			(0.037)			(0.042)			(0.033)	(0.033)	(0.033)	(0.008)
Economic			0065***			0065***			0065***					
globalization			(0.000)			(0.000)			(0.000)					
Social globa	Social globalization			00216**			0021**			0021**				
				(0.096)			(0.096)			(0.096)				
Income		.00068	.0048	00056	.00068	.0048	00056	.000683	.0048	00056				
Inequal	ity	(0.883)	(0.263)	(0.901)	(0.883)	(0.263)	(0.901)	(0.904)	(0.263)	(0.901)				
Log of C	GDP	.131***	.1563***	.1070***	.131***	.1563***	.107***	.131***	.156***	.1070***	.272***	.272***	.272***	.216***
		(0.018)	(0.002)	(0.016)	(0.018)	(0.002)	(0.016)	(0.004)	(0.002)	(0.016)	(0.000)	(0.000)	(0.000)	(0.001)
Ethnic		-1.063***	-1.416***	854***							-2.106***			
Divers	ity	(0.015)	(0.001)	(0.012)							(0.000)			
Linguis	Linguistic				5.055***	6.732***	4.061***					10.010**		
Divers	Diversity				(0.015)	(0.001)	(0.012)					*		
	-											(0.000)		
	Religious							-141.19***	-188.029***	-113.43***			-279.5***	
Divers	ity							(0.003)	(0.001)	(0.012)			(0.000)	
Inclusion of											.096	.096	.096	.1750
minorities											(0.430)	(0.430)	(0.430)	(0.135)
Education														.033**
		-2.516**												(0.068)
Cons	Cons		-3.109***	-1.953**	-4.308***	-5.495***	-3.393***	113.315***	151.147***	91.109***	-6.055	-9.604	223.30	-4.973
			(0.012)	(0.062)	(0.034)	(0.005)	(0.033)	(0.003)	(0.001)	(0.012)	(0.000)	(0.000)	(0.000)	(0.001)
N		102	102	102	102	102	102	102	102	102	92	92	92	92
R-squared		0.515	0.603	0.501	0.515	0.603	0.501	0.515	0.603	0.501	0.6081	0.608	0.608	0.631
Hausman	chi2	13.86***	32.04***	10.67***	13.73***	31.35***	9.61***	13.54***	31.35***	9.61***	9.32***	15.08***	28.95***	
test														
	Prob	(0.0078)	(0.000)	(0.0306)	(0.0082)	(0.0000)	(0.0221)	(0.0036)	(0.0000)	(0.0221)	(0.0536)	(0.004)	(0.000)	
	>													
	chi2													

\*\*\*, \*\* shows significance at 5% and 10% level respectively; In parenthesis ( ) are probabilities.

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# **Table.2 Results of LSDV Model for Developing countries**

(Dependent variable: inter group cohesion.)

		1	2	3	4	5	6	7	8	9	10	11	12	13
Overall Globalization		0031***			0034***			0031***			0031***	0032***	0031***	0040***
		(0.008)			(0.005)			(0.008)			(0.015)	(0.014)	(0.015)	(0.002)
Economic			0022***			0025***			0022***					
globalization			(0.004)			(0.002)			(0.004)					
Social globalization				0042***			0041***			0042****				
				(0.000)			(0.001)			(0.000)				
Income		0005***	0004***	0004***	0005***	0004***	0004***	0005***	0004***	0004***				
Inequality		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)				
Log of GDP		.0974***	.0711***	.109***	.0976****	.0711***	.1038***	.0974***	.0711***	.1090****	.187***	.186***	.1878***	.135***
		(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)
Ethnic		.5068**	.511**	.343							0179			
Diversity		(0.100)	(0.105)	(0.257)							(0.96)			
Linguistic					.209**	.214**	.139					0071		
Diversity					(0.104)	(0.106)	(0.264)					(0.967)		
Religious								.320**	.322**	.217			0113	
Diversity								(0.10)	(0.105)	(0.257)			(0.966)	
Inclusion of											.3562***	.3596***	.3562***	.408***
minorities											(0.002)	(0.001)	(0.002)	(0.000)
Education														.037***
														(0.071)
Cons		-1.596***	-1.053***	-1.814***	-1.485***	938***	-1.629***	-1.635***	-1.093***	-1.841***	-3.667***	-3.648***	-3.66***	-2.852***
		(0.006)	(0.028)	(0.001)	(0.010)	(0.043)	(0.003)	(0.006)	(0.026)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)
N		230	235	235	223	228	228	230	235	235	165	160	165	165
R-squared		0.55	0.53	0.564	0.5617	0.543	0.570	0.550	0.531	0.564	0.680	0.683	0.680	0.692
Hausman	chi2	41.00***	18.51***	46.46***	43.42****	18.10***	46.14****	41.84***	18.45***	46.33***	46.25***	48.93***	44.29***	
test														
	Prob>	(0.0000)	(0.0003)	(0.0000)	(0.0000)	(0.0001)	(0.0000)	(0.000)	(0.0001)	(0.000)	(0.000)	(0.000)	(0.000)	
	chi2													

<sup>\*\*\*, \*\*</sup> shows significance at 5% and 10% level respectively; In parenthesis ( ) are probabilities.

## **Discussion**

The results reveal that overall globalization, economic globalization and social globalization all have negative and significant impact on social cohesion. The signs of overall globalization co-efficient are consistently negative and significant across various specifications and in all models it is statistically significant in case of both developed and developing economies. For developing countries the values of these coefficients range between -0.0031 and -0.0041 while for developed countries, it ranges between -0.0035 to -0.0089. Coefficients on economic and social globalization for developed countries are -0.0065 and -0.0021 respectively for all specifications. The coefficient on economic globalization for developing countries varies between -0.0022 and -0.0030 while coefficient for social globalization lies between -0.0037 and -0.0042.

Income inequality might increase as a result of globalization due to uneven increase in wages of various types of labor (See Barba Navaretti et al., 1998; Berman and Machin, 2000 and 2004; Robbins, 1996 and 2002; Vivarelli, 2004) In current analysis income inequality is found to have a significant negative impact on social cohesion in developing countries. The results reveal that coefficients on inequality are all negative and significant and range between -0.004 to -0.006. Income inequality however is not an important determinant of social solidity in developed countries as coefficients for all specification are insignificant. It suggests that income inequality is a more serious concern in the context of social sturdiness for developing countries. In developed countries income inequalities do exist but due to strong social support system and relatively higher average per capita income even lower segment of the society may be well above minimum threshold (subsistence) level. That means people are at least able to meet their basic needs. This however, is not the case in developing economies where the lower segment of the society is well below minimum threshold (subsistence) level of income and social support programs are either non-existent of have a very narrow coverage. This leads to extreme poverty, deprivation and lack of access to basic necessities of life which creates bitterness among people and can be a threat to social cohesion.

Gross domestic product (GDP) is found to have a significant positive impact on social cohesion in all models for both groups suggesting that affluence leads to a more cohesive society. For developed countries the coefficient on GDP is positive and significant and ranges between 0.1070 and 0.272 while for developing countries this value ranges from 0.0974 to 0.1968.

The study has also investigated the effect of linguistic, religious and ethnic diversity on social consistency. In developed countries both religious and ethnic diversity have negative implications for social cohesion. The coefficients for ethnic diversity lie between -0.854 to -2.106, while in case of religious diversity it ranges between -113.43 to -279.5. However, positive and significant coefficients on linguistic diversity (ranging between 4.061 and 10.010) suggest a positive role in building social cohesion in developed economies. In case of developing economies, all types of diversity (ethnic, religious and linguistic) is found to be helpful in enhancing social cohesion in almost all specifications as most of the coefficients are positive and significant. The coefficients on ethnic diversity has a range of -0.0179 to 0.214, coefficients on religious diversity lie between -0.0113 and 0.322 while those on linguistic diversity have bounds from -0.0071 to 0.214. These results are directly comparable to earlier studies which support the notion that civic rule can be sturdier in societies which are characterized by ethnic consistency; and relatively more educated people having high incomes. (Knack and Keefer 1997). Oliwer and Wong (2003) suggested that people living in diverse environment are broadminded and resultantly are able to easily get along with others. Zimdars and Tampubolon (2012) concluded that diversity can play an important role building up mutual trust among individuals in a country. Some studies however, suggest that socioeconomic weaknesses are more important than ethnic or cultural diversity in defining the social cohesion of a society. (Breton et al. 2004).

Education is another important determinant of social consistency as more educated people are perceived as more enlightened liberal and tolerant individuals and together they make up a more cohesive society. (Tolsma et al. 2009). In present analysis impact of education on social binding is also studied. The

coefficients on education are positive and significant for both developed (0.033) and developing countries (0.037). In last few specifications of the model income inequality is substituted by inclusion of minorities (a proxy for equality) and only over all globalization has been used. The coefficients on inclusion of minorities carry the expected sign but are not statistically significant for developed economies. Inclusion of minorities however has a significant positive effect on societal interconnection in developing countries as the coefficients range from 0.277 to 0.488. These findings suggest that a fair and equitable conduct towards minorities can be helpful in maintaining social cohesion in developing countries. The legislative and institutional framework of developed countries is more effective in taking care of human rights hence treatment to minorities is not a significant determinant of social cohesion in this case. However in less developed countries minorities are subject to discrimination, and their basic rights are not assured which weakens social cohesion. Based on the analysis it can be concluded that for social cohesion, diversity is relatively more important for developed countries as compared to inequality and inclusiveness. For developing countries however diversity, inequality and inclusiveness are vital for social solidity.

## **Conclusion and Policy Suggestions**

The phenomenon of globalization requires an increased and more effective role of state to cope with the challenges imposed. Cultural, social, political and economic dynamics are continuously changing as the world is becoming more globalized and rapid technological progress is taking place. Present study is an effort to find out various determinants of social cohesion for developed and developing economies with particular focus on globalization. The results suggest that globalization in all its forms whether overall, social or economic can threaten social strength for both developed and developing countries. Diversity and Inclusiveness come up as vital determinants of social cohesion in developing countries however, in developed countries diversity seems to be more important. Income inequality turns out to be significant peril to social cohesion in developing economies which confirms the hypothesis that socio economic deprivations are a much greater threat to social cohesion than diversity. The results suggest that there is a need to clearly understand the effects and implications of globalization for social interconnection as it is vital for a peaceful, harmonious and prosperous country. There is a need to design policies to maximize the benefits of globalization and to make it a source of social cohesion. It is essential to focus on attaining a more equitable income distribution for more cohesive societies. Education, economic growth and Inclusiveness can also aid the process of social cohesion so these should be given priority while making and implementing policies.

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# Appendix Developed countries included in the study

Australia Greece Portugal Austria **Iceland** Saudi Arabia Ireland Bahrain Singapore Belgium Israel Spain Brunei Darussalam Sweden Italy Canada Japan Switzerland United Arab Cyprus Korea **Emirates** Denmark Malta

Finland Netherlands United Kingdom
France New Zealand United States

Germany Norway

# Developing countries included in the study

Albania Honduras Romania India Algeria Rwanda Argentina Indonesia Senegal Bangladesh Iran Sierra Leone South Africa Bolivia Iraq Botswana Jordan Sri Lanka Brazil Kenya Sudan Bulgaria Malawi Thailand Burundi Malaysia Togo Cameroon Mali Tonga Chile Mauritania Tunisia china Mauritius Turkey Mexico Colombia Uganda Congo, Dem. Rep. Mongolia Uruguay Costa Rica Morocco Venezuela, RB

Mozambique

Dominican Namibia
Republic Nepal
Ecuador Nicaragua
Egypt, Arab Rep. Niger
El Salvador Pakistan
Fiji Panama

Cote d'Ivoire

Gabon Papua New Guinea

Gambia Paraguay
Ghana Peru
Guyana Philippines

Zambia

Zimbabwe

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