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Quality of Life and Globalization: Evidence from Islamic Countries

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Abstract This study analyzes the relationship between three dimensions (economic, social, and political) of globalization and quality of life using a panel of 44 Islamic countries from 1970 to 2010. Using different estimation techniques, we find that overall globalization has a robust positive effect on quality of life, even when controlling for income, dependency ratio, literacy, number of physicians, and other factors. Nevertheless, the results do not hold for all forms of globalization. Economic and political forms of globalization tend to improve quality of life. In contrast, social globalization does not improve quality of life.

Keywords Globalization · Quality of life · Wellbeing · Islamic countries

JEL Classification C23 · F15 · P4

Introduction

A number of studies have examined the impact of globalization on economic efficiency and growth outcomes (Dreher and Gaston 2008; Dreher et al. 2008). However, sparse attention has been paid to explore the links of globalization with wellbeing. The extant literature on globalization and wellbeing can be categorized into two strands. First strand of the literature argues that globalization is the source of increasing economic growth which eventually enhances wellbeing by providing access to the basic necessities of life.

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Moreover, globalization empowers people by increasing economic freedom and providing access to information (Cornia 2001; Akhter 2004; Dreher 2006).

Whereas second strand of the literature has claimed that globalization hurts the poor by increasing income inequality, decreasing the demand for low skilled labor, and creating stress. Globalization's potential negative effects mediate through increasing societal instabilities and reducing state power and social spending (Tsai 2007). Furthermore, globalization exerts negative wellbeing effects by increasing the trade of tobacco, alcohol, and highly processed food (Drewnowski and Popkin 1997).

In this study, we focus on quality of life as a measure of wellbeing. The quality of life is an elusive concept and generally, it refers to the degree of choice and most of the studies have measured it with Gross National Product (GNP) per capita. However, the psychological and social aspects cannot be measured just by income and wealth variables. The quality of life also depends on environment, mental and physical health, education, social belongings, and leisure time (Nussbaum and Sen 1993).

There are few studies which have examined the impact of globalization on quality of life. Akhter (2004) has studied the impact of economic globalization on human wellbeing ignoring other dimensions of globalization. Tsai (2007) has also studied wellbeing effects of globalization. However, he used data with 10 years intervals and did not use different measures of globalization simultaneously. Bussmann (2009) has studied whether globalization brings winners or losers among the women using only economic integration. Sapkota (2011) has analyzed the effect of globalization on quality of life of 124 developing countries using only 9 years from 1997.

The extant literature ignores different dimensions of globalization in shaping the relationships of globalization with wellbeing. In particular, empirical studies do not consider an exclusive empirical analysis for the Muslim world. Now question arises as to why it is important to investigate separate parameter estimates for Islamic countries? According to the annual economic report on the OIC countries 2010,[1] economic performance in developing OIC countries is substantially different from the rest of the developing countries. Furthermore, Estes and Tiliouine (2016) evaluate achievements and challenges of social and economic progress in Islamic countries. Their analysis shows that overall social and economic progress for the OIC countries is lower as compared to other organizations of nations such as Association of Southeast Asian Nations (ASEAN), Commonwealth of Independent States (CIS), and the South Asian Association for Regional Cooperation (SAARC). Therefore, a generalized empirical analysis may yield biased results. Moreover, in a recent study, Majeed (2015) concludes that Islamic countries differ from non-Islamic countries in terms of their exposure to globalization.

That said, this study explores how globalization has impacted the wellbeing of Muslim world to answer the following questions. Does globalization improve quality of life in the Muslim world? Do all dimensions of globalization increase quality of life? Do wellbeing effects of globalization vary across different regions of the Muslim world at different stages of economic development?

Our study contributes into the literature in following ways. First, we believe that this is the first empirical study of its kind that tests the relationship of globalization with quality

[1] http://www.sesric.org/publications-detail.php?id=159

of life of Islamic countries. Second, we analyze the links of globalization with quality of life using economic, social, and political dimensions of globalization over a long period.

The remaining sections of the study are structured as follows: Section 2 provides a brief review of the existing studies, Section 3 describes methodology, Section 4 explains the data, Section 5 explains empirical results, and, finally, Section 7 concludes and offers policy implications.

Survey of the Literature

The theoretical literature predicts mixed effects of globalization on quality of life. Some studies argue that globalization has a negative effect on a country's quality of life by eliminating many jobs, particularly in manufacturing sector. Moreover, as globalization proceeds, the national governments become powerless to improve the quality of life of their citizens (for details, see Sirgy et al. 2004). In contrast, some studies argue that globalization has a positive influence on quality of life by improving productivity and wages of the workers (Thorbecke and Eigen-Zucchi 2002).

Cornia (2001) argues that globalization enhances human wellbeing of a country given that initial conditions such as competitive markets, strong social safety nets, good quality of domestic policy, and easy access to health related services exist in that country. However, for many developing countries, Cornia argues that globalization has not improved quality of life because of poor domestic conditions, an unequal distribution of foreign investments, and limited access of their exports to the markets of developed economies.

Sirgy et al. (2004) develops various theoretical propositions to explain the links of globalization with quality of life and predicts mixed effects. They argued that economic globalization improves quality of life by creating jobs opportunities, increasing production efficiency, improving access to low-cost and better products. However, economic globalization also have negative impacts on wellbeing by creating loss of jobs in competing domestic firms, depleting natural resources, and increasing trade retaliation from the importing countries.

The extant empirical literature generally suggests favorable impacts of globalization on quality of life. However, the favorable impact of globalization depends upon domestic conditions of a globalizing country. For instance, Akhter (2004) provided evidence that economic globalization has positive and significant impact on human wellbeing using a sample of 75 countries. The favorable impact of globalization on human development mediates through lower corruption and high economic freedom. Similarly, Tsai (2007) also found favorable impact of overall globalization on human welfare using a panel of 112 countries over the period 1980–2000. However, the favorable impact of globalization is more significant in industrialized countries.

Sapkota (2011) analyzed the impact of globalization on quality of life in developing countries from 1997 to 2006 by taking Gender Development Index, Human Poverty Index, and Human Development Index as dependent variables. Overall findings show that globalization has improved quality of life. However, countries at higher level of economic development are more benefiting from globalization.

Using a panel of 130 countries from 1980 to 2011, Jorda and Srabia (2015) exhibited that globalization has increased life expectancy, income, and education with varying

degrees across countries. They conclude that globalization has improved wellbeing of many countries. However, the least developed countries have not benefitted from globalization. Using panel data of Islamic countries from 1965 to 2010, Majeed (2015) found out that globalization causes negative wellbeing effects by increasing income inequality.

We can conclude that there are few studies which have addressed the relationship of globalization with wellbeing. The literature does provide theoretical arguments but empirical evidence is sparse and also not conclusive. The available empirical literature mainly focuses on economic variables to explain the relationship of globalization with wellbeing and lacks comprehensive measures of the data. Moreover, the exposure of the Muslim world to globalizing world has been ignored in the empirical literature. This study contributes into the literature by empirically exploring the impact of globalization on quality of life of the Muslim world using economic, social, and political forms of globalization and a comprehensive measure of quality of life.

Methodology

Globalization has brought fundamental changes in every aspect of the life; so, it is necessary to study its effects on human wellbeing because ensuring wellbeing of all is the fundamental goal of human life. For many decades researcher have employed Gross National Products (GNP) per Capita as a measure of quality of life (Sapkota 2011). Although there is a positive relationship between GNP per Capita and human wellbeing, yet physiological and social aspects cannot be determined by income variable (McGillivray 1991). Commission of international development has also proposed to focus on education and health of the world population instead of only taking

Table 1 The KOF index of globalization

Economic globalization	Social globalization	Political globalization
(i) Actual flows: ➢ Trade ➢ Foreign direct investment flows. ➢ Foreign direct investment stock. ➢ Portfolio investment. ➢ Income payment to foreign nationals. All above variables are taken in percentage of GDP. (ii) Restrictions: ➢ Hidden import barriers ➢ Mean tariff rate ➢ Taxes on international trade (percent of current revenues). ➢ Capital account restrictions.	(i) Data on personal contacts: ➢ Outgoing telephone traffic. ➢ Transfers (percent of GDP). ➢ International tourism. ➢ Foreign population (percent of total population). ➢ International letters (per capita). (ii) Data on information flows: ➢ Internet host (per 1000 people). ➢ Internet users per 1000 people). ➢ Cable television (per 1000 people). ➢ Trade in newspaper (% of GDP). ➢ Radios (per 1000 people). (iii) Data on cultural proximity ➢ Number of McDonald's restaurants. ➢ Number of Ikeas (per capita). ➢ Trade in books (% of GDP).	➢ Embassies in country. ➢ Membership in international organization. ➢ Participation in UN security missions.

Table 2 Description of variables

Variables	Discription	Source
Quality of life (QOL)	Human development index is used to measure QOL that is a composite measure including life expectancy, education and income.	HDR UN (2014)
Globalization	KOF Dreher's index is used for measuring globalization. It assigns values from 1 to 100.	KOF index of globalization
GDP per capita	Natural log of GDP per capita at constant 2005 dollars.	Penn World Table
Age dependency	Ratio of dependents (percentage of working age population).	WDI (2014)
Physician availability	Physician per 1000 people	WDI (2014)
Population growth	Population growth rate (% annual)	WDI (2014)
Education	Secondary school enrollment (% gross)	WDI (2014)
Urbanization	Urban share of population(% of total population)	WDI (2014)

WDI World Development Indicators (2014), *HDR* Human Development Reports UN (2014).

economic growth as center of attention for the wellbeing of world population (World Bank 2001).

The Human Development Index (HDI) is introduced by United Nation Development Program (UNDP 1990) which is considered as a most comprehensive measure of quality of life. This index measures social wellbeing in terms of increasing people's freedom, choices, and capacities to enjoy an elegant standard of living (United Nations 2005). It includes life expectancy, adult literacy, primary, secondary and tertiary school enrolment, and GDP per capita. Higher life expectancy is indicative of better nutrition, medical care, and a cleaner environment. Educational attainment shows people's ability to improve their living conditions and contribute positively to the social system. Real GDP per capita reflects standard of living. Thus, the human development index can be considered reflective of an environment which helps people develop their full potential and lead productive lives.

Table 3 Summary statistics of data

Variables	Observations	Mean	Std. dv.	Min	Max
HDI	230	0.558	0.171	0.191	0.939
Globalization	1653	39.88	13.10	13.02	78.23
Economic globalization	1653	42.65	16.55	9.76	88.91
Social globalization	1653	30.65	15.82	5.98	82.39
Political globalization	1653	50.67	20.35	3.99	94.16
GDP per capita	1602	5008	10,289	290	136,311
Age-dependency	1719	81.75	17.47	17.41	120.82
Urbanization	1722	41.88	21.95	5.746	98.66
Physicians	601	0.940	1.188	0.004	7.739
Population growth	1718	2.60	1.55	−2.96	17.48
Education	1211	42.41	30.81	0	114.87

Table 4 Correlation matrix of variables

Variables		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
QOL	(1)	1										
Globalization	(2)	0.73	1									
Eco. globalization	(3)	0.67	0.88	1								
Soc. globalization	(4)	0.67	0.89	0.8	1							
Pol. globalization	(5)	0.29	0.49	0.12	0.17	1						
GDP per capital	(6)	0.41	0.42	0.46	0.5	−0.07	1					
Age-dependency	(7)	−0.67	−0.69	−0.64	−0.73	−0.15	−0.56	1				
Urbanization	(8)	0.67	0.75	0.69	0.84	0.09	0.62	−0.76	1			
Physicians	(9)	0.51	0.49	0.49	0.51	0.06	0.66	−0.67	0.54			
Population	(10)	0.11	0.12	0.22	0.15	−0.15	0.67	−0.09	0.29	0.25	1	–
Education	(11)	0.71	0.68	0.62	0.75	0.1	0.46	−0.82	0.77	0.71	0.05	1

Empirical Model Specification

To evaluate the impact of world integration on human wellbeing, we estimate following model which is consistent with other studies such as Tsai (2007). We have introduced lag of globalization in our model because its effect is not contemporaneous as recommended by different studies of globalization and quality of life (Tsai 2007; Sapkota 2011).

$$QOL_{it} = \beta_1 + \beta_2 GDP_{it-1} + \beta_3 GLO_{it-1} + \beta_4 X_{it} + A_{it} + \varepsilon_{it} \quad (i = 1, \ldots\ldots N; t = 1, \ldots\ldots T) \tag{1}$$

Where "*i*" indicates country and "*t*" indicates time.

QOL is quality of life which is measured using Human Development Index, GDP represents Gross Domestic Production per Capita, GLO is an index of overall globalization, and *X* indicates control variables which are age dependency ratio, physicians, urbanization, education, and population growth. Note that in the last part of the equation that *A*, the unobservable country effect, has zero correlation with explanatory variables, and is "fixed" overtime; ε_{it} is the residual term with normally distributed random disturbances. Equation 1.1 incorporates decomposition of overall globalization into three components: economic, social, and political globalization.

$$QOL_{it} = \beta_1 + \beta_2 GDP_{it-1} + \beta_3 EGLO_{it-1} + \beta_4 SGLO_{it-1} + \beta_5 PGLO_{it-1} + \beta_6 X_{it} + A_{it} + \varepsilon_{it} \tag{2}$$

Table 5 Link test: quality of life

QOL	Coef.	Std. err.	T	$p > t$	[95% Conf.	Interval]
_hat	1.906654	.5463355	3.49	0.001	.8218918	2.991416
_hatsq	−.7939673	.4739397	−1.68	0.097	−1.734986	.1470511
_cons	−.2418106	.1512104	−1.60	0.113	−.5420423	.0584211

Table 6 VIF tests: quality of life

Variables	GDP/ capita	Urbanization	Education	Age-depend	Physician	Globalization	Population	Mean VIF
VIF	9.11	6.97	5.22	4.38	2.49	2.23	1.45	4.55
1/VIF	0.10972	0.143471	0.191649	0.228237	0.40087	0.44796	0.687973	

Data Description

This study uses a panel data set for 44 Muslim countries from 1970 to 2010. Since globalization is a board and multifaceted phenomenon, a single variable may give biased results. Therefore, in this study we use KOF index given by Dreher's (2006) as a proxy measure of globalization. It includes three domains of globalization that are economic globalization, social globalization, and political globalization. It provides data from 1970 to 2010 and ranges from 1 (lowest) to 100 (highest) levels of globalization. A detailed description of different dimensions of globalization is given in Table 1. Table 2 provides a description of variables used in the study.

Tables 3 provides the summary statistics of variables used in the study. The QOL index shows a large variation across Islamic countries; Niger has minimum level of QOL index 0.191 while Sierra Leone has the highest level of QOL 0.939. Similarly, the index of overall globalization and its components exhibit high variation across Islamic countries. Overall globalization index is minimum for Bangladesh, 13.02 and maximum for Nigeria, 78.23 Table 4.

A simple correlation matrix shows that globalization and quality of life are positively associated. Economic and social dimensions of globalization show the highest correlation with quality of life while social globalization shows the lowest correlation.

The Data Diagnostic Tests

We have applied link test to check the functional form of our model. We have also applied VIF test to check the presence of multicollinearity in our model.

Model Specification Test (Link Test)

The *p* value of the hat-square of link test of emprical model is greater than 0.05%. It implies that functional from of the model is correct**.** The results are summarized in Table 5. We have also applied the test of variance inflating factor (VIF) on our

Table 7 Ramsey RESET TEST

Ramsey RESET test
Ho: model has no omitted variables
F(3, 86) = 1.56
Prob > F = 0.2050

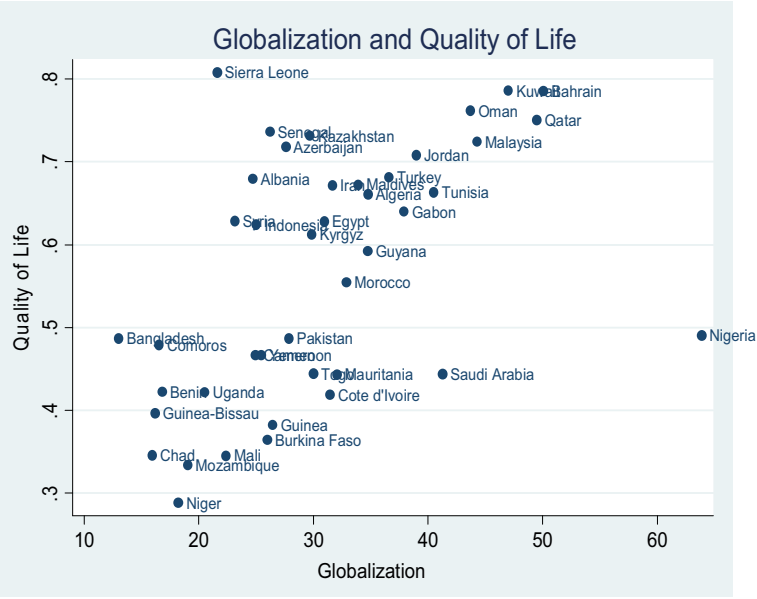

Fig. 1 Globalization and quality of life

model. The VIF test is useful to detect the multicollinearty among the variables. If the value of VIF is greater than 10, then we have the problem of multicollinearity. VIF is equal to the invese of 1- R2 (VIF= $\frac{1}{1-R2}$) Table 6.

Since the VIF values of all individual variables and mean value of VIF are less than 10, We can infer that there is no multicollinearty in our regression equations. Finally,

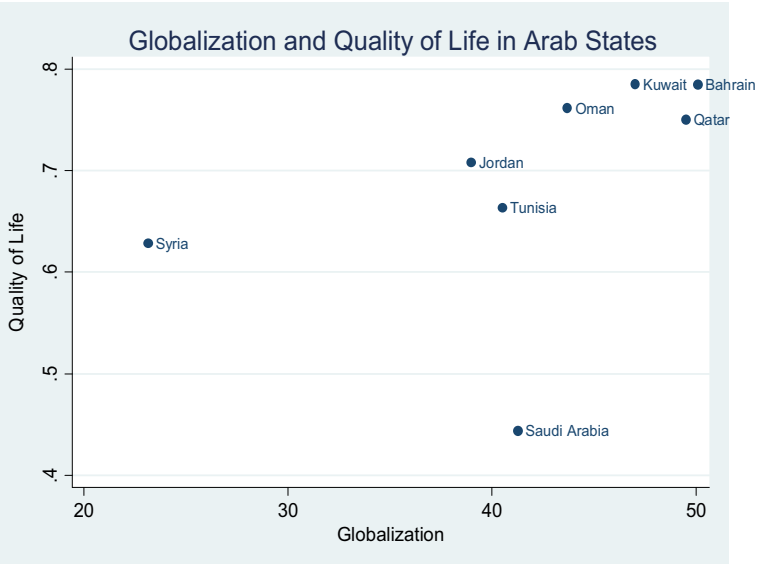

Fig. 2 Globalization and quality of life (Arab States)

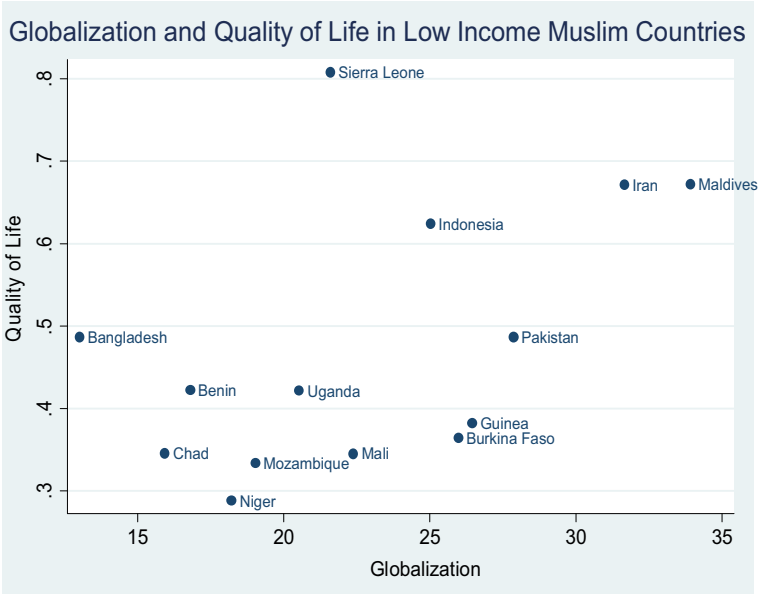

Fig. 3 Globalization and quality of life

Table 7 reports Ramsey RESET Test to test the correct specifiction form of the model. Since p values > 0.05, we infer that specificiation of model is correct.

A Graphical Analysis for Selected Regions of the Muslim World

Figure (1) shows that globalization is positively associated with quality of life. A simple graphical analysis shows that Nigeria's wellbeing indicators perform worse in the globalized world, despite the fact the economy of Nigeria is highly globalized.

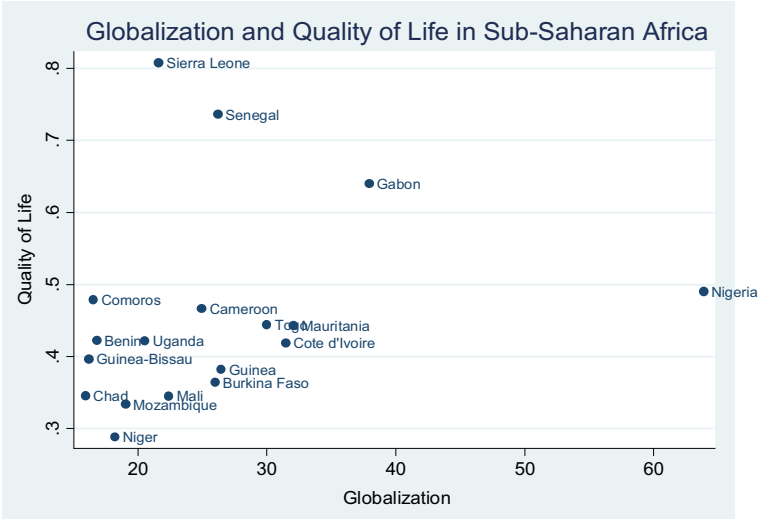

Fig. 4 Globalization and quality of life

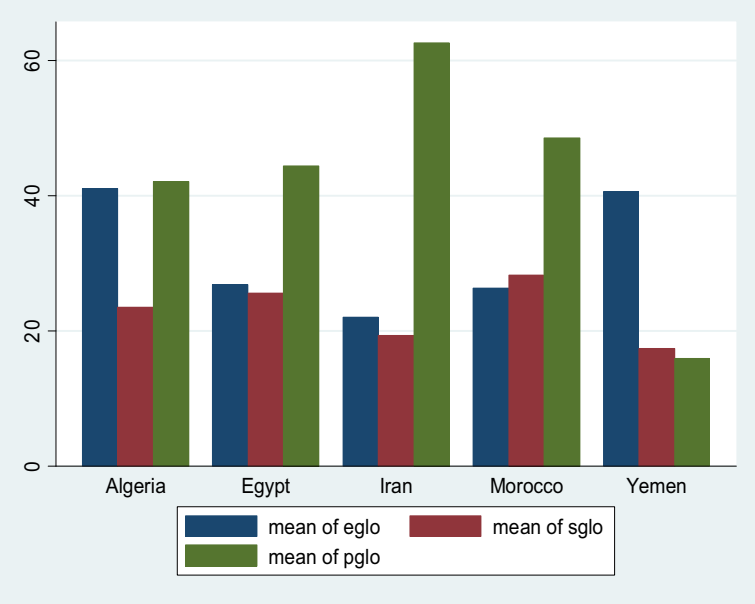

Fig. 5 Middle East and North Africa

Figures (2, 3, and 4) have been drawn to analyze whether the relationship of globalization with quality of life holds in all countries. We can see that this does not hold in low-income developing countries (see Fig. 3). Many Muslim countries such as Pakistan, Guinea, and Burkina Faso have integrated their economies in global world but quality of life is very low in these economies. Similarly, all regions of the Muslim world are not benefiting from globalization. For example, Sub-Saharan Africa's performance on different indicators of wellbeing is rather poor (see Fig. 4).

Figure 5 shows that social globalizatin is comparatively lower in Middle East and North Africn (MENA) countries. Figure 6 indicates that politcal globalization is lower in Eurpoe and Central Asia (ECA) countries. Figure 7 shows that Muslim economeis in South Asia are compartively closed economies. Figure 8 shows that economic globalizatin is highest in the Arab states.

Results

Table 8 provides the results of the relationship between globalization and quality of life. Columns (1–4) of Table 8 show that the coefficient on quality of life is positive and significant at 1% level of significance. The parameter estimates show that 1% increase in overall globalization index leads to 0.20% increase in quality of life. Our results are consistent with the theoretical study of Sirgy et al. (2004).

The results reported in columns (5–9) of Table 8 show that economic globalization has positive and significant association with quality of life. This finding implies that increased trade of goods and services enhance socio-economic development by providing employment, educational access, productivity, government revenues, and

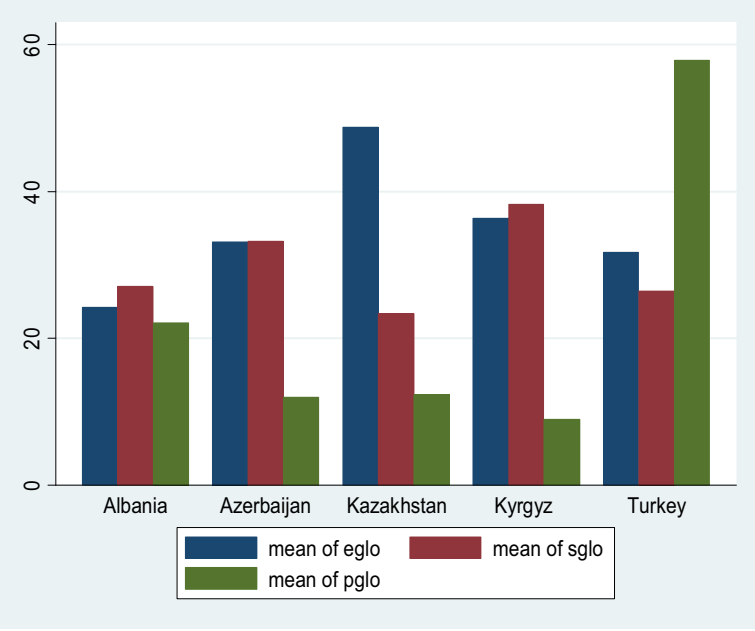

Fig. 6 Europe and Central Asia

standard of living (Şeker 2012). Moreover, economic globalization improves human wellbeing by lowering corruption and increasing economic freedom (Akhter 2004).

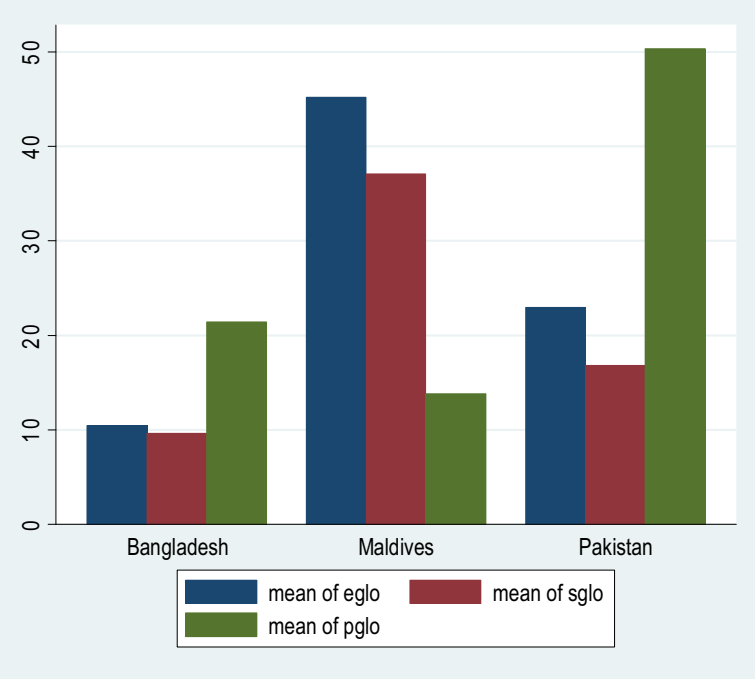

Fig. 7 South Asia

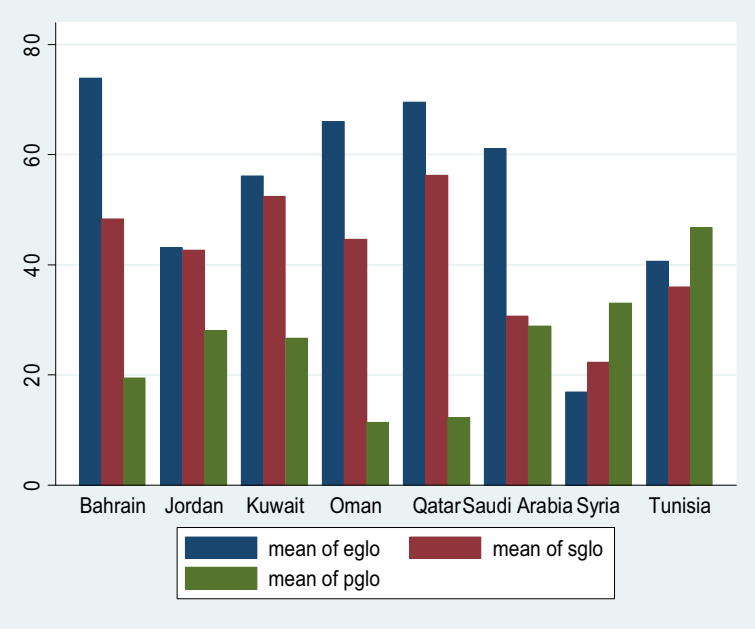

Fig. 8 Arab States

The results also show positive and significance influence of political globalization on quality of life implying that a country's involvement in international political system enhances human wellbeing by implementing wellbeing policies related to control of epidemics, world environment concerns, and human rights. The magnitude of the impact of economic globalization is high in all regressions as compared to other forms of globalization.

Nevertheless, social globalization does not significantly cause quality of life. Ferriss (2006) argues that social structure of the society provides the basis for interactions that lead to satisfactions, subjective wellbeing, and the quality of life. Moreover, social globalization increases information and exchange of culture which enhance wellbeing. However, the Muslim world is not benefiting from social globalization. The likely reason could be existing lower levels of social development in Islamic societies. Estes and Tiliouine (2016) provide evidence on social progress of Islamic countries and conclude that social development is lower for the OIC countries in comparison to other organizations of the nations.

The coefficient of GDP per capita has a positive and significant impact on quality of life. The results show that 1% increase in GDP brings about 0.05% increase in quality of life at 1% level of significance. This result is consistent with the mainstream literature and broad intuition that high income enhances the quality of life (Anand and Ravallion 1993; Ranis et al. 2000; Tsai 2007; Samli 2008).

The coefficient of age dependency shows that one unit increase in age dependency ratio causes 0.001% decrease in quality of life at 1% level of significance. An increase in age dependency ratio leads to decrease in the fraction of labor in working population. It leads to decrease in savings and eventually welfare of individuals as they would not be able to get access to better education, housing, sanitation, nutrition, and health facilities. According to Yenilmez (2015), aging of the population affects all aspects of the society

Table 8 Impact of globalization on quality of life

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GDP per	0.0506**	0.0673***	0.0524***	0.0359**	0.0530***	0.0644***	0.0664***	0.0597***	0.0451***
Capita	(0.0201)	(0.0154)	(0.0125)	(0.0157)	(0.0128)	(0.0217)	(0.0164)	(0.0137)	(0.0170)
Age	−0.000493	−0.00123*	−0.000893	−0.000282	−0.0013**	−0.000735	−0.0015**	−0.00116*	−0.000210
Dependency	(0.00097)	(0.00065)	(0.00064)	(0.00090)	(0.00064)	(0.00098)	(0.00066)	(0.00064)	(0.00092)
Globalization	0.209***	0.221***	0.193***	0.188***					
	(0.0478)	(0.0366)	(0.0349)	(0.0422)					
Physicians	0.00746					0.00602			
	(0.0135)					(0.0139)			
Urbanization		−0.00174*					−0.00123		
		(0.00090)					(0.00094)		
Population			−0.00525					−0.00703	
			(0.00504)					(0.00515)	
Education				0.00185**					0.0022***
				(0.00078)					(0.00079)
Economics					0.0954***	0.101**	0.0913***	0.0991***	0.108***
Globalization					(0.0312)	(0.0469)	(0.0313)	(0.0312)	(0.0364)
Social					0.0196	−0.000931	0.0310	0.0134	−0.00967
Globalization					(0.0291)	(0.0440)	(0.0304)	(0.0294)	(0.0361)
Political					0.0478**	0.0767**	0.0549**	0.0457**	0.0539*
Globalization					(0.0220)	(0.0313)	(0.0226)	(0.0220)	(0.0281)
East Asia and	−0.00492	−0.00811	0.00472	0.0120	0.00792	−0.000955	0.00370	0.00623	0.0115
Pacific	(0.0524)	(0.0377)	(0.0374)	(0.0432)	(0.0389)	(0.0552)	(0.0390)	(0.0389)	(0.0442)
Europe and	0.0153	0.0225	0.0291	−0.000414	0.0345	0.0217	0.0283	0.0267	−0.00409

Table 8 (continued)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Central Asia	(0.0427)	(0.0307)	(0.0307)	(0.0365)	(0.0314)	(0.0443)	(0.0317)	(0.0318)	(0.0379)
Latin	−0.0457	−0.0652	−0.0351	−0.0752	−0.0250	−0.0326	−0.0460	−0.0368	−0.0847
America	(0.0722)	(0.0515)	(0.0485)	(0.0746)	(0.0510)	(0.0775)	(0.0534)	(0.0516)	(0.0788)
South Asia	−0.000487	0.00299	0.0199	0.0352	0.0321	0.0162	0.0247	0.0362	0.0525
	(0.0494)	(0.0342)	(0.0339)	(0.0444)	(0.0350)	(0.0514)	(0.0354)	(0.0350)	(0.0450)
Sub-Saharan	−0.0330	−0.0183	−0.0165	0.0266	−0.0170	−0.0243	−0.00871	−0.00851	0.0286
Africa	(0.0418)	(0.0259)	(0.0269)	(0.0373)	(0.0272)	(0.0451)	(0.0278)	(0.0278)	(0.0385)
Others	0.0107	0.0503*	0.0394	0.00964	0.0381	0.0232	0.0539*	0.0465	0.0102
	(0.0421)	(0.0289)	(0.0284)	(0.0340)	(0.0288)	(0.0445)	(0.0312)	(0.0294)	(0.0357)
Constant	−0.595**	−0.643***	−0.514***	−0.518**	−0.397**	−0.590**	−0.486**	−0.429**	−0.498**
	(0.261)	(0.190)	(0.177)	(0.224)	(0.183)	(0.278)	(0.195)	(0.184)	(0.238)
Observations	121	227	227	177	227	121	227	227	177
R-squared	0.653	0.639	0.634	0.617	0.625	0.646	0.628	0.628	0.614

Standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 9 Impact of globalization on quality of life: fixed effects and random effects

Variables	(1) FE	(2) FE	(3) FE	(4) RE	(5) RE	(6) RE
GDP per	0.0141	0.0270**	0.0298**	0.0248***	0.0255**	0.030***
Capita	(0.00922)	(0.0129)	(0.0134)	(0.00814)	(0.0108)	(0.0113)
Age	−0.00177***	−0.000481	−0.000439	−0.002***	−0.00048	−0.00043
Dependency	(0.000233)	(0.000322)	(0.000330)	(0.00023)	(0.0003)	(0.0003)
Globalization	0.197***	0.146***		0.191***	0.152***	
	(0.0132)	(0.0207)		(0.0129)	(0.0177)	
Physicians		0.000975	−0.00188		−0.00186	0.00105
		(0.00436)	(0.00451)		(0.00422)	(0.00410)
Urbanization		0.000844	0.00101		0.000658	0.000878*
		(0.000606)	(0.000606)		(0.00053)	(0.00052)
Population		−0.00185	−0.00339		−0.00186	−0.00334
		(0.00215)	(0.00224)		(0.00202)	(0.00208)
Education		0.0018***	0.0019***		0.0018***	0.0019***
		(0.000276)	(0.000291)		(0.00026)	(0.00027)
Economics			0.0264*			0.0293**
Globalization			(0.0141)			(0.0132)
Social			0.0266			0.0266*
Globalization			(0.0163)			(0.0152)
Political			0.0702***			0.0709***
Globalization			(0.0128)			(0.0113)
Constant	−0.167**	−0.287***	−0.248**	−0.2***	−0.3***	−0.3***
	(0.0838)	(0.0970)	(0.101)	(0.0811)	(0.0914)	(0.0939)
Observations	227	97	97	227	97	97
R-squared	0.831	0.948	0.948			
Number of country	42	36	36	42	36	36

Standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

including health, social security, education, socio-cultural activities, family life, and the labor market. We have performed sensitivity analysis by introducing physician, urbanization, population growth, and education as control variables. The results remain same. Table 9 reports the results using the fixed and random effects models. Our results show that main findings of the study are consistent with the estimates of fixed effects and random effects models.

Post Estimation Test

We have applied Hausman's test to assess the relative strength of fixed and random effects models. The null hypothesis of Hausman's test is that there is no systematic difference between the fixed and random effects. In the case of quality of life, p value is greater than 0.1 implying that random effects model gives more appropriate results.

Conclusion

Does globalization improve quality of life across the Muslim world? To answer this question, we have used panel data set from 1970 to 2010 for 44 Islamic countries. The empirical findings suggest that overall globalization improves quality of life. However, this finding is not valid for different dimensions of globalization. Economic and political dimensions of globalization exert positive influence on quality of life. In contrast, social globalization does not improve quality of life.

The results also reveal that there is a great disparity of quality of life among different regions of the Muslim world. In particular, Sub Saharan African countries are lagging behind in terms of quality of life. Similarly, Muslim countries at lower level of economic development are not significantly benefiting from globalization.

This study offers following policy recommendations: First, the Muslim countries should support globalization to improve the quality of life of Islamic countries. In particular, economic globalization needs to be increased by lowering or removing artificial trade barriers. Since some regions of the Muslim world are not benefiting from globalization, it is recommended that countries of these regions need to adopt globalization with some protected measures and policies to ensure wellbeing of all countries. In particular, Muslim countries at lower level of economic development need protection in the short run. Moreover, these countries need to strengthen their human resource bases, infrastructures and macroeconomic balance to take the benefits of the global market.

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