International Journal of Multidisciplinary Research and Development
Online ISSN: 2349-4182, Print ISSN: 2349-5979, Impact Factor: RJIF 5.72
www.allsubjectjournal.com
Volume 4; Issue 8; August 2017; Page No. 166-173

Globalization and economic growth: A case study of selected ASEAN countries

Tai Nyuk Chin, Nurul Hidayah Mat Nor

Faculty of Business and Management, Universiti Teknologi MARA, Kampus Kota Kinabalu, Lockeg Bag, Kota Kinabalu, Sabah, Malaysia

Abstract
This study aims to investigate the causality pattern between globalization and economic growth in three selected ASEAN countries, namely Malaysia, Singapore and the Philippines based on the annual time series data for year 1970-2014. The data analysis were carried out by using unit root test to test for stationarity, followed by cointegration test to determine the long run relationship between variables and lastly Granger-causality test to analyze the causality pattern between selected variables. The empirical result suggested that there is evidence of causality (Unidirectional and bi-directional) running from the overall index of globalization towards the economic growth of Malaysia, Singapore and the Philippines. The findings are generally in line with the previous empirical studies, with view that globalization is favorable in promoting economic growth.

Keywords: globalization, economic growth, causality, ASEAN countries

1. Introduction
Globalization is not a new occurrence and while the term is famously known and used worldwide, the meaning and its impact are far from clear. Globalization describes the changes in societies and the world that are the results of increased trade and cultural exchange. In this modern day, the world has become more integrated than it has ever been before. Markets that used to be strictly bordered by closed-economy practices begin to combine together to become a sole global market. By times, the practice of closed economy seems irrelevant. Even though globalization has become a widely used term, equally widespread is its related misconception. In the last two decades, the concept of globalization received attention from researchers because of its generally recognized importance as an economic factor, but seemingly also due to the lack of a generally accepted definition (Morrison and Soesastro, 1998). Ouattara (1997) [54] also believes that globalization has become a major topic of discussion and concern in economic circles since the mid 1990s as it became increasingly clear that the trend toward more integrated world markets has opened a wide potential for greater growth, and presents an unparalleled opportunity for developing countries to raise their living standards. Dreher (2006) [20] also supported this as he suggested that globalization's impact on economic efficiency and growth outcomes conventionally had drawn most research attention.

Globalization can be interpreted in many ways, but the certain thing about this phenomenon is that it will always bring changes that will affect everyone in many aspects. According to Dreher (2006) [20], the implication brought by globalization on economic growth and development has drawn most research attention. In this arising conflict, many come with different interpretation regarding the implication of globalization. Therefore, this paper studies the various impacts of globalization according to the selected countries including Malaysia, the Philippines and Singapore. Most studies on globalization use single index to measure globalization and fails to capture other dimensions of globalization (Rao *et al.*, 2011). In this study, synthetic globalization (KOF Globalization Index, 2017) is used to represent a broader dimension of globalization. The KOF globalization index provides multiple indexes including in economic, social and political aspect to measure globalization over the period of 45 years. This index is believed to capture more implication of globalization from different aspects.

2. Literature Review
Concept and Definition of Globalization
Globalization often defined as a combination of four major trends including the expansion of international trade, financial flows, global communications (including transport) and movement of people (immigration). These four major trends of globalization, however, have worked differently among different countries (Penalver, 2002). The concept of globalization is further explored by Intriligator (2003) [34] in which he stated that globalization is a powerful real aspect of the new world system, and it represents one of the most influential forces in determining the future course of the planet.

Loots (2006) characterised globalisation as the fact that distance and national borders no longer matter, the ease with which business with a customer across the globe can take place and that the nation state and geography are no longer relevant for economic purposes. Many other studies supported the discoveries of diverse social, political and economic complications. They suggested that globalization is an integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology. (Afzal, 2010; Lee & Hesmati, 2010; Malik *et al.*, 2011; Ray, 2012) [40].

The Advantages and Disadvantages of Globalization
Marossi (2006) [45] claimed a positive impact of globalization. Certain changes in technological, social, Economical and, more importantly, legal systems of individual countries can be attributed to the increase in global economic integration.

Through globalization, trade, investments and governance link people together economically and socially which these links are spurred by market liberalization and developments in information and technology, communication and mainly Electronic Commerce. This statement is supported by Stiglitz (2003), Mapuva (2010) [44] and Villaverde and Maza (2011).

Among others, Rao *et al.* (2011) make use of Solow (1956) [57] growth model to derive country-specific estimates for five selected ASEAN countries. Their findings suggested that countries with higher levels of globalization policies have higher Steady State Growth Rate (SSGR). They classified these countries into three groups, namely, countries where the growth effects of globalization are highest and close, as in Singapore and India, modest as in Malaysia and Thailand and the lowest as in the Philippines. They concluded that an increase in globalization seem to have different effects which may be due to the differences in the structure of these economies.

Although many economists believed that globalization does promote some benefits towards the economic growth, some other argued that globalization also harms the economy. Norberg and Cheru (2006) [51] claim that the belief of dismantling trade barriers and reducing or removing government interference was a panacea for poor countries was simply wrong. Similarly, Robinson (2007) also pointed out that the trade and financial openness are by themselves not sufficient to promote economic growth but might as well occasionally backfire in the absence of a wider range of complementary institutional and government reforms. Giddens (2000) [27] as well as Nye and Donahue (2000) [52] also suggested that there is a possibility for the cost to exceed the benefit through the concentration of capital flows in certain countries, misallocation of resources, and loss of macroeconomic stability (inflation pressure, real exchange rate appreciation, and external imbalances) contagion and risk of sharp reversal of capital flows. These findings are further discussed and supported by Vadlamannati (2009) and Rincon (2007).

3. Data and Methodology

The objective of this paper is to investigate the dynamics of the causal relationship between globalization and economic growth in three selected ASEAN countries, namely Malaysia, Singapore and the Philippines based on the annual time series data for year 1970-2014. This study uses annual data on variables - Economic Globalization Index (EGI), Social Globalization Index (SGI), Political Globalization Index (PGI) and Real GDP per capita are used to examine a variety of methodology model and test. The model specification of this study will be estimated empirically, which begins with the Augmented Dickey-Fuller and Philip-Perron unit root test to test the stationarity of the variables. In the second step, the Johansen's cointegration test has been performed to assess whether a long-run equilibrium holds between the research variables. The research furthered with error-correction models and finally the Granger causality and Toda-Yamamoto causality test has been applied in the vector error-correction framework to find out the direction of causal relationship between the cointegrated variables.

4. Empirical Results

Most macroeconomic data often appear to possess a stochastic trend that can be removed by differencing. Guo (2008) [32] stated that, the presence of such trend influences the statistical behaviour of alternative estimators, thus, it is important to determine the order of integration. Ray (2012) also claimed that when dealing with time series data, a number of econometric issues can influence the estimation of parameters that can reflect the problem of spurious regression. Variables that are characterized as non-stationary in levels and become stationary after first differencing once are integrated of order 1, or I (1). These properties can easily be identified by using a unit root test. The ADF and Philips-Perron unit root test is employed to investigate whether variables in the model are integrated of the same order.

Unit Root Test Results

Based on the ADF and Philip-Perron test statistics, the results suggest that most of the variables in Malaysia, Singapore and Philippines are non-stationary in levels. Consequently, the series contain unit root and do not support the rejection of the null hypothesis at the level form. On the other hand, rejection of the null hypothesis is possible in the first difference in which all series for each country was found stationary. Thus, all the variables are integrated of the order one, I (1). Given these results, each variable satisfies the requirement to be included in the long-run cointegration model. The results of ADF and Philip-Perron unit root test are presented in Table 1.

Table 1: Augmented Dicker-Fuller (ADF) and Philip-Perron Unit Root Test Results

ADF			Philip-Perron	
1. Malaysia				
	Level	First Difference	Level	First Difference
LNGDP	-2.646349 (0.2630)	-5.293060 (0.0005)*	-2.696882 (0.2429)	-5.247856 (0.0005)*
LNEGI	-3.851692 (0.0229)**	-7.647138 (0.0000)*	-3.890025 (0.0208)**	-7.821939 (0.0000)*
LNSGI	-1.758704 (0.7075)	-6.177884 (0.0000)*	-2.038166 (0.5647)	-6.178485 (0.0000)*
LNPGI	-2.006504 (0.5817)	-7.133523 (0.0000)*	-1.979912 (0.5958)	-7.139831 (0.0000)*
2. The Philippines				
	Level	First Difference	Level	First Difference
LNGDP	-2.758587 (0.2199)	-4.264627 (0.0082)*	-2.758287 (0.2199)	-4.264627 (0.0082)*
LNEGI	-0.617191 (0.9729)	-6.797156 (0.0000)*	-0.779041 (0.9599)	-6.777505 (0.0000)*
LNSGI	-4.785518 (0.0020)*	-5.982539 (0.0001)*	-2.438482 (0.3558)	-5.920788 (0.0001)*
LNPGI	-1.717685 (0.7265)	-6.463665 (0.0000)*	-1.787647 (0.6937)	-6.468435 (0.0000)*

3. Singapore				
	Level	First Difference	Level	First Difference
LNGDP	-2.659596 (0.2577)	-4.342491 (0.0067)*	-2.274758 (0.4383)	-4.267847 (0.0081)*
LNEGI	-3.858675 (0.0227)**	-5.324076 (0.0004)*	-3.453152 (0.0574)	-5.177334 (0.0007)*
LNSGI	-1.948093 (0.6126)	-7.023281 (0.0000)*	-1.948093 (0.6126)	-7.133583 (0.0000)*
LNPGI	-1.249899 (0.8871)	-4.283153 (0.0078)*	-1.481939 (0.8209)	-3.921086 (0.0195)**

H_0 = series has unit root; H_1 = series has no unit root
Notes: Values in the parenthesis are p-value.
Asterisk (*, **) denotes rejection at 1% and 5% significant level, respectively.

Long-run analysis: The johansen cointegration test results

In the previous test, it was found that the GDP per capita, economic globalization, social globalization and political globalization are in levels non-stationary I(1) variables. The results allow the possibility of a stationary long-run relationship among these variable. Based on the results in Table 2, both trace test and maximum eigenvalue test indicate that there are three cointegrating equation at 5 per cent significant level among GDP per capita, economic globalization, social globalization and political globalization in the sample of Malaysia. In the case of the Philippines, trace test indicates the existence of two cointegrating equation among the variables. However, this result is not supported by maximum eigenvalue test where there is only one cointegrating equation exists in the sample. For the sample of Singapore, trace test detected the existence of four cointegrating variables. Since the long-run cointegrating relation is found among the variables of each country, this ascertain the existence of long run equilibrium relationship between GDP per capita, economic globalization, social globalization and political globalization. The outcome of the results prompted the setting up of an error-correction model.

Table 2: Johansen Cointegration Test Results

1. Malaysia					
H_0	**H_1**	**Trace**	**5%C.V.**	**Max-Eigen**	**5% C.V.**
r = 0	r = 1	80.30508**	47.85613	34.84651**	27.58434
$r \leq 1$	r = 2	45.45857**	29.79707	29.23938**	21.13162
$r \leq 2$	r = 3	16.21919**	15.49471	14.75077**	14.26460
$r \leq 3$	r = 4	1.468423	3.841466	1.468423	3.841466
2. The Philippines					
H_0	**H_1**	**Trace**	**5% C.V.**	**Max-Eigen**	**5% C.V.**
r = 0	r = 1	65.83766**	47.85613	34.43406**	27.58434
$r \leq 1$	r = 2	31.40359**	29.79707	18.27972	21.13162
$r \leq 2$	r = 3	13.12387	15.49471	9.941108	14.26460
$r \leq 3$	r = 4	3.182761	3.841466	3.182761	3.841466
3. Singapore					
H_0	**H_1**	**Trace**	**5% C.V.**	**Max-Eigen**	**5% C.V.**
r = 0	r = 1	68.85613**	47.85613	24.03691	27.58434
$r \leq 1$	r = 2	44.11885**	29.79707	20.25711	21.13162
$r \leq 2$	r = 3	23.86175**	15.49471	18.59047**	14.26460
$r \leq 3$	r = 4	5.271277**	3.841466	5.271277**	3.841466

Note: Values in the parenthesis are p-value.
Asterisk (**) denotes rejection of hypothesis at 5% significant level.

Short-run analysis: Vector error correction model (VECM)

The previous section demonstrates the presence of a cointegrating relationship of the variables in all three countries. Thus, this suggests that an error-correction model exists and combines the long-run relationship with short-run dynamics of the model. According to Guo (2008) [32], it is meaningful to investigate whether the parameters of the error-correction terms implied by cointegrating vectors for GDP in the short run equations are negative and significant. This result demonstrates that the long run equilibrium conditions holds and that the economy responds to deviations from equilibrium in a balancing manner. The lag length in the model has been determined according to Akaike's Information Criterion (AIC). The lag length that minimizes the AIC is 1.

The result in Table 3 confirms that the GDP per capita of Malaysia, the Philippines and Singapore has an automatic adjustment mechanism and that the economy responds to deviations from equilibrium in a balancing manner. The relative value (-1.021904 for Malaysia, -0.036587 for the Philippines and -0.216278 for Singapore) shows the speed of adjustment of any disequilibrium towards long run equilibrium state per year. In another word, Malaysia's economy will converge towards its long run equilibrium level by a fast pace

(10.2%) after the shock or fluctuation of economic globalization, social globalization and political globalization while the Philippines' and Singapore's economy converge to equilibrium by a slower pace (0.4% and 2.1%, respectively).

Table 3: Error Correction Model (Dependent Variable, D (LGDP)

1. Malaysia			
VECM	**Coefficient**	**Standard Error**	**t- statistics**
Cointegrating Eq. (EC(-1)	-1.021904***	0.21398	-4.77578
D(LNGDP(-1)	0.145672	0.15341	0.94956
D(LNEGI(-1)	-0.006180	0.03786	-0.16324
D(LNSGI(-1)	-0.006486	0.12348	-0.04896
D(LNPGI(-1)	0.092723	0.13114	0.70706
C	-0.026679	0.01968	-1.35566
2. The Philippines			
VECM	**Coefficient**	**Standard Error**	**t- statistics**
Cointegrating Eq. (EC(-1)	-0.036587***	0.01567	-2.33467
D(LNGDP(-1)	-0.451281***	0.16080	-2.80655
D(LNEGI(-1)	0.015894	0.00565	2.81418
D(LNSGI(-1)	-0.002538	0.01364	-0.18609
D(LNPGI(-1)	-0.036414***	0.01169	-3.11373
C	-0.007487	0.01450	-0.51637
3. Singapore			
VECM	**Coefficient**	**Standard Error**	**t- statistics**
Cointegrating Eq. (EC(-1)	-0.216278***	0.09393	-2.30263
D(LNGDP(-1)	-0.242461	0.14273	-1.69877
D(LNEGI(-1)	-0.007457	0.00852	-0.87476
D(LNSGI(-1)	0.237055	0.14005	1.69263
D(LNPGI(-1)	0.076391	0.04304	1.77485
C	-0.023083	0.01446	-1.59637

Note: Asterisk (***) denotes rejection of hypothesis at 10% significant level.

Short-run Analysis: VECM-Based Causality Test Result

Granger (1988) stated that causality test is basically an analysis technique to determine whether one time series is significant in forecasting another. The findings from cointegration test and VECM for Malaysia, the Philippines and Singapore suggested the presence of long run association between variables and implies causality relationship among variables. However, this does not reveal the directions of causation among the variables. Thus, in order to differentiate the causal nexus among the concerned variables, causality test is performed. The result of causality test is presented in table 4.

Table 4: VECM Granger Causality/Block Exogeneity Wald Test Results

Dependent Variables	Independent Variable (Excluded variables)			
	D(LNGDP)	**D(LNEGI)**	**D(LNSGI)**	**D(LNPGI)**
1. Malaysia				
D(LNGDP)	-	1.657296 (0.4366)	10.05644** (0.0066)	9.254464** (0.0098)
D(LNEGI)	0.022998 (0.9886)	-	0.029190 (0.9708)	1.012117 (0.6029)
D(LNSGI)	0.120882 (0.9413)	0.384463 (0.8251)	-	1.384448 (0.5005)
D(LNPGI)	0.161302 (0.9225)	0.694403 (0.7067)	1.673432 (0.4331)	-
2. The Philippines				
D(LNGDP)	-	1.720432 (0.4231)	2.034414 (0.3616)	5.641456*** (0.0596)
D(LNEGI)	1.928722 (0.3812)	-	0.046649 (0.9769)	6.113456** (0.0470)
D(LNSGI)	5.371486***(0.0682)	0.171301 (0.9179)	-	0.038234 (0.9811)
D(LNPGI)	0.644662 (0.7245)	1.798654 (0.4068)	0.425707 (0.8083)	-
3. Singapore				
D(LNGDP)	-	0.801059** (0.0123)	4.019477*** (0.1340)	0.157103 (0.9245)
D(LNEGI)	0.641295 (0.7257)	-	0.668862 (0.7157)	0.373969 (0.8295)
D(LNSGI)	1.118655 (0.5716)	1.278844 (0.5276)	-	0.792151 (0.6730)
D(LNPGI)	1.470987 (0.4793)	0.002512 (0.9987)	0.078717 (0.9614)	-

Notes: The figures above are χ^2 (p-value)

Asterisk (*, **, ***) denotes rejection of hypothesis at 1%, 5% and 10% significant level, respectively.

Short-run Analysis: Toda and Yamamoto Non- Causality Test Result

Toda and Yamamoto (1995) levied criticism on VECM based causality test that its results may not be correct because preliminary tests biases of cointegration and first difference stationarity can be a possible source of wrong inferences regarding causality. Thus, to complement the causality results from VAR-ECM and for sake of consistency check, Toda-

Yamamoto Granger non-causality test (1995) should be applied. This procedure as indicated earlier can be applied regardless of whether the series are I(0), I(1) and I(2).

Table 5: Toda-Yamamoto Granger Causality Test Results

Dependent Variables	Modified Wald (χ^2 - statistics)			
	LNGDP	LNEGI	LNSGI	LNPGI
1. Malaysia				
LNGDP	-	0.777559 (0.9784)	16.00419** (0.0068)	3.242711 (0.6626)
LNEGI	4.947256 (0.4224)	-	1.659949 (0.8939)	2.447441 (0.7844)
LNSGI	0.660821 (0.9850)	0.501266 (0.9921)	-	1.397423 (0.9246)
LNPGI	8.200294*** (0.1455)	6.766846 (0.2386)	6.637691 (0.2490)	-
2. The Philippines				
LNGDP	-	0.767475 (0.6813)	1.368644 (0.5044)	7.324093** (0.0257)
LNEGI	0.143848 (0.9306)	-	1.555848 (0.4594)	2.856728 (0.2397)
LNSGI	3.162369 (0.2057)	0.613236 (0.7359)	-	0.157426 (0.9243)
LNPGI	2.473040 (0.2904)	3.342762 (0.1880)	0.350779 (0.8391)	-
3. Singapore				
LNGDP	-	0.0129* (0.0129)	1.738052 (0.4194)	2.164409 (0.3388)
LNEGI	2.481568 (0.2892)	-	0.674508 (0.7137)	0.033315 (0.9835)
LNSGI	1.026060 (0.5987)	0.958542 (0.6192)	-	0.281394 (0.8688)
LNPGI	0.743689 (0.6895)	2.241793 (0.3260)	0.692933 (0.7072)	-

Notes: The figures above are χ^2 (p-value),
Asterisk (*,**, ***) denotes rejection of hypothesis at 1%, 5% and 10% significant level, respectively.

The result in table 5 indicates a consistency with the result obtained in VECM approach of Granger Causality test. For the case of Malaysia, the null hypothesis that SGI does not Granger cause GDP is rejected at 5 percent level of significance. This also indicates unidirectional causality running from SGI to GDP. Unidirectional causality also detected running from GDP to PGI. On the other hand, for the Philippines, only PGI possesses significant causal relationship with GDP and no reverse causal linkages are recorded. In the causal analysis of Singapore, the result is consistent as in VECM Granger causality test. The null hypothesis of Granger non causality is rejected at 1 percent significant level for EGI. Based on the result obtained from the Granger-Causality Test of both VECM approach and Toda-Yamamoto approach, summary of causal relationship among GDP, economic globalization, social globalization and political globalization for Malaysia, the Philippines and Singapore can be constructed to represent the short-run causality. For Malaysia, the analysis has documented a significant relationship between social globalization and political globalization towards the economic growth per capita.

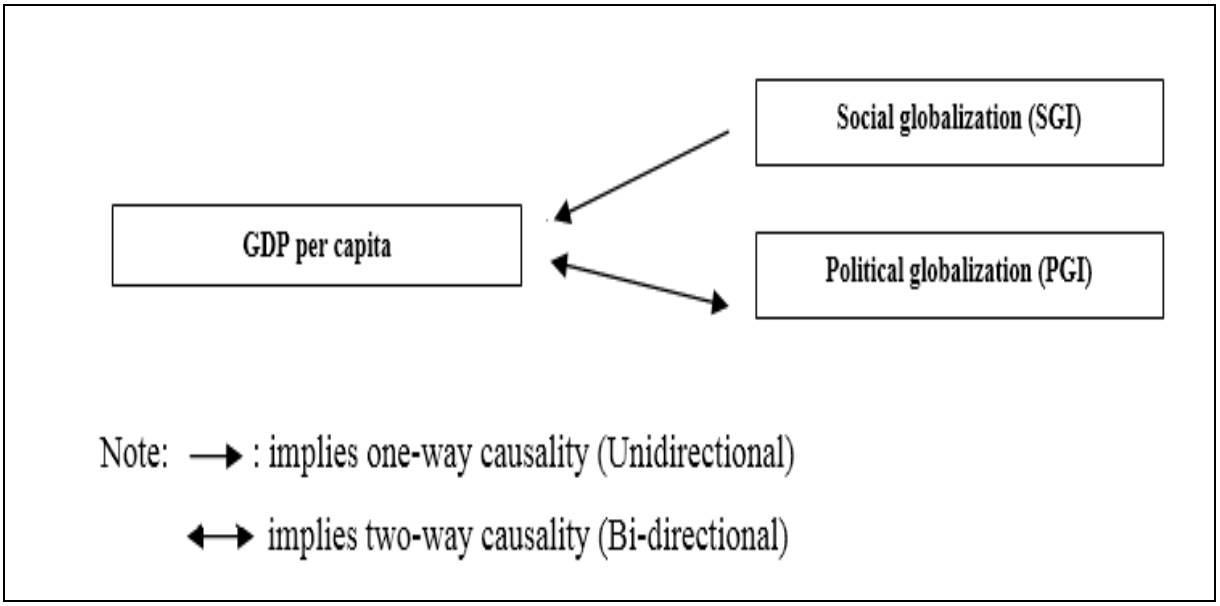

Fig 1: Granger-Causality Result for Malaysia

The result provides indication that a change in social globalization and political globalization gives favourable impact to the economic growth. Reverse causality only detected between PGI and GDP. This result is similar with the findings by Dreher (2006) [20] where globalization caused a favourable impact towards the economic growth. Dreher also suggested that on average, countries that globalized more experienced higher growth rates as compared to those who did not favour globalization.

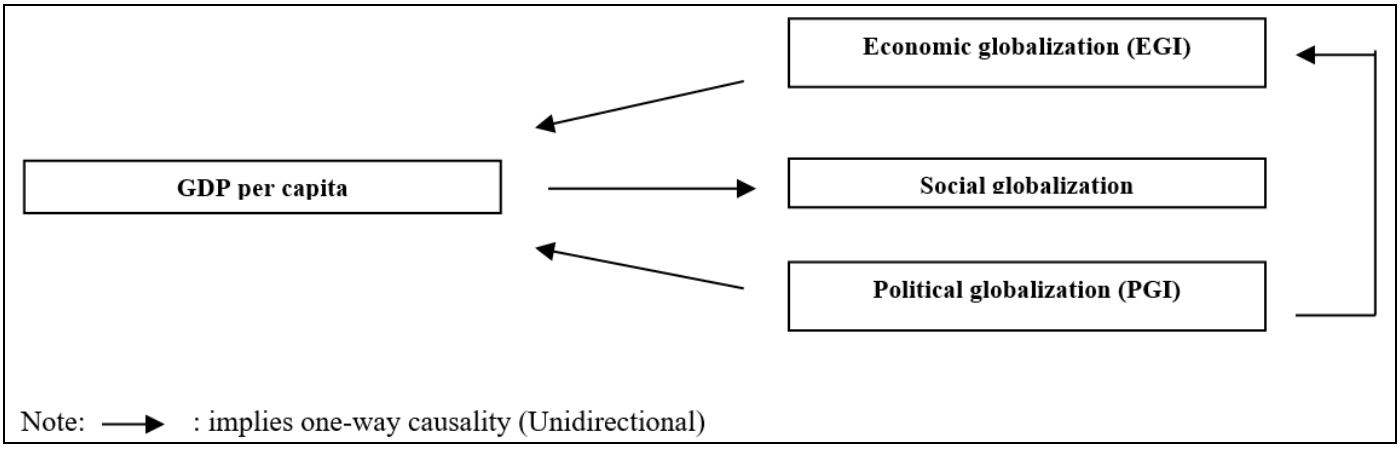

Fig 2: Granger Causality Result for the Philippines

The finding for the Philippines suggests that economic globalization and political globalization has short run impact over the country's economic growth. There is also a significant impact of economic growth towards social globalization.

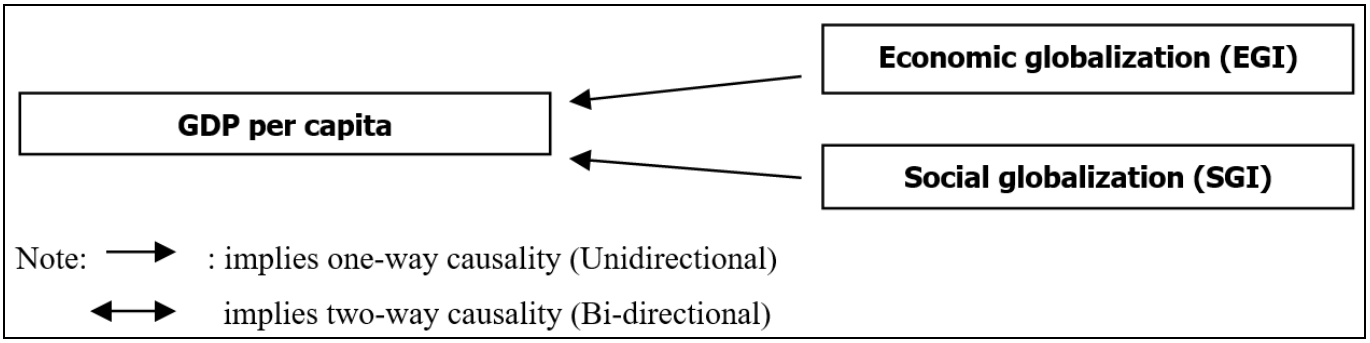

Fig 3: Granger Causality Result for Singapore

The results of causality test on Singapore's variables indicates that economic globalization (EGI) and social globalization (SGI) has a significant short-run unidirectional causality relationship with the GDP per capita. However, the result is not the same for political globalization as there is no significant causality direction exists.

5. Conclusion

This paper explores empirically the linkages between globalization measures and economic growth of three selected ASEAN members, namely, Malaysia, the Philippines and Singapore from the year 1970 to 2014. This study is also set to examine the causality interplay of GDP per capita and globalization throughout the selected period. This paper utilizes the KOF index of globalization (2012) which captures the three main dimensions of globalization, including economic globalization, social globalization and political globalization. The empirical evidence from previous studies suggests that the more globalized a country is, the higher the growth rate would be. This is true at a certain degree. However, some countries also experience negative effects over the coming of globalization. The various implications of globalization experienced by different countries might be influenced by the different economic policies in their response to economic problem and external shocks. The empirical results presented in the earlier chapter suggest that in the long run, economic globalization carry significant positive impacts over economic growth in both the Philippines and Singapore. The findings match those by Moghaddam and Redzuan (2012) [49] that economic globalization, especially through foreign direct investment (FDI) plays a major role in the economic development, which can lead to developments in many other sectors of the economy.

6. References

1. Addison T, Heshmati A. The new Global Determinants and FDI flows in Developing Countries, *Monetary Integration, Market and Regulation, Research in Banking and Finance*, 2004; 4:151-186.
2. Afzal M. The impact of globalization on Economic Growth of Pakistan. *The Pakistan Development Review*, 2007; 46(4):723-734.
3. Amaldas M. The Management of Globalization in Singapore: Twentieth Century Lessons for the Early Decades of the New Century. Journal of Alternative Perspective in the Social Sciences, 2009; 1(3):982-1002.
4. Andersen TM, TT Herbertsson. Measuring Globalization, IZA Discussion Paper 2003, 2003: 817.
5. Arize AC. Imports and Exports in 50 Countries Test of Cointegration and Structural Breaks. *International Review of Economics and Finance*, 1994; 11:101-115
6. Bernardinho N. Ten Years of the WTO Agreement on Agriculture: Problems and Prospects. Paper presented at the International Gender and Trade Network IGTN panel on WTO +10 Meets Beijing +10 during the WTO Annual Public Symposium, April 21, Geneva, Switzerland. 2005

7. Bhagwati JN. The Wind of the Hundred Days: How Washington Mismanaged Globalization, Cambridge, MIT Press. 2004
8. Brune N. Privatization around the World Ph.D. dissertation; New Haven, Connecticut: Yale University. 2004
9. Bultron R. Recruitment Costs, State Exaction and Government Fees', Paper presented at the International Migrant Conference on Labor-Export. 2001
10. Carr M, Chen M, Tate J. Globalization and Home-based Workers. Feminist Economics; 2000; 6(3):123-142.
11. Carr M, Chen M. Gender Implications of Globalization with special reference to the Asian Financial Crisis. Paper presented to a roundtable during International Women's Week, sponsored by the Women in Development and Gender Equity Division, Policy Branch, CIDA, Ottawa. 2001
12. Caselli M. On the Nature of Globalization and its Measurement. Some Notes on the Sacro Cuore, Milano. 2006
13. Chang CP, Lee CC. Globalization and Economic Growth: A Political Economy Analysis for OECD Countries. Journal of Global Economic Review, 2010; 39(2):151-173.
14. Cheng MY. Malaysia: Moving towards Vision 2020. *ACI Working Paper Series*, Lee Kuan Yew School of Public Policy, National University of Singapore. 2008
15. Chia SY, Chen YY. Income Distribution in Singapore. http://www.eadn.org Retrieved 12 August 2012. 2003
16. Ching *et al.* Economic Benefits of Globalization: The Impact of Entry to the WTO on China's Growth. *Pacific Economic Review*, 2011; 16(3):285-301.
17. Dickey DA, Fuller WA. Distributions of the estimators for autoregressive time series with a unit root, Journal of the American Statistical Association, 1979; 74:427-31.
18. Dickey DA, Fuller WA. Likelihood ratio Statistics for autoregressive time series with a unit root, Econometrica, 1981; 49:1057-72.
19. Dreher A. Does Globalization Affect Growth? Evidence from a New Index of Globalization. Forthcoming in Applied Economics. 2003
20. Dreher A. The Influence of Globalization on Taxes and Social Policy – an Empirical Analysis for OECD Countries. *European Journal of Political Economy*, 2006; 22(1):179-201.
21. Engle RF, Granger CWJ. Cointegration and Error Correction: Representation, Estimation and Testing, Econometrica, 1987; 55:251-76.
22. Ernst, Young. Singapore takes third spot on Globalization Index 2011 www.ey.com/.../News%20release %2020120208%20. Retrieved 20th June 2012. 2011
23. Fischer JAV, Somogyi F. Globalization and Protection of Employment. KOF Working 2009, 238.
24. Fischer S. Globalization and its challenges. American Economic Review 2003; 93(2):1-30.
25. Fleicher AM, Mutascu M. Economic Growth and Globalization in Romania. World Applied Sciences Journal, 2011; 12(10):1691-1697.
26. Friedman T. The Lexus and the Olive Tree: Understanding Globalization New York: Anchor Books. 2000
27. Giddens A. Runaway World: How Globalization is reshaping Our Lives, London: Routledge. 2000
28. Gounder R. Effectiveness of Globalization: A case Study of Fiji. Sri Lankan Journal of Agricultural Economics, 2003; 5(1):47-67.
29. Granger CWJ. Investigating Causal Relations by Econometric Models and Cross-Spectral Methods, Econometrica, World Development Indictors (WDI) (2008) World Development Indictors (Washington, DC:World Bank). 1969; 37:424-438.
30. Granger CWJ. Developments in the study of co-integrated economic variables. Oxford. Bul. Econ. Stat. 1988; 48: 213-228.
31. Gujarati D. Basic Econometrics. Third Edition. The McGraw-Hill Companies, 1995, 853.
32. Guo J. The Impact of Oil Price Shock and Exchange Rate Volatility on Economic Growth: A Comparative Analysis for Russia Japan and China", Research Journal of International Studies, 2008; 8:98-111.
33. Heshmati A. Measurement of a Multidimensional Index of Globalization, Global Economy Journal Article 1. 2006a; 6(2),
34. Intriligator M. Globalization of the World Economy. Potential Benefits and Costs and an net Assessment. Milken Institute Policy Brief No.33. California. 2003
35. Johansen S. Statistical Analysis of Cointegrating Vectors, Journal of Economic Dynamic and Control, 1988; 12:231-254.
36. Johansen S, Juselius K. Maximum Likelihood Estimation and Inference on Cointegration with Applications to the Demand for Money, Oxford Bulletin of Economics and Statistics, 1990; 52:169-210.
37. Keho Y. The Demography of Sub-Saharan Africa from the 1950s to the 2000s. A Survey of Changes and a Statistical Assessment. Population, 2012; 59(3/4):455-555.
38. KOF Index of Globalization. http://globalization.kof.ethz.ch/. Retrieved 20th June 2012.
39. Lee HG. Globalization and Ethnic Integration in Malaysia in Saw, S. H. & Kesavapany, K. *ed.* Malaysia: Recent Trends and Challenges, Singapore: ISEAS. 2006
40. Lee S, Heshmati A. The Relationship between Globalization, Economic Growth and Income Inequality,"TEMEP Discussion Papers 201051, Seoul National University; Technology Management, Economics, and Policy Program TEMEP. 2010
41. Lim JM. Social Impact of and Responses to the Current East and Financial Asian Crisis, in Social Impact of the Asian Financial Crisis, Seoul: Korea Development Institute and UNDP. 1998
42. Lim JM. Learning From the East Asian Crisis: The Case of the Philippines, manuscript. 2010
43. Lutkepohl H. New Introduction to multiple time series analysis. Germany: Springer-Verlag. 2005
44. Mapuva J. The Impact of Globalization on South Africa's Economic Development. Journal of Sustainable Development in Africa, 2010; 12(2):390-413.
45. Marossi AZ. Globalization of Law and Electronic Commerce toward a Consistent International Regulatory Framework, University of Amsterdam. 2006
46. Masih AMM, Masih R. On the temporal causal relationship between energy consumption, real income and price: Some new evidence from Asian NICs based on a multivariate cointegration/vector error-correction approach. Journal of Policy Modeling, 1997; 19:417-440.

47. Mengisteab K. Globalization and State- Society Relations in Africa. The Africa Development, 2010; 33(2):37-65.
48. Miller TC. Impact of Globalization on US Wage Inequality: Implications for Policy, North American Journal of Economics and Finance, 2001; 12(3): 219-42.
49. Moghaddam AA, Redzuan M. Globalization and Economic Growth: A Case Study in a few Developing Countries. Research in World Economy, 2012; 3(1):54-62.
50. Nissanke M, Thorbecke E. *Eds*. The Impact of Globalization on the World's Poor: Transmission Mechanisms. Studies in Development Economics and Policy. Houndmills, U.K. and New York: Palgrave Macmillan. 2007
51. Norberg T, Cheru MD. Linkages between Financial Deepening, Trade Openness and Economic Development: Causality Evidence from Sub-Saharan Africa. 2006
52. Nye J, Donahue J. Governance in a Globalizing World. R.R. Donnelley & Sons, Harrisonburg, VA. 2000
53. O'Rourke KH, Williamson M. When did globalisation begin?, National Bureau of Economic Research, Working Paper, W7632, April, Cambridge, MA. 2000
54. Ouattara AD. The Challenges of Globalization for Africa. International Monetary Fund at the Southern Africa Economic Summit. World Economic Forum, Harare Harare, 21 May. 1997
55. Rambaldi AN, Doran HE. Testing for Granger non-causality in cointegrated systems made easy, Working Papers in Econometrics and Applied Statistics 88, Department of Econometrics, The University of New England. 1996
56. Rao B, Tamazian A, Vadllamannati K. Growth Effects of a Comprehensive Measure of Globalization with Country Specific Time Series Data. MPRA Paper No. 7917. Munich, German. 2008
57. Solow R. A contribution to the theory of economic growth, Quarterly Journal of Economics, 1956; 70:65-94.
58. Stiglitz JE. Globalization and Growth in Emerging Markets and the New Economy. The Journal of Policy Modeling, 2008; 25:505-524.
59. Thorbecke E, Nissanke M. The Impact of Globalization on the Poor in Latin America. Economia, Fall, 2008; 153-199.
60. Toda HY, Yamamoto T. Statistical Inference in Vector Autoregression with Possibly Integrated Processes, Journal of Econometrics, 1995; 66:225-250.
61. Toda HY, PCB Phillips. Vector Autoregression and Causality, Econometrica, 1993; 61:1367-1393.
62. Vadllamannati K, Rao B. Growth Effects of Globalization in the Low Income African Countries: A Systems GMM Panel Data Approach. MPRA Paper No. 16595.Munich. 2009
63. Villaverde J. Indicators of regional economic convergence, in: De Lombaerde P. *Ed.* Assessment and Measurement of Regional Integration, Routledge, London. 2006
64. Wei S, Wu Y. Globalization and Inequality without Differences in Data Definitions, Legal System, and Other Institutions, International Monetary Fund mimeo. 2002
65. Zhuang R, Koo W. Economic Growth under Globalization: Evidence from Panel Data Analysis. American Agricultural Economics Association Annual Meeting. Portland. OR, July 29 - August, 2007; 1:1-22.