Journal of Economics and Financial Analysis
Type: Double Blind Peer Reviewed Scientific Journal
Printed ISSN: 2521-6627 | Online ISSN: 2521-6619
Publisher: Tripal Publishing House | DOI:10.1991/jefa.v4i1.a30
Received: 16.05.2020 | Accepted: 01.08.2020 | Published: 28.08.2020
Journal homepage: ojs.tripaledu.com/jefa

Trade Liberalization and International Trade: A Case Study of China

Adel Shakeeb MOHSEN *
British Institute of Management and Technology, Ivory Coast

Abstract

This study investigates the effect of trade liberalization on international trade in China over the period 1980-2018. Trade openness is used as an indicator of trade liberalization. Unit root test, cointegration test, Granger causality tests, and IRFs were used in this study. The cointegration test shows that trade openness has a positive effect on exports and imports. Trade openness has a greater effect on exports than imports. Besides, export and import are positively related to gross fixed capital formation and inflation, but negatively related to oil price. Furthermore, the Granger causality test indicates that there are bidirectional short- and long-run causality relationships between trade openness and exports, and also between trade openness and imports.

Keywords: *Trade Liberalization; China; Cointegration; Causality Test; Trade Openness.*

JEL Classification: *B17, C33, F00, F21.*

* Corresponding author. Abidjan, Ivory Coast.
E-mail: adelmhsen@hotmail.com

1. Introduction

China has the second largest economy in the world by nominal GDP, and the fastest economic growth rate in the world over 30 years until 2015 (Schwartz and Abrams, 2015). Besides, China is the largest manufacturing economy, the fastest growing consumer market, and the largest exporter of goods in the world. It also plays a vital role in international trade, and has the second place as the largest importer of goods in the world (Barnett, 2013).

Since the late 1970s, China has started in reforming its economy to integrate itself into the international trade system. Import and export growth has continued to be one of the major supporters of China's rapid economic growth. Therefore, China worked on improving the quality and quantity of its production, enhancing the investment, and liberalizing its foreign trade. Besides, it has signed free trade agreements with many countries like ASEAN, Pakistan, Australia, South Korea, New Zealand, and Switzerland. It also joined the Asia-Pacific Economic Cooperation (APEC) group in November 1991, and the WTO in December 2001, after 16 years of negotiations (Chen et al., 2015).The biggest percentage share of imports in china consists of capital goods, industrial supplies, and high-technology equipment. The majority of these imports come from developed countries like Japan and the United States. On the other hand, China exports agricultural products, chemicals, and manufactured goods such as electronic equipment and textiles, which consist the biggest percentage share of the total exports in the country.

The main objective of this study is to investigate the effect of trade liberalization on international trade in China over the period 1980-2018. The organization of this study is as follows. The next section is the literature review, the third section provides a brief discussion on the methodology, and the fourth section reports the empirical results and the conclusion are presented in the last section.

2. Previous Studies

A large number of studies investigated the effects of trade liberalization on trade flows. Most of these studies including Santos-Paulino and Thirlwall (2004), Wu and Zeng (2008), Allaro (2012), Hoque and Yusop (2012), Chaudhary and Amin (2012), Kassim (2013), Zakaria (2014) and Sofjan (2017) concluded that trade openness has a positive effect on both exports and imports. Besides, Weiss (1992), Thomaset al. (1991), Helleiner (1994), Joshi and Little (1996), Jenkins

(1996), Bleaney (1999), Ahmed (2000), Edwards and Alves (2006), Ju et al. (2010), Anwar et al. (2010), Cestepeet al. (2015), Ofei (2018) and Osakwe et al. (2018) found that exportsare affected positively from trade liberalization. Melo and Vogt (1984), Bertola and Faini (1991), Mah (1999), Santos-Paulino and Thirlwall (2004), Wu and Zeng (2008), Ju et al. (2010), Fatukasi and Awomuse (2011), Allaro (2012), Hoque and Yusop (2012) and Armah et al. (2014) concluded that trade openness has a positive effect on imports.

On the other hand, there are other studies tested the effects of other factors such as oil price, investment, GDP, consumption and inflation on exports and imports of different countries. Enimola (2011) found that there are positive relationships between exports and GDP, real exchange rate, FDI and external market access indicator in Nigeria. Mohammad's study (2010) revealed that GDP, living standard and balance of trade affect exports positively in Pakistan, but high oil price causes a rise in inflation, which affects exports negatively. Moreover, Elhiraika and Mbate (2014) studied the long-run determinants of export diversification for 53 African countries, and concluded that the per capita income, infrastructure, public investment, human capital and the institutional framework are significant drivers of export diversification and transformation. Karamuriro and Karukuza (2015) detected that the GDP of Uganda, GDP of the importer's countries, GDP per capita, and exchange rates have a positive effect on Uganda's exports flow. Abidin et al. (2016) found that the size of the economies, population, rates of exchange bilateral distance are the determinants of Malaysia-ASEAN exports. Abidin and Haseeb (2017) also found that bilateral distance, exchange rates and GDP per capita are the determinants of the trade relationship between Malaysia and GCC countries. Fochamnyo and Akame (2017) concluded that trade openness, foreign aid, official exchange rates, FDI and gross domestic investment promoted export diversification in SSA countries. Furthermore, Osakwe et al. (2018) revealed that developing countries that are more open to trade have more diversified exports structures comparing with countries that are less open, and the human capital, GDP per capita and institutions play important roles in exports diversification. Uysal and Mohamoud (2018), on another hand, pointed out that GDP growth does not affect the export, while labor force, foreign direct investment, industrialization, and exchange rate have a positive effect on exports, but inflation has a negative effect on exports value of East Africa countries. However, Agboola et al. (2018) concluded that export flow between Malaysia-OIC countries in Africa are determined by distance, common colony, GDP Per capita, GDP similarities, GDP, real exchange rates and population, but the degree of openness of an economy was not significant.

On the other hand, according to Egwaikhide (1999), foreign exchange earnings, relative prices, and real income are significantly determining the total imports in Nigeria. Bahamani and Kara (2003) also get the same result and concluded that income has a significant influence on the import demand of nine industrial countries. Narayan and Narayan (2005) and Joseph and Fosu (2006) revealed that total consumption expenditure, export expenditure, and investment expenditure affect positively the import demand of Fiji and Ghana, while an increase in relative prices affects it negatively. Rahman's (2009) study indicated that inflation, GDP per capita and trade openness have positive effects on the imports of Bangladesh, while the exchange rate has no effect on its imports. Onwuka and Zoral (2009) also concluded that FDI, GDP, and domestic price (CPI) have positive and significant effects on the import demand in Turkey. Besides, Fatukasi and Awomuse (2011) found that GDP, real exchange rate and openness affect positively import demand in Nigeria, while the level of external reserves affects it negatively. However, Aljebrin and Ibrahim (2012) revealed that private consumption, real income, international reserves, and gross capital formation have positive and significant effects on the import demand of the GCC countries in both the long and short run. Other studies including Narayan and Narayan (2006) and Babatunde and Egwaikhide (2010) tested the impact of expenditure on imports for diverse countries, and found that expenditure affects positively on imports. Chani et al. (2011) obtained a positive and significant relationship between import demand and all expenditure components for Pakistan. Vacu and Odhiambo (2018) also found that import demand is positively determined by trade liberalization, investment spending, and gross national income.

3. Methodology

The vector autoregression (VAR) model will be used in this study. In order to investigate the effect of trade liberalization on the international trade in China, two models will be used. The first model is the export model, which consists of five variables, namely, exports, trade openness, oil price, gross fixed capital formation, and inflation. Exports are the dependent variable. The second model is the import model, and also it consists of five variables, namely, imports, trade openness, oil price, gross fixed capital formation, and inflation. Imports are the dependent variable. Trade openness is the indicator of the trade liberalization. The export and import models are presented as follows:

$$\ln(EXP_t) = \beta_0 + \beta_1 \mathrm{OPEN_t} + \beta_2 \ln(OP_t) + \beta_3 \ln(GFCF_t) + \beta_4 \ln(CPI_t) + \varepsilon_t \quad (1)$$

$$\ln(IMP_t) = \beta_0 + \beta_1 \mathrm{OPEN_t} + \beta_2 \ln(OP_t) + \beta_3 \ln(GFCF_t) + \beta_4 \ln(CPI_t) + \omega_t \quad (2)$$

where β_0 is the intercept and β_1, β_2, β_3 and β_4 are the slope coefficients in the export model, while β_0 is the intercept and β_1, β_2, β_3 and β_4 are the slope coefficients in the import model. The variable *ln(EXP)* is the natural log of exports; *ln(IMP)* is the natural log of imports; *OPEN* is the trade openness as a percentage of total exports and imports to GDP; *ln(OP)* is the natural log of oil price per barrel; *ln(GFCE)* is the natural log of gross fixed capital formation; and *ln(CPI)* is the natural log of consumer price index. Both ε_t and ω_t are the error terms in equations (1) and (2).

Annual time series data of China from1980 to 2018 are used in this study, and the data were collected from the World Bank. The analysis will begin with the unit root tests to determine whether the time series data are stationary at levels or first difference. If the variables are integrated of the same order I(1), the Johansen cointegration test will be used to determine whether there is any long-run or equilibrium relationship between the dependent variable and the other independent variables in the two models. If the variables are found to be cointegrated, the Granger causality tests will be conducted based on the vector error correction model (VECM) to determine the causality relationships among the variables in the two models. However, if there is no cointegration relationship among the variables, the VAR model will be employed to test for short-run Granger causality between the variables. Lastly, impulse response functions (IRFs) will be used to determine whether trade liberalization plays any important role in explaining the variation of exports and imports at short and long forecasting horizons.

4. Empirical Results and Discussion

The results of the ADF unit root tests show that all the variables in the two models are not stationary at the level, but become stationary after first differencing at least at the 5 percent level of significance. This means that all the variables are integrated of order one, that is, I(1).

4.1. Johansen Cointegration Test Results

After determining that all the variables are integrated of order one, we can run Johansen cointegration test to check if there is any cointegration or long-run relationship among the variables in the two models. However, we should run the VAR model first to determine the optimal lag length, based on the minimum Akaike information criterion (AIC). The optimal lag length used in this study is four

lags. Tables 1 and 2 below confirm that there is a long-run or cointegration relationship between the variables in the two models.

After having found cointegration relationships among the variables in the two models, the cointegration equations for exports and imports can be written as:

$$\ln(EXP_t) = 0.1981 + 2.7445 * \mathrm{OPEN_t} + 0.1981 * \ln(OP_t) + 0.9293 * \ln(GFCF_t) + 0.1981 * \ln(CPI_t) \quad (1)$$

$$\ln(IMP_t) = 0.4773 + 1.8574 * \mathrm{OPEN_t} + 0.0221 * \ln(OP_t) + 0.9069 * \ln(GFCF_t) + 0.1712 * \ln(CPI_t) \quad (2)$$

Table 1. Johansen Cointegration Test Results for the Export Model

No. of CE(s)	Trace Statistic	Prob	Max-Eigen Statistic	Prob
r = 0	321.3525***	0.0001	178.7871***	0.0001
r ≤ 1	142.5654***	0.0000	64.0767***	0.0000
r ≤ 2	78.4887***	0.0000	34.7427***	0.0006
r ≤ 3	43.7461***	0.0000	29.4322***	0.0002
r ≤ 4	14.3139***	0.0049	14.3139***	0.0049

Note: *** Denotes significance at the 1 percent level, and ** at the 5 percent level

Table 2. Johansen Cointegration Test Results for the Import Model

No. of CE(s)	Trace Statistic	Prob.	Max-Eigen Statistic	Prob.
r = 0	284.5497***	0.0000	109.2741***	0.0000
r ≤ 1	175.2757***	0.0000	87.6688***	0.0000
r ≤ 2	87.6069***	0.0000	44.0248***	0.0000
r ≤ 3	43.5821***	0.0000	30.7722***	0.0001
r ≤ 4	12.8099***	0.0098	12.8099***	0.0098

Note: *** Denotes significance at the 1 percent level, and ** at the 5 percent level

It is clear from equations 3 and 4 above that trade openness has a positive effect on exports and imports. This shows that the Chinese government's efforts in liberalizing foreign trade have resulted in increased exports and imports. Trade

liberalization enhances exports by reducing the restrictions on exports, cutting export taxes, and simplifying the complex export procedures. Besides, it boosts imports through facilitating import procedures and reducing import restrictions in the country. Additionally, trade liberalization opens up new markets for Chinese products, and motivates producers to improve and increase their production, which in turn reflected positively on exports and imports in the country. Wu and Zeng (2008), Chaudhary and Amin (2012), Kassim (2013), Zakaria (2014) and Sofjan (2017) also argued that openness affects international trade positively.

However, it is clear that the oil price has a negative effect on exports and imports. With increases in the oil price, cost of production will increase too, which in turn drives producers to reduce their production. Also, when oil price increases, the prices of foreign goods will be more expensive; this decreases the local demand on it. Hence, the high oil price will reduce the total value of exports and imports in the country. On the other hand, gross fixed capital formation has a positive effect on exports and imports in China. An increase in the investments requires from the producers to import more machines, production equipment, raw materials and semi-finished materials that can be used in their production activities. Besides, a rise in the investment will increase the production in the country, thus leading to an increase in exports and imports. Furthermore, inflation has a positive effect on exports and imports. When prices increase, firms will produce more to increase their profits. Thus, inflation can be a reason that motivates producers to increase their production. On the other hand, when the local prices increase, the prices of foreign products will be less expensive; this increases the local demand on foreign products. Hence, a rise in inflation increases exports and imports in the country.

4.2. Granger Causality Test Results

Since the variables in the two models are cointegrated, the Granger causality tests based on the VECM can be used to examine the short- and long-run causality relationships among the variables in the two models. The results of the Granger causality test are shown in Tables 3.

It is clear from Table 3 that there are bidirectional short-run causality relationships between OPEN, lnGFCF and lnEXP, and unidirectional short-run causality relationships running from lnOP and lnCPI to lnEXP. While in the long run, there are bidirectional long-run causality relationships between OPEN, lnOP, lnGFCF and lnEXP, and unidirectional long-run causality relationships running from and lnCPI to lnEXP. On the other hand, there are bidirectional short-run causality relationships between OPEN, lnOP, lnCPI and lnIMP, and unidirectional short-run

causality relationship run¬ning from lnGFCF to lnIMP. Besides, there are bidirectional long-run causality relationships between POEN, lnOP, lnGFCF, lnCPI, and lnIMP. Hence, there are bidirectional short- and long-run causality relationships between trade openness and exports, and also between trade openness and imports.

Table 3. Granger Causality Test Results of the Export and Import Model

Dependent variables	**Independent variables in the Export model**					
	∑Δ lnEXP	**∑Δ OPEN**	**∑Δ lnOP**	**∑Δ lnGFCF**	**∑Δ lnCPI**	**ect(-1)**
Δ lnEXP	-	6.52 (3)**	5.83 (4)**	5.11 (4)**	8.18 (5)**	-0.82**
Δ OPEN	4.37 (3)*	-	2.43 (2)	4.51 (3)**	1.12 (2)	-0.64*
Δ lnOP	1.47 (2)	5.01 (4)**	-	3.34 (3)*	5.91(3)**	-0.315*
Δ lnGFCF	3.17 (3)**	1.54 (2)	0.19 (2)	-	2.12 (2)*	-0.68**
Δ lnCPI	2.13 (2)	3.21 (3)**	2.08 (2)*	1.98 (2)	-	-0.21
Dependent variables	**Independent variables in the Import model**					
	∑Δ lnIMP	**∑Δ OPEN**	**∑Δ lnOP**	**∑Δ lnGFCF**	**∑Δ lnCPI**	**ect(-1)**
Δ lnIMP	-	7.32 (3)**	4.34 (3)**	4.12 (4)*	8.28 (2)*	-0.42*
Δ OPEN	4.11 (3)**	-	1.73 (2)*	3.71 (2)**	2.17 (2)*	-0.62**
Δ lnOP	5.67 (3)*	3.01 (3)*	-	2.21 (3)	3.12(4)**	-0.85*
Δ lnGFCF	3.21 (2)	1.32 (4)	0.63 (2)	-	3.13 (4)*	-0.92**
Δ lnCPI	6.12 (5)**	3.32 (3)**	2.04 (2)*	5.61 (3)**	-	-0.65**

Notes: ect(-1) represents the error correction term lagged one period. The numbers in the brackets show the optimal lag based on the AIC. Δ represents the first difference. Only F-statistics for the explanatory lagged variables in first differences are reported here. For the ect(-1) the t-statistic is reported instead. ** denotes significance at the 5 percent level and * indicates significance at the 10 percent level.

4.3. Impulse Response Functions

The IRFs are used to indicate the dynamic effects of a particular variable's shock on the other variables that are included in the same model, and to examine the dynamic behavior of the time series over a 10-year forecast horizon. The

generalized impulse response functions will be used in this study. It is clear from Figure 1 that when there is a shock to OPEN, lnEXP and lnIMP will respond positively in the following years. This reflects the important role that simplifying import and export procedures can play in supporting exports and imports in the country. Hence, trade liberalization has a vital role in boosting exports and imports in China.

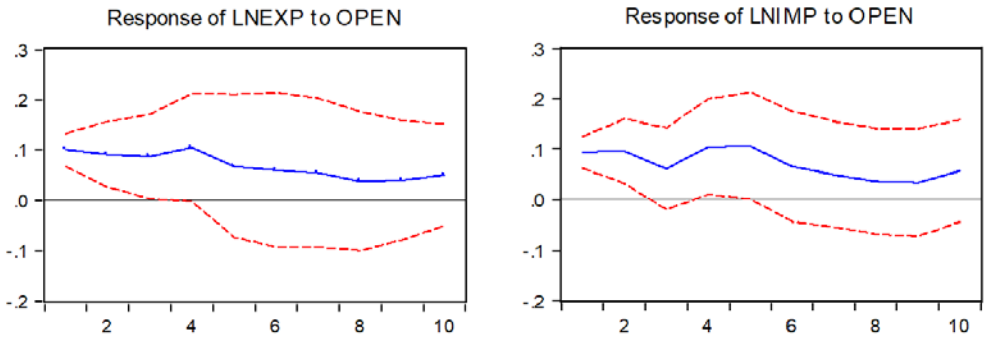

Figure 1. Generalized Impulse Response Functions for the Import and Export Models

5. Conclusion

This study investigated the effect of trade liberalization on international trade in China, using annual time series data from 1980 to 2018. Unit root test, Johansen cointegration test, Granger causality tests, and IRFs were used in this study. The results show that trade liberalization has a positive effect on exports and imports in China. Hence, opening up China's economy to international trade was a good strategy that has been adopted by the government to boost exports and imports of the country. Besides, the effect of trade openness on exports is more than its effect on imports, which means that trade liberalization can play a significant role in supporting the trade balance in the country. Hence, it is necessary for the Chinese government to encourage investment and motivate producers to improve the quality and quantity of their production.

The results also showed that export and import are positively related to gross fixed capital formation and inflation, but negatively related to the oil price. Furthermore, from the Granger causality tests, we found that there are bidirectional short- and long-run causality relationships between trade openness and exports, and also between trade openness and imports. Lastly, the impulse

response functions indicated that exports and imports will respond positively to a trade liberalization shock.

References

Abidin, I.S.Z., & Haseeb, M. (2017). *Malaysia - GCC Trade and Financial Linkages: Scope, Opportunities and Potential*. Proceedings of 44th International Business Research Conference 18 - 19 September 2017, Zurich Marriott Hotel, Zurich, Switzerland.

Abidin, I.S.Z., Haseeb, M., & Islam, R. (2016). Regional Integration of the Association of Southeast Asian Nations Economic Community: An Analysis of Malaysia-Association of Southeast Asian Nations Exports. *International Journal of Economics and Financial Issues, 6* (2).

Agboola, Y.H., Abidin, I., & Bakar, N. (2018). An Empirical Analysis of Determinants of Malaysia's Export to OIC Countries in Africa. *International Journal of Business Management and Economic Research, 9* (1), pp. 1230-1235

Ahmed, N.U. (2000). Export Responses to Trade Liberalization in Bangladesh: A Cointegration Analysis. *Applied Economics, 32*, pp. 1077-84.

Aljebrin, M.A., & Ibrahim, M.A. (2012). The Determinants of the Demand for Imports in GCC Countries. *International Journal of Economics and Finance*, *4* (3), pp. 126-138.

Allaro, H.B. (2012). The Impact of Trade Liberalization on the Ethiopia's Trade Balance. *American Journal of Economics, 2* (5), pp. 75-81.

Anwar, S., Shaukat, F., & Hussain, Z. (2010). Impact of Trade Liberalization on Export of Cotton from Pakistan: A Time Series Analysis. *Sarhad Journal of Agriculture,* 26 (2), pp. 297-304.

Armah, M.K., Brafo-Insaidoo, W., & Akapare, I.A. (2014). Trade Liberalization and Import Revenue Evidence from Ghana. I*nternational Journal of Economics, Commerce and Managemen*t, 2 (9), pp. 1-18.

Babatunde, M.A., & Egwaikhide, F.O. (2010). Explaining Nigeria's Import Demand Behaviour: A Bound Testing Approach. *International Journal of Development Issues*, *9* (2), pp. 167-187.

Bahmani-Oskooee, M., and Kara, O. (2003). Relative Responsiveness of Trade Flows to a Change in Prices and Exchange rate. *International Review of Applied Economics, 17*, pp. 147-163.

Barnett, S. (2013). *China: Fastest Growing Consumer Market in the World* [online]. [Accessed 20th July 2019]. Available from World Wide Web: https://blogs.imf.org/2013/12/02/china-fastest-growing-consumer-market-in-the-world/

Bertola, G., & Faini, R. (1991). Import Demand and Non-Tariff Barriers the Impact of Trade Liberalization. *Journal of Development Economics, 34* (1-2), pp.269-286.

Bleaney, M. (1999). Trade Reform, Macroeconomic Performance and Export Growth in Ten Latin American Countries, 1979–95. *Journal of InternationalTrade and Economic Development, 8* (1), pp. 89-105.

Cestepe, H., Yildirim, E., & Bahtiyar B. (2015). The Impact of Trade Liberalization on the Export of MENA Countries to OECD Trade Partners. *Procedia Economics and Finance, 23*(2015), pp. 1440-1445.

Chani, M.I., Pervaiz, Z., & Chaudhary, A.R. (2011). Determination of Import Demand in Pakistan: The Role of Expenditure Components. *Theoretical and Applied Economics*, *XVIII* (8), pp. 93-110.

Chaudhary, M.S., & Amin, A. (2012). Impact of Trade Openness on Exports Growth, Imports Growth and Trade Balance of Pakistan. *Forman Journal of Economic Studies, 8* (January–December), pp. 63-81

Chen, D., Chen, S., & Hardle, W. (2015). The influence of oil price shocks on China's macro-economy: A perspective of international trade. *Journal of Governance and Regulation, 4* (1), pp. 178-189.

Edwards, L., & Alves, P. (2006). South Africa's Export Performance: Determinants of Export Supply. *South African Journal of Economics, 74* (3), pp. 473-500.

Egwaikhide, F. (1999). Determinants of imports in Nigeria: A dynamic specification. *AERC Research Paper* 91

Elhiraika, A.B., & Mbate, M. (2014). Assessing the Determinants of Export Diversification in Africa. *Applied Econometrics and International Development, 14* (1), pp. 147-160.

Enimola, S.S. (2011). Foreign Direct Investment and Export Growth in Nigeria. *Journal of Economics and International Finance*, *3* (11), pp. 586-594.

Fatukasi. B., & Awomuse, B.O. (2011). Determinants of Import in Nigeria: Application of Error Correction Model. *Centrepoint Humanities Edition*, *14*(1), pp. 52-72.

Fonchamnyo, C,D., & Akame, A.R. (2017). Determinants of Export Diversification in Sub-Saharan Africa: A Fractionalized Logit Estimation Model. *Journal of Economic and Finance, 41*, pp. 330-342.

Helleiner, G.K. (1994). *Trade Policy and Industrialization in Turbulent Times*. London and New York: Routledge.

Hoque, M., & Yusop, Z. (2012). Impacts of Trade Liberalization on Export Performance in Bangladesh: An Empirical Investigation. *South Asia Economic Journal, 13* (2), pp. 207-239.

Jenkins, R. (1996). Trade Liberalization and Export Performance in Bolivia. *Development and Change, 27* (4), pp. 693-716.

Joseph, M.F., & Fosu, O.E. (2006). Aggregate Import Demand and Expenditure Components in Ghana: An Econometric Analysis. *MPRA Paper,* (599), pp. 1-19.

Joshi, V., & Little, I.M. (1996). *India's Economic Reforms 1991-2001*. Oxford: Oxford University Press.

Ju, J., Wu, Y., & Zeng, L. (2010). The Impact of Trade Liberalization on the Trade Balance in Developing Countries. *IMF Staff Papers, 57* (2), pp. 427-49

Karamuriro, T.H., & Karukuza, W. (2015) Determinants of Uganda's export performance: A gravity model analysis. *International Journal of Business and Economic Research, 4* (2), pp. 45-54

Kassim, L. (2013). *The Impact of Trade Liberalisation on Export Growth and Import Growth in Sub-Saharan Africa*. School of Economics Discussion Papers, KDPE 1310, University of Kent.

Mah, J.S. (1999). Import Demand Liberalization and Economic Development. *Journal of Policy Modeling. 21* (4), pp. 497−503.

Melo, O., & Vogt, M.G. (1984). Determinants of the Demand for Imports of Venezuela. *Journal of Development Economics, 14* (3), pp. 351-358.

Mohammad, S.D. (2010). The Impact of Oil Prices Volatility on Export Earning in Pakistan. *European Journal of Scientific Research*, *41* (4), pp. 543-550.

Narayan, S., & Narayan, P.K. (2005). An Empirical Analysis of Fiji's Import Demand Function. *Journal of Economic Studies, 32* (2), pp. 158-168.

Narayan, P.K., & Narayan, S. (2006). Government Revenue and Government Expenditure Nexus: Evidence from Developing Countries. *Applied Economic Letters, 38* (3), pp. 285-291.

Schwartz, N.D., & Abrams, R. (2015). *Advisers Work to Calm Fearful Investors*. The New York Times. 25 August 2015.

Ofei, E.O. (2018). Trade Liberalization and Export Competitiveness: Evidence from the EU-ECOWAS Trade. *MPRA Paper No. 87808*

Onwuka, K.O., & Zoral, K.Y. (2009). Foreign Direct Investment and Imports Growth in Turkey. *Journal of Yasar University*, *4* (15), pp. 2357-2380.

Osakwe, P.N., Santos-Paulino, A.U., & Dogan, B. (2018). Trade dependence, liberalization, and exports diversification in developing countries. *Journal of African Trade 5*, pp. 19-34

Rahman, M.M. (2009). The Determinants of Bangladesh's Imports: A Gravity Model Analysis under Panel Data. *Indian Journal of Economics*, *XC* (357), pp. 773-787.

Santos-Paulino, A., & Thirlwall, A.P. (2004). The Impact of Trade Liberalization on Exports, Imports and the Balance of Payments of Developing Countries. *Economic Journal, 114* (493), pp. 50-72.

Sofjan, M. (2017). The Effect of Liberalization on Export-import in Indonesia. *International Journal of Economics and Financial Issues, 7* (2), pp. 672-676.

Thomas, V., Nash, J., & Edwards, S. (1991). *Best Practices in Trade Policy Reform*. Oxford: Oxford University Press for the World Bank.

Uysal, U., & Mohamoud, A.S. (2018). Determinants of Export Performance in East Africa countries. *Proceedings of The IIER International Conference*, Warsaw, Poland, 16-17th January 2018.

Vacu, N.P., & Odhiambo, N.M. (2018). The determinants of import demand in South Africa: An empirical investigation. *UNISA Economic Research Working Papers 12/2018*

Weiss, J. (1992). Export Response to Trade-Reforms: Recent Mexican Experience.*Development Policy Review, 10* (1), pp. 43-60.

Wu, Y., & Zeng, L. (2008). *The Impact of Trade Liberalization on the Trade balance in Developing Countries*. IMF, Working Papers No. WP/08/14.

Zakaria, M. (2014). Effects of trade liberalization on exports, imports and trade balance in Pakistan: A time series analysis. *Prague economic papers, 1*, pp. 121-139.