

The Effect of Institutional Quality on Export performance of Middle East & North-Africa Region

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Abstract:- The paper investigates the relevance of governance indicators for the export performance of the Middle East and North African (MENA) members of countries. Voice and accountability, political stability and regulatory quality are introduced in an augmented gravity model with a panel data set over 2010-2017. All institutional variables display an insignificant association with export performance except political stability and absence of violence that becomes significant with MENA exports, whereby it has the largest influence. Therefore, to conclude the governments should give high precedence to develop broad policy reforms that encourage institutional development and trade within the region and at the global level to enhance the global competitive position of the MENA region.

Keywords: Export Performance, Regulatory Quality, Political Stability, Voice and Accountability, Labor Force Participation Rate

I. INTRODUCTION

The current research purposes to investigate the influence of institutional quality on export performance for the section of Middle-East and North-African nations namely: Algeria, Egypt, Qatar, United Arab Emirates, and Morocco. These analyses are encouraged by the circumstance that the business atmosphere in which the company's developed their enterprises is anticipated to impact the overall achievement of the whole economy and in specific, worldwide trade. Moreover, highly-functioning institutions enable global transactions and decrease the uncertainty related to trade. According to Handlley and Limao (2017); Bown and Kenynes (2017) lately revealed that actions, such as risks to renegotiate trade contracts can be damaging to economic development due to the risk they involve.

Nevertheless, in this paper, we postulate the influence of governance on export performance and assume that superior institutions might reduce unforeseeable events and reduce trade costs, and therefore could have a positive impact on exports. We concentrate on the economic region of the Middle East and North Africa (MENA), where by many nations faced the Arab Spring which resulted in the changes in the leadership and power vacuums. Further more, the MENA region experiences fragile governance indicators at various stages namely: lower level in political rights, inefficient laws and regulations, and malfunctioning of public management.

Nevertheless, there are numerous studies that emphasis on various interconnected pillars of institutional quality (e.g., Berden, Bergstrand, & Etten, 2014; Bojnec, Ferto, &

Fogarasi, 2014; Charron, Dykstra, & Lapuente, 2014; Meon & Sekkat, 2004). This literature shows that particular governance indicators might influence exports in different manners whereby some of them could be more applicable for emerging countries instead of developed nations. We solely concentrate on this area of research using panel data techniques that will tolerate us to detach issues of causality (Gylfason et al., 2015) and concentration on MENA regions and correlate the influences with other areas in the world economy.

Regarding our knowledge, there have only been three studies that emphasis on MENA region, namely Mean and Sekkat (2004), Ali and Mdhillat (2015) and Martinez-Zaros & Marquez-Ramos (2019). The first paper emphasizes on the effect of institutional quality on trade in MENA countries in the 1990s using openness as a dependent variable and political risk as a proxy for the quality of institutions, however, the second paper utilized a gravity model approach employing data in the 2000s but mainly focuses on corruption, while later uses a gravity model approach using data from 1996-2013 by focusing six dimensions of governance indicators. We differ from these studies in several ways. Firstly, we utilize the World Bank Worldwide Governance Indicators (WGIs) and not the whole six dimensions but only three indicators namely: regulatory quality, political stability, voice, and accountability to postulate their specific impact on exports. Secondly, we apply Hausman tests to show the appropriate model in our study between random and fixed-effect models. Thirdly, we use the most modern data and this permits us to report for the modifications that happened after the Arab Spring.

The major outcomes indicate that among three institutional quality variables only political stability is statistically significant at a 10% level, while regulatory quality is negative and statistically insignificant, not only that but voice and accountability variable are also has a positive coefficient but statistically it's insignificant. While the control variable which is the labor force participation rate is positive and statistically significant at level 1% in the MENA region.

The rest of this paper is organized as follows: Section 2 presents the literature review and Section 3 specifies the methodology and model of the specification. Section 4 displays results and Discussion. Finally, section 5 concludes and displays various policy implications sourced from the findings.

II. REVIEW OF LITERATURE

Neoclassical trade theory stated that countries trade due to their dissimilarity. While the Heckscher-Ohlin model (1995) particularly recommends that a country possibilities to export the products that their products utilize less intensely for the production factor of the country is comparatively well provided with and to import the products that employ intensely scare factor. Therefore, a variety of resource bequests will offer enlargement to the sources of relative advantage and trade.

However, the new trade theories describe trade between nations on the source of enhancing returns to scale and resemblances regarding resource endowments and usage of advanced technology. Nations gain from global trade with each other even if they utilize similar technology, and factor of bequests. Moreover, if each country concentrates on the production of diverse goods, then large scale production capacity might take place, and this will offer growth to specialization which leads by the utilization of more skilled labor and various other input production factors. Consequently, it will result to enhance the productivity factor and trade of each nation.

Nevertheless, a source of relative benefit is also impacted by domestic institutions (Nunn 2007). Although it has been indicated that institutions are numerically essential sources of comparative advantage as traditional sources including technology. According to Levchenko (2007), countries with superior institutions and had a good quality which is the main source of their relative benefit tend to gain the most form of worldwide trade. However, the estimated outcome as the production of service and goods needs outstanding institutions that encourage the production process (Nunn and Trefler 2014). Similarly, Nunn and Treffler (2014) offer a complete review of the association between internal institutions and the source of relative advantage. They determine that institutions play a vital role in shaping the arrangements of relative benefit and global trade and that the connection may run on both sides.

Stimulated by the innovative effort of Levchenko (2007) and Nunn and Trefler (2014), Araujo et al (2016) initiated a theoretical model to describe how the changes of exporting firms are impacted by institutional variations. They display that companies tend to begin with a greater volume of exports and service the endpoint nations with superior institutions for a prolonged period. Contrarily, a firm's export progress is superior to the terminations with fragile institutions. Thus, this indicates that the changes of exporters are influenced by the dissimilarities of the quality of institutions, export capabilities, and the marginal expenditure of exporting that seems to vary over time (Araujo et al 2016).

There is an increasing body of the empirical literature on the impacts of institutions on economic performance and development ((Efendic, Pugh, and Adnett 2011; Boubakri, Ghoul, and Saffar 2015; Geos 2016) indicated that institutions

are essential in increasing economic evolution and improvement than government policies. Current work, conversely, proposes that institutions are conducive to enlarge international trade flows (Levchenko 2007, 2011; Yu 2010; Araujo, Mion, and Ornelas 2016). Instinctively, fragile domestic institutions govern to obstruct trade flow as they utilize greater cost of the transaction upon economic agents (Soderlund and Tingvall 2014) and unsympathetically impact the proportional advantage of regions with depressed quality of institutions (Nunn 2007).

Prior literature has discovered less extensively the association between institutional quality and export performance. The findings are contradictory: one set of researchers boost a positive relationship among governance indicators and export performance (Martinez-Zarzoso and Marquiz-Ramos, 2019; Sila, 2016; Soeng and Cuyvers, 2018); the second view discoveries a negative association (Dehshiri et al, 2013; Meon and Sakket, 2008; Redding and Venabals, 2004).

Jansen and Nordas (2004) investigated trade flow and institutions in a large sample that includes both developed and developing countries for the period 2000 to 2004 utilizing gravity and Ordinary least squares (OLS). The study stated that domestic institutions have a positive and significant impact on bilateral trade flows. Contrarily, Moen and Sakket (2008) institutions in a large sample of countries by utilizing the fixed-effect model. They differentiated between the export of manufacturing goods and non-manufacturing goods, and the outcome of the study revealed that defective institutions significantly reduce exports of manufacturing goods. Similarly, Anderson and Marcouiller (2002) investigated trade and institutions in 48 countries utilizing the augmented gravity model. The results showed that multinational trade flows were hardly impacted by weak institutions in a similar manner that tariffs do.

In the African context, a study made by Martinz- Zarzoso and Marquiz-Ramos (2019) analyzed export and world governance indicators in the Middle East and North Africa (MENA) region for the period 1996 to 2013 applying the fixed-effect model. They found that the level of governance matters in bilateral export flow, and MENA countries the trade are high those have a similar level of regulatory quality and rule of law. Likewise, Sila (2016) examined the export performance and world governance indicators (WGI) in the East African Community (EAC) for the period 1996-2014 utilizing the fixed-effect model. The results of the study showed a positive relationship between the quality of governance and export performance. In contrast, Chacha and Edwards (2019) analyzed export and governance indicators in Kenya from 2004 to 2013 utilizing the gravity model. The study revealed that the impact of business fragility), and dominates that of political fragility have negative and significant on bilateral trade flow of Kenya export to African countries. Ochienga (2015) postulated trade flow, institutions and manufacturing export in the East African Community (EAC) for the period 2005-2014 via augmented gravity model. The result indicated that better quality of governance

institutions enhance in between East African community trade flows, however, these findings are mixed across the country whereby in some countries exports are declined due to the improvement of governance indicators.

From the Asian perspective, the study made by Soeng and Cuyvers (2018) investigated the export performance and governance indicators in Cambodia utilizing the augmented gravity model. The results indicated that all institutional variables have a highly significant positive relationship with Cambodia's export performance. Equally, Prabir De (2013) examined trade and governance indicators in 30 Asian countries from 1996 to 2007 by using the principal component model (PCA). He found all institutional variables except regulatory quality have a significant impact on trade in Asia. On the other hand, Buracom (2014) found that except Singapore most ASEAN nations are affiliated with relative poor institutions for good governance, with less quality government institutions, less quality regulatory agencies, and rule of law that's not well established.

III. METHODOLOGY

3.1 Data Collection and Data Sources

The econometric specification is estimated by using a panel data-set covering 2010-2017. Data for the dependent variable (exports) are taken from the world development indicators (WDI) in the world Bank data set, while data on independent variables of governance indicators are obtained world governance indicators (WGI) data set. Also, we introduce one control variable which is the labor force participation rate (L), and its data is taken from world development indicators from the World Bank data set.

3.2 Model Specification

The gravity model endures being the backbone in international trade in particular and economics in general due to its consistent outcomes, and relatively solid blueprint (Grant and Lambert, 2008). The model has experienced accurate theoretical and practical developments since its origin by Tinbergen in 1962 (Bergstrand, 1985; Anderson and Wincoop, 2003). The main benefit of the gravity trade model is its capability to inspect policy and institutional variables collectively with the popular stimulus of bilateral trade flows. Furthermore, the route of the influence of policy and institutional quality variables, whether negative or positive, need not be prearranged (Anders and Caswell, 2009; Li and Saghaian, 2014).

Therefore, the augmented gravity model can be specified in the following model:

$$EXP_{it} = \beta_0 + \beta_1 REER_{it} + \beta_2 L_{it} + \beta_3 VA_{it} + \beta_5 PS_{it} + \beta_6 RQ_{it} + \varepsilon_{it}$$

Where *EXP* is total exports as a percentage of the GDP to control the size of the economy

β_0 = Constant

L = Labor Force Participation Rate as the percentage of GDP

VA = Voice and Accountability

PS = Political Stability

RQ = Regulatory Quality

ε_{it} = Error term of a country *i* on time *t*

i = Country

t = Time Period

The above-stated model is the yardstick specification that controls for the total influence of institutions on trade flows. Conversely, Anderson and Wincoop (2003) and Baier and Bergstrand (2007) contend that the gravity model experience mislaid variables and policy endogeneity of country's policy complications that may arise from unnoticed heterogeneity among nations. To amend this, this exceptional consequence can be managed as either a random variable or a fixed effect. To select the suitable model among random effects and fixed effects model we should carry on the Hausman specification test if the null hypothesis could not be rejected then the Random Effect Model (REM) will be preferred rather than the fixed effect model (FEM).). Thus, in our model Hausman test failed to reject null and this indicated that the suitable model in our study is Random- effect model.

The world governance indicators (WGI) comprises six measurements of governance, comprising more than 200 nations and territories since 1996. The six segments of good governance include political stability and how a country is free from terrorism, regulatory quality, and rule of law, government effectiveness, and control of corruption, voice, and accountability. However, in this study, we mainly focus on three dimensions of governance indicators which are political stability, regulatory quality, voice, and accountability. According to Kaufmann, Kraay, and Mastruzzi (2010) define the three governance indicators as follows: Regulatory quality taking insights into the capability of the government to frame and instrument effective policies and rules that authorize and stimulate private sector development; Political stability and absence of violence are measuring perceptions of the possibility that the government will be undermined or overthrown by unlawful or violent means; Voice and accountability are measuring the attitude of the extent to which a nation's citizens are able to engage in electing their government representatives, as well as freedom of expression their views and thoughts, association or movement, and media freedom.

IV. RESULT AND DISCUSSION

Table 1. Basic Statistics and Variance Inflation Factor

Variable Name	VIF	Mean	Minimum	Maximum	Std. dev
L(RQ)	3.44	1.5705	0.9124	1.9175	0.3386
L(PS)	7.43	1.4576	0.8218	1.9656	0.4098
L(VA)	1.88	1.3108	1.1239	1.4707	0.1045
L	6.90	64.3417	44.808	88.075	18.0689
Mean VIF	4.91				

Notes: LRQ is a log of regulatory quality; LPS is a log of political stability; LVA is the log of voice and accountability; while under control variable L is the labor force participation rate.

Table 1 displays both descriptive statistics and variance inflation factor results. Farrar and Glauber (1967) argued that if the value is less than 10 percentage, it shows the absence of a multicollinearity problem among independent variables. Thus, there is no multicollinearity issue among the independent variables of the study. Contrarily, descriptive statistics indicate on average the countries under the study had a lower score for voice and accountability at 1.31, and the mean of the natural logarithm of voice and accountability is the least among all governance indicators. Moreover, other poor performing indicators include political stability and absence of violence which is 1.45. This shows that there was a great variance for voice and accountability across countries than in other governance indicators. Second, on average countries in the sample perform best in the regulatory quality indicator, as is evident in a greater mean for the quality of regulatory quality. They also demonstrate good quality of governance regarding regulatory as indicated the mean value.

Table 2. Regression results

Items	Random Effect Model
Constant	-86.1353 (0.056)
Independent variable	
Ln(RQ)	-18.4516 (0.166)
Ln(VA)	36.4753 (0.253)
Ln(PS)	30.0911 (0.063)*
Control variable	
L	1.1132 (0.002)**
R ²	0.7426
Observations	40
Hausman tests	0.0094
Heteroskedasticity	0.1262
Autocorrelation	0.0005
Bruesh and Pagan Lagrangian Multiplier test	0.0000

Ext: Export performance, ln (RQ): log regulatory quality, ln (ps): log political stability, ln (VA): log voice and accountability, REER: real effective exchange rate, l: labor

force participation rate, p-value are in parentheses: $P^{***} < 0.01$, $P^{**} < 0.05$, $P^* < 0.1$

Prior to discussing the empirical outcomes, we briefly sum-up the statistical analyses to employ the most suitable approach for estimations of the selected econometric specifications. The results outcomes were displayed together with the estimates of the utilized explanatory variables highlighted in table 2.

Analyses for heteroscedasticity indicates that the null hypothesis of homoscedasticity is substantially accepted at the 1% level. Therefore, this recommends that the heteroskedasticity issue is absent in our model. Similarly, the autocorrelation test statistics are also not below 0.05 which shows the absence of autocorrelation problem. Thus, our econometric specification showed the absence of both serial correlation and heteroskedasticity bias.

The lagrangian multiplier test (LM) is significant and this shows that the random effect model (REM) is statistically appropriate than the pooled ordinary least approach. We also carried out the Hausman test to choose between FE against the RE model. The Hausman statistics are highly insignificant and this indicates that there is a weak correlation between the explanatory variables and the error terms. Therefore, the RE technique assumes to be statistically more suitable than the FE model.

Table 2 display the individual impacts of the variables utilized for institutions on the performance of exports for the Middle East and North Africa (MENA) countries. We regressed the influence of every institutional variable, controlling for other determinant factors that could impact exports, by employing the random-effect model (REM). The control variable in our model is the labor force participation rate.

Our main goal in the current study is the influence of the various aspect of variables constructed for institutions on MENA region export performance. The table above presents outcomes for the quality of the regulatory, which represents the government's capability to establish and formulate more effective policies and regulations. Moreover, regulatory quality is statistically insignificant. This study is similar in terms of outcome with the study made by Mean and Sekket (2008) and Hernadez, Nieto, and Rodriguez (2016), who found that fragile regulatory quality has positive and statistically insignificant with export performance. It is

because the weak regulatory quality will increase both transaction costs and other risks of trading within the region, and global level, and this will force exporters to consider alternative solution that offers them cheaper production cost that improves their competitiveness rather than investing a country with lower regulatory quality, and by doing this the countries overall production capacity will decrease.

The stability of the politics, which is integral for the enhancement of many countries' economies, is also found to be an insignificant determinant of MENA exports. Moreover, political stability is highly statistically significant at the 10% level which indicates the fundamental role it plays to promote more economical integrations within the MENA region and the rest of the world. This is in line with the study made by Sila (2016) and Martinez-Zaros and Marquez-Ramos (2019). The institutional factor which is the most contributor to increasing exports of the MENA region is the political stability and absence of violence. it has a positive coefficient and remains highly statistical significance. Thus, a unit increase in the score for political stability is estimated to lead to an increase in exports by approximately 30.0911%.

On the other hand, the labor force participation rate displays a positive and strongly significant relationship with an export performance at a 5% level. This outcome is similar to the study made by Dutta, and Mallick(2017); Gaddis and Pietres(2012); Voumik(2019). Indeed, the model explains the data variation quite well, with R^2 being around 74%.

To conclude, our empirical outcomes display that all institutional aspect except the political stability and absence of violence variable are statistically insignificant and has no influence on the export performance of for the sample of Middle East and North African countries (MENA). According to our regression results, political stability and absence of violence become significant. Therefore, these results offer an indication that the political stability variable has played a fundamental role in the development of the MENA region exports to its trading partners markets.

V. CONCLUDING REMARKS

This paper postulates the important effect of governance indicators on export performance of the Middle East and North African (MENA) members of countries, utilizing the institution-augmented gravity model with a panel data set from 2010-2017, comprehensive. We utilized control variables such as the labor force participation rate that are believed to influence exports.

Our outcomes offer relevant support for the substantial role played by the institutions in the MENA region. These institutions reflect the evidence that MENA exports are influenced by some aspect of governance indicators such as political stability, while regulatory quality, voice, and accountability are insignificant. Moreover, among institutional variables, political stability found to be the most significant contributor to shaping the Middle East and North African total

exports. The results of this paper suggest the upgrading of domestic institutions of MENA in terms of quality and effectiveness of its domestic institutions that were impacted tremendously due to lack of good governance, political uncertainty and huge corruption. For the last decades, despite facing tremendous challenges that need to be addressed, the MENA region has gradually developed many of these institutional factors. Likewise, Schwab (2017) reported in World Economic Forum reports currently, among the Middle East and North African member of countries, United Arab Emirates (UAE) is improving most of its global competitive index whereby it records +1.1 difference from 2017 to 2018.

Our findings provide some policy implications for the Middle East and North African member countries whose basic institutions are needed to be upgraded and formulated in a way that reflects their quality standards. These results may also apply to other emerging countries that have similar characteristics of the MENA region. Since political stability is found to have the largest influence on export performance, high priority should be given to the further improvement of political stability by securing the security within the region, and this might facilitate the free movement of goods and services within the countries and through to its neighboring. Also, for the last decade MENA region has experienced a number of terrorist attack and destruction of number of countries after Arab spring, therefore MENA region member of countries might need to establish organizations that facilitate both economic and social integration since the region has a unique characteristics including a good geographical location, resource abundance, availability of economical labor force and huge market.

Equally, the MENA region should put more effort and further institutional reform to develop the effectiveness and efficiency of the public believes particularly the protection of human rights and providing citizens the basic needs. Moreover, as weak regulatory quality is mostly identified as one of the most obstacles faced firms in developing countries (Hernandez 2016; Lio et al 2016), further reporting this issue with capability of MENA for creating effective and broad regulatory quality policy reform that encourage free movement of goods and service within the region and at international trade will improve overall business perception for MENA region. Angkinad and Chiu (2011) indicated that institutional reforms associated costs in the short-run, however, their long-run economic influence are substantial for maintaining prolonged economic performance and increasing global trade and private investment as well as both foreign and domestic investment.

Continuous development of all aspect of governance indicators are also expected to additionally enhance the competitiveness of the Middle East and North African member of countries and to improve its export that is assumed to contribute tremendously on the income of MENA people, reducing trade barrier, more economic integration within the region will be an ideal strategy in order to develop poor

governance indicators that have been hindering the growth of Middle East and North African member of countries and African region in general(Otsuki et al 2013; Buracom 2014).

REFERENCES

- [1] Aghion, P., & P. Howitt (2009). *The economics of growth*. (1st ed.). MIT Press Cambridge.
- [2] Acemoglu, D. (2009). *Introduction to modern economic growth*. Princeton: Princeton University Press.
- [3] Anderson, J. E. (2004). "Trade and informal institutions," in *Handbook of International Trade (Vol. II): Economic and Legal Analyses of Trade Policy and Institutions*, edited by. K. Choi, and J. C. Hartigan, 279–293. Oxford: Blackwell.
- [4] Araujo, L., G. Mion, and E. Ornelas. (2016). "Institutions and export dynamics." *Journal of International Economics* 98: 2–20.
- [5] Araujo, L., Mion, G., & Ornelas, E. (2016). Institutions and export dynamics. *Journal of International Economics*, 98, 2-20.
- [6] Anderson, J. E., & Marcouiller, D. (2002). Insecurity and the pattern of trade: An empirical investigation. *Review of Economics and Statistics*, 84(2), 342-352.
- [7] Anderson, J. E., & Van Wincoop, E. (2003). Gravity with gravitas: a solution to the border puzzle. *American Economic Review*, 93(1), 170-192.
- [8] Anders, S. M., & Caswell, J. A. (2009). Standards as barriers versus standards as catalysts: Assessing the impact of HACCP implementation on US seafood imports. *American Journal of Agricultural Economics*, 91(2), 310-321.
- [9] Anakin and, A. P., and E. M. P. Chiu. (2011). "Will institutional reform enhance bilateral trade flows? Analyses from different reform aspects." *Journal of Economic Policy Reform* 14: 243–258.
- [10] Berden, K., Bergstrand, J. H., & Van Etten, E. (2014). Governance and globalization. *The World Economy*, 37(3), 353-386.
- [11] Ben Ali, M. S., & Mdhillat, M. (2015). Does Corruption Impede International Trade? New evidence from the EU and the MENA Countries. *Journal of Economic Cooperation & Development*, 36(4).
- [12] Bojnec, Š., Fertő, I., & Fogarasi, J. (2014). Quality of institutions and the BRIC countries agro-food exports. *China Agricultural Economic Review*, 6(3), 379-394.
- [13] Boubakri, N., S. E. Ghoul, and. Saffar. (2015). "Firm growth and political institutions." *Journal of Multinational Financial Management* 31: 104–125.
- [14] Briggs, K. (2013). "Institutional quality as a barrier to trade." *Applied Economics Letters* 20: 1453–1458.
- [15] Brown, F. L., Whittingham, K., Boyd, R. N., McKinlay, L., & Sofronoff, K. (2014). Improving child and parenting outcomes following pediatric acquired brain injury: a randomized controlled trial of Stepping Stones Triple P plus Acceptance and Commitment Therapy. *Journal of child psychology and psychiatry*, 55(10), 1172-1183.
- [16] Bilan, Y., Vasilyeva, T., Lyeonov, S., & Bagmet, K. (2019). Institutional complementarity for social and economic development. *Business: Theory and Practice*, 20, 103-115.
- [17] Bown, C. P., & Keynes, S. (2017). Trade talks episode 6: Uncertainty and trade deals-not good. Interview with NunoLim~ao, released Oct 04, 2017. Peterson Institute for International Economics. Retrieved from <https://itunes.apple.com/us/podcast/trade-talks-piie/>
- [18] Buracom, P. (2014). ASEAN economic performance, institutional effectiveness, and foreign direct investment. *Asian affairs: An American Review*, 41(3), 108-126.
- [19] Bergstrand, J. H. (1985). The gravity equation in international trade: some microeconomic foundations and empirical evidence. *The Review of Economics and Statistics*, 474-481.
- [20] Baier, S. L., & Bergstrand, J. H. (2007). Do free trade agreements actually increase members' international trade? *Journal of International Economics*, 71(1), 72-95.
- [21] Chacha, P. W., & Edwards, L. (2019). Exporting to fragile states in Africa: Firm-level evidence. *Review of Development Economics*, 23(3), 1177-1201.
- [22] Charron, N., Lapuente, V., & Dijkstra, L. (2012). Regional governance matters A study on regional variation in the quality of government within the EU. *Regional Studies*, 48(1), 68-90.
- [23] Cooray, A., Dutta, N., & Mallick, S. (2017). Trade openness and labor force participation in Africa: the role of political institutions. *Industrial Relations: A Journal of Economy and Society*, 56(2), 319-350.
- [24] Dollar, D., and A. Kraay. (2003). "Institutions, trade, and growth." *Journal of Monetary Economics* 50:133–162.
- [25] Depken, C. A., and. J. Sonora. (2005). "Asymmetric effects of economic freedom international trade flows." *International Journal of Business and Economics* 4: 141–155.
- [26] De, P. (2013). *Do institutions matter for trade-in Asian countries? (7th ed.)*. Bangkok
- [27] Efendic, A., G. Pugh, and. Adnett. (2011). "Institutions and economic performance: A Meta-Regression Analysis." *European Journal of Political Economy* 27: 586–599.
- [28] Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: the problem revisited. *The Review of Economics and Statistics*, 92-107.
- [29] Gaddis, I., & Pieters, J. (2012). Trade liberalization and female labor force participation: Evidence from Brazil.
- [30] Go'es, C. (2016). "Institutions and growth: A GMM/IV Panel VAR Approach." *Economics Letters* 138: 85–91.
- [31] Grant, J. H., & Lambert, D. M. (2008). Do regional trade agreements increase members' agricultural trade? *American Journal of Agricultural Economics*, 90(3), 765-782.
- [32] Handley, K., & Limão, N. (2017). Policy uncertainty, trade, and welfare: Theory and evidence for china and the United States. *American Economic Review*, 107(9), 2731-83.
- [33] Hernanadez, V., Neito, M. J., & Rodriguez, A. (2016). Home country institutions and export of firms from developing countries: Does innovation matter? Paper Presented 5th Copenhagen Conference on Emerging Multinationals: at Outward Investment from Emerging Market, Denmark.
- [34] Jansen, M., & Nordås, H. K. (2004). Institutions, trade policy and trade flows. *WTO Staff Working Paper*, NO.ERSD 2004-02, World Trade Organization (WTO), Geneva.
- [35] Kaufmann, D., Kraay, A., & Mastruzzi, M. (2010). The Worldwide Governance Indicators: Methodology and Analytical Issues (World Bank Policy Research Working Paper No. 5430). Washington, DC: The World Bank.
- [36] Levchenko, A. A. 2007. "Institutional Quality and International Trade." *Review of Economic Studies* 74:791–819.
- [37] Levchenko, A. A. (2011). "International trade and institutional change." Working Paper 17675, Cambridge: National Bureau of Economic Research.
- [38] Leamer, E. E. (1995). The Heckscher-Ohlin model in theory and practice. *Handbook*. (2nd.). New Jersey University.
- [39] Li, X. L., & Saghalian, S. (2014). The Presence of Market Power in the Coffee Market: The Case of Colombian Milds. *Selected Paper* No. 329-2016-12762, Agricultural & Applied Economic Associations.
- [40] Méon, P. G., & Sekkat, K. (2004). Does the quality of institutions limit the MENA's integration in the world economy? *World Economy*, 27(9), 1475-1498.
- [41] Méon, P. G., & Sekkat, K. (2008). Institutional quality and trade: which institutions? Which trade? *Economic Inquiry*, 46(2), 227-240.
- [42] Martínez-Zarzoso, I., & Márquez-Ramos, L. (2019). Exports and governance: Are the Middle East and North Africa region different? *The World Economy*, 42(1), 143-174.
- [43] North, D. C. (1989). "Institutions and economic growth: An Historical Introduction." *World Development* 17: 1319–1332.
- [44] North, D. C. (1990). *Institutions, institutional change, and economic performance*. New York: Cambridge University Press

- [45] North, D. C. (1991). "Institutions." *Journal of Economic Perspectives* 5: 97–111
- [46] Nunn, N. (2007). "Relationship-Specificity, incomplete contracts, and the pattern of trade." *Quarterly Journal of Economics* 122: 569–600.
- [47] Nunn, N., and D. Daniel Trefler. (2014). "Domestic institutions as a source of comparative advantage," In *Handbook of International Economics (Vol. 4)*, edited by. Gopinath, E.Helpman, and.Rogoff, 263–315. North-Holland: Elsevier.
- [48] North, D Liou, R. S., Chao, M. C. H., & Yang, M. (2016). Emerging economies and institutional quality: Assessing the differential effects of institutional distances on ownership strategy. *Journal of World Business*, 51(4), 600-611.
- [49] Ochieng, A. D. (2015).The effect of institutions on trade flows in the East African community. (*Unpublished Master Dissertation*).University of Nairobi, Kenya.
- [50] Otsuki, T., Honda, K., & Wilson, J. S. (2013). Trade facilitation in South Asia. *South Asian Journal of Global Business Research*, 2(2), 172-190.
- [51] Rigobon, R., and D. Rodrik. (2005). "Rule of law, democracy, openness, and income: Estimating the interrelationships." *Economics of Transition* 13: 533–564.
- [52] Rodrik, D. (2007).*One economics, many recipes: globalization, institutions, and economic growth*. Princeton: Princeton University Press.
- [53] Ranjan, P., and J. Y. Lee. (2007). "Contract enforcement and international trade." *Economics and Politics* 19: 191–218.
- [54] Redding, S., & Venables, A. (2004). Geography and export performance: external market access and internal supply capacity. In *challenges to globalization: Analyzing the economics* (pp. 95-130). University of Chicago Press.
- [55] Söderlund, B., and P. G. Tingvall. (2014). "Dynamic effects of institutions on firm-level exports." *Review of World Economics* 150: 277–308.
- [56] Sila, M. (2016). Analysis of governance and export performance in the EAC. (*Unpublished Master Dissertation*).University of Nairobi, Kenya.
- [57] Soeng, R., & Cuyvers, L. (2018). Domestic institutions and export performance: Evidence for Cambodia. *The Journal of International Trade & Economic Development*, 27(4), 389-408.
- [58] Schwab, K. (2017). The global competitiveness report 2017 & 2018. World economic forum.
- [59] Voumik, L. C. (2019). Trade openness and women participation in the labor market: Evidence from South Asia. *Indian Journal of Economics and Development*, 7(8), 1-10.
- [60] Yu, M. (2010). "Trade, democracy, and the gravity equation." *Journal of Development Economics* 91: 289–300.