Impact of Economic Integration on Firm Performance of Listed Companies in East Africa: Theory and Review of Evidence

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Abstract
The objective of this paper is to thoroughly review the theoretical and empirical literature on the impact of economic integration from the perspective of the performance of listed firms in East African. The findings reveal that whereas there are several theories that underpin integration, none can individually explain it. The static and dynamic theories dominate, while the gravitational model remains the most used method. The literature shows that most studies have been done in the developed countries and less in the developing world. The findings reveal a positive association between integration and trade in the developed nations while in the developing world the findings are mixed. Overall there is hardly any literature on the impact of integration at firm level and none for listed firms in EAC. The scanty literature and mixed findings in the developing world indicate a research gap and therefore more research should be carried out.

Key Words: *Economic Integration, Gravitational Model, Static and Dynamic theories*

1 Introduction:

Economic integration that grew from regional relations (Inter-state trade relations) to intra-continental and now inter-continental is perhaps the economic innovation of the time. It has had unprecedented benefits to many nations but also raised many concerns on who are the benefactors and the beneficiaries. The current "Brexit", which is threatening the whole world economy, perhaps demonstrates the extent to which economic integration is still a topical issue in our time in pursuit of economic welfare and maintaining bilateral and regional relations. This paper, which is a desk review of theory and evidence, gives the background and importance of economic integration in general and East African Community in particular and reviews the literature in terms of scope, contextual, conceptual, findings and methodology and gives the concluding remarks for future research agenda.

1.1 Background:

Though there are many definitions of economic integration, this review uses the definitions by one of the classical researchers on this topic who defines it in two ways: first as a "process that encompasses all the measures designed to abolish discrimination between economic units belonging to different national states" and second as "the absence of various forms of discrimination between national economies" (Balassa, 2013, p.102). The two words 'absence' and 'elimination' in these definitions are important in that they distinguish economic integration from economic cooperation. Economic cooperation is concerned with reducing trade barriers and integration deals with the elimination of trade barriers and therefore the two are distinct. Another distinction that should be made is between economic integration and integration: on one hand integration is the generic term that encompasses the coming together of independent states through a reduction or elimination of different barriers for political, cultural, religious, security and financial gains and on the other economic integration is a more specific term that is concerned with the elimination of barriers for economic gains (Economic Integration, 2016). Though a distinction exists between integration and economic integration, in this review unless specifically noted, they will be used interchangeably. The limiting of this study only to economic integration is not intended to downplay the importance of political factors, whose critical role is acknowledged and indeed the two (politics and economics) are inseparable.

Whereas economic integration had existed for sometime, it was shortly after the Second World War that academicians began to look at it in its own right as a concept. Viner's pioneering work opened the door when he came up with the trade creation and diversion theories, which came to be known as the static effects of integration. Consequently, other researchers followed suit, coming up either with new theories or applying old ones to integration, for example, the dynamic effects, the large - scale economies, the foreign direct investment, factor intensive theory, the comparative and competitive advantage theories and others. These researchers have identified five phases of integration, starting from free trade area, customs union, a common market, economic union and complete economic integration (Balassa, 2013). Since the pioneering work of Viner, economic integration has grown in significance in terms of the theoretical and empirical research, the number of free trading blocks formed and the resources involved.

Conceptually, when nations form a trading block the short-term economic consequences are trade creation or diversion (Viner & Oslington, 2014). Trade creation is a “shift of trade from a high-cost member country to a low-cost supplier member country in the union (Hosny, 2013, p. 135). In the short-run, this has may lead to the following static effects: first, from the supply perspective the low-cost supplier will benefit more as the costs go down and the sales go up and the profits increase. The high-cost supplier will have either to learn fast or close shop because of the reduced protection and increased competition from the low supplier. Second from the consumption side, the customers will have benefit from the reduced price, by either buying more or increase their consumer surplus.

Trade diversion, on the other hand, occurs when "imports are shifted from a low-cost supplier of a non-member country of the union (third country) to a high-cost supplier member country inside the union" (Hosny, 2013). Trade diversion affects the consumer in that the prices may go up for the imported goods, thus leading the consumer to pay more for the same quantity or change to higher priced or poor quality commodities made in the union (Makochekanwa, 2014). From the suppliers' perspective, the high-cost producer will benefit from the protection accorded and even have the opportunity to learn and improve while the low-cost producer from outside the union will have to stop exporting to the union, or reduce the price, albeit the reduction in profitability to stay competitive. This case also represents a short - term effects of economic integration.

In the medium to long-term, integration results in the dynamic effects whose impact depend on each region’s political, economic, social, cultural, technological, environmental and legal milieu. The dynamism of these effects give rise to large-scale economies, technological improvement, positive impact on markets, increased competition, productivity, increased local and foreign direct investment, strong negotiating power with other nations, attraction of foreign direct investment, reduction in risk and uncertainty (Balassa, 2013). These benefits create synergy and once realized should lead to economic growth and development.

The link of economic integration to growth and development has generated a lot of global attention, notwithstanding its contrasts and controversies. For while integration leads to trade creation, it at the same time diverts it; when it removes barriers for partnering members it creates the same for non-members; and when one of the oldest and leading integrating region, the EU is struggling to keep members in the union, new and even large trading blocks are forming (Sen, Srivastava & Webber, 2015).

The interest in the topic is also evidenced by the ever-growing empirical research on the topic, covering different periods and regions, employing different methods but sometimes yielding inconclusive results. The gravitation model, which were first used by Tinbergen and Poyhonen is the most common method employed when analyzing the impact of integration. This model was originally criticized for its lack of theoretical thoroughness, but most of the criticisms have now been addressed and the debate has shifted to the three errors, known as the "gold medal", "bronze medal" and "silver medal " (Shinyekwa & Othieno, 2013). The "gold" errors refers to multilateral resistance terms, which are usually omitted yet they correlate with the trade costs, the bronze medal, which is the wrong deflation of the bilateral trade data and the "silver medal" refers to the averaging of the exports and imports and the wrong deflation of the trade flows (Baldwin & Taglioni, 2006).

The reviewed literature reveal that most of the empirical studies have used data ending around 2011, and the majority of the research is from developed countries. Whereas the research from the developed nations by and large confirm a positive association between integration, trade creation, and growth, investigations in the developing nations is a mixed bag (Head & Mayer, 2013; Shinyekwa & Othieno, 2013; Afesorgbor & Bergeijk, 2013; Riedel & Slay, 2015). Indeed the literature from the developing world is not only inconclusive but also scanty when compared to that of the developed nations yet more and more resources are being poured into the process of integration (Buigut, 2012). For example, the EAC, one of the fastest integrating regions and has had a long history of regionalism still has macroeconomic indicators, which rank among the lowest in the world (Bank, 2016).

1.2 A Brief History Of The East African Community (EAC):

Economic integration in the East African (EA) region started in 1917 with a customs union between Uganda and Kenya, which were later joined by the then Tanganyika in 1927 (EAC, 2016). The EAC countries continued as members of the customs union until 1967, when they agreed to form a common market. Unfortunately, this market ended acrimoniously in 1977 due to among other factors the tense political climate that existed then and the perceived unequal distribution of benefits among the member countries with Kenya being accused of taking the lion's share (Buigut, 2012). The revived EAC came into existence on 7th July 2000 following the signing of the treaty for its reestablishment in November 1999 by all the three original member nations (EAC, 2016). Since then, the EAC has grown rapidly, starting with the implementation of the customs union in 2005 among the original three members, followed by the admission of Rwanda and Burundi in 2007 and the launching of the Common Market in 2010 and the admission of South Sudan in 2016. This region, excluding South Sudan, is a home to 145.5 million people, covering an area of 1.87 million square kilometers and having a combined GDP at current market price of $147 billion (EAC, 2016). The region is now working on the next two stages of monetary union and political federation foreseen in the agreement (EAC, 2015).

The main objectives of creating the EAC are to form one single customs territory with trade at its core, support economic development through the creation of economies of scale and develop the human resource, institutions and infrastructure that will support trade (EAC, 2016). These objectives are informed by the theory and empirical evidence so far adduced on the impact of economic integration. Integration is linked to the performance of listed firms through the static and dynamic effects on the respective economies (Makochekanwa, 2014). Due to the rigorous scrutiny to which equity markets are subjected, using the performance of listed firms offers a reliable measure of the impact of integration on the economy.

Firm performance can be measured in a number of ways, the most popular ones being a return on assets (ROA), which is the ratio of net profit to total assets used to generate it.

ROA measures the profitability of the firm using historical data and it is on this basis that it often criticized. Another tool of measures performance using Firm Value or Tobin's Q, which is defined as "the ratio between the firm's market value and the replacement value of its assets" (Wolfe & Sauaia, 2014 p. 156). This measure is credited for being more realistic than ROA because it is forward looking in that it incorporates the future cash flows of the firm. Both tools, however, remain popular because they are measurable, relevant and important to the firm (Okiro, Aduda & Omoro 2015).

1.3 Statement of the Problem

Thus given the scanty nature of literature some of which uses outdated data; the biased focus of studies, concentrating on developed nations; the methodological challenges of the gravitational model; the poor macroeconomic indicators in EAC and other sub-Saharan nations; the huge resources being invested and the speedy process of integration in EAC against contradictory results and the unfolding impact of integration, then is integration achieving its intended economic goals.

1.4 Objectives of the Review

1.4.1 The objectives of this review are first to identify the knowledge gaps on the impact of integration on firm performance in the existing theory and empirical literature.

1.4.2 To establish empirical findings on the impact of economic integration on firm performance in EAC

1.4.3 Identify the relevant and appropriate methodologies for future research.

Given these objectives, this review will bring out research findings on the impact of the economic integration in general and EAC in particular. The study should reveal areas, which are either under-researched or not touched at all; the theories informing the topic; the common methodologies, their strengths, and weaknesses. It should alert academicians on the current directions and trends of research in this area.

2 Literature Review

From the reviewed literature, most of the studies that have been carried out on economic integration have focused on its impact on trade; that is trade creation and diversion effects (Kahouli & Maktouf, 2015). Besides the direct integration effects, researchers have also explored the indirect impact of integration on economic growth as a whole or on specific sectors of the economy (Muluvi, 2014; Maudos & de Guevara, 2015). Of all the literature reviewed, however, only two articles relate integration with capital markets and none on the impact of the firm performance (Moser & Rose 2014).

When it comes to findings, most of the studies in Europe and other developed nations, have more or less confirmed a positive relationship between integration and trade. In these regions, the focus is shifting from the impact of integration on trade flows to the impact on financial integration, especially the impact of the Euro on the European Union (EU) economies (Maudos & de Guevara, 2015). For example, research carried out using data in the EU from 1999 to 2011 using the gravitational model found that "until the financial crisis that started in 2007, a significant part of financial development is attributable to integration" (Maudos & de Guevara 2015 p.11).

Another study assessed the impact of NAFTA (North America Free Trade Agreement) between Canada, USA, and Mexico on trade and welfare in that block. The researcher applied simulation based on Ricardian modeling on the data from 1993 to 2005 and found that "welfare for Mexico increases by 1.31%, for the US by 0.08% and Canada by 0.06% and that intra-block trade increases by 118% for Mexico, 11% for Canada and 4.1% for the USA" (Caliendo & Parro, 2014, p. 1). These increases are reflected in wages and trade volumes among the member countries. The benefits were, however not uniform for all sectors; the change depended on the previous tariff levels.

Whereas in North America integration seems to be net trade creating, in the South America the story is different. Research on the effects of integration in the Western Hemisphere yielded mixed results (Martin-Mayoral, Morán Carofilis, & Cajas Guijarro, 2015). Their findings revealed that export diversification negatively affects bilateral trade in all American trade agreements. They concluded that "only NAFTA countries seem to be natural trading partners while the rest of the Latin American trade agreements have not resulted in comprehensive, profound and consolidated common market", (Marin-Mayoral, et al., 2015, p. 724).

Research findings in the Asian have also been mixed, for instance, studies on the effects of trade creation and diversion occasioned by the free trade agreements between ASEAN (Association of East Asian Nations) and Japan / ASEAN and China and ASEAN / Korea established a positive association. The author of this study applied a gravitational model on data covering the period from 1993 to 2013. Their findings revealed that trade agreement of ASEAN- plus one "was trade creating with the highest effect happening between ASEAN – China than between ASEAN – Japan and ASEAN – Korea" (Taguchi, 2015, p. 1856). The researchers concluded that the high effect between ASEAN and China were due to previous high tariff rates between these nations, which is in agreement with other empirical studies reviewed. In the same region of Asia, however, other researchers found mixed results when they investigated the effects of preference trade agreement between China and India (Sen, Srivastava & Webber, 2015).

Research findings in East Africa are also mixed; with some stating that integration leads to trade creation and others confirming trade diversion, yet others are unable to confirm either. For example, authors who investigated the effects of integration on bilateral trade in Southern African Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA) and EAC using a quantitative experimental research design of Poisson pseudo-maximum-likelihood, which they applied on panel data from 1995 – 2010 found a positive impact on trade in the COMESA region but they could not confirm the same in the EAC and SADC (Riedel & Slay, 2015). Leading them to "somehow confirm the pessimistic view of the effectiveness of the African FTAs and agree with those that consider African trade agreements as ineffective" (Riedel & Slay, 2015, p. 21).

Researchers have also investigated the impact of integration on economic growth, and their findings indicate inconclusive results. For instance, while investigating the impact of economic integration on growth in the COMESSA region applying the Generalized Methods of Moment (GMM) on data from 1980 to 2010 researchers found "no significant empirical support for a positive growth impact as yet on the region from integration" (Karamiriro & Ijjo, 2015, p. 67).

Whereas theory expects economic integration to lead to financial stability due to increased competition, adoption of best practice and better supervision based on international standards, the empirical findings are inconclusive (Motelle & Biekpe, 2015). For example, in a research done on the financial integration and stability in SADC using the feasible least squares method on data ranging from 1984 to 2010, researchers found that deep financial integrations is associated with financial instability and that there is a causal relationship between financial integration and volatility within SADC (Motelle & Biekpe, 2015).

Given the inconclusive research findings, some authours are shifting their attention to the stock market as a barometer of the impact of integration (Moser & Rose, 2014). These researchers investigated the impact of the signing of RTAs on the stock market of over 80 economies. They used announcements (1000) spanning a period of 20 years, (1988 to 2008) and found that “stock markets of countries that already trade a lot with each reacted positively around the time of signing of RTA and that poorer nations tend to benefit more” (Moser & Rose, 2014, p. 7). The implication is that integration has information for the investors. This area seems to be a new frontier that is yet to be fully explored in studying the impact of integration.

3 Discussion of the Findings:

From the above review, trade creation and diversion theory dominates the evaluation of the impact of economic integration. Other prominent ones are the competitive advantage, the factor intensive, and the foreign direct investment theories. According to these theories, there is a positive relationship between integration and trade through the static and dynamic effects, the latter being considered more important than the former.

When it comes to methodology in the empirical research, the gravitational model is the most common, though it is not free of errors. Some authours make an effort to address these problems, while others ignore them. Most of the articles use trade (imports and exports) as the dependent variable. Exports and imports are used either individually or as an averaged figure. Indeed averaging the two creates the so-called "silver" error, which some authors continue to ignore. For the independent variables, the common regressors are GDP, per capita income, population, foreign direct investment and exchange rates. To these researchers add dummies to account for the differences in language, common border, historical ties, landlocked and location (whether a country is an island or not). The review also reveals that some researchers used economic growth as the dependent variable while having the following as independent variables: capital stock, population growth, world GDP, trade, human capital and adding dummies to represent membership or otherwise to regional grouping.

The literature in this work indicates that most of the authors use panel data covering a period up to 2011, which is from the World Bank, the regional headquarters of the trading block and sometimes the countries themselves covered in the research. Whereas the findings in the developed regions, more or less confirm that economic integration is net trade creating, the same cannot be said for the developing nations. The findings for the developing world are not only inconclusive but also the literature is scanty in comparison to the developed nations.

The literature also reveals that the direction of the debate on economic integration is shifting to how best to model the dynamic effects of economic integration on the citizens’ welfare and the whole economy; the impact at firm-level; the problem of zero trade flows and the gravitational modeling errors. Also, authours are shifting their attention to the stock market as a barometer of the impact, the role of services in integration and whether private led integration is more successful than the public led.

4 Conclusions

Given the scanty nature of literature and limited scope of the investigation; the biased focus of studies and methodological challenges; the huge resources invested and speedy process of integration in EAC, against contradictory results and the unfolding impact of the economic integration, then more research should be carried out. The future research should rely on several theories, correctly apply the gravitational model and focus on the emerging area of firm – level and capital markets, services and welfare impacts.

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