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Measuring the dynamics of COMESA output connectedness with the global economy

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ABSTRACT:

The Common Market for Eastern and Southern Africa (COMESA) is one of the largest economic and trading regional communities in Africa. The recent global headwinds experience by the region in 2016 has been attributed to both idiosyncratic and external conditions. In addition, the region's dependence on trade, especially imports, makes growth vulnerable to external shocks, thereby necessitating this study, which examines the dynamics of its output connectedness with the global economy from 1970Q1 to 2016Q4 using the Diebold and Yilmaz (2009) network approach. A major innovation in the paper is the construction of region-specific generalized connectedness measures for the COMESA region. The results indicate that COMESA's output connectedness with the rest of the world is quite sizeable, with a total connectedness index of 73%. The results also show that the USA, EU, Japan, China, Canada, Indonesia and UK exert the most dominant output influence on COMESA region and therefore have the potential to spread output shocks to it. The results further indicate that the roles of non-COMESA African economies in COMESA's real activities are minimal relative to idiosyncratic conditions and contributions from the rest of the global economy. Overall, we find that COMESA economies are considerably open, deeply interconnected and sensitive to international output shocks such that policymakers in COMESA must be constantly conscious of output headwinds originating from the aforementioned dominant sources.

1. Introduction

The Common Market for Eastern and Southern Africa (COMESA) is one of the trendsetters in regional economic integration in Africa. Even though the treaty establishing it was signed on 5th November 1993 in Kampala, Uganda and ratified on 8th December 1994 in Lilongwe, Malawi, the history of COMESA dates back to the mid-1960s, when the post-colonial Eastern and Southern African countries commenced the process of forming an Eastern and Southern African co-operation arrangement. Specifically, the United Nations Economic Commission for Africa (UNECA) ministerial meeting of 1965 in Lusaka, Zambia recommended the establishment of an Economic Community of Eastern and Southern African countries. Subsequently, a treaty creating the Preferential Trade Area for Eastern and

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Southern Africa was signed in 1981, with the expectation that it would eventually transform into a common market. Currently, the COMESA regional trading bloc consists of 19 countries, namely: Burundi, Comoros, DR Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda, Zambia, and Zimbabwe (COMESA Treaty, 1993; Tumwebaze & Ijjo, 2015; COMESA, 2016).

The vision of COMESA is that of interconnectedness and shared prosperity through regional economic integration. Specifically, COMESA's Vision is to "have a fully integrated internationally competitive regional economic community with high standards of living for its entire people, ready to merge into the African Economic Community" (COMESA, 2016). This vision underlines COMESA's primary goal of creating a large economic and trading unit in order to promote intra-regional trade among member countries, which will in turn foster economic growth and development among these countries. Article 3 of the 1993 COMESA Treaty particularly outlined its aims and objectives as follows:

> "To attain sustainable growth and development of the Member States by promoting a more balanced and harmonious development of its production and marketing structures; to promote joint development in all fields of economic activity and the joint adoption of macro-economic policies and programmes to raise the standard of living of its peoples and to foster closer relations among its Member States; to co-operate in the creation of an enabling environment for foreign, cross border and domestic investment including the joint promotion of research and adaptation of science and technology for development; to co-operate in the promotion of peace, security and stability among the Member States in order to enhance economic development in the region; to co-operate in strengthening the relations between the Common Market and the rest of the world and the adoption of common positions in international fora; and to contribute towards the establishment, progress and the realization of the objectives of the African Economic Community" (COMESA Treaty, 1993).

In sum, COMESA seeks to dismantle the structural and institutional barriers to intra-regional trade and commercial exchanges among its member countries in order to create a fully integrated internationally competitive regional economic bloc that is able to drive and sustain the region's growth and development. To achieve the outlined aims and objectives, COMESA evolved strategies anchored on several pillars, namely: more harmonized macroeconomic and monetary policies throughout the region; attracting investments under a more secure environment and legal framework that will foster the growth of the private sector; industrialization for greater industrial productivity; increased agricultural production and food security; more rational exploitation of natural resources; developing economic infrastructure; strengthening market integration, regional skills and capacity; and harnessing the benefits of strategic partnerships, among others (COMESA, 2016).[1]

Despite the role of COMESA in promoting economic growth and shared prosperity among its members in the past two decades through regional economic integration as detailed in the foregoing paragraphs, economic growth in most COMESA economies has generally remained uninspiring. The average annual GDP growth rate for COMESA member countries from 1994 to 2010 was only 2.9%, with unemployment in some of the member countries standing above 50% while most of the member countries are classified by the United Nations among the most impoverished countries in the world (COMESA, 2015; Tumwebaze & Ijjo, 2015; UNCTAD, 2011). Besides, COMESA's global trade deficit worsened from US$97 billion in 2014 to US$100 billion in 2015 (COMESA, 2016). These facts raise several questions of whether: the vision of a fully integrated internationally competitive regional economic community with high standards of living for its entire people is being achieved; the goal of driving economic growth and development through trade promotion among member countries is being attained; the objective of "inclusive and sustainable industrialization" is being accomplished; the COMESA organs and institutions are living up to their billings in executing its programmes; the strategies and implementation frameworks adopted by the Common Market are yielding the desired results; and whether some COMESA countries are prospering in isolation, despite the concerted efforts towards shared prosperity within the region.

Thus, as COMESA continues to strive for increased economic growth and shared prosperity through greater intra-regional trade integration, it is important to understand the dynamics of the output connectedness of its member countries. Unfortunately, the dynamics of COMESA output connectedness with the global economy has not been specifically accounted for in the literature. Most of the existing related studies, particularly those that employed the Diebold and Yilmaz (2009) network approach focused mainly on financial connectedness, while a few of the studies on global business cycle connectedness did not pay any attention to policy issues that are specific to the COMESA region (Diebold & Yilmaz, 2012, 2014, 2015; Greenwood-Nimmo, Nguyen, & Shin, 2015; Guimarães-Filho & Hong, 2016; Ogbuabor et al., 2016, 2018; Park & Shin, 2014). But a major regional market place for both internal and external trade such as COMESA, with current population of 492 million people, a GDP of US$682 billion as of 2015, and total trade of US$262 billion in 2012 (COMESA, 2015, 2016) deserves an in-depth region-specific study. To fill this gap, this paper provides a pioneer in-depth study of COMESA output connectedness. Specifically, this paper: (i) estimates the size of output connectedness of COMESA with the global economy and how it changed from the short-run through the long-run; (ii) determines the economies that exert the most dominant output influence on COMESA and therefore have the potential to spread output shocks to the region; (iii) estimates the dynamics of output connectedness of each individual COMESA economy with the other economies within the Common Market (i.e. within COMESA), other economies in Africa but outside COMESA, and all other economies in the rest of the global economy; and (iv) determines the economies that are most vulnerable to output shocks emanating from the COMESA region. The remainder of this paper proceeds thus: Section 2 reviews the existing literature; Section 3 discusses the data and methodology; Section 4 presents the empirical results; while Section 5 concludes and discusses policy implications.

[1] Detailed documentation of the history, organs, major milestones, and strategic plans of COMESA is available at http://www.comesa.int/.