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Symmetric or Asymmetric: How is Economic Growth Responding to Global Economic Uncertainty in Africa's Oil Exporters?

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Abstract
Motivated by the persistent fall in oil prices due to incessant uncertainty-inducing events in recent years, this study empirically examined if economic growth in Africa's top five oil exporters (Algeria, Angola, Egypt, Libya, and Nigeria) is responding asymmetrically to changes in global economic uncertainty as well as uncertainties from U.S., Europe and China using nonlinear ARDL framework from 1997Q1 to 2021Q4. We find that rising global uncertainty hampers economic growth in these economies, while declining global uncertainty significantly enhances growth in Nigeria, Angola and Libya in the short run, but becomes growth-retarding in the long run. Thus, economic growth responds asymmetrically to global uncertainty, especially in the short run. The findings are robust to U.S., Europe, and China uncertainties, except that economic growth in Libya and Algeria remained unresponsive to U.S. and China uncertainties respectively. We concluded that Africa's oil exporters should embrace policies that can strengthen their resilience to global economic uncertainty as well as uncertainties from U.S., Europe, and China.

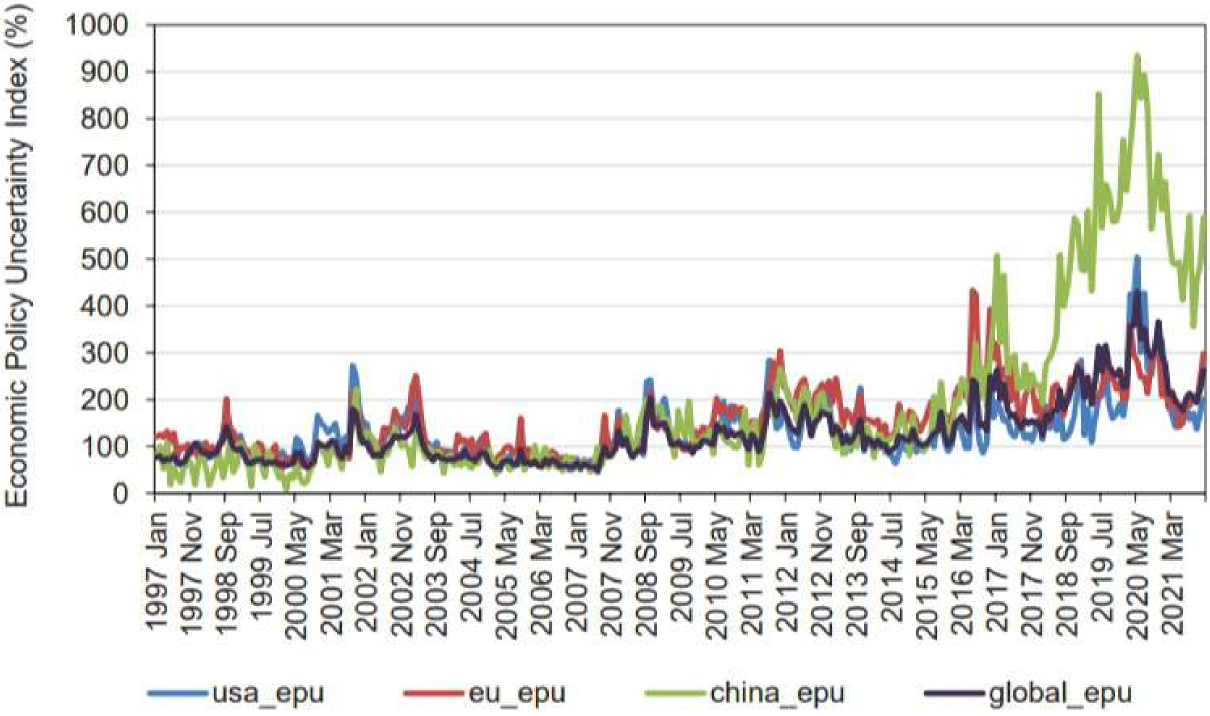
Key words: global economic uncertainty, economic growth, oil exporters; nonlinear ARDL model, Africa

JEL Codes: D80, O40, N57, C22, O55

1. Introduction

The global economy has witnessed several uncertainty-inducing events, especially in the last two decades. Examples of such events that have been blamed for rising global economic uncertainty include the 2008–2009 Global financial crisis; the 2010–2012 Arab Spring crisis that ravaged many countries in the Middle East and North Africa; the Euro area sovereign debt crisis; the persistent global trade disputes, particularly the trade tensions between U.S. and China, which could lead to the U.S. imposing tariffs on African sectors; the 2015–2016 commodity price shock, especially the fall in oil prices; the UK-EU Brexit vote; the Covid-19 pandemic, which crippled economic activities across the globe; and the ongoing Russia-Ukraine war (Ekeocha et al., 2023). The Covid-19 pandemic particularly brought with it the realities of restrictions on economic activities, imposition of lockdowns and social distancing, and shifts in production and consumption patterns across the globe, among others (Altig et al., 2020). These realities drastically increased the level of uncertainty in the global economy. Figure 1 illustrates the increase in global economic policy uncertainty (EPU) during the Covid-19 pandemic as well as the remarkable increase in uncertainty from China, which is the originator of the crisis. As a result of the pandemic, Sub-Saharan Africa experienced its first economic recession in over twenty-five years as economic activities in the region contracted by nearly five percent. Among the top oil exporters in Africa, the worst hit was Libya, as it recorded negative annual GDP growth of −24.9% in 2020 on per capita basis. As shown in Figure 2, other top oil exporters in Africa, like Angola and Nigeria, also witnessed sharp declines in their GDP per capita growth. Figure 2 also shows that Libya witnessed significant decline in GDP per capita during the Arab Spring crisis.

Figure 1: Plots of Economic Policy Uncertainty Index, January 1997 – December 2021



Notes: global_epu: global EPU, usa_epu: USA EPU, eu_epu: European EPU, china_epu: China EPU.
Source: authors' computation, with data from the Economic Policy Uncertainty Group (Davis, 2016)