

# **The Impact of Health-Related Pandemics and the Economic Uncertainty in Sub-Saharan Africa's Labour Market**

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**Topic description:** The study provides a comparative analysis of the impact of health-related pandemics and the level of economic uncertainty in the labour markets of low- and middle-income countries in Sub-Saharan Africa. There is currently a lack of research on the long-term macroeconomic impact of pandemics in the labour market. The majority of research thus far (e.g., Karlsson, Nilsson, and Pichler, 2014; Bick, Blandin, and Mertens, 2020; and Chetty, Friedman, Hendren, and Stepner, 2020) has focused on the short- and medium-term microeconomic economic effects of a particular pandemic episode in a specific area. Most of the studies are bias since they only rely on COVID-19 pandemic analysis. Health-related pandemics other than COVID-19 have also had significant impacts on employment in Sub-Saharan Africa. To quantify the disruptions in the labour markets, the current study utilise the unemployment rate. Moreover, the Pandemics and World Economic Uncertainty indices are used to quantify the frequency of health-related pandemics and the levels of economic uncertainty resulting from policy responses, respectively. Earlier studies relied on dummy variables and the number of infected/death to investigate pandemics; these indices allow for aggregate pandemics analysis.

**Theoretical Focus:** Pandemic theory by Gersovitz and Hammer (2004) serve as the foundation theory of the current study. The theory assert that the susceptible population represents the accurate labour supply in economic activity rather than the total population. In general, the model of diseases spread from person to another counts the population as the total of all those who are susceptible, infected and harmful, recovered and resistant. In addition, the number of susceptible rises with the number of newborns, whereas it falls with the number of infected individuals. The basic idea of this pandemic theory is that a health crisis dramatically adds to the business cycle's downturn.

**Research Method and Data:** An asymmetric panel ARDL and secondary data for the fourteen SSA countries are employed in the analysis, which covers the sample period from 1996 to 2022. The asymmetric panel ARDL technique enable the researcher to better assess the pandemic-related uncertainty associated with domestic policy responses. Compared to the symmetric case, the asymmetric response of the unemployment rate to pandemics is acknowledged by this version of the panel ARDL.

Variable	Description	Unit of measurement	Source
UNEMP	Unemployment Rate	Percent	IFS
PI	Pandemics Index	Index	PWT
WUI	World Uncertainty Index	Index	PWT
GDPg	GDP growth (annual %)	Percent	WDI
GCF	Gross capital formation (% of GDP)	Percent	WDI
TRD	Trade (% of GDP)	Percent	WDI
POP	Population growth (annual %)	Percent	WDI
For Robustness Analysis			
EMPL	Employment Rate	Percent	IFS

**Findings:** The findings demonstrate that pandemics positive shocks significantly affect unemployment rates in low-income SSA countries over both the short and long run. However, the effects of pandemics are only long-term significant for middle-income SSA countries. Furthermore, while low-income countries' unemployment rate is more responsive to uncertainty in the short-term, for middle-income nations, it is more sensitive to uncertainty in the long-term. The findings imply that low-income countries suffer more from pandemics than middle-income countries, given the severity of the effects. Therefore, before implementing policy responses to pandemics initiated by countries with better economic conditions, policymakers in low-income countries should give top priority on establishing their own economic strategies and be vigilant in assessing their current economic circumstances. Moreover, findings reveals that domestic investment has a crucial role in boosting employment and reducing the unemployment rate. Lower-income countries need to consider increasing their investments in fixed assets like land, equipment, buildings, roads, transport, hospitals, and other commercial and industrial facilities.