

# The Macro economic impact of COVID-19 in Uganda

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## Abstract

The study aimed at investigating the macro economic impact of Covid-19 in Uganda. The study adopted exploratory research design and 100 respondents participated. Primary data was collected using questionnaires and secondary data was obtained from government websites, International Agencies' websites, and other authentic online sources. Data was analyzed using SPSS v25. Study findings indicate that Covid-19 will wreak havoc on macroeconomic factors like inflation, unemployment and poverty. The study concluded that the government of Uganda should brace for the looming economic recession. We recommend that, Ugandan government should not be reluctant in investing heavily in the economic and health infrastructures owing to the fact that Covid-19 and other future pandemics will affect millions of Ugandans if it is not nipped in the bud. The study further recommends that government should direct central bank to reduce on interest rates as one of the means of rejuvenating the apparently dying economy.

*Keywords:* COVID-19; Pandemic; macro-economic; impact; Uganda.

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## I. INTRODUCTION

The outbreak of pandemics, such as COVID-19, pose an insurmountable public health dilemma worldwide. Ultimately, the current potential for COVID-19 should not be under estimated, ultimately, IMF calls upon all members to cooperate in facilitating co-financing operations in order to solve the financial needs of all member states, and be on standby, to offer assistance technically as well as policy advice (IMF 2020). The economic challenges of Covid-19 are equated to the great economic recession of 2008-09 whereby the severity was swift and unprecedented (Silver, 2020).

The outbreak of COVID-19 first appeared China in December 2019. As we write this article, according to Johns Hopkins University (2020), there are 3,864,696 confirmed cases over time, USA with the highest number of cases at 1,256,972 and Western Sahara with 6, the lowest number of cases so far. According to Odometer there are approximately 1,356,164 recoveries and 271,426 deaths globally (Odometer, 2020).

There is significant public health risk posed by COVID-19 and the World Health Organization (WHO) has declared a public health emergency of international concern to coordinate international responses to the disease through lock downs (WHO, 2020).

Overall, Africa is also experiencing a wave of increasing cases, as the total number of confirmed cases have reached 37, 717 with South Africa having the highest number of cases at 8,232 (WHO,2020). In Uganda, the 1<sup>st</sup> case was confirmed on 21<sup>st</sup> March 2020 and it has escalated to 101 cases as of today 8<sup>th</sup> May 2020 (Ministry of Health, 2020). The government of Uganda put stringent measures like suspension of schools and all higher institutions of learning; closed country boarders and airports till further notice; banned public and private transport, banned public gatherings; closed business centers and markets and instituted a curfew from 7:00pm to 6:30am (The New Vision, 1<sup>st</sup> April, 2020). All these have slowed down economic activities. Consequently, the prices of food stuffs have doubled, level of unemployment and poverty will ultimately increase and most people cannot afford one dollar per day. This has created some panic among consumers and producers. More to that, Uganda shilling is already losing ground against US Dollar, currently \$1USD buying and selling is at UGX 3700 and UGX 38,00 respectively.

This paper attempts to quantify the potential country macro-economic consequences of COVID-19 under different possible parameters. The goal was to provide a wake up call to policy makers to be proactive bearing in mind that there is looming economic danger. The paper builds upon the experience gained from evaluating the economics of SARS (Lee and McKibbin, 2003) pandemic Influenza of 1918 (Garrett 2007).

## II. LITERATURE REVIEW

Pandemics evolve from occurrence of influenza type A virus which is believed to be so lethal to human race (Glazen, 1996:64). According to Centers for Disease Control (CDC) (2019), the most remarkable pandemic on planet earth was the 1918 influenza which was caused by N1H1 virus. It is reported that the virus infected about 500 million people with deaths estimated to have reached over 50 million people globally. CDC further indicates that, on the onset of the pandemic, there was no vaccine as well as antibiotics to treat opportunistic infections that resulted from the influenza. The only available options were non pharmaceutical interventions which included use of disinfectants, isolation, quarantine, prohibiting public gatherings, practicing good hygiene (CDC, 2019). The pandemic occurred in three different phases: the first phase of the pandemic occurred in March 1918 and lasted to the end of summer, the worst was the second and third which befell during Fall of 1918 and the Spring of 1919 (Garrett 2007).

A report by Garrett on *Economic effects of 1918 pandemic influenza: Implications for a modern day pandemic* indicates that World Bank had estimated that \$800 billion would be lost in world economy and tens of millions would be killed if a new global pandemic influenza breaks out. Garrett further argues that the worst economic effect caused by the 1918 influenza pandemic was the massive death of the males between the ages of 18-40 who were primary bread winners in most families. In other words, there was serious loss of human capital (Garrett, 2007). The report further indicates that the 1918 pandemic's effect on businesses was short-term and the most affected sectors were service and entertainment which endured double digit losses in the revenue collection. Nevertheless, there were increase in the revenues for some other businesses which were dealing in health care products.

Today, Covid-19 pandemic has so far caused devastating effect in all spheres of life. Bluedorn et al., (2020) argue that the world has been pushed into recession and 2020 will be the worst, owing to the fact that infections globally are still increasing. In USA, for instance the economic repercussions are evident, where by in March 2020, more than ten million people applied for unemployment benefits. The good news is that International Monetary Fund has pledged to offer all the needed support in combating the economic and financial impacts caused by this pandemic and most especially the vulnerable peoples and countries. The Fund further notes that it has resolved to double the access to emergency facilities as well as debt relief for twenty five

low income countries. In addition, IMF membership has pledged \$11.7 billion responding to the quest for tripling of the concessional lending capacity (IMF, 2020).

### III. METHODS AND MATERIALS

The study adopted exploratory research design. This design was selected because it is flexible and it emphasises discovery of new ideas and insights (Kothari, 2004). And in this case, it helped in discovering some insights on the impact of Covid-19 on macro-economic situation in Uganda.

Primary data was collected from 100 respondents using questionnaire sent through social media namely: Twitter, What's App and Facebook, and a short informed consent was administered in regard to voluntary participation. Additional data was collected through emailing key informants from different government departments since it was not easy to interact with them face to face due to total lockdown that is being implemented country-wide. Primary data was complemented by secondary data which was obtained from journals, official government and non-government websites, Ministry of Health daily reports and Ugandan president's nation addresses on Covid-19. Data was analyzed using descriptive statistics and the relationship between the variables was established using the following linear regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where Y is the dependent variable,  $\beta_0$  is the intercept,  $\varepsilon$  is the error term and  $X_1$ ,  $X_2$  and  $X_3$  represent the four independent variables of the study. The researcher utilized Statistical Package for Social Sciences (SPSS v25) as the main descriptive statistical tool to analyze the data and determine the extent of relationships between the independent and dependent variables. The results of the processed data was presented using table for easy understanding.

### IV. RESULTS

**Table 1: Model summary**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.874 <sup>a</sup>	0.764	.411	.89724
a. Predictors: (Constant), Inflation, Unemployment, Poverty				

From the results in table 1 the R-squared shows that 76.4% of the variation in inflation, unemployment and poverty is explained by pandemic covid-19 in Uganda. This indicates that any change in spread of covid-19 will lead to changes in rates of increase in inflation, unemployment and poverty levels.

**Table 2: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.223	3	1.741	2.163	0.332 <sup>b</sup>
	Residual	1.610	2	0.805		
	Total	6.833	5			

Table. 2 show the relationship between variables. It was revealed that P-value 0.332>0.05 indicating that there is a relationship between covid-19 and inflation, unemployment and poverty in Uganda.

**Table 3: Predictor coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.088	2.495		0.436	0.705
	Inflation	0.547	1.143	0.352	0.479	0.679
	Unemployment	0.635	0.472	0.595	1.346	0.311
	Poverty	0.094	0.628	0.098	0.150	0.894

$$\text{Covid-19} = 1.088 + 0.547 \text{ Inflation} + 0.635 \text{ Unemployment} + 0.094 \text{ Poverty}$$

$$Y = 1.088 + 0.547 X_1 + 0.635 X_2 + 0.094 X_3 \dots \dots \dots \text{Eqn (1)}$$

The p-value of 0.679>0.05 shows that there is statistical significance at 95% level of confidence that an increase in spread of covid-19 will lead to increase in inflation in Uganda by 0.547.

Furthermore the table 3 shows p-value of 0.311>0.05 that there is statistical significance at 95% level of confidence that an increase in spread of covid-19 will lead to unemployment by 0.635. This indicates that unemployment levels increases with increase in spread of covid-19.

Table 4 shows p-value of 0.894>0.05 that there is statistical significance at 95% level of confidence that an increase in spread of covid-19 will lead to poverty levels increase by 0.094. This indicates that unemployment levels increases with increase in spread of covid-19.

## V. CONCLUSION AND RECOMMENDATIONS

This paper has presented the impact of the COVID-19 pandemic. The overarching purpose was not to be conclusive about the virus outbreak, but rather to offer information about a range of potential economic impact of the Covid-19 pandemic. In the case where COVID-19 has become a global pandemic, we conclude that the impact on inflation, unemployment and poverty and ultimately recession will be ineluctable. This will be exacerbated by poor health systems, thus, new economic reforms must be enforced.

Therefore the study recommends that a range of policy responses will be required in the short term as well as in the coming years. In the short term, commercial banks and Savings and Credit Cooperative Organizations (SACCOS) should make sure that loans are issued with low interests or no interests at all. There is also a critical role for governments to direct central bank reduce on interest rates because the shock is not only a demand management problem but a multi-faceted crisis that will require monetary, fiscal and health policy responses.

Lastly, poverty kills poor people, but the outbreak of COVID-19 shows that if diseases are generated in country's most vulnerable people like slum dwellers due to overcrowding, poor public health infrastructures, and interaction with each other, this pandemic can kill people of any socioeconomic group in the country. The Ugandan government should not be reluctant in investing sufficiently in their health care systems because there is a possibility of covid-19 cases reaching thousands by end of the year, which poses a threat to the lives of millions Ugandans. Ultimately, it is potentially a major disruption to an integrated country's economy and something must be done to nip it in the bud and continue to flatten the curve.

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