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THE LINK BETWEEN EXPANSIONARY FISCAL POLICY AND RESILIENCE TO COVID-19 ECONOMIC SHOCKS IN KENYA: EVIDENCE FROM NAIROBI CITY COUNTY

Moses O. Orori*, & Moses M. Muthinja

ABSTRACT This study examines the nexus between expansionary fiscal policy and resilience to COVID-19 economic shocks in Kenya. We focus on two instruments of fiscal policy namely; public expenditure and public revenue from taxation. The study is on Nairobi City County, Kenya's largest county by population size and contribution to the country's Gross Domestic Product (GDP). With a target population of two million economically active individuals, the study uses a sample of 110 respondents drawn from all the 17 constituencies in the county using quota sampling. Using multiple regression, increased public expenditure leads to a slight increase in resilience to COVID-19 economic shocks while decreased taxation does not lead to an increase in resilience to COVID-19 economic shocks, thus our findings suggest that increased public expenditure and reduced taxation during the pandemic period in Nairobi City County had minimal implications on the resilience to covid-19 economic shock in Nairobi City County.

KEYWORDS: *Economic shocks, Expansionary Fiscal Policy, COVID-19 Pandemic, Resilience*

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1. INTRODUCTION

The struggle to contain a major economic downturn due to COVID -19 economic shocks has given prominence to a field of research focused on the economic consequences of the pandemic coupled with government response policies used to cushion the economy from economic shocks of the pandemic. The importance of this topic is reflected through economic instability throughout the global economies as a result of COVID-19 economic shocks and the effects of fiscal policies employed to gain resilience from the economic shocks of the pandemic which is a gap that requires more investigation.

Fiscal Policy consists of a range of measures utilized by governments in influencing the level of taxation and government expenditure to obtain economic stability (Farhi and Werning, 2016). In this study, we recognize and focus on the importance of a sound fiscal policy applied to counter economic shocks and increase economic growth amidst an economic downturn. In light of the fiscal policy implemented to counter economic shocks from the COVID-19 pandemic in Kenya, we focused on; government spending, private investment spending, and consumption spending by individual consumers as the components of public expenditure utilized by the government to implement its fiscal policy. On taxation, we dealt with taxation on income and value-added tax which were the fiscal policy tools the government utilized to implement its fiscal policy.

In terms of measuring resilience to COVID -19 economic shocks, we applied the ecological measure, it's a measure of resilience based on a comparison between the state of the economy before the COVID-19 pandemic and its state after the impact of the pandemic shocks, this measure also determines the magnitude of shocks that the economy can withstand before it can change (Holling 1973, 1996, 2001; McGlade et al. 2006; Walker et al. 2006). The Engineering measure of resilience was applied to measure the economy`s rebound to its original growth path after the economic shocks of the pandemic. Martin (2012) an adaptive measure was utilized to measure adaption or reconfiguration of the economy to enable resilience against economic shocks of the pandemic.

The study was on Nairobi City County which is Kenya's largest county by population size and contribution to the country's Gross Domestic Product (GDP). We assume that the changes in individual demand and spending are influenced by the changes in income due to increased government expenditure, taxation,

and COVID-19 economic shocks outlined in this study. We consider revenue contribution from economic activities occurring outside the County as negligible and the amount of revenue that leaks into other counties as a result of economic activities occurring within Nairobi City County as also negligible.

We focused on the fiscal policy tools utilized by the Kenyan government to cushion the economy from the COVID -19 economic shocks. We put into account that Kenya is a low-income country, the multiplier effects obtained from a fiscal policy may not obtain the expected results; they could produce a zero-effect due to varied consumer behavior and the scale of economic damage (Kraay, 2010; Ilzetzki, Mendoza and Vegh, 2010) and delays in implementation due to political interference and inefficient bureaucratic systems (Green, 2010).

2. LITERATURE REVIEW

Research work that has been done in and around the link between expansionary fiscal policy and resilience to COVID-19 economic shocks with different approaches in methodology, focus of their study, and results obtained include;

Nechifor et.al, (2020) using the JRC DEMETRA model studied the impact of Corona Virus-2019 and short-term economic rejuvenation in Kenya. The results show that the measures employed such as lowering tax and increasing the level of expenditure on health, tourism, and infrastructure with external borrowing may accrue a short-term recovery of income. They focus more on initial short-term recovery in specified sectors of the economy.

Fornaro and Wolf (2020) used a standard advanced Keynesian illustrative economy model, they analyze how the monetary policy used alongside the fiscal policy can be utilized in response to the COVID- pandemic. The results show that applying an aggressive expansionary fiscal policy will boost investment that in turn can push the economy out of stagnation, easing the monetary policy will mitigate the drop in global demand, In our study, we focused on expansionary fiscal policy and linked each policy tool to resilience to COVID-19 economic shocks.

Guerrieri et al. (2020) used the Keynesian supply model in multiple sectors incomplete markets with liquidity constrained consumers, they analyzed how supply shocks due to a pandemic can create effects that mirror aggregate

demand shocks and the combination of policy tools that would address the demand deficiency. The results obtained show that Demand can overreact to a supply shock as a result of the pandemic`s effects on the supply chain and cause a demand deficient recession.

Faria-e-castro (2020) used a nonlinear DSGE calibrated model to analyze the effects of COVID-19 in the United States and the ensuing fiscal policy response. Results show a forty percent decrease in employment in the service sector and a reduction of GDP by15 percent in the initial three months of the pandemic followed by a very gradual recovery. Our study focused on resilience to specific expansionary policies in a low-income economy based on a descriptive research methodology.

Barro et al., (2020) and Correia et al., (2020) used comparison studies with available data to study the impact of 1918 influenza to infer on health and economic effects of Covid-19. Results show decreased economic output and shocks in supply and demand due to economic distress.

Sarangi (2015) used a Structural vector autoregressive model to analyze the effectiveness of fiscal policy in Jordan in the absence of economic shocks due to a pandemic. Results show that expansionary fiscal policy has a positive impact that is productive to economic growth.

Nawaz and Khawaja (2016) used a solo growth model to analyze the effects of fiscal policy on economic growth in 56 countries, the study does not include effects from economic shocks due to a global pandemic, The results are a positive correlation between the growth of the economy and fiscal policies in developed countries which is negative in underdeveloped countries.

Audu (2012) used a Co-integration error mechanism model to analyze the effects of fiscal policy on the economy in Nigeria. Results show increased economic stability of Nigeria with an application of the fiscal policy which was done in absence of the COVID-19 economic shocks.

Poudel et al., (2020) by Searching and reviewing published articles that are related to the psychosocial effects caused by COVID-19 and other outbreaks analyzed the socio-economic and mental health aspects of Covid-19 in Nepal.

Results show limited availability of raw materials due to closed borders which led to panic buying and hoarding of goods among the Nepalese creating a shortage.

3. RESEARCH PROBLEM

Global economic crisis due to COVID-19 economic shocks has pushed for a great need to outline COVID-19 economic shocks; the state of economic resilience to the shocks caused by the pandemic and negative or positive externalities accrued from the fiscal response policies applied to cushion the economy from the COVID-19 economic shocks.

Studies we reviewed on economic resilience as an area of research have revolved around shocks due to varied causes other than those caused by a global pandemic of COVID-19`s magnitude. The three measures of resilience (Ecological, Engineering, and Adaptive measures) have been put to test as explained in a study by Angulo and Trivez (2018) who use Ecological, Engineering, and Adaptive measures of resilience to analyze resilience to economic shocks of Spanish regions, results show that resilience is accrued based on location and sectoral advantage in the economy.

Bene, Frankenberger, and Nelson, (2015) more studies have focused on the design, monitoring, and evaluation of resilience interventions with empirical and conceptual considerations. Our study focused on the COVID-19 economic shocks, we used the three measures of resilience to link expansionary fiscal policy and resilience to COVID-19 economic shocks in Kenya as evidenced from Nairobi City County which is a gap in research that requires extensive approaches in research.

4. METHODOLOGY

To examine the link between expansionary fiscal policy and resilience to COVID-19 economic shocks we adopted a descriptive research methodology. Our target population was two million economically active individuals, we obtained a sample size of 110 respondents drawn from all the 17 constituencies in the county using quota sampling. We did not have access to the entire population due to COVID-19 restrictions thus we opted for a non-probability sampling technique to ensure that the final sample size was an accurate representation of the target population.

As we were handling a very large population, we wanted to ensures efficient representation in the final sub-population thus we acquired our sample size through this technique; (sample size/population size) x stratum size (Pedhazur and Schmelkin, 1991). According to Mugenda and Mugenda (2003) in descriptive research, a sample size of 10-50% is acceptable.

(Sample size) 200,000 X 1100 (size of each stratum)
(Population) 2000,000 N=110 (Sample size)

We used multiple regression to determine the relationship between the dependent and independent variables.

The following model was used for analysis;

$$Y= \beta 0 + \beta 1X1 + \beta 2\ X2+ \varepsilon$$

Where;

Y= Resilience to Covid-19 economic shocks based on Adaptive, Ecological, Engineering and measure
X1=Increased public expenditure
X2=Decreased taxation
β0=Constant
β1, β2 = Co-efficient of each independent variable in the model
ε= Error Term

5. RESULTS AND DISCUSSIONS

(Table 1.0 Regression Co-efficient Results)

	Unstandardized Coefficient B	STD Error	Standardized Coefficient Beta	T	sig
Constant	**3.537**	**.505**		**7.004**	**.000**
Increased Public expenditure [X1]	**.147**	**.102**	**.048**	**.460**	**.646**
Decreased taxation [X2]	**-.131**	**.109**	**-.126**	**1.202**	**-233**

We obtained results as shown in table 1.0. when the independent variables (Increased public expenditure and decreased taxation) are at constant zero, resilience to COVID-19 economic shocks is at 3.537. The results show that a unit increase in increased public expenditure leads to a 0.147 increase in resilience to COVID-19 economic shocks in Nairobi City County which is a positive but weak relationship. A unit increase in decreased taxation leads to a -0.131 increase in resilience to COVID-19 economic shocks in Nairobi City County which is a negative relationship.

Based on this finding we determined that increased public expenditure and reduced taxation during the pandemic period in Nairobi City County had minimal implications on the resilience to covid-19 economic shock in Nairobi City County.

6. CONCLUSION AND RECOMMENDATIONS

The results we obtained show that increased public expenditure and decreased taxation had a minimal impact on resilience to COVID-19 economic shocks in Kenya as evidenced by Nairobi City County. Increased public expenditure had a positive relationship with resilience to COVID-19 economic shocks. we recommend more focus be put on this area to ensure a stronger resilience to economic shocks of a similar magnitude to those caused by the COVID-19 pandemic.

The results from our study show that decreased taxation has a negative relationship with resilience to COVID-19 economic shocks in Nairobi City County meaning that decreased taxation does not always boost economic activities to foster economic growth in varied economic circumstances.

To conclude we note that countries have variations in income sources and type of expenditure, this means that vital economic sectors vary thus a shutdown economic sector in one country could be the vital economic sector to boost economic growth for another country which should be considered when applying the fiscal policy in different economies. We have obtained the given relationships in our measurements of the link between expansionary fiscal policy and resilience to COVID-19 economic shocks in Kenya as evidenced by Nairobi City County but more techniques and keen consideration to our findings should be applied in expanding this area of study.

7. LIMITS OF THE STUDY

We did this study at the peak of the COVID-19 pandemic where the researchers encountered difficulties in conducting interviews and distribution of questionnaires to a fairly larger population sample due to restrictions in movement and social distance put in place to contain the spread of the virus restrictions.

Due to COVID-19`s devastating effects some people were not willing to respond adequately to questions in and around this topic.

8. SUGGESTION FOR FURTHER RESEARCH

We recommend that other studies to be done should focus on increasing the number of samples to obtain more analysis into the study post COVID-19 containment restrictions.

We applied the regression model to determine the association between the dependent and independent variables a study should be conducted with application of other models to determine if there are changes in the relationship of the dependent and independent variables as obtained in this study.

We conducted this study in Nairobi City County with a focus on the two main variables that expansionary fiscal policy (increased public expenditure and

decreased taxation), the study should be replicated in other counties and regions with additional variables so as to determine their effects in different research sites.

DISCLOSURE OF CONFLICT

The authors declare that they have no conflicts of interest.

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