

Impact of Covid-19 on the Economy of Jigawa State of Nigeria

Danladi Bashir Hadejia, Muhammad Shafi'u Wadari

Jigawa State Polytechnic, Dutse, Nigeria; Jigawa State Polytechnic, Dutse

Submitted: 25-05-2021

Revised: 01-06-2021

Accepted: 05-06-2021

ABSTRACT:

The occurrence of Corona virus also referred as Covid-19 has disrupted the global economy, the evolution of the disease and its economic consequency is highly uncertain, which makes it difficult for government or policymakers to formulate a befitting macroeconomic policy prescription. In order to better understand possible economic outcomes from grass root, this paper only focus on Jigawa State in Nigeria because of its striking dependence on oil revenues accruing from the sales of oil in the global market. Jigawa state, like other states in Nigeria, has recorded cases of the pandemic resulting to the lockdown of almost all the local governments in the state. The price of oil hit its lowest level in 17 years, from \$59 to less than \$28 per barrel within a month as a result of lower demand and a lack of coordination between OPEC and Russia to reduce supply. The economy of Jigawa State is largely characterized by informal sector activities with agriculture as the major economic activity. Over 80% of the population is engaged in subsistence farming and animal husbandry, the state government receives its subvention on monthly basis from the federation account which is used to finance projects and pay salaries to civil servants in the state. This study examines the impact of Covid-19 on the economy of Jigawa State by way of using primary data largely from questionnaire administration and interview. The study reviews relevant literature with a view to bridge knowledge gap, a descriptive statistics and simple regression analysis have been employed to assess the impact of the pandemic on the economy of the state with a view to offer policy suggestions to the sate government and other drivers of the economy like entrepreneurs of SMEs, farmers etc, The findings show that Covid-19 has impacted negatively on the economy of the state especially in the performance of agriculture, public sector and small and medium scale enterprises in the state.

Keywords: Agriculture, Corona virus, Macroeconomics, Oil price, Pandemics.

I. INTRODUCTION

In December 2019, several cases resembling to pneumonia from an unknown virus appeared in Wuhan, China. Based on laboratory findings, the disease named Corona virus disease 2019 (abbreviated as Covid-19) was regarded as an infectious disease that is caused by severe acute respiratory syndrome Corona virus and hence Covid-19 continues to spread across the world. Initially the epicenter of the outbreak was China with reported cases either in China or being travelers from China. At the time of writing this paper, at least almost all countries in the world are largely affected by Covid 19. Even though the cases reported from China are expected to have peaked and are now falling (WHO 2020), cases reported from countries previously thought to be resilient to the outbreak, due to stronger medical standards and practices such as Germany, India etc have recently increased. While some countries have been able to effectively treat reported cases, it is not certain where and when new cases will emerge. Amidst the significant public health risk Covid-19 poses to the world, the World Health Organization (WHO) has declared a public health emergency of international concern to coordinate international responses to the disease.

There are concerted efforts by way of vaccination and social distancing to curtail the spread of infection which is almost driven by human-to-human transmission. Apart from the serious health hazards and human consequences of the Covid-19 pandemic, the economic uncertainties and disruptions is also a significant cost and concern to the global economy as result of slowdown in the global economy and lockdown in many countries. Covid-19 has significantly affected the global demand for oil due to restriction of movements and consequent drop in economic activities. The fall in the oil demand is estimated to surpass the loss of nearly 1 million barrels per day during the recession of 2007. This is also coming at a time when two major key players in the global oil industry - Russia and the OPEC cartel - are at



loggerheads on the decision to reduce output. The unequivocal oil price war started between these two global oil market giants may have more dire consequences on the oil price that has started to drop.

Jigawa State gets its subventions from the federation account which largely depends on the proceeds from the sales of oil finds it difficult to provide palliative measures to areas on lockdown as so many businesses have suffered a serious setback This paper attempts to examine the impact of Covid-19 on the economy of Jigawa state, Nigeria. The goal is to provide guidance to policy makers in the state to the economic benefits of globally-coordinated policy responses to curb the virus. The paper builds on some literature on the economics of SARS (Lee & McKibbin 2003) and Pandemic Influenza (McKibbin & Sidorenko 2006). The paper first summarizes the existing literature on the macroeconomic costs of diseases. The state government takes palliative measures to tame the economic hardship caused by the lockdown of many local governments in the state but however, due to the economic realities could not alleviate the suffering of the people as so many people in the state earn their living in the informal sector (they get their daily bread when they go out for work).

II. LITERATURE REVIEW

Many studies have found and revealed that population health, as measured by life expectancy, infant and child mortality and maternal mortality, is positively related to economic welfare and growth (Pritchett and Summers, 1996; Bloom and Sachs, 1998; Bhargava and et al., 2001; Cuddington et al., 1994; Cuddington and Hancock, 1994; Robalino et al., 2002a; Robalino et al., 2002b; WHO Commission on Macroeconomics and Health, 2001; Haacker, 2004).

There are many avenues through which an infectious disease like Covid-19 can significantly affect the economy of any nation. Direct and indirect economic costs of illness are often the subject of the health economics studies on the burden of disease. The usual approach uses information on deaths (mortality) and illness that prevents work (morbidity) to estimate the loss of future income due to death and disability. Losses of time and income by patients and direct expenditure on medical care and supporting services are added to obtain the estimate of the economic costs associated with the diseases. This approach underestimates the true economic costs of infectious diseases of epidemic and pandemic proportions which are highly contagious and

transmissible and for which there is no vaccine (e.g. HIV/AIDS, SARS and pandemic influenza). The experience from these previous disease outbreaks provides valuable information on how to think about the implications of Covid-19. The HIV/AIDS virus affects households, businesses and governments - through drop in labor productivity and supply; efficiency of labor and drop in household incomes; increased business costs and foregone investment in staff training by firms; and increased public expenditure on health care and support of disabled and children orphaned by AIDS, by the government (Haacker, 2004).

The influenza virus is by far more contagious than HIV, and the onset of an epidemic can be sudden and unexpected. It appears that the Covid-19 virus is also very contagious as presently in India, the virus has triggered the lockdown of so many institutions, prohibiting Indian nationals entrance to other countries. The afraid of 1918-19 Spanish influenza, the "deadliest plague in history," with its extreme severity and gravity of clinical symptoms, is still present in the research and general community (Barry, 2004). The fear factor was influential in the world's response to SARS - a Corona virus not previously detected in humans (Shannon and Willoughby, 2004; Peiris et al., 2004). Entire cities in China, India was closed and travel restrictions placed by countries on people entering from infected countries. The fear of an unknown deadly virus is similar in its psychological effects to the reaction to biological and other terrorism threats and causes a high level of stress, often with longer-term consequences (Hyams et al., 2002). A large number of people would feel at risk at the onset of a pandemic, even if their actual risk of dying from the disease is low.

III. RESEARCH METHODOLOGY

The study was conducted among some selected small and medium entrepreneurs in Jigawa State, Nigeria with emphasis in agricultural industry as the driver of the economy regarding their quarterly productivities. The state economy is dominated by informal sector activities of which over 80% of the people in the state are farmers who engaged in farming and animal husbandry. The population of the state is about 4.4 million people and ranked 8th most populous states in Nigeria. With its agricultural dominated economy, it has a high potential as a market both in terms of production and consumption (Mohammed M, 2017). Commerce and Industry are limited to small and medium scale such as; agricultural produce, livestock, fisheries, food and beverages, shoemaking, carpentry and production of other



household consumer goods (see paths2, 2014; Wikipedia, 2014).

Population

The population of the study was the 2,370 registered small and medium scale enterprises in Jigawa State (Smedan, 2017)

Subjects/Samples

The subject of the study were the 20 registered small and medium scale entrepreneurs in Jigawa state selected at least from each of the 3 senatorial districts using purposive non-random sampling.

Sampling Techniques

The study has adopted purposive non-random sampling technique. Small and medium scale entrepreneurs have been surveyed based on their fitness into the study.

Data Collection

A structured questionnaire in some portion with likert scale has been designed for data collection. Questions were asked on the effect of covid 19 on their respective enterprises, government palliative measures as well as their productivity of the last three months as compared with pre-covid 19 productivity.

Models Specification

To test the impact of covid 19 on the economy of Jigawa State in Nigeria, the empirical model has been estimated as follows: JSECON= $\alpha + \beta$ 1COVID 19 + e

Where; JSECON = Jigawa State Economy, β COVID 19 = Corona Virus, e = Error term, α = Autonomous constant term, β = Parameters of the model.

IV. DATA ANALYSIS

Analysis of the data collected has been done using Statistical package for social sciences (SPSS) version 21.0. The result is categorised into two: the descriptive statistics result that gives an overview of the features of respondent while the other category that shows the effects of the independent variables on the dependent variable.



Chart 1 summary of the impact of covid 19 on the economy of the Jigawa State:

Table 1 Simple Regression Summary:

Regression Statistics						
Multiple R	0.935270533					
R Square	0.874730969					
Adjusted R Square	0.867771578					
Standard Error	9.382227885					
Observations	20					

DOI: 10.35629/5252-0306689693 Impact Factor value 7.429 | ISO 9001: 2008 Certified Journal Page 691



Regression Result of the Determinants of the economy of Jigawa State.										
	Coefficient	Standard			Lower	Upper	Lower	Upper		
	S	Error	t Stat	P-value	95%	95%	95.0%	95.0%		
Intercep		4.61031	33.3763			163.561	144.189	163.56154		
t	153.875625	9	5		144.1897	5	7	6		
Х										
COVID		0.07285		0.03999	-					
19	-0.8167813	4	-11.2112	4	0.9698421	-0.66372	-0.96984	-0.6637205		

Regression Result of the Determinants of the economy of Jigawa State.

V. DISCUSSION:

The R square value is 0.874 indicating that 87% of the variation in dependent variable (Jigawa State economy) is account by the independent variable (regressor) and Covid 19 has negative coefficient of -0.816 with a probability value of 0.039 which indicates that it is statistically significant at 5%. We can conclude that covid 19 has significant impact on the economy of the state.

Policy Suggestions

Given the magnitude of the economic impact of the pandemic in Jigawa state of Nigeria, there is the need to implement the following policy suggestions.

- The state government should be more aggressive in revitalizing agriculture in the state by way of distributing fertilizers at subsidized costs as well as encouraging credit to farmers in the state.
- The CBN's decision to increase the cash reserve ratio (CRR) from 22.5 percent to 27.5 percent in January 2020 should be revisited to provide liquidity for banks so that banks can, in turn, create credit to small and medium scale enterprises to all the states in the federation.
- Jigawa state government should revamp its primary health care agency by way of staff training, provision of facilities to tame the virus.
- To provide additional liquidity in the entrepreneurs and the household sector of the state economy by way of waiving tax holiday to all farmers and entrepreneurs in the state.
- Farmers in the state should be exempted from lockdown so that food production and general productivity will not suffer.
- The state should ensure adequate supply of vaccinations to also tame the spread of the virus

VI. CONCLUSION

The Covid 19 pandemic is a clarion call to policy makers in the state to come up with a policy of curbing the rate at which the disease is spreading in the state. The present study highlighted that covid 19 has negatively impacted on the economy of the state.

REFERENCES

- Aguiar, A., Chepeliev, M., Corong, E., McDougall, R., & van der Mensbrugghe, D. (2019). The GTAP Data Base: Version 10. Journal of Global Economic Analysis, 4(1), 1-27.
- [2]. Arndt, C. and J. D. Lewis (2001). The HIV/AIDS Pandemic in South Africa: Sectoral Impacts and Unemployment. Journal of International Development 13(4): 427-49.
- [3]. Barker, W. H. and J. P. Mullooly (1980). Impact of epidemic type A influenza in a defined adult population. American Journal of Epidemiology 112(6): 798-811
- [4] Barro, R. J. (1991). Economic Growth in a Cross-Section of Countries. The Quarterly Journal of Economics, Vol. 106, No. 2, pp. 407-443.
- [5]. Barro, R. J. (2015). Convergence and Modernisation. Economic Journal, Vol. 125, No. 585, pp. 911-942.
- [6]. Bell, C., S. Devarajan and H. Hersbach (2004). Thinking about the long-run economic costs of AIDS, in The Macroeconomics of HIV/AIDS, M. Haacker (eds). Washington DC, IMF: 96-144.
- [7]. Beveridge, W. I., 1991. The chronicle of influenza epidemics. History and Philosophy of the Life Sciences 13(2), 223-34.
- [8]. Congressional Budget Office (2005) A Potential Influenza Pandemic: Possible Macroeconomic Effects and Policy Issues, CBO Washington DC.
- [9]. Cuddington, J. T. and J. D. Hancock, 1994. Assessing the Impact of AIDS on the Growth Path of the Malawian Economy. Journal of Development Economics 43(2), 363-68.
- [10]. Cuddington, J. T., J. D. Hancock, et al., 1994. A Dynamic Aggregate Model of the



AIDS Epidemic with Possible Policy Interventions. Journal of Policy Modeling 16(5), 473-96.

- [11] Freire, S., 2004. Impact of HIV/AIDS on saving behaviour in South Africa. African development and poverty reduction: the macro-micro linkage, Lord Charles Hotel, Somerset West, South Africa.
- [12]. GHSIndex, 2020. Global Health Security Index 2019. Nuclear Threat Initiative, Washington D.C; Johns Hopkins Center for Health Security, Maryland; and The Economist Intelligence Unit, London. https://www.ghsindex.org/.
- [13]. Gordon, R. H. and A. L. Bovenberg, 1996. Why Is Capital So Immobile Internationally? Possible Explanations and Implications for Capital Income Taxation. American Economic Review 86(5), 1057-75.
- [14]. Grais, R. F., J. H. Ellis, et al., 2003. Assessing the impact of airline travel on the geographic spread of pandemic influenza. European Journal of Epidemiology18(11), 1065-72.
- [15]. Lee J-W and W. McKibbin (2004) "Globalization and Disease: The Case of SARS" Asian Economic Papers Vol. 3 no 1. MIT Press Cambridge USA. pp. 113-131 (ISSN 1535-3516).
- [16]. Lee J-W and W. McKibbin (2004) "Estimating the Global Economic Costs of SARS" in S. Knobler, A. Mahmoud, S. Lemon, A. Mack, L. Sivitz, and K. Oberholtzer (Editors), Learning from SARS: Preparing for the next Outbreak, The National Academies Press, Washington DC (0-309-09154-3)
- [17]. Levine D.I. and W. J. McKibbin, W. (2020) "Simple steps to reduce the odds of a global catastrophe" The Brookings Institution, https://www.brookings.edu/opinions/simplesteps-to-reduce-the-odds-of-a-globalcatastrophe/
- [18]. Lokuge, B., 2005. Patent monopolies, pandemics and antiviral stockpiles: things that developing and developed countries can do. Centre for Governance of Knowldege and Development Working Paper, ANU. mimeo