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EMPIRICAL ANALYSIS OF THE IMPACT OF COVID-19 ON INFORMAL SECTOR: A CASE STUDY OF KATSINA STATE

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Abstract

Hitherto, studies on the impact of health epidemics on informal sector have not gained important acknowledgement from researchers and policy makers alike. This study empirically examined the impact of covid-19 on informal sector in Katsina State with a particular reference to Katsina Local Government. The study used primary data elicited via structured questionnaires administered to 120 sampled informal sector operators in the study area. The study employed Binary Logistics regression models in which case lockdown and closures were used as proxy for covid-19 while informal sector sales volume and employment size were respectively used as dependent variables and proxy for informal sector. Findings of the study reveals that, covid-19 has statistically significant negative impact on informal sector employment size ($p < 0.05$) and sales volume ($p < 0.05$) for the adopted models respectively. It is in the wake of this, the study recommends that, the government should provide credit facilities, strengthened healthcare system and debt relief packages amongst others, as these would indubitably suppress the impact produced by the pandemic on informal sector businesses and parade the art of confidence in the realm

Keywords: Informal Sector, Covid-19, Empirical, Employment and Sales Volume.

Introduction

Corona virus (Covid-19) first emerged in china towards the end of 2019. It was initially considered to be regional health challenge whose potential global risk has been underestimated in summary terms. Although, many countries were in solidarity in china, from the time when the first cases of Covid-19 were identified in Wuhan City, China, in December 2019, whereby in less than 3 months it has spread across the globe and was declared a global pandemic by the world health

organization (WHO) on 11th march, 2020. WHO has been at the forefront of the country's containment and effort? The WHO Country Office in China, supported by the Regional Office for the Western Pacific and global headquarters, has provided the Government of China with technical advice on detection, testing, isolation and quarantine measures to support a rapid response to contain the outbreak. However, given that the modern world is entrenched in the concept of globalization and the position of China as the manufacturing hub of the world; a seemingly less risky

Chinese health issue metamorphosed into a global scale with lethal consequences (Price & van Holm, 2020; Ezeaku & Asongu, 2020).

More so, the Covid-19 has spread with alarming speed, infecting millions and bringing economic activity to a near standstill as countries imposed tight restrictions on movement to halt the spread of the virus, as the health and human toll rise, the economic impact is already visible and constitutes the world's biggest economic shock in decades. As at the 6th of August, 2020, statistics showed that the total global confirmed cases of Covid-19 were 18,853,853 while the global death toll was 706,000. This indicated a 3.75 percent fatality rate and about 60 percent recovery rate (WHO, 2020).

On 27th February 2020 Nigeria recorded Covid-19's first case. As of 6th August, 2020, the total confirmed cases in Nigeria were 44,890 with 32,165 discharged and 727 deaths, representing a recovery rate of around 71.65 per cent and a fatality rate of 1.6 per cent respectively. What is evident in the Covid-19 pandemic pattern in Nigeria is that Group transmission has increased.

The greatest threat to Nigerian economy following the outbreak of Covid-19 in the country is the threat of loss of jobs and livelihoods. Like any other state in Nigeria, informal sectors within Katsina state have been heavily affected by the Covid-19 pandemic, due to the closures and reduced working hours recommended to curb the spread of the virus. This has had a negative effect on businesses. Recent forecasts indicate that the economy will experience a slow growth in the retail, manufacturing and agriculture sectors, a rise in unemployment, a decrease in government revenues, a drop in exports and a disruption in supply chains

Furthermore, the informal economy which is the part of any economy that is neither taxed nor monitored by the government also known as the underground economy, within Katsina state are greatly affected with the unfavourable terms of trade which is slowly causing Nigerian economy to deteriorate. The adverse effects of Covid-19 pandemic where numerous vital sectors of the economy were affected thereby prompting the need for critical evaluation and assessment. This is a crisis like no other, and there is substantial uncertainty about its impact on people's lives, livelihoods and economy

(IMF, 2020). A lot depends on the epidemiology of the virus, the effectiveness of containment measure, and the development of therapeutics and vaccines, all of which are hard to predict (IMF, 2020).

Flattening the spread of Covid-19 using lock-downs allow health systems to cope with the disease, which then permits a resumption of economic activity. While this is crucial for a strong recovery, there is considerable uncertainty about what economic landscape will look like when we emerge from this lockdown. Consequential from the above matter, Katsina LGA being part of Nigeria authorized for a total lockdown amidst the pandemic spur the need for assessment. Secondly, Literature on the economic impact of Covid-19 is still scant because as we write, the pandemic is still increasing across the world with other regions becoming epic centres. Specifically, there has not been any study conducted addressing the impact of Covid-19 on small scale enterprises in Katsina local government.

There is lack of literature's to review and fully address the Covid-19 pandemic as we write. Lack of literal works on the Covid-19 pandemic is a serious constraint to providing suitable policies to stabilize economic activities amidst the pandemic.

Based on motivation and conflicting empirical evidences, this study aims to provide answers that have not yet been answered in the field of Covid-19 pandemic.

Consequently, this study seeks to assess the economic impact of Covid-19 on informal sectors in Katsina Local Government Area. In line with the slated objectives above, this study seeks to provide answers to the following research questions; what is the impact of Covid-19 on informal sector employment size in Katsina local government? What is the impact of Covid-19 on informal sector sales volume in Katsina local government? What are the ways forward for combating the effects of Covid-19 on informal sector in the study area?

Literature Review

Empirical Literature

There are not enough written works with lasting and artistic merit on the Covid-19 pandemic yet as the pandemic is still exacerbating. It is suggested that the

study would gleam on few literary works present and also review incidence from historical from a historical perspective. For example Oruonye, Miftahu and Ahmed Y.M (2020) conducted a conceptual approach research on impact of Covid-19 on informal sector and Livelihood sustainability in Nigeria, they revealed that many business in all sectors of the economy have been affected by the social distancing and lockdown measures thereby inflicting more economic hardship and decreased social welfare in addition to loss of learning among students. Their work suggested that government should provide massive loans to business with generous interest rate and payback periods in addition to palliatives. More so, international monetary agencies should provide a debt relief services to enable government focus on protecting vulnerable population and strengthening palliative measure.

In a Brief documented by UNDP (2020), on the impact of the Covid-19 pandemic in Nigeria; A socioeconomic analysis. The brief outlined the significant pressure on the health care system in Nigeria thereby by revealing that around 20 percent of Covid-19 cases require hospitalization and another 7.4 percent require intensive care at the time of writing the project. if confirmed cases reach numbers similar to that in Italy-53,578 at the time of writing, it is projected that almost 15,000 people would need to be hospitalized/require intensive care in Nigeria. Based on trends experienced in Italy, in the first month after the 30 confirmed cases, this could mean as much as 3500 Nigerians requiring intensive care in the next 30 days. UNDP also revealed the decline in oil prices by 55 percent between the ends of 2019 to march 2020. Also lack of demand could also reduce domestic oil production (supply) in the short to medium term. As such, fiscal space could be narrowed significantly further limiting the government's ability to cope an emergency response.

Adeoji O. Et al (2020) examined the economic consequences of the Covid-19 pandemic in Nigeria. The study adopts aggregate supply and aggregate demand (AS-AD) model to provide the theoretical motivation for the study. The study reveals that the Covid-19 pandemic has insignificant negative impacts on basic macroeconomic variables in Nigeria such as inflation, employment, exchange rate, GDP growth, among others. Hence, time is required before the established

correlations withstand empirical scrutiny in terms of casualty. It is hoped that the attendant policies would be properly implemented so as to provide critical mass to repositioning the country's economy on the path towards inclusive and sustained economic development.

A Brief by International Labour congress (ILO) (2020) modeled Covid-19 crisis and the informal economy, immediate responses and policy challenges. The mass number of workers in the informal economy are highly exposed to occupational health and safety risks, no appropriate protection, and an increased likelihood that they will suffer from illness, accident or death, in the brief Covid-19 is said to have the potential to add to these risks. They revealed that Informal food markets play an essential role in ensuring food security in many countries, both as a source of food and a place for smallholder farmers to sell their products, thereby, logistical challenges within supply chain, particularly cross-border and domestic restrictions of movement, may lead to disruptions in food supply, undermining informal workers food security and poverty.

KPMG (2020) analyzed Covid-19's economic effects in Nigeria, with a focus on business activities. Findings revealed the pandemic has a twin shock on the oil-dependent Nigerian economy, including global and domestic shocks as well as oil price shock. The study said the twin shocks are expected to have an effect on the economy across supply, demand, and financial networks. The study concluded that, the pandemic's socio-economic effects could still continue long after the virus had been conquered

The World Bank (2020) offered an explanation for Covid-19's late arrival and the rapid spread across Sub-Saharan Africa. The study suggested that the low number of cases reported in the area could best be explained by the inadequate capacity of testing in several countries that may have understated the true number of infections. This negative view contradicts the prevention steps taken by these African countries and the potential for indigenous virus cure that could be viable due to unique regional characteristics. The study projected a significant macroeconomic impact of the pandemic on the region that involves a decrease in Sub-Saharan Africa's economic growth from 2.4 per cent in 2019 to 2.1 and -5.1 in 2020 that could lead to a

potential recession in the area. The region's production loss was expected to range from US\$ 37 billion to US\$ 79 billion, as the three main economies in the region — Nigeria, South Africa and Angola — would experience sustained low growth and investment as a result of commodity price fluctuations.

Theoretical Framework

The study adopts income and employment theory in assessing the economic impact on informal sectors.

Theory of Employment

At the macro level, employment refers to the application of the factors of production to efforts that will generate income for the welfare of the citizens. Indeed, it is in that process that employment of labour at the sub-macro (micro) levels by the diverse economic agents is engendered. Consequently, any change in the quantum, mix, and nature of combining these factors of production at the macroeconomic level, *ceteris paribus*, also translates to changes in the same direction in the combination and condition of employment of labour at the micro level. In John Keynes' *The General Theory of Employment, Interest and Money*, the great Economist postulates that the national income depends on the volume of employment, i.e. on the quantity of effort currently devoted to production, and there is a unique correlation between the two. In addition, a state of full employment is achieved by an economy when all its resources have been appropriated to the fullest and economic activities are in a stable condition, so that a shift in the dependent variables results in unstable conditions and/or reduced level of real income.

However, evidence indicates that full or even approximately full employment is of rare and short-lived occurrence. Until then, additional increases in and different combinations of the factors of production are possible efforts to attain a full employment condition. In other words, there will always be an inducement to

push the rate of new investment to the point which forces the supply-price of each type of capital-asset to a figure which, taken in conjunction with its prospective yield, brings the marginal efficiency of capital in general to approximate equality with the rate of interest, and changes in the rate of consumption will move in the same direction (though smaller in amount) as changes in the rate of income. In the same vein, if we assume (as a first approximation) that the employment multiplier is equal to the investment multiplier, we can, by applying the multiplier to the increment or (decrement) in the rate of investment, infer the increment of employment, as long as the value of output will rise when employment increases even if the wage-unit and prices are unchanged.

In formulating the general theory of employment, some existing or available factors are taken as given, but this does not mean that these factors are assumed to be constant; but merely that, the effects and consequences of changes in them are not taken into consideration or into account, for now. They influence the independent variables, but do not completely determine them. The independent variables, in the first instance, are the propensity to consume, the schedule of the marginal efficiency of capital and the rate of interest.

Therefore, the above theory was selected to serve as the basis or framework backing up this research owing to its relevance to the problem(s) that informed this study in general.

Materials and Methods

This study will use primary data, in which case, structured questionnaire was used to elicit information from small scale informal enterprises. This research work is designed to determine the impact of Covid-19 on informal sector in Katsina local government. Hence, the design is basically Analytical (Amin, 2015).

Table 1: Variables Measurement

S/N	Variable	Measurement	Description	Expected Sign	Status
	Informal sector	Total number of economic activities that are neither taxed nor monitored by the government	Economic Sector that is neither taxed nor monitored by any form of government	positive	Dependent Variable
	Lockdown	Measured in terms decline of economic activities when inter-state travel was shut	A restriction policy for people or community to stay where they are, enforcing a ban on state	negative	Independent Variable

			travels.		
	Closure	Measured in terms economic down turn when activities within state were shut	A regulation that is meant to reduce or stop operations within states.	negative	Independent Variable

Source: Author's Computation

Population and Sample of the study

Given the nature of this study, Purposive non-probability sampling (also known as judgment, selective or subjective sampling) was used, which is non-probability sampling method where elements for the sample are chosen by the judgement of the researcher, justified by the belief that researchers can obtain a representative sampling using sound judgment which will result in saving time and money. Hence, 120

informal sector firms were used as a sample of this study. Further justification for choosing such sample stem from the fact that, Katsina local government area has 12 political wards, and considering that, the size of informal cannot be determined as its definition suggests, the study resolved to use purposive non-probability sampling approaches to elicit information from 10 informal sector firms across each political ward of Katsina local government area.

Model Specification

Following the work of Umar (2015), model for this study will be adopted with modifications thus:

Informal sector = f(closure, lockdown)...1

$ISES = \beta_0 + \beta_1 LD + \beta_2 CL + \varepsilon$ 2

$ISSV = \beta_0 + \beta_1 LD + \beta_2 CL + \varepsilon$ 3

Where:

ISES = Informal Sector Employment Size

ISSV= Informal Sector Sales Volume

LD= Lockdown of inter-local government and inter-state government travel

CL= Closure of businesses and public places

Method of Data Analysis

Binary Logistic regression would be used to analyse the impact of Covid-19 on small scale informal enterprises in Katsina local government area. Given the nature of the model, the results would be interpreted as elasticities.

Results and Discussion

Data Presentation and Analysis

Table 2: Questionnaire Returns

Questionnaire	Frequency	Percentage (%)
Administered	120	100.00
Filled and Returned	116	96.67
Available	116	96.67

Source: Field work, 2021

Socio-economic Characteristics of Respondents

This section presents the age structure, educational background, gender and marital status, length of doing business, family size, ownership and income level of

the respondents. It is noteworthy that, the respondents used in this study were employers of informal sector business enterprises, who were affected by the Covid-19.

Table 3: Age structure of the informal sector Employers

Age	Frequency	Percentage (%)
18-27	21	18.10
28-37	33	28.44
38-47	49	42.24
48-Above	13	11.20
Total	116	100.00

Source: Fieldwork, 2021

Table 3 above shows that, 18.10% of the informal sector employers fall within the age bracket of 18-27 years of age. 28.44% of them are within the age range of 28-37 years, 44.24% of the informal sector employers in Katsina fall within the age bracket of 38-

47 years of age. However, the remaining 11.20% of the informal sector employers in the study area are between the age ranges of 48-above years of age as depicted in the figure 3 above.

Table 4: Marital Status of the informal sector Employers

M/Status	Frequency	Percentage (%)
Married	70	60.34
Single	46	39.66
Total	116	100.00

Source: Fieldwork, 2021

The above Table 4 shows that, 60.34% of the informal sector employers in Katsina are married while 39.66% are not. This is not startling due to the norms and

culture of the Katsina society that is predominantly Muslims with its practise and tradition of early marriage.

Table 5: Educational Qualification of the informal sector Employers

Qualification	Frequency	Percentage (%)
Primary	15	12.93
Secondary	64	55.17
Tertiary	32	27.59
Others	5	4.31
Total	116	100.00

Source: Fieldwork, 2021

Table 5 above shows that 55.17% of the informal sector employers have Secondary Education Qualification, 27.59% have Tertiary Education Qualification, 12.93% have Primary Education Qualification while 5 of the

informal sector employers do not have any educational Qualification.

Table 6: Years in Business for the informal sector Employers

Duration	Frequency	Percentage (%)
< 1 Years	3	2.59
1-5 Years	32	27.59
6-10 Years	51	43.97
11-15 Years	21	18.10
>15 Years	9	7.75
Total	116	100.00

Source: Fieldwork, 2021

The above Table 6 shows that 43.97% of the informal sector employers have been in business within the range of 6-10 years, 27.59% of the informal sector employers have been in business within the range of 1-5 years, 18.10% of the

informal sector employers have been in business within the range of 11-15 years, 7.75% of the informal sector employers have been in business above 15 years and finally 2.59 % have been in business for less than a year.

Table 7: Family size of the informal sector Employers

Family	Frequency	Percentage (%)
None	46	39.66
1-5	54	46.55
6-10	9	7.76
Above 10	7	6.03
Total	116	100.00

Source: Fieldwork, 2021

The Table 7 above shows that 46.55% of informal sector employers have children within the range of 1-5, 39.66% have no children at all, 7.76 % have 6-10 children and 6.03% have above 10 children.

Table 8: Income level of the informal sector Employers

Income	Frequency	Percentage (%)
Low	44	37.93
Middle	58	50.00
High	14	12.07
Total	116	100.00

Source: Fieldwork, 2021

The Table 8 above shows that 50.00% of informal sector employers have middle income, 37.93% have low income, and 12.07% have high income which reflects on majority of the informal business owners earning within the range of middle and low rates of income.

Table 9: Ownership status of the informal sector Employers

Status	Frequency	Percentage (%)
Family	27	23.28
Sole Proprietor	64	55.17
Partnership	20	17.24
Others (specify pls)	5	4.31
Total	116	100.00

Source: Fieldwork, 2021

Table 9 above shows that 55.17 % of the informal sector employers are Sole Proprietors, 23.28% being family owned businesses, while 17.24% as Partnership businesses and only 4.31% as other type of businesses. This reflects on majority informal business owners starting their businesses solely by themselves.

Table 10: Rating of Covid-19 impact on Informal sector employers sales volume

Rating	Frequency	Percentage (%)
Extremely High	51	43.9
High	36	31.0
Medium	16	13.7
Low	9	7.7
Extremely Low	3	2.5
Total	116	100.00

Source: Fieldwork, 2021

The above Table 10 shows that Ratings on the impact of Covid-19 on informal sector employers' sales revenue produced extremely high impact on informal sector employers' sales revenue (43.9%). This is followed by high impact (31.0%), medium, low and extremely low with a percentage of 13.7%, 7.7% and 2.5% respectively. This is further illustrated in the bar chart below:

Table 11: Rating of Covid-19 impact on Informal sector employers employment size

Rating	Frequency	Percentage (%)
Extremely High	30	25.8
High	45	38.7
Medium	28	24.1
Low	10	8.6
Extremely Low	2	1.7
Total	116	100.00

Source: Fieldwork, 2021

Table 11 above shows that ratings on the impact of Covid-19 on informal sector employers' employment size had a moderately high impact on informal sector employers' cost of production (38.7%). This is followed by extremely high impact (25.8%), medium, low and extremely low with a percentage of 24.1%, 8.6% and 1.7% respectively. This is further illustrated in the bar chart below:

Table 12: Rating of Covid-19 impact on Informal sector employers cost of production

Status	Frequency	Percentage (%)
Extremely High	40	34.5
High	36	31.0
Medium	27	23.3
Low	10	8.6
Extremely Low	2	1.7
Total	116	100.00

Source: Fieldwork, 2021

The above Table 12 shows that there is an extremely high impact by respondents on the ratings on impact of Covid-19 on informal sector employers cost of production with a percentage of 34.5%, followed by high impact (31.0%), medium, low and extremely low with a percentage of 23.3%, 8.6% and 1.7% respectively. This is further illustrated in the bar chart below:

Table 13: Rating of Covid-19 impact on Informal sector employers level of wages

Rating	Frequency	Percentage (%)
Extremely High	26	22.4
High	36	31.0
Medium	34	29.4
Low	12	10.4
Extremely Low	7	6.5
Total	116	100.00

Source: Fieldwork, 2021

Table 13 above shows that there is a moderately high ratings on the impact of Covid-19 on informal sector employers' levels of wages (31.0%). This is followed by medium impact (29.4%), extremely high, low and extremely low with a percentage of 24.1%, 8.6% and 1.7% respectively. This is further illustrated in the bar chart below:

Table 14: Rating on the recommended solutions to the challenges facing Informal sector posed by Covid-19

Rating	Frequency	Per. (%)
Provision of Credit Facility	20	17.2
Lowering the Cost of Borrowing (IR)	6	5.2
Provision of enhanced state of security	10	8.6
Debt relief packages	30	25.9
Strengthened healthcare system	5	4.3

Increase in employment opportunities	10	8.6
Promoting ease of doing business strategies	12	10.4
Relaxing trade restrictions for SMEs	12	10.4
Tax relief/concessions to SMEs	11	9.5
Total	116	100.00

Source: Fieldwork, 2021

Table 14 above suggests the recommendations by informal sector employers for the government in tackling and compensating for the impact of Covid 19 on the informal sector. It shows that the provision of “Debt relief packages” has the highest response from the respondents (25.9%) followed by provision of credit facilities, Relaxing trade restrictions,

ease of doing business strategies amongst others. This is further illustrated in the bar chart below:

Data Analysis

Model 1: Impact Of Covid-19 On Informal Sector (Employment Size)

Table 15: Dependant Variable: Informal Sector (Employment Size)

Variables	Coefficient	S.E	Sig. Value
Constant	13.893	2.279	0.000**
Lockdown	-0.204	0.061	0.001**
Closures	-0.169	0.060	0.005**

Source: Computations using SPSS V.21

*** indicates significance at 1% and 5% levels respectively

Pseudo (R² cs) = 0.570 to 0.769

The above result reveal that, holding the other explanatory variables constant, the magnitude of the impact of Covid-19 on informal sector employment size in Katsina stood at 13.893. However, lockdown of town and state has an inverse relationship with informal sector in the study area. A unit increase in the lockdown period will reduce the employment size of the informal sector by approximately 20.4%. The relationship between informal sector employment size and lockdown legislation is negative and statistically significant as the sig. value reads 0.001 which is statistically less than 0.05 significance level.

Meanwhile, closures of schools, markets and other establishment where informal sector sells its services has affected the informal sector negatively as well. This is for, the magnitude of the coefficient of closures show that, a unit increase in the period (days) of closures (of markets, schools, establishment etc.), informal sector

will be negatively affected by approximately 16.9% reduction in its employment size. The sig. Value of 0.005 indicates that the relationship between informal sector is although found to be negative, it is yet, statistically significant (sig. Value<0.05).

The value of R² which is the coefficient of determination measures the variable in informal sector as explained by Covid-19 (lockdown and closures). From the results above, the explained variation in the dependent variables based on our model range from 57.0% to 76.9%.

The value of Omnibus Tests of model coefficient shows that overall, the model is statistically significant (Chi-square value=97.806, sig. Value =0.000).

Model 2: Impact of Covid-19 on Informal Sector (Sales Volume)

Table 18: Dependant Variable: Informal Sector (Sales Volume)

Variables	Coefficient	S.E	Sig. Value
Constant	13.347	2.229	0.000**
Lockdown	-0.242	0.057	0.000**
Closures	-0.118	0.052	0.023*

Source: Computations using SPSS V.21

*** indicates significance at 1% and 5% levels respectively

Pseudo (R² cs) = 0.572 to 0.764

The above result reveal that, holding the other explanatory variables constant, the magnitude of the impact of Covid-19 on informal sector sales volume in Katsina stood at 13.347. However, lockdown of town and state has an inverse relationship with informal sector in the study area. A unit increase in the lockdown period will reduce the sales volume of the informal sector by approximately 24.2%. The relationship between informal sector sales volume and lockdown legislation is negative and statistically significant as the sig. value reads 0.000 which is statistically less than 0.05 significance level.

Meanwhile, closures of schools, markets and other establishment where informal sector sells its services has affected the informal sector negatively as well. This is for, the magnitude of the coefficient of closures show that, a unit increase in the period (days) of closures (of markets, schools, establishment etc.), informal sector will be negatively affected by approximately 11.8% reduction in its employment size. The sig. Value of 0.023 indicates that the relationship between informal sector is although found to be negative, it is yet, statistically significant (sig. Value<0.05).

The value of R^2 which is the coefficient of determination measures the variable in informal sector as explained by Covid-19 (lockdown and closures). From the results above, the explained variation in the dependent variables based on our model range from 57.2% to 76.4%.

The value of Omnibus Tests of model coefficient shows that overall, the model is statistically significant (Chi-square value=98.507, sig. Value =0.000).

Conclusion and Recommendations

The impacts of the Covid 19 pandemic crisis on the informal sector in Katsina Local Government in respect to employment size and sales volume were enormous indeed. The crisis due to the corona outbreak which led to a policy of limiting community activities greatly affected the decline in economic productivity to a lower level, including the informal sector. The empirical fact of the impacts of Covid 19 on the informal sector shows that the resilience of the economic sector to the crisis cannot be equalized.

This study provides a preliminary picture that informal sector employers were largely affected by the crisis triggered by the Covid-19 pandemic. Majority of the respondents felt the crisis had a negative impact on their

businesses. With the lockdown and closure, economic activity were completely paralyzed. This evidence shows that health disasters are no more feared than the secondary effects caused by a pandemic. Initial studies analysis found that the informal sector especially informal workers are considered more vulnerable because they do not have clear health and employment guarantees. The solution in saving the informal sector is to strengthen the health system to ensure financial access for all; building universal social protection, supporting the recovery of productive economic units, increasing productivity and facilitating the transition to the formal sector to increase formal employment opportunities. Although not immune to the effects of Covid-19, businesses in the informal sector are estimated to be more resilient to restore productivity than businesses in the formal sector because they have greater flexibility in carrying out economic activities. However, this is different from informal workers who feel they will not be able to recover their incomes after the pandemic and have the potential to transfer jobs.

Based on the findings of the study, the following recommendations are suggested; Government should provide massive loans to informal sector businesses with generous interest rate and payback periods. Majority of self-employed, daily wage-workers and mid-sized businesses would be forced to close when they realized that paying back debts would lead to bankruptcy. When a government forces a business to close for public health reasons, the same government should also be able absorb the debt, and not the business. However Governments should initiate debt relief packages to decrease the financial burden on the poor through support for utilities, housing, and taxes. These measures, such as freezes on rent payments, can also apply to the work spaces informal workers use, and thus can help informal businesses restart their economic activities. Moreover Government should increase and enhance the state of security in the states and country at large down from the local, state and federal level. The country is in continuous insecurity from the notorious Boko haram and kidnappers, in which most of their victims are poor and less privileged citizens who largely make up the informal sector lastly the government should put in more effort and resources in strengthening and enforcing the healthcare system in the country, with more focus and priority given to the manpower and infrastructural

development of the countries healthcare including measures and response protocols put in place for an

emergency situation like that of Covid-19.

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