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THE IMPACT OF COVID-19 ON INTERNALLY GENERATED REVENUE OF SOUTH-WEST NIGERIA

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Abstract

Purpose: the paper investigated the impact of COVID-19 on the Internally Generated Revenue (IGR) of southwest Nigeria comprising Ekiti state, Lagos state, Ogun state, Ondo State, and Osun state, Oyo state.

Methodology: the authors sourced data from secondary sources; the Internally Generated Revenue was obtained from the annual publication of the National Bureau of Statistics covering 2019 and 2020 and the COVID-19 confirmed cases were obtained from National Disease Control Centre.

Findings: The result showed that paired correlation of IGR 2019 and 2020 showed a strong positive correlation and the same was also true of COVID-19 cases and IGR 2020 ($p = 0.001$). The result of the t-test showed no significant difference ($p > 0.05$) between IGR 2019 and IGR 2020 quarter on quarter.

Unique Contribution to Theory, Practice and Policy: The result supported two theories; The 'Pecking Order Theory and Ability-To-Pay, Internally Generated Revenue focuses on funds derived within the state, just like internal financing to a firm. The internally generated revenue did not decline during the pandemic because taxes were paid since the majority were paid salaries during the pandemic and transactions were conducted online via platforms, more importantly, the Central Bank of Nigeria did not shut down so economic activities were not paralyzed but migrated to online. The study proved that in times of crisis, IGR may not be adversely affected if all the channels of generating income are available to taxpayers. This aids budget and planning during a crisis period, furthermore, the government will be able to plan and channel funds to areas of need accordingly. The result further supported the new model of working; people can work remotely and pay their taxes despite the lockdown.

Keywords: *COVID-19, Internally Generated Revenue, South-West, Taxes, Lagos State, Ogun State*

INTRODUCTION

Fiscal policies of various countries in the world center on the generation of revenue through tax and expenditure to ensure a favourable economic growth and economic development (Yahaya, 2020) by increasing employment and raising the standards of living of the populace, however, when the government is unable to generate revenue, its ability to fund its expenditure may be negatively impacted. This was the concern during the COVID-19 pandemic as sources of government revenue was being threatened. In the United States, individual income taxes contribute up to 37.7% to government revenue compared with other types of taxes, social insurance is the second largest contributor while corporate income tax contributes the lowest. Likewise in Denmark and Australia, individual income tax contributes more than any other tax type (Pomerleau, 2014). This is however different from many Organization for Economic Co-Operation and Development (OECD) countries, where social insurance taxes contribute more (Pomerleau, 2014). These various taxes were of immense concern during the pandemic as its elongated period became a threat to these government revenues. Similar to other regions, tax is one of the sources of revenue for the government in sub-Sahara Africa, majorly types of taxes for the government in the region are income tax, both personal and company income tax, taxes on profits and capital gains, goods and services and international trade transactions (Aslam, et al., 2022). Unlike other regions, taxes in sub-Sahara Africa have been low, given many constraints like structural issues, weak reforms, and informality coupled with ridiculous exemptions and incentives (Aslam, et al., 2022). The state governments in Nigeria do finance their budget by both internally generated revenue and federal allocation, which comes from oil proceeds (Ogbodo & Mehara, 2021), however, due to instability in crude oil prices, federal allocation is not expected to be taken as a mainstay but rather a supplement. Contrarily, many states depend significantly on federal allocation hence, the constraint in implementing their annual budgets. Few of the states, however, generate sufficient revenue internally and are able to finance their budget. Nevertheless, when sources of these revenues are impaired, then there could be difficulty in realizing the revenue. This is the reason many were skeptical of the ability of the state governments to generate enough revenue to fund the 2020 budget and even the 2021 budget considering the huge impact of COVID-19 on the global economy.

Coronavirus infectious disease (COVID-19) otherwise called Sars-Cov 2 is a Ribonucleic acid (RNA) viral infection of pandemic proportion that essentially presents with acute respiratory symptoms which may have fatal outcomes in the elderly and individuals with underlying comorbidities (Ni, et al., 2021). It was first identified in Wuhan city in China in December 2019 (Kumar, et al., 2021) and the first case was confirmed in Nigeria on February 27, 2020 (Daniel &Adejumo, 2021). The pandemic affected many sectors in various economies, be it government or private sector, subsequently resulting in a downturn in domestic demand, a decline in tourism and travel, altered supply, insufficient trade, and production (Alam, et al., 2020). Given the fatal nature of the infection and the mortality rate in many parts of the world in 2020, Nigeria, in order to control the spread, introduced a total lock-down in Federal Capital Territory, Abuja, Lagos state, and Ogun state on March 30, 2020, migrated to partial lock-down in July 2020 and finally came out of lockdown in August 2020. The country was shut down for the greater part of quarter 2 and a lot of economic activities were affected. The government, in ensuring that the impact is not too harsh on the citizen, also introduced relief packages especially during the total lockdown to ameliorate economic challenges faced by a majority of the populace especially those that live on a daily income. These unexpected expenses were to be funded by the government leveraging on their revenue mostly the Internally Generated Revenue.

The Internally Generated Revenue of the state government in Nigeria majorly depends on Pay As You Earn (PAYE), Taxes, Direct Assessment, and revenue from Ministry, Department, and Agency (NBS, 2018). These various sources of state revenue relate to many of the activities that were affected by COVID-19, subsequently, the stream of income from these various channels was greatly disturbed by the pandemic. The lockdown had an impact on the nation as many economic activities were paralyzed especially in the second quarter of 2020. Various institutions were shut down in observance of the lockdown, consequently, income was adversely affected. The drop in income did have an impact on all other factors or indices (Mohamed, et al., 2020). As a result of this, it was expected that the IGR of the state government will be adversely affected especially in the southwest region particularly in Lagos state.

Lagos state is the economic center of the nation and attracts many citizens in search of economic activities, inevitably, movement into Lagos may sometimes be more frequent than in any other state in the country. It was very imperative to lockdown Lagos state to control the spread of the virus even though the lockdown stalled many activities, especially in the southwest region as Lagos state is assumed the economic capital of the country. For example, most of the ports are in Lagos state, as a result, importers and exporters were hindered from moving their goods from or to the port even though the shipping lines were in operation. Many traders that purchase their goods in Lagos to serve other markets in the region were also prevented from coming to Lagos due to the lockdown. This temporary hold on economic activities affected some of the taxes and levies that state governments do collect. For instance, Road taxes that are paid by commercial transporters operating within the states gradually disappeared since there was no movement. Furthermore, PAYE too could have been affected due to non-payment of wages and salaries or partly paid wages and salaries.

While some researchers like Dube, Nhamo & Chikodzi (2020), worked on OVID-19 cripples the global restaurant and hospitality industry, they found that sit-in-guess dropped to zero in many countries and loss of employment and revenue. Bloom, Fletcher & Yeh (2021), studied the impact of COVID -19 on US firms, the result showed a negative sale impact with some firms recording zero or positive impact. Ng'etich, et, al (2021), investigated the impact of the COVID-19 pandemic on Kenyan tax revenue, the study showed that the pandemic constraints had a negative effect on business entities and invariably on tax revenue. Sarkodie & Owusu (2021) researched the impact of the COVID-19 pandemic on waste management, they found that there was an increase in the quantity of waste during the pandemic. Given these studies, much has not been done on the Internally Generated Revenue of southwest, Nigeria. This study aims to analyze the impact of the pandemic on the IGR of the aforementioned region with the following objectives:

1. To determine if COVID-19 affected the IGR of south-west, Nigeria

2. To determine the significance of the impact if any

LITERATURE REVIEW

Conceptual Review

The World Health Organization announced Coronavirus popularly called COVID-19 as a pandemic on March 11, 2020, after its discovery in Wuhan city in China, in December 2019 (Kumar, et al., 2021). According to Mckibbin & Fernando (2020), severe acute respiratory syndrome coronavirus 2 (Sar-Cov-2) causes COVID-19 with symptoms like high fever, dry cough, sore throat, diarrhea, and shortness of breath. The commonest symptom often reported are fever (83%), cough (82%), shortness of breath (31%) and vomiting, diarrhea with abdominal pain (2-10%) (Wang, et al., 2020) with an incubation period of 1 - 14 days (Wu & McGoongan, 2020). Being a novel virus there was no effective treatment at its discovery, hence the more dreaded it became. Upon its discovery in Wuhan, the spread to other countries was very fast and, in a few months, it has become a global pandemic (Ni, et al., 2021). As of September 23, 2021, the documented cases globally were 230,892,835 with 4,733,053 deaths and 207,595,460 recoveries and in Nigeria, the total documented cases as of September 23, 2021, was 203,081 with 2,666 deaths and 191,601 recoveries (Worldmeter, 2021). Due to the fatality rate, a lot of measures were introduced to curb the spread, and while the lockdown was gradually removed across the globe, the resultant effect of the lockdown in 2020 had a great social and economic impact on the world with a fear of possible global recession (Baker et al., 2020; Baldwin & di Mauro, 2020). Furthermore, according to OECD, the containment and mitigation measures introduced in 2020, had both social and economic impacts, it was estimated that the impact could lead to a decline in output in many countries between one-fifth and one-quarter and a drop in consumer spending by one-third. Likewise, The World Bank (2020) also noted that with COVID-19 many countries experienced a drop in Gross Domestic Product, a rise in income inequality, a rise in poverty, and high unemployment as a result of global economic contraction due to lockdown and fall in demand and supply of goods and services.

According to the constitution of the Federal Republic of Nigeria of 1999, there is revenue that is exclusive to state governments and there are those that are for the federal government. In line with section 162, subsection 10, revenue is " income or return accruing to or derived by the Government of the Federation from any source and includes a. any receipt, however, described, arising from the operation of any law; b. any return, however, described, arising from or in respect of any property held by the Government of the Federation; c. any return by way of interest on loans and dividends in respect of shares or interest held by the Government of the Federation in any company or statutory body". Taxes and levies collected by the state government are Personal income tax in respect of (a) PAYE & (b) Direct taxation (Self-assessment), Withholding tax for Individuals, Capital gains tax for individuals, Stamp duties on instruments executed by individuals, Pools betting, lotteries, gaming and casino taxes, Road tax, Business premises registration, Development levy for individuals, Naming of street registration fees in State Capitals, Right of Occupancy fees on lands owned by the State Government. Market taxes and levies where State finance is involved, Hotel, Restaurant, or Event Centre Consumption Tax (where applicable), Entertainment Tax (where applicable), Environmental (Ecological) Fee or Levy, Mining, Milling, and Quarry Fees (where applicable), Animal Trade Tax (where applicable), Produce Sales Tax (where applicable), Slaughter or Abattoir Fees, where state finance is involved Infrastructure Maintenance Charge or Levy (where applicable), Fire Service Charge, Economic, Development Levy (where applicable), Social Services Contribution Levy (where applicable), Signage and Mobile Advertisement, Jointly collected by States and Local Governments, Property Tax and Land use charge (where applicable) (NBS, 2018).

The state budget will be difficult to execute if there is inadequate revenue, therefore, successful implementation of the budget that aids the stability of major economic indicators will largely depend on a regular and stable source of revenue (Igyo, Simon, & Iorlumun, 2016). Many states in Nigeria do not have substantial IGR because of reliance on federal allocation, however, when there is a drop in the foreign exchange earnings due to instability in the price of crude oil, the budget is either not implemented or partially implemented. The heavy reliance on federal allocation does hinder the state governments from focusing on increasing their IGR. Consequently, many states in Nigeria can barely survive without federal allocation. Ekankumo & Braye (2011), opined that dependence on taxes as major sources of IGR may not yield the desired result but entrepreneurship development, agricultural development, and systemic sensitization aided by adequate training of government officials. Uviomo (2009), also argued that due to foreign exchange earnings from crude oil, many state governments, and the federal government do not fully exploit the IGR. In the study of Olusola (2011) on "Boosting IGR in Ogun State", he identified porous sources, negligence, human resources challenges, poor internal control, lack of accountability, and others, as factors affecting IGR. In order to harness the full potential of IGR in the states, the states must be able to identify taxpayers and their line of business (Okauru, 2012). Despite the constraints of revenue generation by the state government, the expenditure keeps rising and this continually put a lot of pressure on the government to generate more revenue.

Theoretical Review

The pandemic that ravaged the world in the year 2020 created a lot of fear in various sectors inclusive of the government sector. The disruption in economic activities was a concern as the slow and some instances a complete halt will affect the disposable income of many citizens and thereby affect their spending including payment of taxes. The theory of Ability-To-Pay will be more relevant in the situation of COVID-19. According to the proponent of the theory, Adam Smith, (Olalekan & Oyedokun, 2019), taxes should be paid according to the ability of the taxpayers. Everyone in the state should support the government by contributing his portion according to his wealth derived under the protection of the government. This theory formed the basis for progressive tax though some critics said it discourages hardworking. In the words of Batt (2012), the Ability-To-Pay theory entails a taxpayer's ability to pay taxes based on his income or his profit. Zhou & Madhikani (2013) also supported this by stating that the Ability-To-Pay theory is premised on the economic status of the taxpayers as well as their resources, wealth, and power to pay. While the Ability-To-Pay theory is more on the taxpayer's side, there are other theories in relation to the model government or firm can adopt to generate revenue to finance its expenditure.

Buchanan and Wagner (2013) and Friedman (1978) proposed a unidirectional causality relationship from government revenue to government expenditure; if revenue drives spending, budget deficit can be eliminated by adopting revenue-stimulating policies (Paresh & Seema, 2006). Wagner posited that government spending increases as income rises, and this leads to a functional relationship between economic growth and growth in government spending. In alignment with this theory, Nigerian, states' budgets are mostly funded by the federal allocation except for a few states that have robust IGR, so, revenue drives expenditure.

The 'spend and tax' hypothesis as proposed by Barro (1974); Peacock & Wiseman (1979) states that government determines its expenditure before its revenues. As stated by Peacock and Wiseman, government expenditure increases during crises, and taxes are subsequently increased, thereby leading to unidirectional causality from government expenditure to government revenue. According to the Wiseman-Peacock hypothesis, government expenditure is not expected to increase regularly and continuously but rather rise in a step-like form as a result of critical needs like war and epidemics. This increase in expenditure cannot be financed by existing revenue hence the rise in taxes. The expectation of rises in taxes to finance the budget deficit can lead to capital flight as a result of fear of an increase in taxes (Paresh & Seema, 2006). Relating this to Nigeria by Nwosu & Okafor (2014), expected government expenditure determines the optimal level of government revenue. Contrary to previous theories on the unidirectional relationship between government expenditure and government revenue, Musgrave and Meltzer & Richard propounded the bidirectional relationship between government expenditure and revenue, they posited that government both generates revenue and spends it simultaneously (Sulaiman 2012). This supports the fiscal synchronization hypothesis and fiscal neutrality hypothesis, which rests on the fact that government can modify its spending and taxes concurrently. This reflect a bidirectional relationship between revenue and expenditure, nevertheless, if this does not hold, then expenditure decisions are made independent of revenue decision (Chang et al., 2002) and if government expenditure constantly rises faster than revenue, there will be a serious budget deficit to contend with (Narayan, 2005). The pecking Order Theory by Brealey & Myers (1996) focused on internal finance rather than external finance. They believe internal funds should dominate equity; firms should do debt financing but embrace more internal financing. Relating this to Nigeria, IGR is more a reliable source for the states if well explored and optimized than the dependence of states on federal allocation which is a major bane to the growth of the states. All the states may not be equally endowed as a result of some structural differences, but there is no single state without a minimal sustainable resource.

Empirical Review

Eteng & Agbor (2018), In their study of challenges of internal revenue generation and inclusive development of local government areas in Cross River state, Nigeria, it was realized that tax evasion was due to a lack of accountability, corruption, and domineering influence of state government on local government. Daniel & Erik (2020) studied State and local government employment in the COVID-19 crisis using data from the monthly files of the Current Population Survey, Annual Survey of State and Local Government Finances from the Census of Governments, and the COVID Tracking Project. The study revealed that local governments experienced huge losses in revenue while expenditure rose as a result of the pandemic. They established a causal relationship between fiscal pressure resulting from COVID-19 and state and local government workers that were laid off although the CARE Act's provision of US$150 billion as aid to the state and local government ameliorated the fiscal pressure. In the study by Kenneth (2021), the data indicate COVID-19 impact on state revenue was not as severe as feared – economic and fiscal health impact, using annual tax receipts valued at US$100 million of major revenue sources and above obtained from the Office of the Illinois Comptroller from July 2014 – November 2020. It was highlighted that revenue fell dramatically in April 2020 due to the direct effects of COVID-19 and the delayed tax-filing deadline introduced as a recovery tool, however, by August 2020 and September 2020 revenue was slightly below forecast and remained close to the forecast. Likewise, in the study of Adekoya & Lateef (2021) on the COVID-19 Pandemic and Internally Generated Revenues in Local Government: in Nigeria Experience, it was found that the impact was not as severe as predicted by international bodies like World Bank and World Health Organization. As some scholars have examined the impact of the COVID-19 pandemic on some areas like the state and local government employment generation, state revenue, and internally generated revenue of local government in Nigeria, this study, however, narrowed the impact of the pandemic on the internally generated revenue of southwest region, Nigeria, to establish whether the pandemic affected IGR of the region or not.

METHODOLOGY

The study is on the southwest region of Nigeria, which comprises Ekiti state, Lagos state, Ogun state, Ondo state, Osun State, and Oyo state. The region was selected based on the following points:

1. Lagos state is the commercial hub of West Africa
2. The other five states are close to Lagos state (figure 1)
3. There is a high inter-state movement within the region
4. This region recorded the first case of COVID-19 in February 2020
5. Lagos state was the epicenter of COVID-19.
6. Lagos state and Ogun states were the two states that had the first total lockdown in addition to Federal Capital Territory.
7. Lagos state being the economic nerve of the country, any effect on the state impacts other states, especially the immediate surrounding states.
8. Lagos state has had the highest internally generated revenue in the whole federation in the past decade

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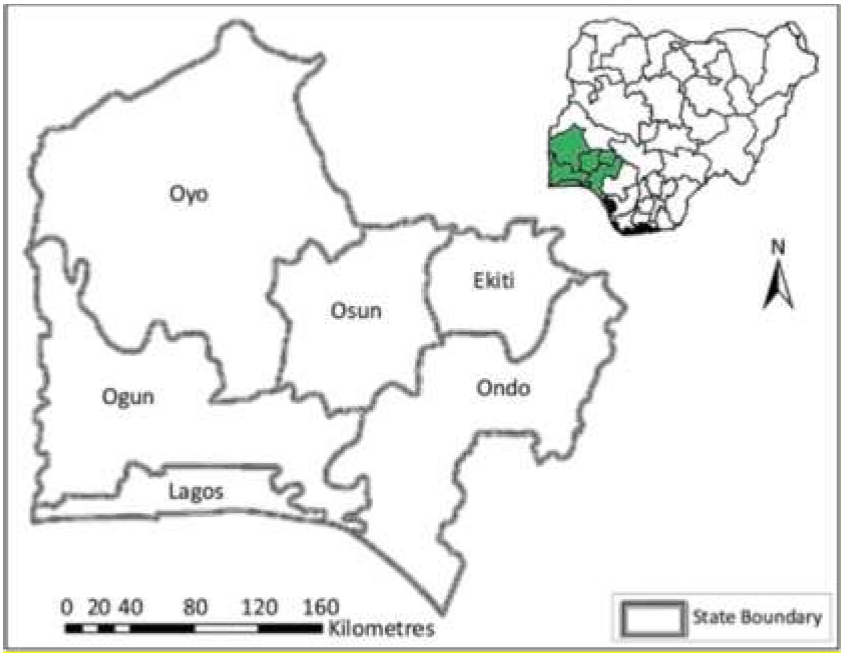

Figure 1: Studt Area

Source: article.sapub.orgsors

The data used for the study was obtained from secondary sources; the internally generated revenue of the six states was obtained from the annual publication of the National Bureau of Statistics (NBS) covering January to December of each year. The data on confirmed cases of COVID-19 on the other hand was collated on daily basis for the year 2020 from National Centre for Disease Control (NCDC) in Nigeria. The data did not pass the normality test hence it was transformed to log form. The study covers twenty-four months, from 2019 to 2020, The two years were chosen to compare the impact of the pandemic on the state's internally generated revenue. 2019 was chosen among the pre-COVID-19 years, being the immediate pre-COVID-19 year and 2020 was the COVID-19 first year. The study divided the two years into eight quarters to analyze the impact of the virus on the state revenue on a quarterly basis. This is to ascertain the presence of shocks in the region that could result in a drop in the internally generated revenue of the six states. A descriptive statistic was used for the study. This involves the use of mean to evaluate the variables and standard deviation to measure the spread of the variables in addition to measurement of the minimum and maximum of the variables. Paired sample T-test was used to test the null hypothesis as stated thus at a 95% confidence interval and *p-value of* ≤ 0.05.

H_0 – COVID-19 does not have any impact on the Internally Generated Revenue of south-west Nigeria

Discussion and Analysis of Result

Figure 2 shows the trend in the IGR of the six states in eight quarters, The IGR of Lagos state in

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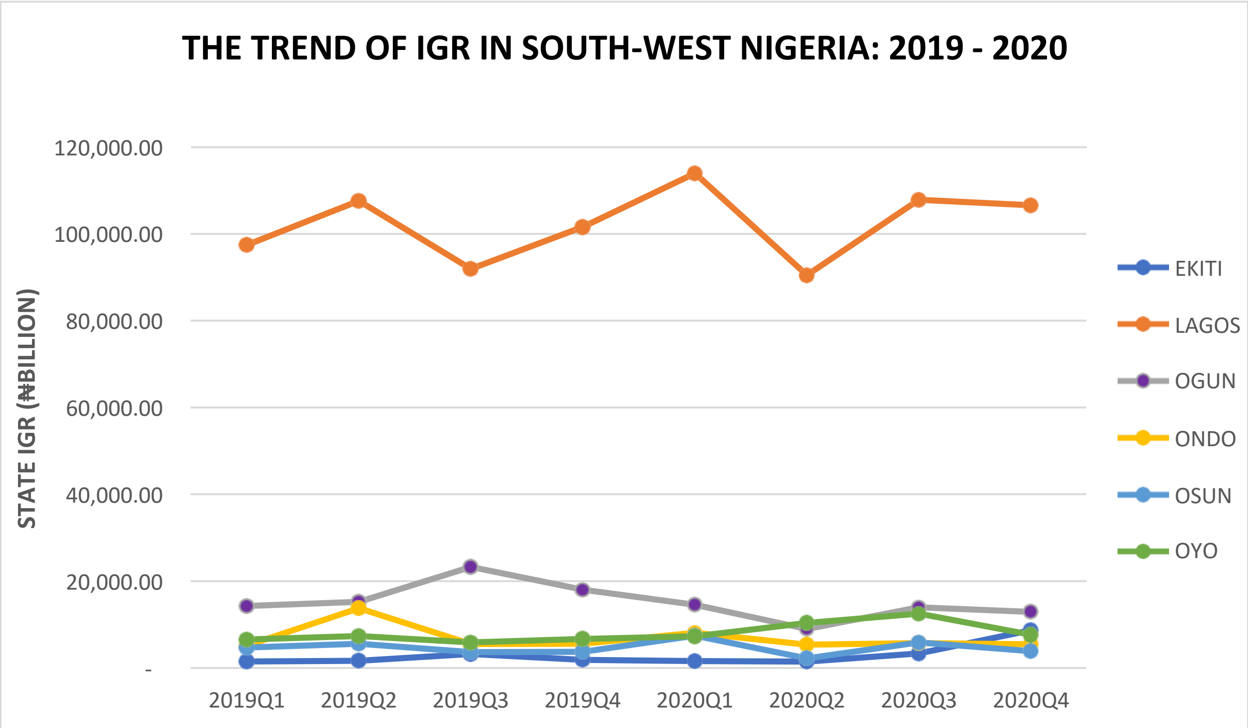
all the eight quarters is over 70% more than the IGR of the other five states individually. Lagos state IGR was above ₦90billion in all the quarters while none of the five states crossed ₦20 billion except for Ogun state which recorded ₦23.3B in 2019Q3. Ogun state IGR was above the other four states; Osun, Oyo, Ekiti, and Ondo, especially in 2019Q3, Q4, and 2020Q1 while Ondo state IGR was above IGR of Osun, Oyo, and Ekiti states in 2019Q2 however, in 2020Q2 and Q3 Oyo state recorded ₦10.4B and ₦12.6B IGR respectively which were above those of Ondo, Osun, and Ekiti states. The pattern of IGR in the region is fairly stable in 2019, there was no significant fall or rise in the revenue.

Figure 2



In the COVID-19 year, in Ekiti state, the IGR dropped in Q2 from ₦1.65B

to ₦1.55B but from Q2 to Q4 the IGR rose by 156.37%. In Lagos state, the IGR dropped by 20.60% comparing the IGR of Q1 to Q2, meanwhile, in Q3 the IGR rose by 19% but dropped by 1.13% in Q4. The other four states, Ogun, Ondo, Osun, and Oyo states followed the same pattern as Lagos state in the four quarters. Ogun state IGR dropped from ₦14.62B in Q1 to ₦9.07B in Q2 but rose to ₦14.05B in Q3 and dropped to ₦13.02 in Q4. In Ondo State, IGR fell from ₦8.16B in Q1 to ₦5.42B in Q2 but rose marginally to ₦5.79B in Q3 and thereafter dropped to ₦5.48B in Q4. In the Osun state, there was a sharp drop in IGR from ₦7.46B in Q1 to ₦2.30B in Q2. In Q3, the IGR rose to ₦5.95B but dropped again to ₦3.97B in Q4. For the Oyo state, the result was slightly different, unlike the other five states, the IGR rose from ₦7.35B in Q1 to ₦10.42B in Q2 and to ₦12.55B in Q3 but fell to ₦7.72B in Q4.

In figure 3, the highest IGR in 2019 was recorded in Q2 while the lowest revenue was in Q1, however, in the year 2020, the highest IGR was in Q3 while the lowest was in Q2.

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
2019Q1	6	1602.49	97475.05	21658.4233	37382.66091	2.381	.845	5.726	1.741
2019Q2	6	1730.14	107688.34	25269.0717	40694.68695	2.364	.845	5.677	1.741
2019Q3	6	3250.91	91933.02	22279.9233	34945.72358	2.219	.845	4.985	1.741
2019Q4	6	1963.33	101635.84	22960.3233	38955.23007	2.340	.845	5.546	1.741
2020Q1	6	1653.93	114001.94	25541.1800	43531.66023	2.401	.845	5.813	1.741
2020Q2	6	1551.32	90512.19	19876.8200	34784.34316	2.393	.845	5.784	1.741
2020Q3	6	3399.91	107844.78	24930.9033	40832.95130	2.393	.845	5.781	1.741
2020Q4	6	3972.80	106629.68	24254.3233	40474.50098	2.418	.845	5.876	1.741
CASES Q1	6	.00	82.00	16.6667	32.13513	2.406	.845	5.833	1.741
CASES Q2	6	43.00	10510.00	2196.3333	4103.82108	2.369	.845	5.681	1.741
CASES Q3	6	321.00	19461.00	4560.5000	7368.38250	2.350	.845	5.609	1.741
CASES Q4	6	415.00	31321.00	6864.1667	12047.45202	2.390	.845	5.769	1.741
Valid N (listwise)	6								

Figure 3: Descriptive Statistics

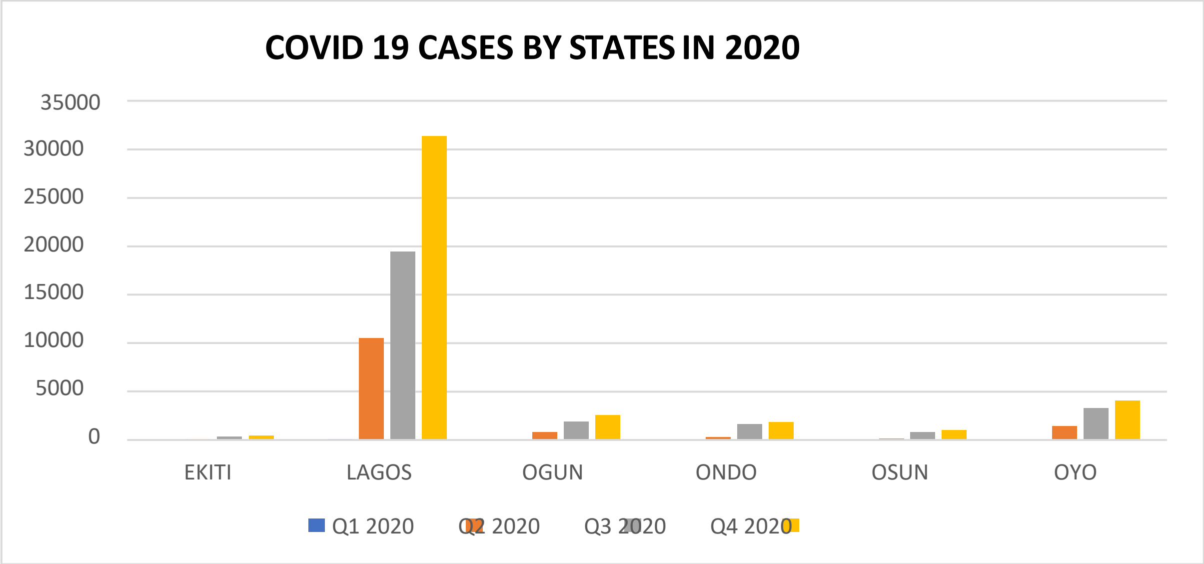


Figure 4: COVID 19 Cases by States in 2020

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From figure 4, the COVID-19 confirmed cases rose steadily from Q1 to Q4 in all the states but confirmed cases were much more in Lagos state. In Lagos state, confirmed cases in 2020Q4 were 31,321, 4,035 confirmed cases in Oyo state in 2020Q4, 2,552 in Ogun state 2020Q4, 1,843 in Ondo state in 2020Q4, 1,019 in Osun state in 2020Q4 with Ekiti state having the lowest confirmed cases of 415 in 2020Q4.

		N	Correlation	Sig.
Pair 1	LG102019Q1 & LG102020Q1	6	.990	.000
Pair 2	LG102019Q2 & LG102020Q2	6	.938	.006
Pair 3	LG102019Q3 & LG102020Q3	6	.945	.004
Pair 4	LG102019Q4 & LG102020Q4	6	.891	.017

Figure 5; Paired Samples Correlations (2019 IGR and 2020 IGR)

In figure 5, the IGR of the six states for the four quarters in 2019 and four quarters in 2020 are positively correlated. Likewise, figure 6 depicted a positive correlation between IGR in the four quarters of 2020 and the confirmed cases of COVID-19 in the four quarters. From figure 7, there is no significant difference in quarter-on-quarter analysis in 2019 and 2020, the null hypothesis will not be rejected if the t-value is not significant.

		N	Correlation	Sig.
Pair 1	2020Q1 & CASES Q1	6	.994	.000
Pair 2	2020Q2 & CASES Q2	6	.999	.000
Pair 3	2020Q3 & CASES Q3	6	.996	.000
Pair 4	2020Q4 & CASES Q4	6	.994	.000

Figure 6: Paired Samples Correlations (2020 IGR and Confirmed Cases)

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	LG102019Q1 - LG102020Q1	-.08805	.08612	.03516	-.17843	.00234	-2.504	5	.054
Pair 2	LG102019Q2 - LG102020Q2	.16714	.21585	.08812	-.05939	.39366	1.897	5	.116
Pair 3	LG102019Q3 - LG102020Q3	-.06936	.18511	.07557	-.26362	.12490	-.918	5	.401
Pair 4	LG102019Q4 - LG102020Q4	-.09966	.27718	.11316	-.39054	.19123	-.881	5	.419

Figure 7: Paired Samples Test

Discussion

COVID-19 was a major disruption in 2020, the year started without any anticipation of economic shocks or dislocation even though it was noted that COVID-19 was discovered in Wuhan city, China, everyone would have thought the virus could be curtailed. On the contrary, the movement of people across the globe aided the spread of the virus. The first case was recorded in Nigeria in February and from that date the country commenced measures to forestall its spread. Lagos state in the southwest region was easily exposed because of the international airports, more than 60% of travelers pass through Lagos state and the surrounding states, hence the serious exposure. As advised globally, the surest way to stop the spread was to lock down and prevent the movement of people while COVID-19 safety measures were to be adhered to strictly.

In Nigeria especially in the southwest region, the expected impact of the COVID-19 pandemic was presumed to be very severe considering the lockdown and the paralysis of economic activities. In analyzing the impact of the pandemic and comparing the IGR in 2019 and 2020, the study revealed that IGR in the six states in the year 2019 was on average, stable, without severe drop or rise, however, in the COVID-19 year, 2020, the IGR in Q1 across the six states fairly increased. This is quite understandable because the confirmed cases were not high and there was no lockdown. People have not really understood the pandemic and relatively we could say the pandemic was at its early stage. In 2020Q2, comparing quarter on quarter, IGR, rose across the six states, with the highest percentage growth in Ondo state. Even Lagos which had the highest confirmed cases still had a growth of 10.48% in its IGR. This shows that as the confirmed cases were increasing the IGR was also increasing, although, comparing 2019 with 2020, there was a drop across the six states, this drop could not be related to COVID-19 because it was expected that IGR in 2020Q2 should be lower than that of 2020Q1. By implication, other factors outside COVID-19 could have been responsible for the fall in revenue.

In 2020Q3, looking at the quarter-on-quarter result with 2019, all the states recorded a growth in their IGR except Ogun state which had a dip of 39.66%. Comparing the IGR in 2020Q2 and 2020Q3, there was a drop in IGR for Lagos, Ondo, Osun, and Oyo while Ekiti and Ogun had a rise even though confirmed cases were on the rise. This further shows that other factors could be responsible for the fall in IGR of the other four states. In 2020Q4 quarter on quarter with 2019, the rate of growth dropped in four states while Ekiti and Ogun states had a rise, however, comparing the IGR in 2020Q3 and 2020Q4, there was a growth in IGR of Lagos, Ondo, Osun, and Oyo states but a drop in Ogun and Ekiti. The growth could have possibly been more if not for the 'END-SARS' insurrection that disrupted economic activities, especially in Lagos state, for instance, Lagos IGR 2020Q4 only grew by 4.91% compared with 17.13% growth in 2020Q3.

The result did not show that COVID-19 had much impact on the state IGR, this can be due to the components of the IGR. PAYE, one of the components of state IGR, was not affected by COVID because all the states pay the salaries of the workers despite the lockdown, and even many private organizations did the same. Another component of IGR is the Road taxes, which were expected to be adversely impacted. This tax, like PAYE, did not reflect a significant drop in 2020 across the states. In Oyo state, the PAYE rose by over 100% in 2020 while in Osun state the road taxes rose

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from ₦42.7million to ₦296.7million. In Lagos state, the PAYE rose from ₦67.7billion in 2019 to ₦278.9 billion in 2020, while Road taxes rose from ₦2.6billion to ₦12.1billion. Ekiti and Ondo states, like Osun, Oyo, and Lagos also had significant increases in both PAYE and Road taxes. Ogun state, however, experienced a significant drop in Road taxes with a dip in its overall taxes comparing the aggregate figure with 2019. Given this result, the impact of COVID-19 on states' IGR, is not severe as it was presumed, the determinants of the state IGR are not seriously affected by the pandemic. We, therefore, accept the null hypothesis. This result aligned with that of other scholars like Kenneth (2021) and Adekoya & Lateef (2021) while on the contrary Daniel & Erik (2020) found a causal relationship between COVID-19 and the revenue of the local government.

Conclusion

The year 2020 was one that we cannot easily forget, it was a global crisis that took many lives, disrupted many plans, and shook many economies. Nigeria was not left out in the crisis; businesses were affected especially during the total lockdown. The most important thing was life, according to the president of Ghana, Nana Akufo-Addo "We know how to bring the economy back to life. What we do not know is how to bring people back to life". However, the economy was becoming a concern as many nations were locked down, hence the agitation for immunization as the lockdown was no longer seen as the ultimate solution. Nigeria had its fair share in the crisis, on the economy, the impact of COVID-19 was mild on the state IGR, this was majorly due to the fact that the components were not impacted by COVID-19. The salaries were still paid especially in the government sector which is the highest employer of labour. The initial shock was obvious, especially in quarter 2 but after a while, the economy stabilized and business continued, in fact, the Nigeria stock market was recorded as the most-performing globally in 2020 with a 50% gain (Bloomberg, 2020). So, the impact was not severe as expected, this is similar to the studies by Kenneth (2021), which showed that the COVID-19 impact on state revenue was not as severe as feared and that of Adekoya and Lateef (2021) on the COVID-19 Pandemic and Internally Generated Revenues in Local Government in Nigeria Experience, it was found that the impact was mild contrary to the prediction of World Bank and World Health Organization, however, contrary to the study of Ng'etich, et al., (2021), with adverse impact on business entities with extension to tax revenue. Other scholars can research further on this study to ascertain the reason why other economies were adversely affected while Nigeria's case was a bit different.

Recommendation

Given the Pecking Order theory, whereby firms prioritize the use of internal financing, the Nigerian government should modify its tax reforms to minimize tax avoidance and evasion, furthermore, excessive tax exemption, tax holidays, and even concessions should be discouraged. In Nigeria, the significant component of IGR is PAYE and Road Taxes, this is why there was no reduction in IGR because salaries were still paid. The IGR would have been more if informal sectors like markets, shops, and artesian are included in the tax nest. The government should ensure the state is peaceful without any insurrection or unrest to guarantee freedom of movement that will enable the populace to earn their living. The case of End SARS protest was a major disruption, the percentage increase in Lagos IGR rose by 17.13% in 2020Q3 but by 4.91% in 2020Q4 when there was an insurrection.

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The pandemic may not necessarily affect IGR if salaries are paid, hence during a pandemic government should ensure people can work remotely and salaries are paid.

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