

Impact of COVID-19 on the Aviation Industry in Nigeria

Siyan, Peter¹ PhD; Adegioriola, Adewale E² PhD; Agunbiade, Olabode³

¹Professor of Economics, Department of Economics, University of Abuja, Abuja, Nigeria

²Lecturer, Department of Economics, Federal University, Lafia, Nasarawa State, Nigeria

³PhD Candidate, Department of Economics, University of Abuja, Abuja, Nigeria

ABSTRACT

This paper is a timely examination of the novel Corona Virus (Covid-19) that is currently ravaging the entire world. The main objective of this research is to study the impact of this global pandemic on the aviation sector in Nigeria. The methodology adopted is basically qualitative, explorative and analytical in nature, involving the use of secondary data via journal publications, government official documents, health authorities' data and internet materials. This due to the fact that the virus is novel and very recent. The study found out that the Covid-19 pandemic has thrown the entire global economic, political and social systems into turmoil. The Nigerian economy and aviation sector in particular, has been in a meltdown, which had been thrown into a huge crisis. Some of the negative impacts of the scourge on the Nigerian aviation industry include closure of airports and banning of flights, increasing industry debt profile, negative impact on tourism, increased competitive pricing and severe loss of jobs. In terms of future prognosis, it will be quite a while before the sector recovers and whenever it re-opens, the most immediate visible change will be social distancing, touch less travel with passengers needing to be fit to travel. The turnaround time for local and international travels will increase as aircraft will be need to sanitize each time the planes land. Furthermore, there will be increased movement towards the digital space and most of the flight operations will be on digital platforms.

KEYWORDS: Covid-19, Pandemic, Aviation Industry, Nigeria

1. INTRODUCTION

Since the end of the Second World War in 1945, no single global event has taken centre stage than the novel Corona virus, otherwise known as Covid-19. It has taken the entire world by storm, spreading like a wildfire. Pneumonia of unknown cause was detected in Wuhan, China and was first reported to the World Health Organisation (WHO) Country Office in China on 31 December 2019. WHO has consequently declared it a global pandemic. Since then, the world has confronted significant challenges on all spheres of human endeavour: political, social, economic, demographic among others (WHO, 2020a & 2020b).

The unprecedented problem being confronted globally has no equal in recent memory. Apart from its clear threat to humanity in terms of health, life and safety, COVID-19 poses significant economic and financial risks to businesses, employment and livelihood. Governments all over the world have therefore been taking important steps to control the spread of the disease, ranging from severe restrictions of human movement in terms of lockdowns, closing down of internal and international borders in a bid prevent the spread of the infection and in order to manage the health concerns of those who have been infected.

Consequently, various global businesses, political, social and even sporting events like the Tokyo Summer Olympics 2020 have all been postponed or outrightly cancelled. The

How to cite this paper: Siyan, Peter | Adegioriola, Adewale E | Agunbiade, Olabode "Impact of COVID-19 on the Aviation Industry in Nigeria" Published in International Journal of Trend in Scientific Research and Development (ijtsrd), ISSN: 2456-6470, Volume-4 | Issue-5, August 2020, pp.234-239, URL:

www.ijtsrd.com/papers/ijtsrd31787.pdf

Copyright © 2020 by author(s) and International Journal of Trend in Scientific Research and Development Journal. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<http://creativecommons.org/licenses/by/4.0>)



IJTSRD31787



International Monetary Fund (IMF) has downgraded its growth projection for the global economy as the Covid-19 outbreak threw its earlier projection into serious doubt (International Monetary Fund, 2020). The flow of goods through global supply chains have reduced drastically, given that China is one of the world's largest manufacturers and exporters, and the Chinese government ordered the closure of major factories in the country. There is a general consensus among economists and financial analysts that the pandemic will likely plunge the world into another global recession (Financial Times, 2020). Covid-19's effect on the global economy is broader and more severe than most epidemics, pandemics, and economic crises of recent decades. Most recessions are triggered by a lack of spending, which governments can address through fiscal stimulus, but COVID-19 is interrupting economic activity at multiple points, creating a complex combination of supply and demand shocks at the same time (Baldwin, 2020).

For the primary time in world history, about 90% of the world's citizens are restricted from travelling, either to return home or to destinations of choice either for business trip or tourism. Without a doubt, the foremost affected in travel & tourism is that the aviation industry. An estimated 25 million aviation jobs and 100 million travel and tourism jobs across the world are in danger. That is not all; the growth recorded in the industry in the last seven years

would potentially be lost across the world as a result of COVID-19 (IATA, 2020)

Sub-Saharan Africa reported its first case of Covid-19 infection in Nigeria on February 27, 2020, through an Italian man who came to Nigeria from Milan. According to the African Centre for Disease Prevention and Control (African CDC), 14,524 Covid-19 cases were reported in 52 of the 54 countries in Africa, with 788 deaths and 2570 recoveries, as of April 13, 2020 (ACDC, 2020). Even though over four million cases of this pandemic infection have been confirmed world-wide as at mid-May 2020, reported infections in Africa remain comparatively low. Infection rate figures appear to be evolving differently in Africa, and recorded Covid-19 fatalities remain considerably lower than elsewhere, leading some to suggest that the continent may yet be spared from the worst (Pilling 2020).

Reasons ascribed to this phenomenon include the fact that the continent has a young population, warmer weather and also the prevalence of BCG vaccinations against tuberculosis. Figures started rapidly rising late April 2020, when Africa experienced a jump of more than 40% in just over a week (Burke 2020). In May 2020, the WHO further warned about mass casualties and overwhelmed health systems over a longer period of time if countries fail to take a proactive approach to the crisis (WHO 2020b).

In the Nigerian situation, President Muhammadu Buhari announced the lockdown of two states from the South West region of the country, Lagos, Ogun and the Federal Capital Territory, Abuja on 13th of April, 2020. Other State Governors also announced various measures including total or partial lockdowns all in an effort to contain the spread of the growing Corona virus pandemic. The Nigerian Government has issued several Directives and Orders to assist in containing the spread. Included is the COVID-19 Regulation, 2020 which imposed significant restrictions on the movement of persons and non essential goods all over the country especially the epic states (Lagos, Ogun and Federal Capital Territory (Adekilekun, Ahmed & Egbewole, 2020).

The respective state governments also imposed varying degrees of restrictions on movement of persons and goods, including public gatherings and markets within their states. There were also various fiscal and economic stimulatory measures introduced by the Federal Government of Nigeria to ameliorate the impact on businesses and save the economy from collapse (Shittu, 2020; Adekilekun, et al., 2020). Of particular note is the financial framework taken out as measures by the Federal Government of Nigeria and Central Bank of Nigeria on fiscal and monetary which include Conditional Cash Transfer, Food Distribution to the Less Privileges, tax reliefs, tax waivers, credit facilities and loan rescheduling among others.

COVID-19 pandemic brought to fore the serious underlying challenges that have bedeviled the Nigeria health system over the years. While Africa's major health indicators (life expectancy, mortality and morbidity) have improved significantly in the last two decades (United Nations, 2019), the emphasis has been on confronting specific health threats (child mortality, maternal health and child health, malaria, tuberculosis, ebola and HIV/AIDS). Even though there were

existing health institutions charged with responsibility for this type of infection in Nigeria – National Centre for Disease control (NCDC), Institute of Human Virology (IHV), National Institute for Medical Research (NIMR) – poor funding and lack of preparedness made them ineffectual in the face of rampaging Covid-19. A major concern is the inability of Nigeria to manage the challenges posed by the need to maintain social distance. The major cities are overcrowded with many informal settlements and slums which are inevitably overcrowded. Added to this is illiteracy and lack of enlightenment. People live very closely together in slums and shanties and use shared infrastructure and sanitation which quickens the spread of infectious diseases. The absence of a social safety net exposes millions of Nigerians working in low-paying jobs in the large informal sector to the vagaries of the economic environment.

The challenge of a drastic fall in the oil prices for a major oil exporting nation like Nigeria can be better imagined. The closure of factories and businesses globally has virtually eliminated the demand for Nigeria's crude oil. The resulting demand-supply imbalance has led to Nigeria selling her oil at discounts not seen even during the 2009 financial crisis. The resultant effect has been the downward review of national and sub-national budgets. Also foreign remittances and other vital sources of foreign currency have also dried up. The exchange rate has been on a negative against the local Naira with the obvious effect on inflation. All of these have left Nigeria in an extremely vulnerable position, with economic growth expectations slashed, falling revenues, rising unemployment and weakening currency. Thus far, African countries, including Nigeria, have only been able to adopt stimulus packages worth an average 0.8% of GDP, in comparison to an average of 8% in developed countries (Okonjo-Iweala, Coulibaly, Thiam, Kaberuka, Songwe, Masiyiwa, et al., 2020).

2. Literature Review

In terms of the significance or importance of air transportation to the economy, Aizenman (2004) and Schaur (2006) believe that air transportation is more reliable and faster to handle international demand volatility. This is because air transportation takes hours rather than weeks. Air transport shipping provides real option of smooth demand shocks for organizations or firms. An efficient air transportation system and shipping modes helps in quality improvement of the air transport system and also elevate international and domestic trade, business and economic process of a nation.

Aun (2013) studied the role of airport infrastructural development on socio-economic development of Nigeria. Using a descriptive survey method, the study reveals that there's a correlation between airport infrastructure development and socio-economic development of the country. The study concluded that, for any proper achievements to be achieved in aviation sector, government must intensify its contribution, regulation and due process of law must be followed in awarding of contract and making decisions that relate to the development of aviation.

Nwaogbe, Wokili, Omoke and Asiegbu (2013) carried out a descriptive analysis of the impact of air transport on economic development in Nigeria. They reported that the air transport sector has contributed immensely to the economic

development of Nigeria and the entire globe in two major ways. Firstly, through the taxes levied on Gross Value Added i.e. the sum of profits and wages. Secondly, through its payment investment and its use of upper advanced technology systems for its operations and maintenance.

Several studies have been conducted on consumer choice and preferences in airline travel. Many studies have investigated the factors that influence decision making related to airline choice. However, the importance of each factor differs among travelers and depends mainly on their socio-demographic attributes and trip characteristics (Gilbert & Wong, 2003). Several researchers found that socio-demographic characteristics such as income, age, gender tend to exert a significant impact on the significance of service quality dimensions (Clemes, Gan, Kao & Choong 2008).

For instance, a study by Soomro, Hameed, Shakoor, Butt and Khani (2012) in Pakistan found boarding and clearance time and ease of e-ticketing to have significant impact on customer preference and positively lead to purchasing intention of the services the airline companies in the market. Sai, Ekiz & Kamarulzaman (2011) came up with different findings for either FSCs or LCCs in Malaysia. The study found safety and service quality to exert a significant positive effect on choice decision in Full Service Airlines, whereas price, strategic alliance and loyalty programmes exerted significant positive effects on the choice decision for Low Cost Carriers.

OAG Worldwide (2000) studied factors influencing passenger choices of airlines and the survey established that 3,000 business air travellers around the world (including the US, Europe, Singapore, and Australia) singled out convenient schedules, reputation for safety, frequent flier programmes, on-board comfort, leg-room and efficient check-in procedures as the highly featured factors when business passengers chose an airline. Such travelers were not concerned about obtaining the cheapest fare.

Fourie & Lubbe (2006) in South Africa focused on business air travellers and factors they consider in selecting either full-service or low-cost carriers. Results indicate that, for both business travellers using LCCs and those using FSCs, the three most important service factors were seat comfort, the schedule/frequency of trips and the price of the air ticket, whilst in-flight entertainment was regarded as the least important.

A study conducted by Namukasa (2013) in Uganda examined the pre-flight (back office operations), the in-flight and the post-flight service quality effect on passenger satisfaction. The study also ascertained whether satisfaction affects passenger loyalty. The findings show that there was a strong relationship between the proposed variables and customer satisfaction. Also, Adeniji (1993) maintained that passengers who travel regularly demand consistency of service. Consistency of services in the form of computerized reservation system, corporate identification, computerized check in, through check in to final destination, frequent flyer tracking, branded or business lounges and above all recognition. The study of Ukpere, Stephens, Ikeogu, Ibe and Akpan (2012) on air travel in Nigeria found that gender, age, marital status, income, comfort, on-board services,

frequency, crew behaviour, ticket fare and power of monopoly were significant influencing variables.

2.1. Overview of the Aviation Industry

There have been significant developments in the airline industry as a result of technological advancements, which made the mode serve not only as a reliable means of transportation, but also acts as an enabler in achieving economic growth and development (Ismaila, 2013). In fact, air transportation facilitates the mixing into the worldwide economy and provides vital connectivity on national, regional and international scales. According to International Air Transportation Association - IATA (2017), aviation brings people together, transports vital medicines to patients in need, and facilitates the exchange of experiences and ideas. Additionally, air transport creates significant employment, thereby contributing to making a living through created income (Pleiss-Fraissard, 2004). Large improvements in aircraft technology, coupled with the rise of Low-Cost Carriers (LCCs), also known as budget airlines, account for more than half of total capacity, hence allowing many people to fly for the first time (Pleiss-Fraissard, 2004).

Owing to the nature of the airline market structure which is oligopolistic, few companies do dominate a limited market. Customers are hypersensitive to fare, causing airlines to operate close to the break-even seat factor. On average, 80% of airline companies use flexible pricing whereby most of the seats are on discount basis to fill the aircraft because empty seats are perishable (Malik, 2016). Price is the major determinant of choice of air transport in a highly price sensitive market (Ukpere, et al., 2012). Many businesses charge a competitive fare with various techniques applied for influencing positive demand.

In Nigeria, the regulatory authorities supervising the aviation sector are the Federal Ministry of Aviation at the apex, supported by other agencies such as the National Civil Aviation Authority (NCAA), National Airspace Management Agency (NAMA) and the Federal Airport Authority of Nigeria (FAAN) (Nwakoby & Chukwujekwu, 2020). FAAN is empowered to develop and maintain airports and other facilities within the Nigerian airspace. The mandate of NAMA is to oversee the provisions and safeguarding of air navigation in Nigeria, while NACA is in charge of licensing, restoring and regulating aircraft as well as accident control. The Civil Aviation Act of 2006 is charged with the duty to regulate aviation in Nigeria and makes provision for all aspects of air carriage and it domesticated the Montreal Convention of 1929 (Nwakoby & Chukwujekwu, 2020).

The history of air transport in Nigeria can be traced to 1925 when three aircrafts from the British Air Ministry landed in Kano from their base in Helwan, near Cairo for the purpose of gaining experience in long distance flights over tropical countries (Shobande & Akinbomi, 2020). Real air travel in Nigeria commenced during World War II (1939-1945) when it become necessary to move troops and supplies fast across the country. Several air strips were built then which were converted after the war to civilian use (Iloeje, 2003). Nigeria Airways was established in October, 1958 as a Joint Venture between the Nigerian Government, Elder Dempster Lines and the British Overseas Airways Corporation (BOAC). The Airways took over the operation of domestic flights from the

disbanded West African Airways Corporation (WAAC) which had been operating commercial aircraft within the country since 1946 (Ladan, 2012).

After independence, in 1963, the Nigerian Federal Government bought out the other shareholders and Nigeria Airways became wholly-owned by the Nigerian government. The airline had a monopoly for providing domestic air services in Nigeria. It was also the ensign carrier for international services along the West African Coast, Europe and therefore the us of America. The need for further transformation of the country's air transport services led to the eventual deregulation of the industry by the government (OECD, 1999). This action signalled unrestricted competition among the operators leading to the proliferation of small airline companies in Nigeria.

In pursuance of the deregulation policy of the aviation industry, about 25 private airline operators were licensed in the early 1990s to contribute to the development of the industry. The emergence of private airline operators successfully broke the state monopoly (of the Nigerian Airways) as they continue to run commercial air operations on most domestic trunk routes. The open skies policy delivered yet another liberalisation policy adopted to increase competition and growth of the industry in Nigeria. The air transportation industry in Nigeria experienced a landmark event in 1985 when entry into the domestic airline sector and air fares was formally deregulated. The narratives round the industry gradually changed from a national carrier focus to at least one focused on private carriers. By 2003, the industry was composed entirely of private carriers, given the collapse of Nigeria Airways. Apart from the deregulation of airline services, government, in recent years, is gradually divesting from air transportation infrastructure and inspiring provision of those by the private sector also. Some gains of personal participation are readily observable within the airline sector, namely increased competition, more efficient electronic based booking systems, and discount fares in some cases (Daramola & Fagbemi, 2019).

3. Impact COVID-19 on the Aviation Sector

The Coronavirus pandemic has thrown the aviation sector in Nigeria into a huge crisis. The pandemic has grounded activities in the sector across the world. In Nigeria, the aviation sector, contributed nearly 150 billion Naira to the Gross Domestic Product (GDP) in 2018. The figure rose by 33 per cent to nearly 200 billion Naira in 2019. The figures showed that aviation sector recorded the fastest growth in activities compared to other transportation sub-sectors in the fourth quarter of 2019 (NBS, 2020).

But since Nigeria recorded its first patient of COVID-19 in March, 2020, alongside the next closure of all the airports within the country, activities within the sector suffered a sharp decline. Expectedly, revenues have also nose-dived. The Government had on March 23, 2020 shut all international airports for an initial period of one month as part of efforts to contain the spread of corona virus in the country. Local airports were also shut a few days later. The lockdown and restriction of airspace movement have led to the grounding of about 120 domestic aircraft nationwide, leaving operators with no income but recurrent expenses. The Nigerian aviation sector has been losing N21 Billion monthly since the outbreak of covid-19. The huge lost is

attributed to lack of activities at the sector whose income solely depends on flight operations (Sirika, 2020).

Some of the negative impact of COVID-19 on Nigerian aviation industry includes:

Closure of Airports and Banning of Flights: Flying has been banned globally and airports have been closed, except for essential services. The travel and tourism sector has been one of the hardest hit by the Covid-19 pandemic (Shretta, 2020). Travel restrictions are more widespread and stringent than in any previous pandemic response, and the combination of economic recession and individual reluctance to travel is expected to depress international travel significantly longer than in previous pandemics.

Negative impact on tourism: It has been estimated by the World Bank (2017) that the travel and tourism sector is responsible for more than 10% of global GDP, 7% of all international trade, and 30% of the world's exports in services. In lower- and middle-income countries, tourism directly contributes 4.5% to 6.3% of GDP (Jansen, 2013). As of the end of April 2020, every country and territory in the world had imposed travel restrictions related to Covid-19, including totally closing borders to tourists, suspending international flights, banning entry to people arriving from or transiting through particular countries, or requiring quarantine or self-isolation measures – measures that have never been so extreme or widespread (UNWTO, 2020a). International tourist arrivals are forecast to decline in 2020 by up to 30%, with a loss of international tourism receipts of up to US\$450 billion (UNWTO, 2020b). This is approximately ten times the global financial impact of the SARS epidemic (Shretta, 2020).

Increase in aviation industry debt profile: International Air Transportation Association (IATA) recently stated that the air travel industry would lose about US\$113 billion if the COVID-19 outbreak is not quickly contained and the industry debt overhang could reach USD 550 billion by end of this year (IATA, 2020a).

Postponement and cancellation of events: The aviation industry, tourism industry, hotel businesses and international events worth billions of US Dollars have been postponed or cancelled due to the pandemic. All these have negative impact on the aviation industry.

Increased competitive pricing: The airline industry is one of the most competitive industries in the world (Armstrong, 2020). Airlines are incredibly price competitive to ensure that price-sensitive flying customers choose their airline and not a competitor's. With the advent of Covid-19, the effect of competition on fares would be more pronounced.

Loss of jobs: Globally, an estimated 25 million aviation jobs and 100 million travel and tourism jobs across the globe are at risk. Phillips Consulting (2015) has noted that the aviation industry supports 254,500 jobs in Nigeria and contributes US\$940 million (N184.7 billion) to national GDP. These quarters of a million jobs are presently at risk now in Nigeria due to the continuous closure of the airports.

4. Future Prognosis

The aviation industry in Nigeria is already beset with many challenges prior to the occurrence of the Covid-19 pandemic.

Some of these challenges include the absence of coherent air transport policy, absence of a national carrier, poor oversight by regulatory agencies, poor management by operators, deteriorating facilities, poor security, incessant closures of airports for upgrades and maintenance, intermittent air crashes, poor safety records and so on. The current Covid-19 pandemic can only worsen the plight of the aviation sector in Nigeria.

In an airline industry survey conducted in April, nearly 40% of the respondents indicated that they would wait six months or more after official travel restrictions are lifted, before they would consider travelling by air again (International Air Transportation Association, 2020b). Recent trends towards remote working and video conferencing would potentially reduce demand for overseas travel in the long term (World Bank, 2020).

Whenever the industry re-opens, the most immediate and perhaps most visible change that will be witnessed is social distancing, touchless travel and passengers will need to be fit to travel. Passengers must arrive earlier than they used to at airports and they should expect more delay. In the immediate future, the turnaround time for local and international travels will increase, because aircraft will be sanitised every time the planes land

There will be increased movement to the digital space where physical interaction would be reduced drastically. Most of the flight operations will be on digital platforms. New products that will be come into being in the industry will emphasize health, safety and compliance; and not necessarily comfort and leisure that were the focus in pre-Covid-19 era.

References

- [1] Adekilekun, M. T., Ahmed, A. A., & Egbewole, W. O. (2020). The Impacts of Coronavirus Disease (Covid-19) on Pre-Existing Contracts in Nigeria. *International Journal of Comparative Law and Legal Philosophy (IJOCLLEP)*, 2 (2), 22-28. Retrieved on 19th May, 2020 from: www.nigerianjournalsonline.com > article > download
- [2] Adeniji, K. (1993). Transport policy and subsidy: An overview. Ibadan: NISER.
- [3] Africa Center for Disease Control (ACDC, 2020). *COVID-19; 2020*. Retrieved on 29th May, 2020 from: <https://africacdc.org/covid-19/>.
- [4] Aizerman, J. (2004). Endogenous Pricing to Market and Financing Cost. *Journal of Monetary Economics*, 51(4), 691-712.
- [5] Armstrong, P. M. (2020). *Airline Fare Competition in the Post-Merger Era. Honors Theses and Capstones*. 496. University of New Hampshire Scholars' Repository. Retrieved on 19th May, 2020 from: <https://scholars.unh.edu/honors/496>
- [6] Aun, I. I. (2013). Airport development and socio-economic development of Nigeria. *Journal of Research in National Development (JORIND)*, 11 (1), 196-205. Retrieved on 3rd June, 2020 from: www.transcampus.org/journals; www.ajol.info/journals/jorind/11. September 2014.
- [7] Baldwin, R. (2020). *Trade and Global Value Chains in the Age of COVID-19. The COVID Concussion and Supply Chain Contagion Waves*. Retrieved on 2nd June, 2020 from: <https://www.worldbank.org/en/news/video/2020/04/22/trade-and-global-value-chains-in-the-age-of-covid-19>.
- [8] Clemes, M. D., Gan, C., Kao, T. H. & Choong, M., 2008. An empirical analysis of customer satisfaction in international air travel. *Innovative Marketing*, 4 (2), 50-62.
- [9] Daramola, A. & Fagbemi, T. (2019). *Air Travel and Airline Operations in Nigeria: Market Potentials and Challenges*. DOI: <http://dx.doi.org/10.5772/intechopen.80646>.
- [10] Fourie & Lubbe (2006). Fourie, C., & Lubbe, B. (2006). Determinants of selection of full-service airlines and low-cost carriers—A note on business travellers in South Africa. *Journal of Air Transport Management*, 12(2): 98-102.
- [11] Financial Times (2020). *Global recession already here, say top economists*. Retrieved on 29th May, 2020 from: <https://www.ft.com/content/be732afe-6526-11ea-a6cddf28cc3c6a68>
- [12] Gilbert, D., & Wong, R. K.C. (2003). Passengers expectations and airline services: A Hong-Kong based study. *Tourism Management*, 24, 519-532.
- [13] Iloeje, N.P. (2003). *A New Geography of Nigeria Fifth edition*. Ikeja, Lagos: Longman Nigeria Plc
- [14] IATA (2020). International Air Transport Association. IATA calls on Nigerian Government to Support Aviation in the Face of COVID-19 Crisis. Available on: <https://www.iata.org/en/pressroom/pr/2020-05-07-01/>
- [15] IATA (2017). International Air Transport Association *IATA Annual review 2017*. Retrieved on 4th June, 2020 from: <https://www.iata.org/publications/Documents/iata-annual-review-2017.pdf>
- [16] IATA (2020a). International Air Transport Association. *Airline debt threatens recovery*. Retrieved 31st May, 2020 from: <https://airlines.iata.org/news/airline-debt-threatens-recovery>.
- [17] IATA (2020b). International Air Transport Association. *Air passenger demand & capacity evaporate amid COVID-19*. Retrieved from <https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-monthlyanalysis---mar-2020/>
- [18] International Monetary Fund (2020). *World Economic Outlook Reports*. Retrieved on 2nd June, 2020 from: <https://www.imf.org/en/Publications/WEO>
- [19] Ismaila, D. (2013). *The Impact of International Air Transport Liberalisation: The Case of Nigeria*. Unpublished Ph.D Thesis. University of Huddersfield, Huddersfield, United Kingdom. Retrieved on 2nd June, 2020 from: <http://eprints.hud.ac.uk/id/eprint/20346/>
- [20] Jansen, M. (2013). *Aid for Trade and Value Chains in Tourism*. Retrieved on 3rd June, 2020 from: https://www.oecd.org/dac/aft/AidforTrade_SectorStudy_Tourism.pdf
- [21] Ladan, S. I. (2012). An Analysis of Air Transportation in Nigeria. *Journal of Research in National Development*

- (*JORIND*), 10 (2). Retrieved on 3rd June, 2020 from: www.transcampus.org/journals, www.ajol.info/journals/jorind
- [22] Malik, M. A. (2016). *What is the airline industry's market structure like?* Retrieved 1st June, 2020 from: <https://www.quora.com/What-is-the-airline-industrys-market-structure-like>
- [23] Mbura, O. K. (2019). Salient Attributes on the Choice of an Airline Service Provider: A Case of Domestic Airlines in Tanzania. *Business Management Review*, 22(2), 135-154.
- [24] Namukasa, J. (2013). The influence of airline service quality on passenger satisfaction and loyalty: The case of Uganda airline industry. *The TQM Journal*, 25 (5), 520-532.
- [25] National Bureau of Statistics (2019). Available on: [https://nigerianstat.gov.ng/elibrary?queries\[search\]=transport%20data](https://nigerianstat.gov.ng/elibrary?queries[search]=transport%20data)
- [26] Nwakoby, C. S., & Chukwujekwu, A. E. (2020): Impact of Consumer Protection Laws On Aviation Industry in Nigeria. *International Journal of Comparative Law and Legal Philosophy (IJOCLEP)*, 2 (1), 38-45.
- [27] Nwaogbe, O., Wokili, R., & Victor, O. (2013). An Analysis of the Impact of Air Transport Sector to Economic Development in Nigeria. *Journal of Business and Management*, 14 (5), 41-48.
- [28] OAG Worldwide (2000). *Official Airline Guide*. North American Ed. IL. Oak Brook
- [29] OECD (1999). *Infrastructural development and regulatory reform in sub Saharan Africa: the case of air transport*. In: OECD Working Paper No 154
- [30] Okonjo-Iweala, N., Sangafowa Coulibaly, B., Thiam, T., Kaberuka, D., Songwe, V., Masiyiwa, S., Mushikiwabo, L., & Duarte, C. (2020). *Africa needs debt relief to fight COVID-19*. Brookings Institute.
- [31] Phillips Consulting (2015). *The 2015 Domestic Aviation Industry. Customer satisfaction survey report 2015*. Retrieved on 3rd June, 2020 from: www.phillipsconsulting.net
- [32] Pilling, D. 2020. Low Covid-19 death toll raises hopes Africa may be spared worst. *Financial Times*, 28 April 2020.
- [33] Pleiss-Fraissard, M. (2004). *Why is Air Transportation Important for Social & Economic Development?* Retrieved on 1st June, 2020 from: http://www.nextor.org/Conferences/200404_Economic_and_Social_Value/Maryvone_Fraissard.pdf.
- [34] Sai, B. T., Ekiz, E. H., & Kamarulzaman, Y. (2011). Factors Influencing the choice of Full Service Airlines and Low Cost Carriers: Case of Malaysia. *Asia Pacific Journal of Innovation in Hospitality and Tourism*, 1(2):179-194.
- [35] Schaur, G. (2006). *Airplanes and Price Volatility*. Mimeo, Purdue University. Sciences, 3 (1), 77-89.
- [36] Shittu, I. (2020). *Nigerian governments' initial measures and palliatives to businesses in the wake of COVID-19 pandemic*. Retrieved on 31st May, 2020 from: <https://iclg.com/briefing/11546-nigerian-governments-initial-measures-and-palliatives-to-businesses-in-the-wake-of-covid19-pandemic>
- [37] Shobande, O. A., & Akinbomi, M. D. (2020). Competition dynamics in Nigerian aviation industry: A game theoretic approach. *Future Business Journal*, 6(11), 1-8
- [38] Shretta, R. (2020). *The economic impact of COVID-19*. Retrieved from Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford website: <https://www.tropicalmedicine.ox.ac.uk/news/the-economic-impact-of-covid-19>.
- [39] Sirika, H. (2020). COVID-19: Aviation sector loses N21bn, airlines may not survive post-pandemic. Available on: <https://www.blueprint.ng/covid-19-aviation-sector-loses-n21bn-airlines-may-not-survive-post-pandemic-minister/>
- [40] Soomro, Y. A., Hameed, D., Shakoor, R., Butt, A. S., & Khani, S. (2012). Factors Effecting Consumer Preferences in Airline Industry. *Far East Journal of Psychology and Business*, 7(1), 63-79.
- [41] Ukpere, W. I., Stephens, M. S., Ikeogu, C. C., Ibe, C. C., & Akpan, E. O. (2012). Determinants of airline choice-making: The Nigerian perspective. *African Journal of Business Management*, 6(15), 5442-5455.
- [42] United Nations (UN) (2019). *Ensure healthy lives and promote well-being for all at all ages*. Retrieved on 31st May, 2020 from: https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/E_Infographic_03.pdf
- [43] UNWTO. (2020a). Covid-19 Related Travel Restrictions: *A Global Review for Tourism, Second Report as of 28 April 2020*. Retrieved on 3rd June, 2020 from: <https://webunwto.s3.eu-west-1.amazonaws.com/s3fspublic/2020-04/TravelRestrictions>
- [44] UNWTO. (2020b). *World Tourism Organization Underscores Tourism's Importance for Covid-19 Recovery in Audience with the King of Spain*. Retrieved on 3rd June, 2020 from: <https://www.unwto.org/news/unwto-underscores-tourisms-importance-for-covid-19-recovery-inmeeting-with-the-king-of-spain>
- [45] World Bank (2017). *Tourism for Development: 20 Reasons Sustainable Tourism Counts for Development*. Retrieved on 3rd June, 2020 from: <https://openknowledge.worldbank.org/bitstream/handle/10986/28388/119954-WP-PUBLICSustainableTourismDevelopment.pdf?sequence=1&isAllowed=y>
- [46] World Bank. (2020). *Commodity Markets Outlook*. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/33624/CMO-April-2020.pdf>
- [47] WHO (2020a). *World Health Organisation Rolling Updates on Corona Virus disease (COVID-19)*, Updated 01 June, 2020. Retrieved on 3rd June, 2020 from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>
- [48] WHO (2020b). *World Health Organisation estimates 190,000 people could die of Covid-19 in Africa if not controlled*. Retrieved on 3rd June, 2020 from: <https://www.afro.who.int/news/new-who-estimates-190-000-people-could-die-covid-19-africa-if-not-controlled>

