Regulation of Foreign-Owned Telecom Companies and Public Investment in Nigeria-Owned Telecom Companies

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Abstract

Telecommunication sector is one of the fastest growing industries in Nigerian economy. However, Nigeria in her quest to regulate foreign-owned telecom companies adopts the sector-specific regulatory approach in its telecommunications market by the Nigeria Communication Commission (NCC) which has attracted more investors to participate in the industry. Essentially, this paper is targeted at providing empirical linkage between the regulation of foreign-owned telecom companies and public investment in Nigeria-owned telecom companies. The paper also x-rays the protective measures as guidelines for regulation of the Nigeria-owned telecom companies as well as the challenges faced by investors. Methodologically, the study relied on much of the data scooped from secondary sources which were analyzed qualitatively. Using the Neo-liberal theory of the state as a framework for analysis, the paper discovered as findings that despite the existence of the protective measures as guidelines for regulation of foreign-owned telecom companies with a view to attract more investors to participate in the industry, investment in local telecom networks and services still lie low due the fact that it is constrained by a number of challenges which limit operators' incentives to invest. Based on these findings, the paper recommended among others that effort should be geared towards addressing the challenges while increasing the level of investment in the Nigeria-owned telecom companies.

Keywords: Regulation, Foreign-owned Telecom Companies, Investment, Nigeria.

Introduction

Historically, one of the earliest recorded attempts at general regulation of foreign-owned telecom companies can be traced to the common law doctrine of restraint of trade, which remains relevant in Nigerian legal jurisprudence. In general terms, this doctrine renders provisions which impose restrictions on a person's freedom to engage in trade or illegal employment. This doctrine thus provided the foundation for an attempt by courts to reconcile the well-established principle of freedom to contract with freedom to trade, with the resultant effect of encouraging competition and investment (Muhammed & Oyinwola, 2019, p, 13). With 112 countries possessing a telecommunications regulator at the end of 2001, government intervention in telecommunications markets largely takes the form of telecommunications regulation. It was designed to mitigate the adverse effects of telecommunications monopolies, promotion of universal service to basic telecommunications services and to pursue public policy objectives.

To meet this wide range of objectives, telecommunications regulators have often applied broad-ranging rules or regulations that apply either to the entire industry or to certain categories within it. These regulations are typically applied ex-ante and are precise in setting the parameters of acceptable market behaviour. They range from explicit retail price control to the determination of access terms and conditions (Odion, 2016). However, Nigeria, in bid to regulate foreign-owned telecom companies similarly to most newly liberalized telecommunications in Africa, adopts the sector-specific regulatory approach in its telecommunications market. This regulatory approach draws support from the provisions of the Nigerian Communications Act of 2003 (Muhammed & Oyinwola, 2019, p, 17). The reason for the preference to this sector-specific approach is not far-fetched. First, as a newly liberalised market, there was need to achieve immediate and sustainable degree of competition through a sector-specific body that would be focused on issuance of operating licenses to many telecommunications firms. Secondly, there is a normative argument that sector-specific regulators are imbued with expertise to deal with competition issues in their industry. Thirdly, it has been argued that sector-specific regulation of competition provides impetus for legal certainty in regulation of competition with a view to encouraging public and private investors in the telecommunication sector in order to meet up with large unmet demand for basic telephone services and ever-increasing demand of business for modern communications facilities (Awosika, 2014; Akanmu, 2014; Obayemi, 2014; Odion, 2016; Egwuchukwu, 2020; Ogbanje, 2020).

The foregoing however, brought to bear Decree 75 of 1992 which allowed public participation and investment in Nigeria-owned telecom companies. Following this development, the Nigerian Communications Commission (NCC) was established by statute in 1992 (Onakoya, 2013). The agency was given a mandate to issue license to privatecompanies to participate in telecommunications business in Nigeria. This in turn brought revolution in Nigeria’s telecommunication sector. The revolution in Nigeria’s telecommunication sector is obviously an example of the impact of investment in infrastructural development, occasioned by government’s liberalization of the sector, which enabled the opening up of the sector to both public and private investment. The market reform particularly helped to accelerate investment flow into the sector resulting in the rapid roll out of multifarious communication services (Tooki 2011). For example, the International Finance Corporation (IFC) is known to have loaned NGN61, 078million (USD$395million) to MTN Nigeria. This has been the IFC's second largest investment in any African country thus far. Other international finance institutions that have invested in the Nigerian telecommunications sector include the Export-Import Bank of the United States, the African Development Bank (AfDB) and the Development Bank of Southern Africa (www.africagoodnews.com). In fact, the above Foreign Direct Investments (FDI) into the telecommunications sector have contributed to the beefing up of healthy competitions among telecom providers and create new employment opportunities and enable the springing up of indigenous telecommunications companies. Consequently, many telephony service providers such as MTN, GLO, AIRTEL, and ETISALAT now (9MOBILE) emerged (Oji-Okoro, 2010).

It was in line with this background Ndukwe, (2009) declared that:

> Within the last thirteen years, telecom investments in Nigeria have exceeded, the $18 billion mark on account of a predictive regulatory environment and supportive government for a deregulated telecom industry." The sector thus offers ideal conditions for continued expansion: a large young population, levels of penetration that leave room for growth, and limited fixed market, favourable regulatory conditions, high level of investment and a very competitive market thereby leading to phenomenal growth in Nigeria-owned telecom companies and to the Nigeria's economic at large.

Echoing similar spectrum of thought, Egwuchukwu (2020) noted that the NCC estimated that total investment in the Nigerian telecom industry had reached $70 billion since 2019. Despite these levels of investments, the Nigerian mobile operators have been experiencing declining average revenue per user (ARPU) that levels below the regional average. This is because; public investment in local telecom networks and services is constrained by a number of challenges which limit operators' incentives to invest. For instance, mobile operators have identified several policy and environmental issues that add to the cost of network investment in Nigeria, including: high costs of rights of way, delays in obtaining permits, an inadequate electricity supply, frequent and costly damage to networks caused by road construction accidents, sabotage and terrorism, multiple regulation and taxation at various levels of government that make investment costlier, thereby limiting mobile operators' ability to undertake upgrades and roll-out of network infrastructure. Consequently, public investment in Nigeria-owned telecom companies is comparatively more difficult than in other countries due to those adumbrated factors coupled with other issues like geographic characteristics of Nigeria and security concerns which act to increase investment risks. These challenges have contributed to a situation today where many Nigerians are not covered by mobile networks (Alison, Fola & Onkokame, 2018, P, 17).

Conceptual Clarification

Regulation: Regulation is defined as the practices established to control and manage an activity or process. It is where an entity with power and authority in a certain area formulates rules to influence its operations to ensure that it operates as per the formulated rules. It can also be seen as the principles that an authority put up to determine the direction a system or process takes based on the statutes said.

Investment: Investment is a process of putting money or value into an asset with the expectation of generating funds. In layman's terms, it is the process of putting savings into assets to generate more worth than initial investment (Intellipaat/ https://intellipaat.com).

Theoretical Framework

The study adopted Neo-liberal theory of the state as the framework of analysis for regulation of foreign-owned telecom companies and public investment in Nigeria-owned telecom companies. Neo-liberal theory of the state emerges by the mid-1970s and extending up to the middle of the 80s. The theory emerged in response to extreme degree of anger and disenchantment with the Welfare State in liberal capitalist democracies where the State too was angry and perplexed with the citizens' due to seemingly never-ending demands and disinclination towards improving their lot through private initiative in the UK, the USA and other western democracies. The major exponents of this theory include: Friedrich von Hayek, Robert Nozick (1974) and Milton Friedman. Neo-liberal theory is anchored on ideology based on the primacy of individualism, market liberalism, entrepreneurship and state contraction, with the central assumption being that competitive, unregulated markets represent the optimal mechanism for economic development. The Neoliberal's original argument was in favour of government taking a leading role in the allocation of investment, thus controlling the commanding heights of the economy and intervening to compensate for market failures. From the early 1980s therefore the views of Neoliberals increasingly favoured limiting the role of the state, creating a liberal economy and instituting a strict monetary policy according to the guidelines of the International Monetary Fund (IMF) and the World Bank as the major policy options especially for the several third world countries that were already enmeshed in deep financial crisis. It was against this background that several of these countries including Nigeria embraced policies, which favoured deregulation and privatization of state enterprises (Iwuagwu, 2014, p, 3).

In view of the foregoing, Neoliberals thus argue that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets and free trade (Harvey 2005). Hence, the role of the state is to create and preserve an institutional framework appropriate to such practices. It must set up those military, defence, police and legal structures and functions required to secure private property rights and to guarantee by force, if need be, the proper functioning of markets (Harvey 2005). Echoing similar spectrum of thought, Friedman whose idea represent the dominant view of neo-liberal thought, argues that government's role should be limited to providing law and order, defence and of essential services while upholding voluntary interaction between buyers and sellers of goods and services by creating economic freedom, which in turn was essential for political freedom. Friedman observes that when government – in pursuit of good intentions – tries to rearrange the economy, legislates morality, or help special interests, the costs come in inefficiency, lack of innovation, and loss of freedom, the government should therefore, be a referee not an active player. The Neo-liberals are the advocates of a 'Minimalist Role for the State'. They are 'inherently suspicious of the State. They regard State activity as interfering in the natural order of life – be this in relation to the functioning of the market or the way in which social relations within society are formed and played out (Davies, 2014; Dardot & Laval, 2014; Brown, 2015).

The application of this theory to the study illustrates how the state must act as the regulator and guarantor of economic competition via the provision and enforcement of competition (anti-trust) law. Second, Neo-liberal ethos for 'the maximisation of individual liberty and freedom' through the rolling back of the State from the economy has succeeded in liberating individual entrepreneurial freedoms and skills within the telecommunication sector characterized by strong private property rights, free markets and free trade. Hence, the role of the state is to create and preserve an institutional framework appropriate to such practices as greater freedom leads to greater innovation and progress in the telecom industry which ordinarily would not occur where the State owns or controls the means of production. The resultant effect of the foregoing led to the entrance of multiple individual operators in the Nigeria telecom sector particularly the mobile segment which brought resounding success in the industry in terms of growing the subscriber base, decreasing tariff, widening the coverage area, improving quality of service levels and above all, expanding the product range and innovativeness.

Above all, the Monetarist view of Neoliberals increasingly favoured limiting the role of the state policies favoured Nigeria's deregulation and privatization of telecommunication sector. Consequently, the Neoliberal's monetarist argument has helped the Nigerian government in taking a leading role in the allocation of investment, thus controlling the commanding heights of the economy and intervening to compensate for market failures with a view to regulating foreign-owned telecom companie**s** particularly, the pricing of telecommunications services in order to protect the consuming public from damaging manifestations of market failure, such as the hidden manipulation of market forces and prices through collusive practices between apparent competitors, or the unwitting substitution of a public monopoly with a private monopoly in the provision of services.

Methodology

The paper adopts qualitative research design to gain an insight into the nature and character of regulation of foreign-owned telecom companies and public investment in Nigeria-owned telecom companies. The researchers used descriptive analysis to x-ray the protective measures as guidelines for regulation of the Nigeria-owned telecom companies as well as the challenges faced by investors. The paper which is theoretical in nature draws its argument basically from secondary data which include journal publications, textbooks and internet sources that are relevant to the work. Statistical data were also used where necessary as empirical evidence portraying our argument. To improve on the reliability and validity of the paper, multiple secondary sources were used to minimize risk of error. To realize these objectives and for ease of analysis, the paper is pigeon holed into the following six compartments: The first compartment chronicled introduction and conceptual clarification. The second section examined theoretical issues central to the discourse and methodology. The third discussed the protective measures as guidelines for regulation of the Nigeria-owned telecom companies. The fourth x-rayed the challenges faced by investors. The fifth centers on the prospects, while the last focuses on conclusion and recommendations.

Protective Measures as Guidelines for Regulation of the Nigeria-Owned Telecom Companies

Protective measures are product of legislative intervention in the regulation of telecom operators in the country. These measures are encapsulated in the provisions of the Nigerian Communications Act and its subsidiary regulations and guidelines aimed at the regulation of the conduct of telecom operators and ultimately protect subscribers/consumers in the sector by the Nigerian communications commission. This is because the commission is entrusted with the general powers of implementing Government's policies in the communications sector as well as enforcing existing regulations aimed at ensuring standard and quality of service to consumers of communication services in the country. It is in line with the above that the Nigerian communications commission as part of its efforts at regulating standard and quality of communication services offered to consumers, formulated and enacted two principal regulations as (protective measures) namely:The Consumer Code of Practice of 2007 and the Quality of Service Regulations of 2009 (Ogbanje, 2022, p, 80).

On the one hand, **the Consumer Codes of Practice** is a guideline formulated by the Commission and directed at the GSM service providers as the benchmark for rendering qualitative service and at affordable rates to the subscribers (consumers). This Code is arrived at on the basis of a consensus between the GSM service providers, the subscribers and the commission. The Commission in fashioning this blueprint has made it imperative that an ideal consumer code of practice by the service providers must be anchored on a procedure that: 1. Reasonably meets theneeds of the consumer; 2. Provides for the handling of consumer complaints and disputes through elaborate alternative dispute resolution mechanism as well as a judicial process; 3. Ensures that this resolution process culminates in appropriate compensation for the subscriber as well laying down the procedure for the enforcement of such compensation or awards; 4. The code is geared towards the overall protection of the subscriber (Odion, 2016, p,16-19).

On the other hand, **the Quality of Service Regulations** deals with specific technical issues. Specifically, Part 1 of the Quality of Service Regulations encapsulates the rationale behind the expected quality of service to include the following: 1. improving service quality by identifying service deficiencies and by encouraging or requiring appropriate changes; 2. maintaining service quality, while recognizing environmental and operating conditions.3.Making information available to help inform the subscriber of the choice of services offered by the licensees.4. Improving the operations and performance of interconnected networks.5.Assisting the development of related telecommunication markets.In addition to these general guidelines, the Consumer Codes as well as the quality of service regulation also address the following specific issues exemplified in the table below

Table 1: Specific Issues Covered by the Consumer Code of Practice and Quality of Service Regulations to Regulate the Conduct of Telecom Operators in Nigeria

S/N	The Consumer code of practice Regulation	Issues covered	The Quality of Service Regulations	Issues covered
1	**Overall Goal:** Geared towards the overall protection of the subscriber	Qualitative service and at affordable rates to the subscribers (consumers)	Ensure quality of service to consumers	**Overall Goal:** Deals with specific technical issues
2		Advertising or representation of services withemphasis on advertisement of product and services of other companies aired through the medium		Improving service quality by identifying service deficiencies and by encouraging or requiring appropriate changes
3		Customer charges, billings, collection credit practices, and any other matter which in the opinion of the commission may be of		Maintaining service quality, while recognizing environmental and operating conditions

		concern to the consumer		
4		The provision of information to subscribers regarding services, rates and performances		Improving the operations and performance of interconnected networks
5		Provides for the handling of consumer complaints and disputes through elaborate alternative dispute resolution mechanism		Assisting the development of related telecommunication markets

Source: (Ogbanje, 2022)

The above presents a list of specific issues covered by the consumer codes as well as the quality of service regulation in addition to their general guidelines. Furthermore, in order to ensure strict compliance with the provisions of the Quality of Service Regulations and the Consumer Code as discussed, the Commission is given specific powers to evolve enforcement mechanism and procedure under the relevant Regulations. In particular, under the Quality of Service Regulations, the Commission is in the event of a contravention by the operator empowered to do the following: Demand from the operator, a published information about its remedial plans or; in appropriate cases issue one or more directives pursuant to section 53 of the Act especially in the area of directing the operator to compensate the aggrieved consumer.

Similarly, Section 104 of the Nigerian Communications Act provides that all service providers must meet such minimum standard of quality of service that the commission may from time to time specify and publish. It is further provided that all service providers are to deal reasonably with consumers and adequately address consumer complaintsparticularly in the area of the quality of network coverage. The foregoing is the reason that 21 years after the advent of the GSM in Nigeria, the network coverage of the various networks have improved as manifested in the visible presence of most of the major networks in most cities and villages across the country. The impact of these codes on consumer service and the technical aspect dealing with the quality and standard of telecommunication equipment used by the operators and the consumer welfare aspect of the relationship between the operators and the subscribers have led to improvement in infrastructure deployments, network rollouts, upgrades and expansions, support mobile infrastructure. Also, helping telecom operators embark on building backbone networks as evidenced in areas of fiber-optic cables, base stations and satellite connections, transmitting traffic with a view to developing the Nigeria telecommunications industry as well as contributed to the beefing up of healthy competitions among telecom providers and create new employment opportunities and enable the springing up ofindigenous telecommunications companies. Consequently, many telephony service providers such as MTN, GLO, AIRTEL, and ETISALAT now (9MOBILE) emerged (Oji-Okoro, 2010; Ndukwe, 2014).

In fact, in Nigeria for instance, there are presently two (2) specific telecommunications markets: (1) Mobile Telephone Services and 2) International Internet Connectivity. Mobile Telephone Services is, in turn, divided into two (2) sub-categories, viz, 1) Code Division Multiple Access (CDMA) and 2) Global System for Mobile Communications (GSM). Presently, there are also five (5) major operators in each of CDMA and GSM bands. On the one hand, CDMA has Starcomms, Visaphone, Multi-Links, Intercellular, and Zoom Mobile. On the other hand, GSM has MTN, Globacom (Glo), BhartiAirtel Limited (formerly "Zain"), and Etisalat while Internet Service Providers in Nigeria include: VSAT Nigeria, Megatech Networks, Netcom, Hyperia, Linkserve Limited, Junisat, Direct On PC, Swift Networks Limited, Tara Systems, MetroNG, Skannet - General Data Engineering Services PLC (GDES), Electronic Connections Limited, More Time Information Technologies Limited, Integrated Telekom & Networks Limited, Cobranet Limited, Hirest Africa limited, Kkontech, Rainbownet Limited, and MWEB Nigeria (Obayemi, 2014, p, 11). The table below presents a list of Nigerian telecom operators, types of services provided and their primary website.

Table 2: Nigerian-Owned Telecom Operators, Types of Services Provided and their Primary Website.

Nigeria Telecom Operators	Types of Services Provided	Primary Website
Airtel Mobile	GSM Service Provider	www.ng.airtel.com

Etisalat (Now 9mobile)	Tele-Com Service Provider	www.9mobile.com
Globacom Mobile	Second National Telecommunications Operator (Mobile GSM Telephone Services, Broadband Access, International Gateway, Online Telecommunication Services)	www.gloworld.com
Starcomms Mobile	Total Telecommunications Service Provider	www.starcomms.com
MTN Nigeria Mobile	Telecommunication Service Provider	www.mtnonline.com
MTEL (NITEL) Mobile	Local and International Telecommunications Services	www.mtelnigeria.com
Multilinks (Telkom) Mobile	Telecommunications Service Provider, Operator of Telecommunications Services	www.multilinks.com
Visafone Mobile	Telephony Service Operator, Telecommunication Service Provider	www.visafone.com.ng
Zoom Mobile	Advanced Digital/Mobile Wireless Telephone Service Provider	www.zoomnigeria.com

Source: NCC Final Report for Development of Best Practices in Information Infrastructure Security Management. Accessed on 03/04/2022

The entrance of these multiple operators in the Nigeria telecom sector particularly the mobile segment coupled with intensifying competitive rivalry, has had resounding success in the industry in terms of growing the subscriber base, decreasing tariff, widening the coverage area, improving quality of service levels, expanding the product range and innovativeness. For instance, subscriber market penetration increased from 20% in 2007 to 45% in 2016 upward. As a result, the growth of the market penetration in Nigeria was in line with other countries in the region (CAGR around 10%), and higher than in some of the more mature North African markets but lower than in Ghana and Tanzania (Muhammed & Oyinwola, 2019, p, 26-27). Be that as it may, it has been noted the entrance of these multiple operators in the Nigeria-owned telecom industry has reason being that Nigeria is now the largest economy in Africa and has the largest mobile market in the continent in terms of subscribers.

For instance, the local telecom companies have leveraged Nigeria's robust population, currently at over 200.0 million people, with total subscribers at 184.7m in 2019 from 2.3m in 2002, reflecting an 18-year CAGR of c.27.7%. Likewise, the penetration rate measured by teledensity (measures the number of telephone lines for every 100 individuals in an area) increased from 1.9% in 2002 to 96.8% since 2019, with usage of telecoms services predominantly mobile-based (Egwuchukwu, 2020, p, 19). In the same vein, Muhammed and Oyinwola (2019) rightly observes that currently, we have not less than 37 different telecom companies (internet service operators) dealing only in the provision of internet to at least 286,046 subscribers at 927 different points in the country making a total connection of 390,794(Muhammed & Oyinwola, 2019, p, 28). Presently, Nigeria remains the fastest growing telecommunications market in Africa, rising from a meager 500,000 telephone subscribers in 2001 to over 149,293,870 (149.2) million since March2018 and now to 174,012,136 while teledensity stands at 124.29. These giant strides in the telecommunications industry over the last decade were the direct effects of an enabling regulatory environment created by the Commission and the competition policy encouraged by the Act. More importantly, the exponential growth of the industry has also led to the increased maturity and sophistication of individual networks and has which ushered in intense competition amongst the industry players. In fact, the local telecom companies particularly, the mobile segment holds the key to delivering digital inclusion in Nigeria with over 45% of the population currently using mobile services, as it delivers substantial economic and social benefits to consumers and the wider Nigerian economy. Already, the mobile industry is contributing over USD 8 billion annually on the supply side of the economy and generating 156,500 jobs thereby, making Nigeria a leading generator of mobile content within Sub-Saharan Africa. The table below exemplifies this reality.

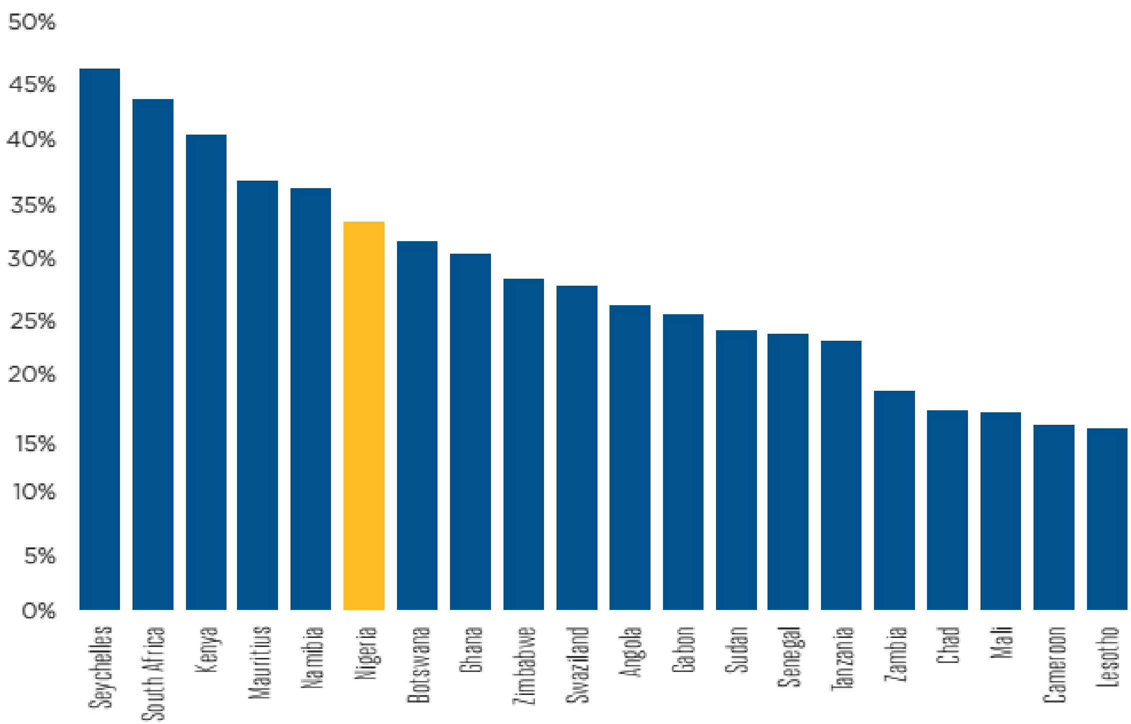
Table 3: Percentage Share of Telecom-related Service Employment in Nigeria

S/N	Job category	No of persons employedEmployment
1	Handset dealers	3.300
2	Advertising	12000
3	Network marketing and public relations	500
4	Security workers in the protection of base stations	12,500
5	Recharge card distributors	118,600
6	Suppliers of support services	9,600
	Total	**156, 500**

Source: Researcher's compilation from Deloitte analysis in (Digital Inclusion and the Role of Mobile Network in Nigeria, 2022).

The above table is a show of employment scenario of 156, 500 jobs created by local telecom companies for operators across the mobile ecosystem in Nigeria as a result of the interactions with the mobile operators with over 118,000 airtime dealers and retailers operating from supermarkets, technology stores and smaller independent points of sale taking a larger share of the employment ratio while, others fellow suit as seen in their job specifications.It is in addition to the above that all four major mobile operators (MTN, Globacom, Airtel, and Etisalat) now provide both 2G and 3G services 4G in Nigeria, representing only 0.15% of total connections. However, despite mobile's progress in extending the benefits of digital inclusion; the sector has yet to fully deliver its potential. Although the Nigerian economy overtook South Africa's as the continent's largest economy since 2014, Nigeria has only the sixth highest mobile internet penetration in Sub-Saharan Africa, ranking behind several countries with lower per capita incomes and those with a similar level of economic development as unique subscriber mobile penetration is low in Nigeria. The graph below shows the growth of mobile telecom network in Nigeria in comparison with some other African countries in terms internet penetration.

Figure 1: Mobile internet penetration (unique subscribers as percentage of population) in top 20 Sub-Saharan African countries since Q1 2015 Till Date



Source: *GSMA Intelligence database*

Figure 1 above reveals that in Nigeria, mobile internet usage is relatively low and among Sub-Saharan African countries, and that Nigeria has the 8th highest percentage of mobile internet penetration at 33% of the population, lagging behind some major mobile markets like South Africa and Kenya, at 43% and 40% respectively. Although mobile phone access is boosted by sharing of handsets between individuals, fewer than half of Nigerians have their own connections, and many Nigerians therefore remain unable to access the benefits of even basic mobile services as well as the reason the Nigerian mobile operators have been experiencing declining average revenue per user (ARPU) that levels below the regional average. This is because; public investment in local telecom networks and services is constrained by a number of challenges which limit operators' incentives to invest.

THE CHALLENGES FACED BY INVESTORS

The Nigeria-owned telecom companies is much encouraged by large unmet demand for basic telephone services and ever-increasing demand of business for modern communications facilities.This is because; public investment in local telecom networks and services is constrained by a number of challenges which limit operators' incentives to invest. For instance, mobile operators have identified several policy and environmental issues that add to the cost of network investment in Nigeria, including: high costs of rights of way, delays in obtaining permits, an inadequate electricity supply that severely disrupts network services and forces mobile operators to use diesel generators to power base stations, underdeveloped road infrastructure, and frequent and costly damage to networks caused by road construction accidents, sabotage and terrorism. Also, the Central Bank of Nigeria's recent ban on purchasing electronics and telecommunications equipment with official foreign exchange has also raised the cost of infrastructure investment. Added to this, mobile operators are also exposed to multiple regulation and taxation at various levels of government that make investment costlier, limiting mobile operators' ability to undertake upgrades and roll-out of network infrastructure. These added costs can particularly constrain investment in Nigeria, especially in a competitive market where mobile operators have been experiencing declining average revenue per user (ARPU) that levels below the regional average.

Consequently, public investment in Nigeria-owned telecom companies is comparatively more difficult than in other countries due to those adumbrated factors coupled with other issues like geographic characteristics of Nigeria and security concerns which act to increase investment risks. These challenges have contributed to a situation today where many Nigerians are not covered by mobile networks. For instance, 2G coverage is available for 87% of the population, 3G and 4G coverage is available for only 51% of the population. This particularly impacts Nigerians who live in rural areas: urban mobile ownership is 1.4 times higher than rural ownership. Even where coverage exists, services are sometimes reportedly unreliable; while network infrastructure is being upgraded in many areas, service penetration and usage have increased at a very fast pace, as a result, mobile networks have suffered from congestion. Therefore, extending service availability to uncovered regions and improving quality of service require significant network investment by mobile operators. To ensure a high quality of service and extend coverage, it is necessary to have more low frequency spectrum available. In addition, to encourage investment by operators in rural and remote areas, the regulator needs to provide a clear long term strategy for spectrum allocation and licence renewal.

However, at present, there are few incentives for a new entrant to invest into the Nigerian market, or for current players to expand existing operations through fresh investments this is because, foreign investment in the sector since 2014 has been minimal as a result domestic investment has not been able to compensate for this, especially with over USD 5 billion having been sucked out of the sector as a result of punitive penalties melted out to operators that are disproportionate to the infringements for failure to register SIM cards. This, together with high USD/NGN exchange rates set by government, which have limited the importation of dollar-based equipment required for network extension, has brought investment in the sector to a low point. Furthermore, the global recession and its effects on the global telecommunications market had been noted as a factor affecting public investment in Nigeria telecom industry. Be that as it may, the growth in the sector has out-stripped national growth, especially with the bottom dropping out of the oil market. This is because; public investment in the Nigeria telecom companies has attracted avalanche of benefits from enormous technological innovations, such as OTT services on global platforms and the Internet of Things (IoT). With many still clinging to voice to amortize their investments, operators are reluctant to make the transition from voice revenues to data revenues (Alison, Fola & Onkokame, 2018, P, 17).

PROSPECTS

In summing up the sequel, we aver a position that the prospects of new entry into the industry remain limited given economies of scale and the high capacity for huge capital expenditure, research and advertising spend. Despite the significant progress made in the industry, there is still space for strong growth in the future due to the fact that broadband penetration remains weak at 37.8% since 2019 relative to peers such as South Africa and Egypt, suggesting that more investment is needed as there is significant earnings prospects. Currently, the Average Revenue per User (ARPU) of our coverage mobile telecoms networks remains weak relative to levels in other peer countries such as South Africa and Egypt. We believe platforms of operators can be leveraged to catalyse change in other sectors, especially financial services, and deliver enhanced earnings performance. Also, the speed and flexibility of regulation would shape the trajectory of growth and investment in the sector.

CONCLUSION

Also, the regulatory guidelines for foreign-owned telecom companies equally promoted the development of local telecom companies in Nigeria by regulating foreign-owned telecom companies throughthe adoption of sector-specific regulatory approach in itstelecommunications market. This it does via the regulatory approach which draws support from the provisions of the Nigerian Communications Act of 2003 which formulated and enacted two principal regulations as (protective measures) namely, the Consumer Code of Practice Regulation of 2007 and the Quality of Service Regulations of 2009 designed with a view to mitigating the adverse effects of telecommunications monopolies and to pursue public policy objectives as part of its efforts at regulating standard and quality of communication services offered to consumers whileencouraging the development of the local telecom companies.

RECOMMENDATIONS

Based on the findings and conclusions of this study, we recommend the following to further enhance the Nigerian telecommunications industry:

(1). Emphasis should be made towards increasing the level of investment in the service sector with more focus on telecommunication to boost the growth of the GDP: Nigeriawill need to do more to develop the needed skills and knowledge that would be relevant for ensuring growth through services sectors.Added to this, investment is needed to provide new, innovative services to consumers. An example is mobile money (“m-money”) services. M-money is taking off in many African countries, such as Kenya and Tanzania, where 59% and 43% of the population are m-money users, respectively. Although m-money could make a significant impact on the Nigerian economy through greater financial inclusion, few Nigerians are m-money users. Since 2013, there were fewer than 1 million m-money users in Nigeria representing less than 1% of the population. In view of the foregoing, mobile operators have recognised this need and are undertaking significant investment. Compared to other Sub-Saharan African countries, mobile operators spent a relatively large proportion of revenue on capital expenditure annually. For example, in 2012 and

2013, operators invested more than twice as large a proportion of revenue than operators in South Africa (33% and 38% in Nigeria compared to 14% and 15% in South Africa in 2012 and 2013, respectively).

(2).To ensures a high quality of service and extends coverage, the regulator needs to provide a clear long term strategy for spectrum allocation and licence renewal. In addition, to encourage investment by operators in rural and remote areas, it is necessary to have more low frequency spectrum available.

(3). Above all, there should be guidelines for a clear and equitable balance between the protection of the public interest and the commercial interests of the mobile operators: On this note, the NCC is therefore should be called upon to implement the policy directives of the NTP by formulating a tariff regulation regime for the mobile sector, and in the event that it has already done so, it should be further called upon to publish that regime on its website and other publicly accessible media for the benefit of operators and consumers alike. The primary objective of such a regime will be to ensure that end-user prices are fair and affordable, taking into account the cost of providing the mobile services as well as the long exclusivity period given to the operators for recouping their investments. While it is important to ensure that investors are guaranteed a reasonable return on their financial investments, the protection of the public interest must always remain uppermost in the mind of telecom regulators.

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