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Review

The Informal Sector and Economic Growth of South Africa and Nigeria: A Comparative Systematic Review

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Abstract: The informal sector is an integral part of several sub-Saharan African (SSA) countries and plays a key role in the economic growth of these countries. This article used a comparative systematic review to explore the factors that act as drivers to informality in South Africa (SA) and Nigeria, the challenges that impede the growth dynamics of the informal sector, the dominant subsectors, and policy initiatives targeting informal sector providers. A systematic search of Google Scholar, Scopus, ResearchGate was performed together with secondary data collated from grey literature. Using Boolean string search protocols facilitated the elucidation of research questions (RQs) raised in this study. An inclusion and exclusion criteria became necessary for rigour, comprehensiveness and limitation of publication bias. The data collated from thirty-one (31) primary studies (17 for SA and 14 for Nigeria) revealed that unemployment, income disparity among citizens, excessive tax burdens, excessive bureaucratic hurdles from government, inflationary tendencies, poor corruption control, GDP per capita, and lack of social protection survival tendencies all act as drivers to the informal sector in SA and Nigeria. Several challenges are given for both economies and policy incentives that might help sustain and improve the informal sector in these two countries.

Keywords: informal economy; systematic review; economic growth; economic development; open innovation; South Africa; Nigeria

1. Introduction

Globally, two billion people take part in informal employment, with the accompanying risks and vulnerabilities [1]. This translates into 60% of the global labour force and 90% of all small- and medium-scale enterprises [2]. This poses policy challenges to governments especially in the Global South, where documentation shows that most individuals depend indirectly or directly on the informal sector for survival [3]. Presently, formal employment as is generally known in the developed and developing countries has been transformed by globalisation and shifts in economic incentives and policies. Larger portions of manufacturing, as well as the service industry, are being outsourced from organised and regulatory factories to non-centralised, flexible, production units. Unregulated and non-unionised contractual informal employments are put in place between non-formal workers and most corporations as a means of reducing operational costs and increasing profitability of these companies [4,5]. According to [5], a new trend in employment revolves around part-time/part-year employment, flexible/fixed-term employment contracts, employment arrangement achieved through temporary agencies or contract firms, casual employment, contract labour, and services outsourced to home workers with flexible working schedules. Unfortunately, all these forms of employment directly or indirectly feed into the growth dynamics of informality in the economy. Inherently this makes the informal sector more complex, substantially increasing the job creation process in the informal sector. However, all these jobs are survival, and are sometimes precarious or are intended to provide an outlet for temporary employment until job prospecting improves in the formal sector [6].

Generally, the informal sector (consisting of unpaid workers in family enterprises, casual wage employment, home-based worker or service providers, street vending) are the means of survival for poor people in slums [7], and people exposed to natural disasters or acute urbanisation from rural settings. This is also prevalent when there are slower growth and cycles of a downturn in the economy, resulting in fall of the national GDP. Consequently, the widening output gap leads to inequality in income distribution [8]. The inadequacies of national/local governments and the formal sector to cater to the sudden surge in migration mean that people become economically active in the informal sector out of necessity and for survival. Under circumstances of high underemployment, unemployment, low capital inflows, lack of social protection/or social benefits, low human capital development, informal employment becomes a viable option. Employers in informal manufacturing might recruit skilled workers to run smaller informal businesses offering higher wages [9–13], but on the whole, informal employment continues to be the only viable option open to these workers.

The importance of the informal sector (viz., grey/shadow economy) acting as "conduits of employment" for the provision of products/goods and services has been acknowledged by several authors [1,7,10,14]. The International Monetary Fund [15,16] opines that within sub-Saharan Africa (SSA) informal employment and the informal sector contribute about 20% (South Africa, Lesotho, Namibia) to 60% (Nigeria, Tanzania, Benin) to the national GDP. Despite this disparity in size, the informal sectors in South Africa and Nigeria are mediums where unemployed persons (mostly women and youths) in both countries try to earn a living, albeit at the survivalist level [17–19]. The Association of Chartered Certified Accountants (ACCA) [20] contends that factors such as economic, business processes, socio-demographic and socio-environmental, governance, science and technology all drive the informal economy. According to [21], the informal economy is estimated to be worth USD 10 trillion, employing about 1.8 billion people globally. In the view of [22], the policies designed for the informal sector by governments, and economists are most times inappropriate. It is sustained by underdevelopment stemming from low physical and human capital [22], but it is a sector that is complex and difficult to measure [23]. This complexity means that the contributions are difficult to measure and estimate, and the figures obtained cannot be relied upon to reveal the true picture.

Generally, the informal sector provides employment with below-average wages for survival, and informal workers and informal micro-entrepreneurs operate at the survivalist level. The notion that it is just a temporary outlet for future opportunities in the formal sector no longer holds for most workers in developing countries become stock in this type of employment for most of their productive adult lives.

Data obtained from [20] reveals the projection of the size of the informal sector in Nigeria and South Africa from 2011 to 2025, and the factors that will determine the size of the informal sector in the two countries (Tables 1 and 2).

Table 1. Forecast of the size of the informal economies (per % GDP) in Nigeria and South Africa [20].

Year	2011	2016	2017	2020	2025	Period Average (2011–2025)
Nigeria	50.73	48.37	47.70	46.99	46.11	47.93
South Africa	23.49	21.29	23.33	23.71	24.19	23.59
Global	23.10	22.66	22.50	22.11	21.39	22.35

Table 2. Top three factors that determine the size of the informal sector by countries [20].

Country	Factor 1	Factor 2	Factor 3
Nigeria	Corruption control	GDP per capita	Bureaucratic quality
South Africa	Unemployment	Bureaucratic quality	Law and order
Global	Bureaucratic quality	Corruption control	GDP per capita

The importance of this paper is in providing an analytical perspective on the contributions of the informal sector to the economic growth of South Africa and Nigeria. The rationale for this approach is that few authors have paid attention to the importance of the informal economy to the overall economic growth of the two largest economies in SSA. South Africa has a nominal GDP of USD 351.431 billion, and Nigeria has a GDP of USD 448.121 billion [24]. Although several authors in South Africa and Nigeria have studied the relationship between the informal sector and economic growth in their countries, so far, a comparative perspective that highlights the conceptual similarities and differences of the informal sector of South Africa and Nigeria is lacking in the literature. Thus, a sufficient basis to foster a deeper understanding of the state of the informality and its impact on economic growth in two largest economies in Africa is still lacking.

Equally, the motivation for adopting a systematic literature review (SLR) was to address normative questions through the use of concise and comprehensive overview of existing records and state of knowledge [25,26] on the informal sector in SA and Nigeria. Additionally, SLR (1) is known to be transparent, rigorous, focused, and accessible, while enhancing clarity and providing the foundation for evidence leading to informed decision-making for practitioners, researchers, consumers and stakeholders [27–29]; (2) helps to highlight research gaps in the informal sector in both economies; and (3) will ensure the diversity of knowledge obtained from synthesis of the existing literature [30], which can be systematically managed to inform policy and practice [27,30]. Thus, as a contribution, this paper provides a basis for a deeper understanding of the issues of informality and economic growth that pertains to South Africa and Nigeria from a comparative perspective, which is hitherto unaddressed in the existing literature.

The rest of this paper is arranged as follows: Section 2 presents an overview of the informal sector and its distinguishing characteristics compared to the formal sector. Section 3 presents the methodology that was applied for the study, the research questions (RQs) that were investigated as the basis for a systematic literature review. The findings of the study are presented in Section 4, while the discussion of the findings is presented in Section 5. The limitations of the review are presented in Section 6, while the paper is concluded in Section 7.

2. Overview of the Informal Sector

The informal sector (also described as the shadow economy or grey economy) represents economic activities by individual operators and economic units (in law or practice) having no formal contractual arrangements. The informal sector does not include illicit/illegal business operations according to the 17th International Conference of Labour Statistics (ICLS) cited in [3]. These economic activities operate outside accepted norms of society in that they are not regulated or registered with the government, and are hence non-taxable. Furthermore, Ref. [3] posits that employees in the informal sector typically operate at the lowest level of organisation and on a small/tiny scale. Labour relations, when existent, are based on personal and social relationships instead of contractual arrangements with legal protection. Table 3 explains the disparity between the informal and formal sector.

Table 3. Differences between the informal and formal economies [31,32].

Informal Sector	Formal Sector
Entry requirements are minuscule/easy	Difficult entry requirements
Dependent on local/indigenous resources	Frequently relies on overseas resources
Ownership—family enterprises	Ownership is through a corporation
Business operation is a small scale	Enterprise operation is a large scale
Operation is labour intensive, using locally adapted technologies	Operation is capital intensive depending on imported technologies
Un-skilled employees acquired outside the formal school system	Formally acquired skills, often through the use of expatriate services
Generally competitive and unregulated markets	Markets are protected by the use of high tariffs, or trading licences.

Moreover, [31], cited in the Global Development Research Centre (GDRC), highlighted four cardinal policy pillars, two as internal variables (capacity building and organisational management) and two as external variables (support services and mainstreaming the sector) that should be part of what is pursued by governments in developing economies. Secondly, GDRC uses four constructs (employment, enterprise, habitat and credit) as distinguishing characteristics that are pertinent to the informal sector (Table 4). Specifically, Ref. [32] defines the informal sector as covering a wide spectrum of unorganised economic activities/units in commerce, agriculture/agro-allied industries, construction, mining, manufacturing, transportation and services. This sector globally accounts for 60% of the adult working labour force in urban centres of developing countries.

Table 4. Characterisation of the informal sector [32,33].

S/N	Distinguishing Characteristics	Comments
1	Employment (important features of people in the informal sector)	No official protection and recognition Non-coverage by legislation and security system Predominantly single own-accounts/self-employment work Non-trade unions organisation Low income and wages Lack of fringe benefits—paid sick and holidays.
2	Enterprise (activities in the informal sector)	Unregulated and very competitive markets Small-scale operation/family ownership Entry requirements minuscule Local resources reliant Adaptive technology and labour intensive Lack of access to institutional support, protection or credit
3	Habitat (land and housing)	Use of public space and private land Use of unauthorised structures and buildings Absence of restrictive standards and regulations Dependent on family labour for the construction of a trading post. Absence of mortgage/subsidised financing
4	Credit	Not regulated and unsubsidised Small in size and readily accessible. Low administrative and operational cost No collateral required Flexible interest rates and repayment tailored to individual needs.

2.1. Drivers of the Informal Business Sector

The characterisation of informal employment by the ICLS [34] includes the informal sector and all informal employees working for several economic units that are unregistered and undocumented by enterprise employers. For developing economies such as Nigeria, informal employment is characterised by several factors [35,36]. These range from lower educational levels with limited skills and lower literacy rate than formal workers. There are no vocational training or skill development processes, and informal workers spend longer working hours in productivity.

However, some drivers of informality according to [20] include economic and business challenges, as well as socio-demographic, socio-environmental, governance, science and technology factors. These are explained as follows:

- Economic drivers: this include high or rigid taxation regimes which are cumbersome to entrepreneurs. Additionally, a sudden downturn in the economy and fall in national GDP because of recession in the local economy helps to drive informality.
- Business challenges: this include external competitive pressures that affect small survivalist businesses. Additionally, there might be strong market competition, as well as an increase in independent workers/contractors.
- Socio-demographic and socio-environmental constraints: this include increases in unemployment, high poverty levels, limited access to education and training (including vocational and apprenticeship in the formal jobs), and high corruption in government.
- Governance: this includes increases in regulation that impede the activities of informal sector providers on the street, and low investments from governments toward the informal sector.
- Science and technology: this have the potential to either slow the growth or enhance the growth of the informal sector. Leveraging of technology can improve visibility, profitability and semi-formalisation of micro-enterprises. Unfortunately, the outgrowth of the "making economy" where workers make their own or re-design products for other consumers can lead to growth and expansion of informality.

Thus, it could be argued that central to the issue of informality, the basic factors or constructs that influence the growth and resilience of the informal sector could be grouped as the strain on economic activities, ineffectual policies and regulations, taxation aversion, absence of sustainable business ecosystems, moral laxity/flaws and social tension within the society. These are summarised in Table 5.

Table 5. Core informal economy parameters [20].

Core Factor	Parameters	Percentage Contribution
Economic	High and complex taxation regime	98%
	Recession/economic downturn in the local economy	91%
	Occurrence of a global recession	88%
	Absence of local market dynamics	54%
Business factors	Increasing pressure on locally active small business	76%
	Intense competitive market pressures	64%
	Increasing the number of independent workers	57%
Socio-demographic	Increasing unemployment rate	94%
	Rising poverty levels	92%
	Lack of education training or skills development	70%
	Growing/expanding population	61%
	Urbanisation	55%
Socio-environmental factors	A high rate of corruption among citizens	93%
	Lower social pressures and norms	81%
	Shifting generational norms	56%
	Absence of strong ethical standards and cultural acceptance	54%
Governance	A decline in government expenditure	55%
	Regulations which do not agree with citizens' rights and aspirations	54%
Science and technology	3D printing	57%
	Expanding internet connectivity	53%
	Leveraging of digital technology	50%

2.2. Related Work

To date, in the literature, few authors have focussed on the relationship between the informal sector and economic growth.

In [37], the impact of informality on economic growth and poverty in SSA countries was examined. The author identified the key roles of the informal sector as providing the link between consumers and subsectors of the formal economy and offering product and services that are not offered by the formal economy. It is also a major source of employment and poverty reduction. It was also observed that it has been difficult to measure the exact contribution of the informal sector to the national output of most countries because of the lack of adequate data. The study identified the need to formulate policies that will address the problems of unemployment, lawlessness, and tax evasion by informal sector operators. The need for SSA countries to expand the economic participation of marginalised people that work in the informal sector was also espoused. The study offered policy recommendations such as: (i) reducing barriers to entry and asset accumulation for small firms or raising wages and working conditions for vulnerable workers; (ii) the provision of title deeds offers poor people the right to use their properties in legally secured market transactions; (iii) promotion of informal-formal economy linkages; and (iv) providing social safety nets for people working in the informal economy since they are more vulnerable to economic shocks than those in the formal sector.

Similarly, Ref. [38] opined that despite the massive size of the informal sector in sub-Saharan countries, SSA countries have failed continually to harness the great capacity of the informal sector for economic growth. This is because of a lack of proactive policies that can harness the economic activities of the informal sector to bring them under the purview of formal regulations by the government. The study offered policy recommendations, which include the need to bring large informal organisations under the formalised regulation net to make them taxable and to ensure that small informal micro-enterprises are encouraged towards formalisation.

For Nigeria, in [39], the authors found that although the informal sector is a source of income for a large number of people in Nigeria, it is difficult to determine its exact contribution to economic growth and development in the short run. The authors used the Error Correction Model (ECM) to analyse data from 1985–2014 to arrive at this conclusion. The results show that the informal sector has a long-running and positive relationship with economic growth, but that this is statistically insignificant. The author suggested the need for improved fiscal and employment policies to engender economic growth and development. Additionally, Ref. [40] reported the impact of the informal sector on the economic growth of Nigeria between the period of 1980–2014. An endogenous growth model that incorporates variables such as official economy nominal GDP, informal economy nominal GDP, currency in circulation, demand deposit, the ratio of currency in circulation to demand deposit, narrow money, the informal economy as a percentage of official economy was used to determine the impact of the informal sector on Nigeria's economic growth. It was discovered that despite the commendable impact of the informal sector on economic growth, this relationship is not linear. The authors suggested that government should integrate informal sector businesses into the formal sector, and regulate the sector because of its potential to increase fiscal revenue through tax collection.

For South Africa, Ref. [41] employed a macro-economic perspective to analyse the relationship between the informal sector, economic growth, and the business cycle in South Africa. The study explored the relationship between informal sector and formal sector employment, and economic growth and outputs using data from 2002–2016. The findings of the study showed that the informal sector has played a limited role in employment creation in the period since 2002. Thus far, no previous study has considered the issue of the informal sector and economic growth from a comparative perspective, which is a theoretical gap that this paper attempts to address.

3. Methods

This paper assesses the contributions of the informal economy to the economic growth of South Africa and Nigeria through a systematic review of papers that have been published in the literature. A systematic literature review (SLR) provides a synopsis of primary studies or "secondary" research conducted in a manner that portrays an explicit, transparent methodology, and must be reproducible [42,43]. According to [44], a systematic literature review is a robust overview of the current literature, and its limitations, quality and embedded potential [44]. It must be able to answer the question(s) raised in the research, as well as highlighting gaps in the research and literature and indicating the pathway for future research [18]. The main advantages of SLR are transparency in data collection and synthesis of the data for results enabling a higher level of objectivity and reproducibility [30].

3.1. Research Questions

This Systematic Literature Review (SLR) adopted a qualitative method for the collation and documentation of secondary data with the following Research Questions (RQs):

RQ 1: What are the pertinent factors that act as drivers of the informal sector in SA and Nigeria?

RQ 2: What are the major challenges of the informal sector in SA and Nigeria?

RQ 3: What are the policy incentive(s) of the governments in the two countries that target the informal sector?

RQ 4: What are the dominant types of informal activities in Nigerian and South Africa?

3.2. Study Design

The design of this systematic literature review (SLR) was structured to assess the contributions of the informal sector to the Gross Domestic Products (GDPs) of SA and Nigeria based on evidence gathered from the literature. A SLR comprises both a quantitative, bibliographical analysis, together with a more qualitative thematic approach [30]. The literature search adopted five procedural steps, which are outlined in Table 6. Equally, each procedural step is explained in sequel sections.

Table 6. The systematic review process [45].

S/N	Process
1	Research question(s) formulation as part of the review
2	Identify pertinent and relevant work together with the inclusion and exclusion criteria
3	Quality assessment/assurance of the studies
4	Summation of evidence (analyse and present results)
5	Interpretation of the findings

3.3. Research Questions Formulation as Part of the Review (Step 1)

It is of importance that the question(s) formulated at the beginning of the search be designed to be clear, unambiguous and clearly structured, as this will determine both the direction and focus of the research [45]. According to [18,43], the research questions must be formulated to convey an intervention (I), participants (P) or outcome (O); or in the view of [46], a RQ should use the PICOTS (Population, Intervention, Comparator, Outcome, Timing, Setting) framework, registering the protocol with PROSPERO for initial review.

According to [47], SLR can be defined as a "review of an existing body of literature that follows a transparent and reproducible methodology in searching, assessing its quality and synthesising it, with a high level of objectivity".

Thus, search processes were initiated to include clear explicit criteria for inclusion and/or exclusion of the studies from the review. While the emphasis was on bibliographic databases, we also included grey literature to maximise comprehensiveness and guide against publication bias [48]. During January and February 2020, a search was conducted on databases including Google Scholar, Scopus, ResearchGate, and WIEGO (Women in Informal Employment: Globalising and Organising) representing an action research policy network.

3.3.1. Search Queries

The search queries used common syntax components [keywords or "search string"] including use of parentheses as well as Frequent Boolean operators "OR", "AND", and "NOT" [49]. The keyword-based search strings that were to identify documents that relate to South Africa, and Nigeria were:

(a) "Informal Sector" OR "Informal Economy" AND "Economic Growth" AND "in" AND "South Africa"

For South Africa, applying the search string yielded 859 documents from Scopus; 3140 documents from Google Scholar; and 70 documents from ResearchGate.

(b) "Informal Sector" OR "Informal Economy" AND "Economic Growth" AND "in" AND "Nigeria"

For Nigeria, applying the search string produced 523 documents from Scopus, 2610 documents from Google Scholar, and 59 documents from ResearchGate (see Table 7). ResearchGate was used so that we could gain access to relevant articles made available for open access by their authors. Scopus and Google Scholar were selected due to their international prominence as standard indexes of research publications.

Table 7. Search strings and results.

S/N	Search String	Scopus	Google Scholar	ResearchGate
South Africa				
1	"Informal Sector" OR "Informal Economy" AND "Economic Growth" AND "in" AND "South Africa"	859	3140	70
Nigeria				
2	"Informal Sector" OR "Informal Economy" AND "Economic Growth" AND "in" AND "Nigeria"	523	2610	59

3.3.2. Data Sources

Modern-day research has become interdisciplinary, collaborative, and internationalised, such that leading institutions demand high-quality data to inform priorities and drive sound decision-making. It is, therefore, incumbent on researchers to glean information from rich and highly standardised data sources including:

Scopus (https://www.scopus.com): Launched in 2004, Scopus indexing is part of Elsevier's service, which is highly prized globally, emulating Reuters/Thompson Reuters Web of Science service including SCIE/SSCI journals. SCOPUS database covers 36,377 titles (22,794 active titles and 13,583 inactive titles), and about 94.4% of these are peer-reviewed journals in diverse disciplines covering life sciences, social sciences, physical sciences and health sciences. Book series, journals and trade journals are the three main types of source, producing quality assurance measure (h-index, CiteScore, SJR—(SCImago Journal Rank), and SNIP (Science Normalised Impact per paper) for each title.

(a) ResearchGate (https://www.researchgate.net): a European social networking platform for scientists and researchers, for question asking/answering, and collaboration. Founded in 2008 by scientists, it has over 11 million users globally. A RG score is allocated to most published scientists. With over 100 million publications, it has become a secondary source for data acquisition.

(b) Google Scholar (https://scholar.google.com): a free search engine using full text or metadata to index scholarly literature across several publishing format and disciplines. Google Scholar allows one to search articles, theses, books, abstracts, and court opinions from several sources (professional societies, academic publishers, online repositories, universities, and a host of websites). Google and GS's Boolean searching default is AND: more so google search is not comprehensive for its searches and skims what is available on the Web within a particular context.

3.4. Study Selection Criteria (Step 2)

The adopted selection criteria to determine the articles that were selected were as follows:

(a) Articles had to be published in English for both South Africa and Nigeria, with the cut-off year of 2013 for South Africa and Nigeria. In 2013, Nigeria's rebased GDP was USD 510 billion from USD 270 billion [50–52].
(b) Peer-reviewed/scientific articles, masters and doctoral theses, conference papers, policy documents, government gazette, statistical data from governments, international organisations reports were all taken into consideration.
(c) Words such as "informal sector", "informal economy" and "economic growth" or suitable synonyms were used in the title or abstract to narrow down the selection criteria.
(d) Both quantitative survey articles and articles with qualitative secondary data were included in the research.
(e) Articles that were finally selected had to enable the authors to obtain answers to at least one of the four RQs formulated (see Section 3: Methods).

These criteria then resulted in seventeen (17) articles for South Africa and sixteen (16) for Nigeria (see Table 8 below for enumeration of pertinent articles). These results were based on the search protocol [43]. The protocol forming the basis for the research spells out the constructs/parameters for data collation—such as search strings, the databases, inclusion/exclusion criteria, quality assurance, etc. [53].

Table 8. Systematic Literature Review of Articles

S/N	The Authors (South Africa)	The Authors (Nigeria)
1	Burger and Fourier [41]	Sakanko and Ewugi [39]
2	Stats SA [54,55]	Yelwa and Adam [40]
3	ACCA [20]	Bank of Industry [BoI] [66]
4	Rogan and Cichello [56]	Cathy-Austin and Oluwatoyin [67]
5	IMF [57]	IMF [15,68]
6	Charman and Petersen (SLF) (Econ3x3) [58]	ACCA [20]
7	Liederman, Charman, Piper and Petersen (SLF) (Econ3x3) [59]	Omodero [69]
8	Rogan and Skinner (REDI3x3) [60]	Agbuabor and Maluola [70]
9	Bonnet, Vanek and Chen (WIEGO) [61]	SMEDAN/NBS [19]
10	Fourie [14]	Businessamlive [16]
11	Rogerson [62]	CISLAC (MarketTaxFair) [71]
12	Skinner [10,11,63]	National Bureau of Statistics (NBS) [72]
13	Skinner and Rogan [64]	Igudia, Ackrill, Coleman and Dobson [73]
14	World Bank [65]	Ehiaghe [74]
15		CBN Statistical Bulletin [16]

3.5. Quality Assurance of the Assessment and Extraction Process (Step 3)

The quality assurance process that was undertaken involved sending the primary articles collated by the first author to the second author for further review. A rigorous vetting and exclusion procedure was performed. At the end of this process, articles that formed an integral part of the study are summarised in Tables 9 and 10 below.

Table 9. Extracted papers on South Africa.

S/N	The Authors (South Africa)	Research Design Used	Policy	RQ1	RQ2	RQ3	RQ4
1	Stats SA [13,54,55]	Quantitative/qualitative	No	No	Yes	No	Yes
2	ACCA [20]	Quantitative/qualitative	Yes	Yes	Yes	Yes	No
3	Rogan and Cichello [56]	Qualitative	Yes	Yes	Yes	Yes	Yes
4	IMF [57]	Qualitative	Yes	Yes	No	Yes	No
5	Charman and Petersen [SLF] (Econ3x3) [58]	Qualitative/Quantitative	No	No	No	No	Yes
6	Liederman, Charman, Piper and Petersen [SLF] (Econ3x3) [59]	Qualitative	Yes	No	Yes	Yes	Yes
7	Bonnet, Vanek and Chen (WIEGO) [61]	Qualitative	Yes	No	No	Yes	No
8	Rogerson [62]	Qualitative	Yes	No	No	Yes	Yes
9	Fourie [14]	Qualitative	Yes	No	Yes	Yes	No
10	Rogan and Skinner QLFS 2008–2014 (REDI3x3) [60]	Qualitative	Yes	No	Yes	Yes	Yes
11	Skinner and Rogan [64]	Qualitative	Yes	No	Yes	Yes	No
12	Skinner [10,11,63]	Qualitative	Yes	Yes	No	Yes	Yes
13	Burger and Fourier [41]	Quantitative	Yes	No	Yes	Yes	No

Table 10. Extracted papers on Nigeria.

S/N	The Authors (Nigeria)	Research Design Used	Policy	RQ1	RQ2	RQ3	RQ4
1	Bank of Industry (BoI) [66]	Qualitative	Yes	No	Yes	Yes	Yes
2	Cathy-Austin and Oluwatoyin [67]	Quantitative	No	Yes	No	No	Yes
3	IMF [15,68]	Qualitative	Yes	No	No	Yes	No
4	ACCA [20]	Quantitative/qualitative	Yes	Yes	Yes	No	No
5	Omodero [69]	Quantitative	No	No	No	No	Yes
6	Agbuabor and Maluola [70]	Quantitative	No	Yes	No	No	Yes
7	SMEDAN/NBS [19]	Qualitative	Yes	Yes	Yes	No	Yes
8	CISLAC (MarketTaxFair) [71]	Qualitative	Yes	Yes	No	Yes	Yes
9	National Bureau of Statistics (NBS) [72]	Quantitative/Qualitative	No	Yes	Yes	No	Yes
10	Igudia, Ackrill, Coleman and Dobson [73]	Quantitative/qualitative	Yes	Yes	No	Yes	No
11	CBN Statistical Bulletin [16]	Quantitative/qualitative	No	Yes	No	No	Yes
12	Sakanko and Ewugi [39]	Quantitative	Yes	No	Yes	Yes	No
13	Yelwa and Adam [40]	Quantitative	Yes	No	Yes	Yes	No

A total of thirty-one (31) papers (17 for SA and 14 for Nigeria) were selected through the extraction process. Two papers for Nigeria that were found to have reported essentially the same thing as their more detailed equivalent by the same authors were dropped, which resulted in a total of 14 papers for Nigeria. These papers were published in peer-reviewed journals or as articles published by academics who are known to research issues of the informal sector of South Africa on public debate platforms such as Econ3x3 (https://www.econ3x3.org/about-econ3x3-forum) and REDI3x3 (https://www.redi3x3.org.za). Examples of these types of papers include [58–60,64]. The authors found no masters or doctoral thesis in the primary source for data collation, because pertinent materials were part of peer-reviewed articles already published by these authors. Most of the articles from SA included in the study design were qualitative (70.5%) in nature, and dealt more with factors acting as drivers to informality, policy recommendations, and dominant sub-sectors or sectorial segmentation. With respect to the Nigerian informal sector, articles that formed the primary data collected were qualitative (35.7%), quantitative (35.7%) and mixed (28.6%) in design, detailing contributory factors to informality, challenges, policy incentives and dominant sub-sectors. In particular, Ref. [73], using a multiple-cause, multiple-indicator [MIMIC] model together with primary data, ascertained determinants of the informal economy in Nigeria. Additionally, Ref. [70], employing Error Correction EMIMIC (multi-cause, multi-indicator model), opined that informal enterprises were a medium for employment and potential sources for livelihood for those that were unemployed in Nigeria. Additionally, Ref. [13,55], using Quarterly Labour Force Survey (QLFS) reports with respect to SA, detailed demographic characteristics of informal sector providers, provincial distribution/concentration, and gender participation (for both formal and informal employment). In the same vein, Ref. [60], regarding SA, covered the size of the informal sector, gender and race characterisation and policy incentives for FY2008 to FY2014.

4. Results

4.1. Summary of the Evidence (Step 4)

In [42], it was suggested that the collected qualitative evidence should be organised as a synthesised narrative. This process would enable the representation of different studies by the researchers in a logical and sequential manner.

RQ 1: What are the pertinent factors that act as drivers of the informal sector in SA and Nigeria?

The authors in [61] opined that most of the global population (between 15 and above) employed in the informal sector is 61 per cent. This accounts for a total of 2 billion workers, representing about 90% in developing (low income) countries, 67% in emerging, and 18% in advanced economies. According to [20], the three most important drivers to informality in SA are unemployment, bureaucratic quality, and law and order. Thus, high unemployment, income disparity among the citizens, and the resulting fall in national GDP (due to financial crisis, or formal enterprises closing down operations and moving to the informal economy) act as contributory factors to the propagation of the informal sector in SA [61].

Considering Nigeria, three authors detail possible causes of informality, corruption control, GDP per capita, bureaucratic quality [20], unemployment, tax burden, the excessive bureaucratic burden from government, inflationary tendencies, lack of social protection, more regulations introduced to the formal sector such as labour markets, interest rate variations, less than 40 h/week employment for formal labour workers, redundancies, and early retirement [70]. Equally, Ref. [73] identified a higher rate of unemployment, a desire to be self-employed and independent, corruption of government agencies/officials, the incentive to avoid taxation, and survival inclinations as causes of informality. However, the core factors in terms of magnitude and impact were survival tendencies and corruption.

The rationale for this disparity is due to the nature of the economy; SA is an upper-middle-income country, in contrast to Nigeria, which is rated as a middle-income, resource-driven and mixed economy with expanding manufacturing, financial services, communication, technology and entertainment industries. However, Refs. [75,76] observed that the informal economy is characterised by lower productivity, higher poverty levels and unemployment, and could lead to slower economic growth and GDPs.

It is interesting to emphasise that [73] furthermore categorises these drivers to informality in Nigeria into the various schools of thought developed in the theoretical framework of the informal economy. These schools of thought include structuralism-structuralist (survival tendencies and under-regulation); neoliberals (choice to engage in micro-enterprises, over-regulation of the formal economy/sector, bureaucratic processes inherent in government offices); and post-structuralism (choosing to migrate/or be a part of the informal economy, corruption, absence of social protection). A summary of the causes of informality in SA and Nigeria is presented in Table 11.

Table 11. Causes of informality in South Africa and Nigeria.

S/N	South Africa	Author
1	Unemployment Bureaucratic quality Law and order	[20]
2	Income disparity Fall in the national GDP A downturn in the economy Labour markets regulations.	[60,61]
	Nigeria	**Author**
1	Poor corruption control Low GDP per capita Excessive bureaucracy from government	[20,73] [20] [20,70]
2	High levels of unemployment High Tax burden of the formal sector Lack of social protection Less than 40 h/week employment Redundancies and Early retirement Inflationary tendencies Excessive regulation to register in the formal sector	[70,73] [70] [70] [70,73]
3	Personal motivation factors Self-employment tendencies Survival tendencies among nationals Environment factors Business freedom/independence Tax evasion opportunities	[73]

RQ 2: What are the major challenges of the informal sector in SA and Nigeria?

The challenges to the performance and growth of the informal sector/economy, in general, are not unique to the two economies (SA and Nigeria), but mirror those peculiar to most developing and emerging countries. Regarding SA (Table 12), crude technology adoption, external competitive pressures, lack of social protection, poor access to finance/credit, infrastructural challenges, security issues, non-standardisation of goods/services, changing zoning regulations which adversely impact service providers negatively, and government policy which is counterproductive to greater productivity of the informal economy [10,11,13,40,62].

Table 12. Challenges of the informal sector in South Africa and Nigeria.

	South Africa	Nigeria
Challenges	Crude/low technology adoption [77] Lack of credit [59] Infrastructural challenges Lack of social protection [10,60] Poor government policy and regulation [60,63] Non-standardisation of goods/services Unfavourable zoning laws [11] External competitive pressures [13,54,55]	Lack of technology adoption and usage [66] Lack of access to finance [66,71] Low market capitalisation [72] Lack of land/and physical infrastructure [66] Lack of social protection [71] Poor government policies and regulation [19,39,40] Lack of skills and vocational training [19,66] Lower educational qualifications [19,66] Intense market competition [66]

In the case of Nigeria: intense market competition, lack of finance, lack of skills or vocational training, lack of social protection, poor integration of technology, non-conducive governmental regulations and policies [19,72]. However, according to [71], the existence of the informal economy/system is exacerbated when there is overregulation (requirements of higher taxes and costs for participation in the formal economy), coupled with systematic corruption and inefficiencies in compliance with government laws and regulations. More importantly, when entry to the formal sector is challenging and costly, citizens have to resort to the informal sector to earn a living. However, certain entrepreneurs deliberately choose to be part of the informal sector to avoid taxation.

Equally, Ref. [66] opined that there was inadequate technology integration by informal sector providers, poor foundation in education, market pressures, lack of land and physical infrastructures for business activities, limited access to credit/finance, and limited training in management and skills development.

Hence, commonalities between the SA and Nigerian informal sectors include low technology adoption, lack of finance/credit, limited training or human capital development, tax aversion, stringent zoning laws prevalent in SA, but relatively weak/non-compliance in Nigeria, resulting in the proliferation of the informal sector, infrastructural challenges, poor policy incentives for semi-formalisation, together with the non-digitalisation of business operations. A summary of the major challenges of the informal sector in SA and Nigeria is shown in Table 12.

RQ 3: What are the policy incentives of the governments in the two countries that target the informal sector?

Considering South Africa, Ref. [61] made interesting observations. For street vendors who experience confiscated goods, spaza shop owners subjected to constant changing zoning irregularities, recycles who may be denied access to dumpsites, domestic workers paid poverty wages, and bead makers facing bankruptcy due to currency fluctuations, policy dealing with poor working conditions and increased incomes ought to be formulated.

According to [78], the current policy process should encourage the National Economic Development and Labour Council (NEDLAC) to implement ILO recommendation R204 for formalising the informal sector. The various local governments/municipalities must be compelled to comply with informal sector guidelines. Additionally, there should be collective action from groups such as SAWPA (South Africa waste pickers Association), SAITA (South Africa informal Traders Association), and SADSAWU (South Africa Domestic Service and Allied Workers Union), supported by International Alliances StreetNet and IDWF (International Domestic Workers Federation), which are members of WIEGO, the Congress of South African Trade Unions (COSATU), and the South African Federation of Trade Unions (SAFTU) to present a united front in dealing with municipalities and government. Advocacy platforms for waste pickers and street vendors are necessary, as they struggle against denial of access to sites and public space for trading and business activities.

The authors in [59], by using the ethnographic design on size and spatial distribution, recommended a two-prong policy approach that involves the formalisation of larger informal shops, while permitting and encouraging informal micro and survivalist businesses in the townships. Fostering entrepreneurship both for foreigners and poor township shops to procure goods at competitive prices from big trading houses/outlets was also recommended. They also suggested that policy intervention should include the encouragement of larger shops to relocate to high streets in compliance with municipal laws such as registering staff, paying minimum wages, employee benefits, submitting VAT and income tax returns.

In [60], the authors underscored the importance of understanding some of the variables affecting gender configuration, youth participation, educational qualifications, and changes to an industrial composition for proper formulation of suitable policies for the informal sector. The drawback to the National Informal Business Uplifting Strategy (NIBUS) is that it neglects survivalist businesses while catering to micro-enterprises [60]. However, the policy ought to be holistic and not to marginalise women, which maximizes poverty levels among SA informal providers [60].

Today, NIBUS concentrates only on five primary industries—trade/retail, manufacturing, services, construction and agriculture/agro-processing [79]. However, according to [80], the implementation plan from the Department of Small Business Development would marginalise a lot of South Africans and impede formalisation.

Furthermore, Ref. [63] reiterates that Provincial and City initiatives, such as KwaZulu-Natal (KZN) Business Policy [81], which provides a standardised regulation framework for informal businesses, Gauteng Township Economic Revitalisation Strategy (GIBUS) [82], Limpopo Development Strategy [83], City of Johannesburg [84], City of Cape Town [85] policy, and eThekwini Informal Economy Policy [86] for street traders, should be fully operational. These policies are dualist, focussing on cross-cutting supporting measures such as credit, training, business support services, and infrastructure. However, according to [63], all these policies fail to understand how informal sector operators fare in the bureaucratic process. Policies tend to favour formal sector operators. The authors observed that all the approaches fail to address structural impediments as informal sector try to transition to more lucrative markets, and thus secure better livelihoods.

In [73], the authors, while writing on policy implications in Nigeria, highlighted the creation of conducive environments for business activities, which enhance job provision and entrepreneurial development, dealing with corruption, financial assistance and training for budding entrepreneurs in the informal economy. This can be in the form of technical assistance, financial help and managerial skills for informal entrepreneurs.

Additionally, Ref. [69] observed the need to have legal codes formalised for enhanced taxation, and the elimination of unlawful activities in Nigeria's informal sector. On the other hand, Ref. [71] attributed informality to the high cost of entry to the formal sector, and the high cost of business operations in terms of company registration, and higher taxes. These, according to the authors, can be policy-driven to increase formalisation and taxation revenue of the government. Policy incentive should include proper taxation regime and legislation, adequate administration, and good public awareness that could incentivise informal sector providers to reconsider formalisation. According to [71], the notion of a "cashless society", through the use of bank cards for electronic fund transactions that was introduced by the Central Bank of Nigeria (CBN) should be encouraged to discourage tax evasion. An overview of the policy incentives for the informal sector by the governments in SA and Nigeria is presented in Table 13.

Table 13. Policy incentives from the governments of South Africa and Nigeria.

S/N	South Africa	Nigeria
1	Implementation of ILO Recommendation R204 [63,80] Groups such as South Africa Wood Preservers Association (SAWPA), South African Informal Trade Alliance (SAITA), Congress of South African Trade Unions (COSATU), South African Federation of Trade Unions (SAFTU), working with the government to improve conditions and social protection of informal workers [61]	Creation of conducive environments by the government to enhance micro-entrepreneurship [73]. Dealing with corruption at all levels of government [73]. Financial and technical assistance and training for informal sector practitioners [73]
2	Formalisation of larger informal shops and encourage them to relocate to "high street". This makes them compliant with formal sector regulations [59] Support and encourage small size informal micro- and survivalist businesses to increase earnings and stay in townships [59]	Legal codes formalised to informal sector providers for taxation avoidance [69]
3	National Informal Business Upliftment Strategy (NIBUS) to regulate, support survivalist businesses to increase earnings and eventually to formalise [63] Department of Small Business Development (DSBD) cease from marginalising micro-enterprises in favour of formal sector [62,63]	Lowering of entry criteria to the formal sector/economy [71]. Proper taxation regimes and legislation. Adequate administration [71]. Good public awareness of the benefits of formalisation for the informal sector providers [71]
4	Provincial and city initiatives in support of the informal sector put into compliance [63].	Creation of formal jobs to incentivise informal workers to migrate to formal employment [66]. Policies to re-address key challenges unique to the informal sector to bring about increased productivity and income generation [66]. Training and financial support for market women, artisans, traders [FG Economic Empowerment Programme—"GEEP product" and "ASM Fund" for Artisans and small scale miners] [66]

RQ 4: What are the dominant types of informal activities in Nigerian and South Africa?

In South Africa, Refs. [58,59] reiterated that three-quarters of micro-enterprises are located in informal settlements and include spaza, shebeens, and liquor shops. Sub-sectors include haircare, takeaway food, religious services, street traders, mechanical repair services, greengrocers and recycling, education and healthcare services, while according to [60], informal subsectors include manufacturing (9.0%), construction (16.6%), community, social and personal services (16.4%), wholesale and retail trade (41.7%), financial services (7.2%), transport, storage, and communication (9.1%), and other (0.2%) as of the third quarter of 2014.

In Nigeria, informal sectorial segmentation according to [70] includes small scale business, unregistered sole-proprietorship firms in rural/urban settlements. In rural centres, agriculture and allied industries, blacksmithing, weaving, and pottery are prevalent. In urban centres of Lagos, Abuja, Kaduna, Port Harcourt, and Enugu, informal businesses such as trading, small-scale manufacturing and repairs, including upholstery, furniture making, woodworks, metal works, bakery, masonry, and printing are prevalent. The dominant activities in South Africa and Nigeria informal sectors are presented in Table 14.

Table 14. Sub-sectors of the informal sector in South Africa and Nigeria.

S/N	South Africa	Nigeria
1	Street vendors, spaza shops, liquor, recycling, waste pickers, domestic workers, bead-making [61]	Small-scale unregistered sole proprietorship businesses, joint-ownership businesses. Farming/allied industries, blacksmithing, weaving, pottery. In Larger cities—Lagos, Abuja, Kaduna, Kano, Enugu—trading, carpentry, masonry, cobbling, furniture making, confectionery, auto repair, electricians, metal works, printing [70]
2	Liquor and spaza shops, haircare, takeaway foods, religious services, street trading, mechanical repair services, green groceries, recycling, education and healthcare [58]	Street traders, subsistent farmers, small-scale manufacturing, service providers—hairdressers, private taxi operators, carpenters, metal workers [66].
3	Food vendors, retail, trade, construction, manufacturing, mining, services, transport, re-cycling, cobbling, house repairs and services, handicraft, spaza shops, shebeens [10,13,14,54,55]	Credit vendors, petty traders, and unregistered economic units, components of the service sector, furniture making, re-cycling, woodwork, tailoring, carpentry, cobbling, masonry, and handicraft [19]

4.2. *Interpretation of the Findings*

The findings from the investigation of specific RQs are discussed in the following subsections.

4.2.1. Pertinent Factors and Drivers of the Informal Sector (RQ1)

The summary of findings from the primary study revealed that significant similarities exist in the drivers of the informal sector activities in South Africa and Nigeria (see Table 11). It was discovered that the effects of bad economic situations are mostly responsible for the proliferation of informal sector activities. For both South Africa and Nigeria, the relatively high unemployment rate and the legal requirements to become a formal business operator are major factors, because unemployed persons and those that cannot meet these requirements can only find solace in the informal sector. In South Africa, the slow rate of economic growth, the impact of high income disparity between the different racial groups, and unemployment rates have led to the high Gini Index/Gini Coefficient for the country [87]. Higher employment rate, status, and wages are more common among the whites, while lower employment rate, wages, and status, are more common among Black Africans. Moreover, Ref. [55] opines that 30.1% of South Africans are unemployed. However, according to [55], the informal sector supported 27% of all working people. Reports from [1] indicate that 34% of all South Africans work in the informal sector (21% of total employment is informal, 8% domestic households, 5% are formal).

Nigeria's informal sector is expected to support the projected high unemployment rate of 33.5% in 2020. According to [72], the 3QLFS unemployment rate (2018) rose to 23.1%.

Additionally, the labour regulations stipulate conditions for employment in South Africa which makes it difficult for foreigners who do not possess critical/scarce skills as gazetted in the list of critical skills by the South African government to find jobs in the formal sector. This leads many foreigners to take jobs in the informal sector. Similarly for Nigeria, based on the findings of [20,70], it can be deduced that harsh economic factors such as early retirement, inflationary tendencies, insufficient employment engagements with many people working less than 40 h per week, lack of social protection are key drivers of the proliferation of informal sector activities in Nigeria.

However, for Nigeria, in contrast to South Africa, it was also reported that the disposition of individuals in terms of self-employment tendencies and survival tendencies is also a major factor that has promoted informal sector activities. Another factor is the nature of the regulatory environment in Nigeria which enables independence and freedom to undertake business activities with less restriction in many public and private places, and a weak tax monitoring system that allows tax evasion. These were also reported as factors that have given impetus to the proliferation of informal sector activities in Nigeria.

4.2.2. Major Challenges of the Informal Sector (RQ2)

The findings from the primary studies show that the informal sector in South Africa and Nigeria are confronted by similar challenges, as shown in Table 12. The issues of lack of credit/low capitalisation, poor technology adoption, poor support infrastructure, poor government policy, and lack of social protection are common to the informal sector in both countries. However, the South African informal sector has particularly to cope with the effects of unfavourable zoning laws, which stipulate places where informal activities are allowed and disallowed. The Nigerian government appears to be less strict in this aspect. The intense market competition among informal sector operators is a challenge for Nigeria's informal sector, as many people may be selling the same product or offering similar services, leading to intense competition. Market competition seems not to be as intense in the South African informal sector. However, informal businesses in South Africa have had to cope with the challenges of external competitive pressures such as the influence of imported goods compared to local goods, and the price and quality of similar products that are marketed by formal retailers.

4.2.3. Policy Incentives of the Government for the Informal Sector (RQ3)

Findings from the studies show that the two countries have taken good steps to put in place appropriate policy incentives to aid the informal sector (see Table 13), and substantial similarities exist in terms of the goals and objectives of these policy incentives. In South Africa, the Department of Trade and Industry (DTI) through the Department of Small Business Development and the National Informal Business Upliftment Strategy, together with provincial and local strategies, are tasked with issues of the informal sector providers. In the case of Nigeria, the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN/NBS), the Central Bank of Nigeria (CBN) and the Bank of Industry (BoI) are mandated to deal with micro and small businesses.

The focus of the policy incentives has been on increasing formalisation of informal businesses, providing better working conditions and social protection for informal workers, ensuring better compliance with expectations. The focus on the policy incentives in Nigeria has been on encouraging informal business formalisation, encouraging micro-entrepreneurship, financial assistance and training to informal operators including women, artisans and traders, creation of formal jobs opportunities to cause the migration of informal operators.

4.2.4. Types of Informal Sector Activities (RQ4)

From Table 14, above, we observe that the sub-sector distribution of the informal sector between SA and Nigeria are similar except credit vendors and motorbike services which seem to be more prevalent in Nigeria. Arguably, the spatial distributions of the informal sector are quite the opposite in South Africa and Nigeria. Comparatively, informal distribution is lowest in Gauteng and Western Cape, but highest in Limpopo, Mpumalanga, Eastern and Northern Cape. The highest concentration is found in cities—eThekwini, Cape Town, Gauteng and Tshwane. Average earnings for informal sector providers run from R1733 per month in 2013 against R5000 per month for formal employees. Nigeria's informal sectors are mostly concentrated in larger metropolitan centres of Lagos, Ibadan, Kaduna, Kano, Abuja, Enugu, and Port Harcourt due to acute urbanisation. Lagos State alone, as the financial hub of Nigeria, with many informal sector economic units, generated a total output of USD 136 billion in 2017 [88].

5. Discussion

Based on the systematic literature review, we observed that several authors have considered issues of the South African and Nigeria informal sectors. However, so far, an attempt to draw conceptual differences and similarities between the informal sectors of South Africa and Nigeria has not been made. This type of comparative analysis is necessary to provide a framework for the holistic development of informal sectors in Africa for improved economic growth and socio-economic development. Our findings from this study show that some age-old structural problems such as unemployment and socio-economic inequality will continue to cause a proliferation of informal businesses in these countries. Several authors have suggested the need for a more committed response to the challenges that informal sector operators face daily, which hinders their profitability and livelihood. It has been advocated that addressing these issues will have a positive impact on economic growth and economic development [63,70,71].

For example, in Nigeria, by using the Error Correction MIMIC (EMIMIC) model [70], the size of the Nigerian informal economy since 1970 was estimated to vary between 53.6% and 77.2%, with an average of 64.6%, of GDP. According to [70], the informal sector, with a 65% contribution to Nigeria's GDP, should be protected. This is because it offers parallel economic units and finance structures that operate mostly on unwritten rules, but providing credit services for informal businesses, and enabling significant wealth creation. While the population of South Africans in the informal employment is relatively small (about 6%) in comparison to other sub-Saharan African (SSA) countries, the Quarterly Labour Force Survey (QLFS) from 2008 to 2014 showed a contribution to GDP of between 16% and 18% [60]. Presently, its percentage of GDP is in the low 20 s [65]. Therefore, according to [59,60,63], relevant government departments in South Africa such as the Department of Trade and Industry (DTI), and Small Business Development (SBD), should provide more policies in favour of the informal sector to enable them to become viable and sustainable. This will enable their transition from being survivalist micro-enterprises to viable business entities with increased earnings. A summary of the key findings of this study is presented in Table 15.

Table 15. Summary of findings of the comparison of SA and Nigeria sectors.

RQs	Similarities	Differences
RQ1	High unemployment rate is a major driver of informality in both South Africa and Nigeria.	In South Africa, the slow rate of economic growth, and the high-income disparity between the different racial groups is a major factor. With the groups with lower employment rate, and foreigners without critical skills taking solace in the informal sector.
		In Nigeria, the disposition of many persons to pursue self-employment has promoted informal sector activities.
		The regulatory environment in Nigeria enables independence and freedom to undertake business activities with less restriction in many public and private places which has encouraged the proliferation of informal sector businesses.

Table 15. *Cont.*

RQs	Similarities	Differences
RQ2	The informal sector in South Africa and Nigeria are confronted with similar challenges. These include lack of finance, infrastructure constraints, low technology adoption, poor government policy and incentives, low market capitalisation.	South Africa has strict zoning laws which regulate places where informal business activities can take place, which inhibits the proliferation of informal business activities. The zoning laws in Nigeria are more relaxed.
RQ3	Both South Africa and Nigeria have increased formalisation of the informal sector as the main policy objective. However, currently, policy gaps exist that has limited the capacity to fully harness the potential of the informal economy of both countries.	Aside from formalisation, policies have targeted promotion of micro-entrepreneurship, financial assistance and training, and the creation of formal job opportunities to encourage migration from the informal sector.
		Aside from formalisation, the policy focus has been on providing better working conditions and social protection for informal workers, ensuring better compliance with expectations.
RQ4	The types of informal business activities in the informal sectors of South Africa and Nigeria are similar.	Informal credit vendors are prevalent in Nigeria, which has enabled many informal businesses to harness business financing.
		In Nigeria, there is more concentration of informal business in the larger towns and cities due to increased urbanisation.
		In South Africa, informal business activities are more prevalent in the less developed townships and cities. The distribution and concentration of informal business are lowest in most developed cities/provinces such as Gauteng and Western Cape.
		In Nigeria, the greater concentrations of informal business are in the most developed cities, which thrives side by side with the formal economy.

5.1. Recommendation

The recommendations offered in this section stem from two perspectives. These are the need for increased support for the informal sector by government, and the need for the adoption of open innovation in the informal sector for economic growth. These two perspectives are presented in the following sections.

5.1.1. Increased Support for the Informal Sector

In agreement with the observations of several other authors, we hereby present the following recommendations to buttress the need for more support for the informal sector in South Africa and Nigeria.

Support for technology adoption: The problem of COVID-19 has emphasised the need for increased adoption of web/mobile technology for business operations by informal business owners. This will enable them to reach a larger market, and increase their profitability. The governments of South Africa and Nigeria can aid informal business by setting up e-marketplaces where informal business can be hosted and patronised. Such websites could be zero-rated in terms of data consumption, with electronic payment capability. This will help these governments to gather more information on informal businesses and motivate them to embrace semi-formalisation in a gradual way [77].

Increased infrastructural support: Additional infrastructural support that will enable informal businesses to thrive is required. This could be by providing constant electricity supply that is cheap/free in dedicated trade zones for informal businesses, free internet hotspots in several localities/communities where informal sector providers are concentrated, zero-rated websites where people can buy and sell informally, and many more. All of these will provide a basis to aid informal business operators for improved productivity which will inevitably contribute to the economic growth of South Africa and Nigeria.

Enhanced social support for informal sector providers: Informal business must be able to access financial support from governments directly and through NGOs that can provide agency on behalf of government and funders. NGOs and social workers can help to bridge the gap between government, stakeholders, and the informal sector providers [63]. Access to soft loan facilities, and professional services support such as training that is directed at the skill acquisition in critical aspects such as bookkeeping, accounting, and business management are services that can be rendered through NGOs that can benefit informal businesses significantly.

Supportive policies by the government: Informal economy has always been the backbone of most developing countries, contributing significantly to national GDPs. Today, the non-farm informal economy is a major significant economic force for employment and wage earnings [65], and therefore governments should explore impediments to greater productivity, irrespective of the type of work—agro-allied industries, non-farm household micro-enterprises, and the formal sector. Policies need to be holistic, and informed by facts, cost analysis, and data generated after careful analysis of prevalent problems experienced by these practitioners [63]. Initiatives and policies that are adopted must involve full participation of informal service providers. The focus of these policies should be to increase visibility, brand promotion, profitability, sustainability and eventual formalisation of the sector.

5.1.2. Open Innovation in the Informal Sector for Economic Growth

Open Innovation is the purposive use of inflows and outflows of knowledge to, respectively, accelerate internal innovation and expand the markets for external use of innovation [89]. So far, the role of open innovation in the informal economy has not gained much attention in extant literature. In [90], the authors reported that informal cultural norms such as social trust or ties can improve open innovation outputs when explored by an informal economy as demonstrated by the Shenzhen mobile industry in China. The potential for open innovation in the informal economy was also substantiated by observed practices among informal sector auto parts fabricators in Kampala, Uganda as reported in [91,92]. These informal sector operators were found to engage in a high degree of knowledge sharing based on social trust, which is derived from ties such as apprenticeship, family ties and friendship. Similarly, it was observed that the association of traditional healers in South Africa, which operates informally, has found ways to make some forms of knowledge about their practices openly available for the benefit of members of the association to enhance general practice. However, certain forms of knowledge that are deemed sensitive and worth preserving in order to foster the specialisations of individuals are not shared openly [93]. These examples suggest that open innovation can indeed enhance the level of productivity, and service delivery in the informal sector is it is encouraged [91]. Thus, the following perspectives on open innovation could be explored by the governments of South Africa and Nigeria.

Fostering of open innovation in the informal sector: According to [94], the process of implementing an open innovation paradigm includes unfreezing, moving, and institutionalising open innovation. So far, there is sufficient basis to believe that open innovation is inherently entrenched in many facets of informal sector businesses activities, which is built on social trust among the actors. The necessary next steps are how to move to formalise it, move it forward, and institutionalised. The governments and social development actors such as NGOs in South Africa and Nigeria will need to devise procedure and policies that will encourage systematic open knowledge transfer and innovation in the various sub-sectors of the informal economy in their countries to enhance the productivity and service quality in the informal economy.

Open Social Innovation for Tackling the Challenges of the Informal Sector: Open social innovation is focused on implementing an open innovation paradigm that has the goal of solving a social problem [95,96]. The social hazards that are most prevalent in South Africa and Nigeria are associated with poverty, and joblessness, and other indicators of poor human development index (HDI). Many informal business operators belong to the lowest rung of society, which is most vulnerable to these social hazards. Thus, tackling the problems of the informal sector from the perspective of open social innovation will trigger social changes that will have a practical impact on the socio-economic lifestyle of informal sector operators and vulnerable people in society.

Inclusive Open Innovation: In [97], a quadruple-helix model conceptual framework for understanding open innovation micro- and macro-dynamics relevant to the context of any developing nation was proposed. The framework was designed to impact social, environmental, economic, cultural, policy, and knowledge sustainability. The informal sector, as the largest employer of labour in most developing countries, must be harnessed for inclusion as one of the beneficiaries of open innovation at the micro and macro levels. As observed in [91], the informal sector is quite receptive to open innovation because:

(i) African micro and small businesses, including the informal sector, are open to innovation practices instead of exclusion, and do engage in it in diverse informal ways;
(ii) These innovative practices are largely motivated by contextual factors such as social ties (friendship, family), need for survival, apprenticeship, and mutual common interest concerns;
(iii) The innovation interactions rely mostly on offline and socially constructed trust and linkages;
(iv) These innovation knowledge transfer practices are informal and semi-formal in nature, with little consideration of legalities, and intellectual property rights.

These characteristics of African informal businesses offers a good template for the respective governments in South Africa and Nigeria to evolve an inclusive model of open innovation that will span the social, environmental, economic, cultural, policy, and knowledge sustainability aspects of their countries. A contextualised open innovation paradigm that is based on the conceptual framework that is proposed in [97] will enhance the productivity of the informal sector, promote semi-formalisation of informal business, and engender open innovation of the market for the benefit of SMEs, start-ups, and big businesses [98]. This will inevitably stimulate quantitative and qualitative economic growth for both South Africa and Nigeria.

5.2. Policy Implications

The policy implications for both South Africa and Nigerian economies can be viewed from perspectives of systems thinking. Through a systemic lens, the SA government's main goal is to formalise the sector for increased accountability and productivity. The heterogeneity of the informal sector points to inconsistencies in policy toward these micro-businesses. Here specifically, DTI/SEDA has to scale up policies and incentives that target the informal sector providers. These must include financial inclusion, solutions to prevailing infrastructural challenges, social protection, medical aid coverage, management skill/human capital development and leveraging of technology. For these to be achieved, substantial investment has to be channelled to the informal sector.

In Nigeria, formalisation can equally be achieved through wage relaxation for informal workers to migrate them to higher wage brackets. Fostering of micro-enterprises, human capital/management skills development, increased training for women, artisans and craftsmen have to be intensified. Relevant government agencies such as SMEDAN/BoI/CBN must be tasked with the sole purpose of funding of these sectors and assisting increased productivity and viability of these micro-enterprises. It is advisable to have effective public–private partnerships to accelerate and enhance reforms in the informal sector.

Informal sector operators should also be encouraged through the provision of training, credit, and business development services to enhance the potential for enhanced growth and productivity. Additionally, in agreement with [38], both countries need to devise more policies that will facilitate the promotion of informal–formal economy linkages and provision of social safety nets for people working in the informal economy since they are more vulnerable to economic shocks than those in the formal sector.

6. Limitation of the Systematic Review

The authors explored Scopus, ResearchGate, and Google Scholar databases, WIEGO and internet-based publications as data collection sources. The findings of this paper were based on the analysis and synthesis of articles from these sources as interpreted by the research team, therefore elements of human error cannot be completely discounted. The focus was also mainly on papers published in the English language, considering that both South Africa and Nigeria are English-speaking countries. The cut-off year of 2013 was used as the inclusion and exclusion criteria because variables (micro and macro) that account for economic growth affecting nominal GDP are constantly changing; thus, we felt that a seven-year window was reasonable. Additionally, 2013 was the year that the Nigerian economy was rebased to include activities in the informal sector [50–52].

7. Conclusions

In this paper, a comparative systematic review of the state of the informal sectors of South Africa and Nigeria has been presented. This was motivated by the need to analyse the conceptual similarities and differences that exist between the informal sectors of these two countries and evaluate their potential to contribute more to economic growth. Based on four research questions that were formulated, and by considering 31 primary studies, we were able to identify the similarity and differential patterns in the pertinent factors that drive informality in these two countries, the challenges of the informal sector, the policy incentives of the governments of South Africa and Nigeria for the informal sector, and the dominant types of informal sector activities. We also analysed the impact of the informal sector on the economic growth of South Africa, and Nigeria, and identified areas where improvements are required to strengthen the informal sectors of the two leading economies in SSA. Notably, we found that due to some age-long structural problems, unemployment and socio-economic inequality will continue to cause a proliferation of informal businesses in these countries. However, although this is not an ideal scenario, tangible steps can be taken to leverage the large number of persons working in the informal sector for economic growth and economic development through the provision of better technology support, infrastructural support, and social support for the informal sector to enhance it. We also advocated for the need for the adoption of the open innovation paradigm as way to advance the development of the informal sectors of South Africa and Nigeria. This will lead to increased productivity of informal business entrepreneurs, which will inevitably stimulate economic growth and socio-economic development in these two countries.

The perception globally is that the informal economy contributes nominally to national GDPs. At the other end of the spectrum is the notion that informal economy acts as an inhibitor to the economic viability of most developing/emerging countries. This is true in instances where the governments concerned fail to understand the drivers to informality, which are reflections of the systemic structural problems in the economy [15]. Attempts that have been made to correlate the output gap to informality in terms of the relationship between GDP and size of the informal sector [41,99]. These reveal contradictory evidence on any correlational trend between GDP and informality. Thus, the growth of informality is not advantageous for economic growth if there are no sufficient policies to harness the informal economy by a country.

Additionally, Ref. [100] posits that research and development expenditures that are usually classified as discretionary costs by the government can stimulate innovation, which can engender diversity of the economy, higher performance, productivity and economic efficiency. Investment in research, technology innovation, and education are vital keys that can help to harness the informal economy for economic growth in South Africa and Nigeria. This is in tandem with the three assumptions of the Romer model [101], which are (i) economic growth is a function of capital accumulation and progress in technology; (ii) market challenges drive private agencies to innovation and advance in technology; and (iii) knowledge of technology acts as a non-rival input. This will lead to enhanced economic growth which will create better opportunities for citizens limiting the proliferation of the informal economy [102].

In the future, as an extension of this study, we shall consider the role of the informal sector on the socio-economic development of common people in South Africa and Nigeria.

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