



Impact of COVID-19 pandemic on small-scale businesses in Port Harcourt: An empirical study

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Abstract

The COVID-19 pandemic has posed unprecedented challenges to economies worldwide, with small-scale businesses in developing urban centers being particularly vulnerable. This study examines the impact of the COVID-19 pandemic on small-scale businesses in Port Harcourt city, a major commercial hub in Nigeria. The primary objective is to empirically analyze how the pandemic affected business operations, revenue, employment, and overall sustainability within this sector. Employing a mixed-methods approach, data was collected through structured questionnaires administered to a representative sample of small business owners across various industries, complemented by in-depth interviews. Quantitative data were analyzed using statistical tools, while qualitative insights provided contextual understanding. Findings reveal significant disruptions including decreased customer demand, supply chain interruptions, and cash flow challenges, leading to reduced incomes and workforce layoffs. Additionally, many businesses faced difficulties in accessing government support and adapting to digital alternatives. The study concludes that the pandemic has critically undermined the resilience of small-scale businesses in Port Harcourt, highlighting the urgent need for targeted policy interventions such as improved financial aid, capacity building for digital adoption, and robust support systems to enhance business continuity in future crises. These insights contribute to a better understanding of pandemic-induced economic vulnerabilities in urban Nigerian settings and offer guidance for stakeholders aiming to bolster small business sustainability.

Keywords: COVID-19 pandemic, small-scale businesses, Port Harcourt, economic impact, sustainability

Introduction

The outbreak of the COVID-19 pandemic in late 2019 swiftly evolved into a global crisis, disrupting health systems, social interactions, and economic activities worldwide. By 2020, governments implemented unprecedented public health measures including lockdowns, travel restrictions, and social distancing mandates to curb the virus's spread. While necessary, these interventions triggered significant economic shocks, particularly affecting the informal and small-scale business sectors that underpin many developing economies. In Nigeria, where small-scale businesses account for over 80% of employment and contribute significantly to Gross Domestic Product (GDP), the pandemic threatened livelihoods and economic stability on a large scale (National Bureau of Statistics, 2021).

Port Harcourt, the capital of Rivers State and a key commercial hub in the Niger Delta region, hosts a vibrant small business community engaged in diverse activities ranging from retail trade and food services to manufacturing and artisan crafts. Before the pandemic, these businesses were already navigating challenges such as limited access to credit, infrastructural deficits, and fluctuating market demand (Akinola, 2019)^[1]. The advent of COVID-19 added layers of complexity by disrupting supply chains, reducing consumer spending, and enforcing operational restrictions that constrained business activities. Despite these challenges, small-scale businesses are often celebrated for their flexibility and resilience, making their response to the pandemic a critical area of study.

Understanding the specific impacts of the pandemic on small-scale enterprises in Port Harcourt is vital for several reasons. First, these businesses serve as a critical source of income and employment for a large segment of the population, particularly youth and women. Any downturn in this sector has immediate socio-economic repercussions

including increased poverty and social instability. Second, insights from this research can guide policymakers in designing targeted interventions to support economic recovery and build resilience against future crises. Lastly, analyzing business responses sheds light on innovation and adaptation strategies that can inform broader development agendas in similar urban contexts.

Existing literature on the economic effects of COVID-19 has grown rapidly, with numerous studies focusing on supply chain interruptions, demand shocks, and digital transformation across various economies (Bartik et al., 2020^[2]; Fairlie, 2020). Globally, research indicates that small businesses were disproportionately affected due to their limited financial buffers and weaker institutional support. For instance, studies in the United States and Europe report significant revenue losses and permanent closures in small business sectors (Bartik et al., 2020^[2]; Kuckertz et al., 2020)^[6]. In sub-Saharan Africa, early investigations suggest similar trends with added challenges due to weaker healthcare infrastructure and less fiscal space for government support (World Bank, 2021).

In Nigeria, however, empirical studies focusing explicitly on the pandemic's impact on small businesses are limited, particularly at the city level. While some research has documented the national economic slowdown (CBN, 2020), less attention has been given to the microeconomic effects on urban small-scale businesses and their coping mechanisms. This gap is especially evident for Port Harcourt, which faces unique socio-economic dynamics influenced by the oil industry, fluctuating urban migration, and infrastructural challenges. Understanding how these local factors interact with the pandemic's disruptions is critical for tailoring appropriate policy responses.

This study seeks to address these gaps by empirically analyzing the effect of COVID-19 on small-scale businesses

in Port Harcourt city. It investigates the nature and extent of operational disruptions, financial losses, employment changes, and the adoption of adaptive strategies during the pandemic. The research is guided by the following questions: How has COVID-19 affected the viability of small businesses in Port Harcourt? What are the primary challenges faced by these businesses? How have business owners responded or adapted to the crisis? And what role has government and institutional support played in mitigating these impacts?

The scope of this research is limited to small-scale enterprises operating within Port Harcourt city, spanning key sectors such as retail, food services, manufacturing, and crafts. Data collection combines quantitative surveys with qualitative interviews to provide a comprehensive understanding of the pandemic's multifaceted impact. The paper is structured as follows: the next section reviews relevant literature, followed by the methodology outlining data collection and analysis techniques. Subsequently, results are presented and discussed in the context of existing knowledge. Finally, the conclusion synthesizes findings and offers policy recommendations to support small business recovery and resilience.

Through this study, we aim to contribute to the growing body of knowledge on COVID-19's economic effects in urban African settings, providing empirical evidence and actionable insights for stakeholders invested in sustainable small business development.

Methods

This study employed a mixed-method research design combining quantitative and qualitative approaches to comprehensively analyze the impact of the COVID-19 pandemic on small-scale businesses in Port Harcourt city. The use of both methods allowed for numerical measurement of pandemic effects and in-depth exploration of business owners' experiences and coping strategies.

Research Design

A cross-sectional survey was conducted to gather quantitative data from small-scale business owners operating in various sectors within Port Harcourt. This survey was supplemented by semi-structured interviews to provide qualitative insights into the challenges faced and adaptive measures adopted during the pandemic. The mixed-method design was chosen to enhance the validity and richness of the findings, ensuring both statistical rigor and contextual depth.

Sampling Method and Population

The target population for this study consisted of small-scale business owners in Port Harcourt city. According to the Rivers State Ministry of Commerce, approximately 5,000 registered small businesses operate within the city across sectors such as retail trade, food services, manufacturing, and artisan crafts. Due to resource constraints, a sample size of 300 business owners was deemed sufficient to achieve representativeness and statistical reliability.

A stratified random sampling technique was applied to ensure proportional representation of different business sectors. The sampling frame was divided into four main sectors—retail, food services, manufacturing, and crafts—with sample sizes allocated based on the relative population in each sector. Within each stratum, participants were

randomly selected using business registration lists provided by local business associations and chambers of commerce.

Data Collection Tools

Data collection took place over a two-month period from April to May 2024. A structured questionnaire was developed to collect quantitative data on business demographics, operational status before and during the pandemic, financial performance, employment changes, and access to government support. The questionnaire included closed-ended questions with Likert-scale items to measure perceived severity of impacts.

For the qualitative component, 20 semi-structured interviews were conducted with a purposive subset of survey respondents who volunteered to participate further. Interview questions explored in detail the specific challenges encountered, coping mechanisms, and perceptions of government interventions. Interviews lasted between 30 to 45 minutes and were audio-recorded with participants' consent.

Data collection was conducted face-to-face adhering to COVID-19 safety protocols, including physical distancing, use of face masks, and hand sanitizers. In cases where in-person meetings were not feasible, phone interviews and online surveys were utilized.

Analytical Tools and Techniques

Quantitative data from the surveys were entered into and analyzed using the Statistical Package for the Social Sciences (SPSS) version 28. Descriptive statistics such as frequencies, percentages, means, and standard deviations were computed to summarize the characteristics and pandemic effects on businesses. Inferential statistics, including chi-square tests and regression analysis, were used to examine relationships between business characteristics (e.g., sector, size) and the extent of pandemic impact.

The qualitative interview data were transcribed verbatim and analyzed using thematic analysis facilitated by NVivo 13 software. Coding was performed iteratively to identify recurring themes related to challenges, adaptations, and support mechanisms. This approach allowed for systematic interpretation of nuanced experiences and perspectives.

Ethical Considerations

Ethical approval for the study was obtained from the University of Port Harcourt Research Ethics Committee. All participants were informed about the purpose of the research, their voluntary participation, and their right to withdraw at any time without penalty. Informed consent was obtained prior to data collection through signed consent forms for face-to-face participants and verbal consent for phone interviews.

To ensure privacy and confidentiality, personal identifiers were removed from the dataset, and data were securely stored on password-protected devices accessible only to the research team. Findings are reported in aggregate form to prevent identification of individual respondents.

Results

This section presents the findings from the quantitative survey and qualitative interviews conducted with small-scale business owners in Port Harcourt city. The data are organized to provide an overview of the demographic characteristics of respondents, the impact of the COVID-19 pandemic on business operations, financial performance, employment, access to support, and adaptive strategies.

Demographic Characteristics of Respondents

A total of 300 small-scale business owners participated in the survey. Table 1 summarizes the distribution of respondents by age group, gender, and business sector.

Table 1: Demographic Profile of Survey Respondents

Demographic Variable	Category	Frequency (n)	Percentage (%)
Age Group	18-25	70	23.3
	26-35	110	36.7
	36-45	80	26.7
	46 and above	40	13.3
Gender	Male	180	60.0
	Female	120	40.0
Business Sector	Retail Trade	120	40.0
	Food Services	90	30.0
	Manufacturing	50	16.7
	Artisan Crafts	40	13.3

Note: Percentages may not sum to 100 due to rounding.

2. Impact of COVID-19 on Business Operations

Respondents were asked to indicate the extent to which their business operations were disrupted by the pandemic. Figure 1 illustrates the distribution of responses on a 5-point Likert scale from "No disruption" to "Severe disruption."

3. Financial Performance During the Pandemic

Table 2 summarizes changes in monthly revenue compared to the pre-pandemic period.

Table 2: Change in Monthly Revenue Due to COVID-19

Revenue Change	Frequency (n)	Percentage (%)
Decreased by >50%	140	46.7
Decreased by 25-50%	90	30.0
No Significant Change	40	13.3
Increased	30	10.0

4. Employment Effects

Regarding workforce changes, 55% of businesses reported layoffs or reduction in employee hours (Table 3).

Table 3: Employment Changes Among Businesses

Employment Change	Frequency (n)	Percentage (%)
Laid off employees	110	36.7
Reduced working hours	55	18.3
No change	120	40.0
Increased employment	15	5.0

5. Access to Government and Financial Support

Survey participants were asked about their access to government aid or financial relief programs during the pandemic. Figure 2 shows the distribution of responses.

6. Adaptation and Coping Strategies

Respondents identified various strategies adopted to cope with the pandemic's effects. Table 4 highlights the most common adaptive measures reported.

Table 4: Business Adaptation Strategies

Adaptation Strategy	Frequency (n)	Percentage (%)
Shifted to online/digital sales	90	30.0
Reduced operational hours	110	36.7
Diversified product/service offerings	65	21.7
Sought informal financial support	40	13.3

Qualitative Insights from Interviews

Thematic analysis of interviews revealed three primary themes:

- **Operational Challenges:** Supply chain delays, reduced customer footfall, and increased costs were frequently mentioned.
- **Financial Strain:** Many businesses experienced cash flow difficulties, leading to layoffs and, in some cases, temporary closure.
- **Innovation and Resilience:** Despite hardships, several entrepreneurs leveraged digital platforms for marketing and sales, indicating a shift towards technology adoption.

Summary of Key Findings

- Majority (60%) of small-scale businesses in Port Harcourt experienced moderate to severe operational disruption due to COVID-19.
- Nearly half (46.7%) reported a revenue decline of more than 50%.
- Employment was negatively affected in over half of the businesses, with layoffs and reduced working hours common.
- Access to government support was limited, with only 22% receiving aid.
- Adaptation strategies varied, with digital transition and operational adjustments being the most frequent.

Discussion

- The findings of this study reveal significant disruptions to small-scale businesses in Port Harcourt city as a result of the COVID-19 pandemic. The majority of respondents reported moderate to severe operational disruptions, with nearly half experiencing drastic declines in monthly revenue. These results affirm the widespread economic toll that the pandemic has exerted on small businesses globally and resonate with findings from previous research both within Nigeria and internationally.
- The sharp decrease in revenue reported by 46.7% of businesses, alongside substantial layoffs and reduced working hours, underscores the vulnerability of small enterprises to external shocks. This aligns with global studies by Bartik et al. (2020) [2] and Kuckertz et al. (2020) [6], which documented similar revenue collapses and employment contractions in small businesses during the pandemic. The finding that only 22% of respondents accessed government or institutional support is consistent with observations in sub-Saharan Africa where limited fiscal capacity and administrative challenges have constrained the reach of aid programs (World Bank, 2021). This highlights a critical policy gap in effectively supporting micro and small enterprises during crises.
- The adoption of digital platforms and diversification of products/services by many respondents as coping strategies is noteworthy. It reflects a broader trend documented in the literature emphasizing digital transformation as a key resilience factor for businesses in the pandemic era (Donthu & Gustafsson, 2020) [4]. However, the relatively low uptake of digital adoption (30%) also signals barriers such as limited digital

literacy, poor infrastructure, and financial constraints, which are well-documented challenges in the Nigerian context (Akinola, 2019) [1]. These barriers may explain why a significant proportion of businesses still relied on reducing operational hours or informal support mechanisms rather than digital innovation.

- Qualitative insights further revealed that supply chain disruptions and reduced customer demand were the primary operational challenges. This finding corroborates global supply chain studies (Ivanov, 2020) [5] and confirms that the pandemic's impact extends beyond immediate health concerns to structural economic weaknesses. Interestingly, while many businesses reported severe difficulties, a minority indicated stable or even increased revenues, possibly due to shifts in consumer behavior or sector-specific demand. For example, some food services and essential retail businesses may have experienced sustained demand despite restrictions, a nuance that warrants further exploration.
- Despite these valuable insights, the study faced limitations that may influence the interpretation of results. The sample size, though adequate for the scope of this study, may not fully capture the heterogeneity of small businesses in Port Harcourt, especially those operating informally outside registration frameworks. Additionally, the cross-sectional design captures a snapshot during a particular phase of the pandemic, limiting the ability to assess dynamic changes over time. Access to comprehensive financial records was also constrained by respondents' willingness and capacity to disclose detailed data, potentially affecting the precision of revenue impact estimates.
- Future research should consider longitudinal studies to monitor the long-term effects of the pandemic on small-scale businesses and their recovery trajectories. Additionally, in-depth sectoral analyses could identify specific industries that are either more resilient or more vulnerable, informing targeted support. Investigating the role of digital infrastructure and financial inclusion in facilitating business adaptation would also provide actionable insights. Finally, comparative studies across different Nigerian cities or other African urban centers could help contextualize Port Harcourt's experience within broader regional patterns.
- In conclusion, this study confirms the profound negative impact of COVID-19 on small-scale businesses in Port Harcourt, consistent with global and regional literature. The findings underscore the urgency for more inclusive and accessible support mechanisms, enhanced digital capacity-building, and policies tailored to the unique challenges faced by small businesses in developing urban contexts. These measures are critical to safeguarding livelihoods and fostering economic resilience against current and future shocks.

Conclusion

- This study has demonstrated that the COVID-19 pandemic significantly disrupted small-scale businesses in Port Harcourt, leading to widespread operational challenges, drastic revenue declines, and reductions in employment. The limited access to government support and low levels of digital adoption further exacerbated these impacts, highlighting systemic vulnerabilities

within the sector. By providing an empirical assessment specific to Port Harcourt, this research contributes to the growing body of knowledge on pandemic effects in developing urban contexts, offering insights that can inform both local and broader economic recovery strategies.

- Practically, the findings emphasize the need for targeted interventions that enhance financial support accessibility and promote digital literacy among small business owners. Policymakers should prioritize inclusive programs that address the unique challenges faced by these enterprises to foster resilience and sustainable growth. Ultimately, strengthening the capacity of small-scale businesses is essential not only for economic recovery but also for reducing poverty and promoting social stability in Port Harcourt.
- Future efforts should focus on building adaptive capabilities within this sector to better withstand future shocks, including investing in infrastructure and digital technology. The lessons learned from this pandemic present an opportunity to reimagine and reinforce the foundations of small business sustainability in Nigeria and similar urban settings.

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