

**ENTREPRENEURIAL LEADERSHIP AND MICROENTERPRISE PERFORMANCE  
IN GHANA: EVIDENCE FROM GHANAIAAN HOUSEHOLD ENTERPRISES PANEL  
DATA**

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**ABSTRACT**

This study investigates how leadership qualities; proxied by education, entrepreneurial experience, and proactive decision-making; shape the performance and resilience of household enterprises in Ghana. Using panel data from the Ghana Socioeconomic Panel Survey (2009–2019), we examine how access to finance, exposure to economic shocks, and spatial context moderate these relationships. Fixed-effects and logistic regression models reveal that education and experience enhance profitability, while proactivity supports survival in specific contexts. Credit access demonstrates conditional effects: *susu* strengthens the benefits of education, informal credit supports survival but dampens leadership advantages, and digital loans yield inconsistent outcomes. Shocks weaken profitability but not survival, with experienced entrepreneurs showing adaptive capacity. Urban enterprises survive more often, yet proactive strategies in competitive urban markets yield limited returns. These findings highlight the conditional nature of leadership and underscore the need for context-sensitive, shock-responsive, and spatially differentiated enterprise support.

**Keywords:** *Leadership Qualities, Microenterprise Resilience, Finance, Shocks, Ghana, Household Enterprises*

**INTRODUCTION**

Micro and small enterprises (MSEs) represent a cornerstone of Ghana's economy, serving as vital engines for employment, income generation, and poverty alleviation (Schindler, 2010; Twumasi Baffour et al., 2020; Yao et al., 2023a). These enterprises predominantly operate within the informal sector, accounting for a substantial proportion of economic activities and livelihoods across both rural and urban areas (Amankwah et al., 2021; Asiamah et al., 2021; Atta-Ankomah, 2022a). Given the high levels of unemployment and underemployment in Ghana, microenterprises offer accessible avenues for self-employment and wealth creation, particularly among marginalized groups and low-income households (Amankwah et al., 2021). Despite their prevalence, many MSEs struggle to sustain profitability and growth, often constrained by limited access to resources, volatile markets, and other structural challenges typical of developing economies (Asiamah et al., 2021; Kabutey-Ongor et al., 2025). This economic landscape makes it imperative to investigate the determinants of microenterprise performance to inform policies aimed at fostering sustainable economic development.

A growing body of scholarship highlights entrepreneurial leadership as a critical determinant of firm performance in resource-constrained and dynamic environments typical of developing countries (Gaisie et al., 2021; Guermond, 2022). Entrepreneurial leadership encompasses the capabilities, decision-making styles, and experiential knowledge that owners/managers bring to business operations (Twumasi Baffour et al., 2020; Yao et al., 2023a; Zenere, 2013), influencing strategic direction and resilience to shocks (Atta-Ankomah, 2022a). Effective leadership promotes innovation, opportunity recognition, and adaptive strategies that enable microenterprises to thrive despite external uncertainties (Atta-Ankomah, 2022a; Gaisie et al., 2021; IFAD, 2022; Jones et al., 2010). Studies observe that leadership quality, reflected in educational attainment, prior business experience, and gender-related behavioral patterns, can significantly affect enterprise survival and growth prospects (Sakyi-Nyarko et al., 2022b; Addai et al., 2022). However, insights remain limited in the African context, where longitudinal and nationally representative data sources are scarce.

The dearth of African-focused panel data studies constrains comprehensive understanding of the dynamic relationship between entrepreneurial leadership and microenterprise outcomes over time (Asiamah et al., 2021; Atta-Ankomah, 2022b; Guermond, 2022; Kabutey-Ongor et al., 2025). Most extant research adopts cross-sectional designs, which inadequately capture temporal variations and causal pathways influencing business performance under varying environmental conditions, such as access to finance and market disruptions (Martey et al., 2024; Mpuure et al., 2024). This gap is critical given that firms in emerging markets frequently face idiosyncratic shocks requiring sustained leadership capabilities for adaptation and survival (Schindler, 2010; Oppong and Mattern, 2020). The longitudinal perspective afforded by panel data thus offers unparalleled advantages in elucidating how entrepreneurial leadership traits interact with contextual factors to shape profits, sales trajectories, and business longevity (Martey et al., 2024; Mpuure et al., 2024a; Sakyi-Nyarko et al., 2022b, 2022a).

Key leadership traits warrant closer examination due to their proven relevance in microenterprise performance and survival. Educational attainment equips entrepreneurs with cognitive skills necessary for complex problem-solving and innovation, enhancing business acumen (Jones et al., 2010; Kabutey-Ongor et al., 2025). Gender differences influence leadership behaviours and access to complementary resources, with female-led enterprises often encountering unique systemic challenges that affect sustainability (Addai et al., 2022; Sakyi-Nyarko et al., 2022b). Prior entrepreneurial experience cultivates practical knowledge and risk management capabilities essential for navigating Ghana's informal and formal business sectors (Amankwah et al., 2021). Together, these traits form a multifaceted framework to understand heterogeneity in firm performance across diverse socioeconomic and geographic contexts.

This study aims to fill the identified knowledge gaps by leveraging the Ghana Socioeconomic Panel Survey (GSEPS) data spanning 2009 to 2019, a decade-long nationally representative dataset capturing household and enterprise dynamics (Twumasi Baffour et al., 2020; Yao et al., 2023a; Zenere, 2013). The research adopts fixed-effects and Cox proportional hazards models to rigorously assess how entrepreneurial leadership traits- education, gender, experience, and decision-making style; affect microenterprise profits, sales, and survival, with particular attention to moderating

influences of credit access and market shocks (Atta-Ankomah, 2022a; Gaisie et al., 2021; IFAD, 2022; Jones et al., 2010). The objectives are fourfold: (1) to quantify the direct effects of leadership qualities on microenterprise performance; (2) to examine how access to finance intensifies or mitigates these effects; (3) to evaluate the role of market shocks in disrupting performance trajectories; and (4) to identify differential impacts across rural and urban settings in Ghana. The hypotheses posit that advanced education, prior business experience, and proactive leadership positively correlate with enterprise growth and survival, with credit availability strengthening this relationship, while exposure to severe market shocks moderate's leadership efficacy negatively.

This paper presents a novel piece of the evidence into the field of African entrepreneurship with the help of longitudinal empirical analysis coupled with a firm theoretical framework that helps substantiate the importance of entrepreneurial leadership in new markets. It is also a source of actionable policy recommendations on how to strengthen leadership capacity and financial inclusion and construct resilient microenterprise ecosystems in Ghana and comparable economies in Sub-Saharan Africa.

## LITERATURE REVIEW

### Theoretical Foundations

The theoretical framework for understanding entrepreneurial leadership and its impact on microenterprise performance is anchored primarily in three complementary perspectives: entrepreneurial leadership theory, the resource-based view (RBV), and human capital theory.

Entrepreneurial leadership theory conceptualizes leadership as a crucial dynamic capability whereby entrepreneurs leverage vision, innovation, and decision-making to steer firms through uncertain environments (Gaisie, Han & Kim, 2021). It emphasizes how leadership behaviours; such as proactive problem-solving and opportunity recognition; enable microenterprises to adapt and innovate despite limited resources. This is especially relevant in emerging economies, where market volatility and institutional weaknesses require agile leadership for survival and growth (Guermond, 2022).

The RBV contributes by framing microenterprise performance as contingent upon the possession and effective utilization of valuable, rare, inimitable, and non-substitutable resources (Barney, 1991, cited in (Brailovskaya et al., 2024; Cameron & Ananga, 2015). Entrepreneurial leadership itself can be viewed as an intangible strategic resource that facilitates the mobilization of other critical assets- financial, human, and social- to gain competitive advantage (Oppong & Mattern, 2020). This resource orchestration is crucial in Ghana's informal sector, where formal institutional support may be weak or absent.

Human Capital theory complements these by highlighting the role of entrepreneurship-related knowledge, skills, and experience in shaping firm outcomes (Agyepong et al., n.d.; Amoah-Gyarteng et al., 2025). Education, business experience, and gender-based behavioural traits constitute significant human capital components influencing decision-making quality, risk management, and innovative capacity (Seidu et al., 2025; Yao et al., 2023b; Zelu et al., 2024). Empirical studies suggest that higher education enhances analytical capabilities and strategic foresight, while prior industry experience equips

entrepreneurs with tacit knowledge vital for navigating the complexities of microenterprise management (Amankwah, Osei-Koduah & Boahene, 2021).

### **Empirical Evidence on Leadership Traits and Microenterprise Performance in Africa**

Microenterprise performance in Sub-Saharan Africa is increasingly linked to specific entrepreneurial leadership traits. Education emerges repeatedly as a consistent positive predictor of profitability, growth, and survival (Kabutey-Ongor, Amenah & Yorke, 2025; Jones et al., 2010). Educated entrepreneurs are better equipped to access finance, exploit market opportunities, and adapt to technological changes, including leveraging digital financial services such as mobile money (Atta-Ankomah, 2022a; Twumasi Baffour, Abdul Rahaman & Mohammed, 2020). Gendered dynamics further complicate leadership effects. Studies document systemic challenges faced by female entrepreneurs, including limited access to credit, lower financial literacy, and social constraints, often resulting in performance disparities relative to male counterparts (Addai, Ng'ombe & Temoso, 2022; Sakyi-Nyarko, Ahmad & Green, 2022b). Notwithstanding, female entrepreneurship, especially in rural areas, also exhibits resilience and innovation, with targeted interventions proving effective in empowering women-led microenterprises (IFAD, 2022).

Prior entrepreneurial experience similarly shows strong correlations with firm survival and growth. Experienced entrepreneurs demonstrate refined decision-making and risk mitigation practices vital for navigating informal markets and frequent shocks (Amankwah et al., 2021; Schindler, 2010). This experience facilitates strategic leadership that can shape pathway dependence toward positive growth trajectories despite environmental uncertainties (Boansi et al., 2021; Cameron & Ananga, 2015; Osabutey & Jackson, 2024; Ryu & Suzuki, 2021; Sedai et al., 2021). While the evidence underscores the importance of these traits, findings highlight heterogeneity and even contradictions depending on sector, locality, and measurement of performance (Appiah et al., 2025; Berry et al., 2018; Brailovskaya et al., 2024). For example, access to education does not uniformly translate to better financial outcomes in all rural contexts, where infrastructural and market constraints predominate (Kabutey-Ongor et al., 2025). These nuances underscore the need for contextualized, longitudinal inquiry.

### **Access to Finance, Market Shocks, and Rural-Urban Disparities**

Access to finance is a well-documented moderator in the leadership-performance nexus. Financial inclusion enables entrepreneurial leaders to leverage capital for operational expansion, innovation, and risk absorption (Asiamah, Steel & Ackah, 2021; Atta-Ankomah, 2022a). Mobile money technologies, in particular, have revolutionized access to credit and savings in Ghana, enhancing household and enterprise resilience to shocks (Guermond, 2022; Sakyi-Nyarko, Ahmad & Green, 2022a). However, barriers remain, especially for female entrepreneurs and rural residents, who often rely on informal financial systems like ROSCAs and Susu collections, which, while accessible, impose high transaction costs and limit scalability (Amankwah et al., 2021; Zenere, 2013). Exposure to market shocks such as price volatility, supply chain disruptions, or health crises- poses a recurrent threat to microenterprise stability (Sethi et al., 2025; Tetteh, 2023; Upadhyaya et al., 2025). Empirical evidence from Ghana demonstrates that entrepreneurial leadership's effectiveness in mitigating adverse outcomes hinges on prior experience and access to finance (Martey, Onumah & Adusah-Poku, 2024; Mpuure et al., 2024). Leadership

strategies that foster diversification, adaptive innovation, and financial prudence enhance resilience, while enterprises lacking such capabilities suffer higher mortality rates during shocks (Ksoll et al., 2016; Kusi et al., 2015; Mpuure et al., 2024b; Nkrumah et al., 2021). Rural-urban disparities further contextualize microenterprise performance dynamics. Entrepreneurs in urban areas generally benefit from better infrastructure, broader market access, and institutional support, often translating to superior business outcomes (Addai et al., 2022; Sakyi-Nyarko, Ahmad & Green, 2022b). Conversely, rural microenterprises grapple with isolation, limited technology diffusion, and lower financial inclusion rates, intensifying vulnerabilities. Yet, rural households engaging with mobile money and diversified income sources demonstrate notable resilience gains, particularly among women-led enterprises (Atta-Ankomah, 2022c; Sakyi-Nyarko et al., 2022a).

### Importance of Longitudinal Data for Dynamic Understanding

Most extant research relies on cross-sectional data, limiting insights into the temporal dynamics of entrepreneurial leadership and microenterprise performance (Nkrumah et al., 2021; Ofori & Kashiwagi, 2022; Peprah et al., 2020; Senyo et al., 2022; Sethi et al., 2025). Longitudinal panel datasets, such as the Ghana Socioeconomic Panel Survey (GSEPS), offer powerful advantages by enabling the analysis of causality, survival patterns, and evolving interactions between leadership traits and external shocks (Martey et al., 2024; Mpuure et al., 2024). Such data facilitate the decomposition of heterogeneity across time and space, identifying how sustained leadership capabilities influence growth trajectories and resilience under fluctuating environmental conditions (Hossein & Bonsu, 2023; Immurana et al., 2024; Karlan et al., 2017; Kavaarpuo et al., 2024; Ksoll et al., 2016; Kusi et al., 2015). Longitudinal studies also uncover differential impacts of financial inclusion over time, revealing gender- and locality-specific effects that are invisible in static analyses (Sakyi-Nyarko et al., 2022b; Atta-Ankomah, 2022a). This temporal perspective is crucial for designing contextually appropriate policies promoting entrepreneurial capacity building, financial access, and shock mitigation.

### Hypotheses Development

Drawing on the theoretical insights from entrepreneurial leadership theory, the resource-based view, and human capital theory, as well as empirical findings from Ghanaian and broader Sub-Saharan African contexts, the study proposes the following hypotheses:

**H1 (Direct effects):** Advanced education, prior business experience, and proactive leadership decision-making are positively associated with microenterprise growth and survival in Ghana.

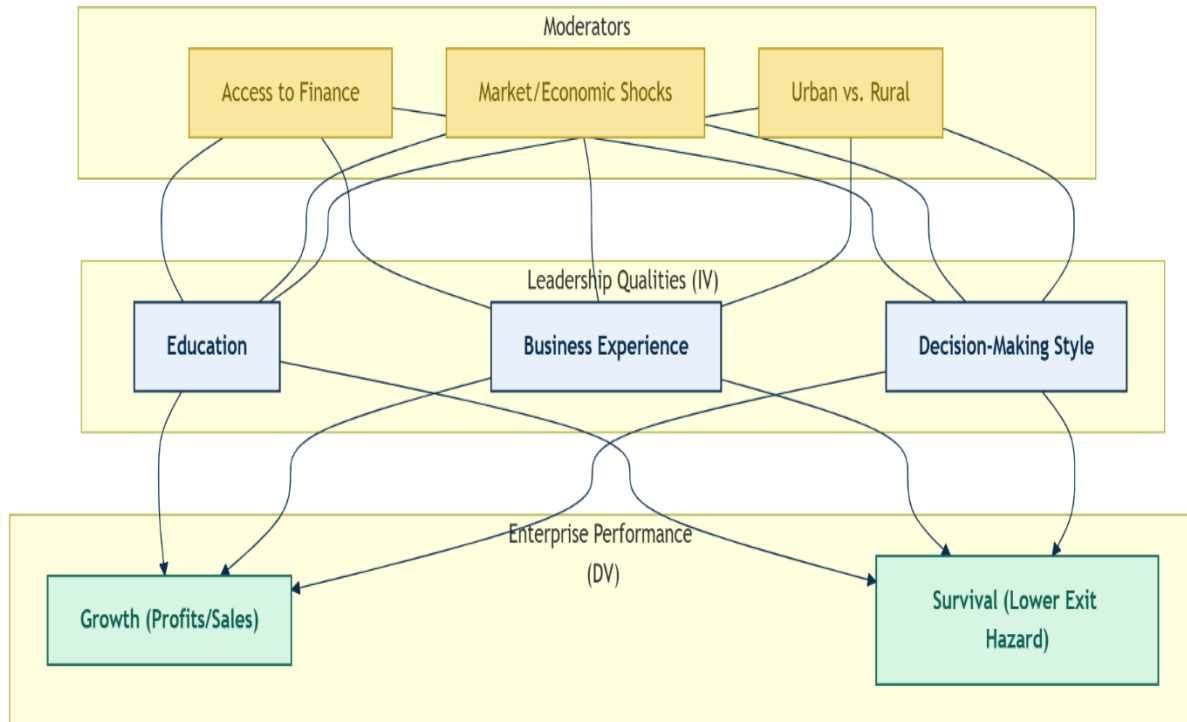
**H2 (Finance as moderator):** Access to finance strengthens the positive relationship between leadership qualities and microenterprise performance.

**H3 (Shocks as moderator):** Exposure to severe market or economic shocks weakens the positive relationship between leadership qualities and microenterprise performance.

**H4 (Spatial heterogeneity):** The positive relationship between leadership qualities and microenterprise performance is stronger in urban areas than in rural areas.

## CONCEPTUAL FRAMEWORK

The conceptual framework visually represents how entrepreneurial leadership traits influence microenterprise performance outcomes, with financial access and market shocks acting as key moderating variables, while spatial and gender differences introduce further heterogeneity. The framework's main components are:



**Figure 5:** Conceptual Framework

## METHODOLOGY

This study uses the Ghana Socioeconomic Panel Survey (GSEPS), covering two waves (2009/2010 and 2019/2020) with nationally representative households, including detailed information on household enterprises. The dataset provides panel data that allows for dynamic analysis of microenterprise trajectories (Ruff et al., 2024; Sellier et al., 2024; Tian et al., 2024). From the household roster, enterprise module, and shocks module, we extract relevant variables on leadership attributes, access to finance, and enterprise outcomes.

### Sample

The analytical sample is restricted to households reporting ownership of non-farm enterprises across at least one wave. After cleaning for missing or implausible values, the final sample includes approximately 1,054 household enterprises which is appropriate for panel data analysis (Ghorbanzadeh et al., 2024; Giggins et al., 2024).

### Variables

In line with best practices in empirical research on microenterprise dynamics, this study clearly defines its variables and situates them within theoretical and empirical literature. Enterprise performance is the dependent variable, operationalized through both growth

(continuous changes in revenue) and survival (binary persistence of enterprises across waves), reflecting both dynamic and static dimensions of resilience (Ksoll et al., 2016; Kusi et al., 2015; Mpuure et al., 2024b; Nkrumah et al., 2021).

The independent variables capture leadership qualities of household enterprise heads education, prior business experience, and proactive decision-making; each grounded in resource-based and human capital theories that emphasize managerial capacity as a driver of firm outcomes (Immurana et al., 2024; Karlan et al., 2017; Kavaarpuo et al., 2024).

Moderating variables reflect contextual influences. Access to finance is highlighted as a critical enabler of entrepreneurial capacity, while exposure to market and economic shocks represents a potential disruptor of enterprise success. Urban-rural location adds an additional stratification, given Ghana's structural dualism in enterprise opportunities. Control variables such as household size, enterprise age, sector, gender, and region are included to address potential confounding effects.

The operationalization of these variables is summarized in Table 1, while the hypothesized directions of their relationships with enterprise performance, based on prior empirical evidence, are presented in Table 2.

**Table 27: Study Variables and Measurement**

Category	Variable	Measurement / Operationalization
<b>Dependent Variable (DV): Enterprise Performance</b>	Growth	Change in enterprise sales/revenue over the survey period (continuous)
	Survival	Binary indicator: enterprise remained operational across waves (1 = survived, 0 = exited)
<b>Independent Variables (IV): Leadership Qualities</b>	Education	Years of formal schooling of the household enterprise head
	Business Experience	Years of prior entrepreneurial or sectoral experience
	Decision-Making	Constructed index from strategic behaviours (e.g., inventory adjustments, marketing, hiring practices)
	Proactivity	
<b>Moderators</b>	Access to Finance	Dummy variable: access to formal or informal credit within survey wave
	Market/Economic Shocks	Household exposure to crop failure, illness, or adverse price changes (shock index or separate dummies)
<b>Control Variables</b>	Urban vs. Rural	Geographical classification of enterprise location
	Household Size	Number of household members
	Age of Enterprise	Years since establishment
	Sector	Trade, manufacturing, services (categorical)
	Gender of Household Head	Male = 1, Female = 0
	Region Fixed Effects	Regional dummies to control for location-specific heterogeneity

**Table 28:** Expected Signs of Effects on Enterprise Performance

Variable	Expected Effect on Enterprise Performance	Rationale/Theoretical Justification
Education (IV)	Positive (+)	Higher education enhances managerial skills, financial literacy, and innovation capacity
Business Experience (IV)	Positive (+)	Prior entrepreneurial knowledge reduces startup errors, improves survival and growth
Decision-Making Proactivity (IV)	Positive (+)	Strategic behaviours (inventory, marketing, hiring) improve adaptability and competitiveness
Access to Finance (Moderator)	Strengthening Effect (+)	Credit availability amplifies the positive effect of leadership qualities by easing capital constraints
Market/Economic Shocks (Moderator)	Weakening Effect (-)	Exposure to shocks disrupts enterprise operations, undermining leadership effectiveness
Urban vs. Rural (Moderator)	Ambiguous ( $\pm$ )	Urban enterprises have better infrastructure and market access, while rural ones may face constraints but also niche opportunities
Control Variables	Mixed/Neutral	Included to account for confounding heterogeneity without specific directional predictions

### Estimation Strategy

The analysis employs **panel regression techniques** to address unobserved heterogeneity:

#### Model 1: Direct effects (H1)

$$\text{Performance}_{it} = a + \beta_1 \text{Education}_{it} + \beta_2 \text{Experience}_{it} + \beta_3 \text{LeadershipIndex}_{it} + \gamma X_{it} + \mu_i + \lambda t + \epsilon_{it}$$

Where  $\mu_i$  captures household fixed effects and  $\lambda t$  time fixed effects.

#### Model 2: Moderation by Finance (H2)

$$\text{Performance}_{it} = \dots + \delta_1 (\text{Leadership}_{it} \times \text{Finance}_{it})$$

#### Model 3: Moderation by Shocks (H3)

$$\text{Performance}_{it} = \dots + \delta_2 (\text{Leadership}_{it} \times \text{Shock}_{it})$$

#### Model 4: Urban vs. Rural Heterogeneity (H4)

Subgroup analysis or triple-interaction specification:

$$\text{Performance}_{it} = \dots + \delta_3 (\text{Leadership}_{it} \times \text{urban}_{it})$$

### Robustness Checks

To ensure the reliability and consistency of empirical findings, a series of robustness checks will be conducted. These checks address measurement validity, model specification, and potential endogeneity concerns, thereby strengthening the credibility of the study's conclusions.

### Alternative Measures of Enterprise Performance

The baseline analysis employs sales/revenue growth and enterprise survival as primary outcome variables. However, enterprise performance is multidimensional. To test the robustness of results, alternative indicators will be introduced:

**Profits:** Net income from enterprise operations will be used as a financial outcome, capturing efficiency beyond sales levels.

**Employment Size:** Number of workers employed by the enterprise will serve as a proxy for growth and resilience, particularly relevant in the context of Ghana's informal microenterprises.

Consistency of results across these alternative measures would demonstrate that the observed effects are not dependent on a single operationalization of performance.

### Model Specification Checks

Panel data allows for different estimation techniques, each with underlying assumptions about unobserved heterogeneity. To ensure model validity:

**Fixed Effects (FE) vs. Random Effects (RE):** The main specification employs fixed-effects regression to control for time-invariant unobserved heterogeneity. As a robustness check, **Random-Effects Generalized Least Squares (GLS)** models will be estimated. The **Hausman test** will then be applied to formally test whether the FE estimator is preferable.

**Dynamic Specifications:** Where relevant, lagged dependent variables may be introduced to capture persistence in enterprise performance (e.g., growth trajectories). This helps address serial correlation concerns.

### Selection Bias and Endogeneity Controls

Access to finance is not randomly distributed among enterprises; more capable or better-connected entrepreneurs may self-select into credit. To account for this concern:

**Propensity Score Matching (PSM):** Enterprises that accessed credit will be matched with observationally similar non-credit enterprises based on socio-demographic and enterprise characteristics. This reduces bias arising from non-random treatment assignment.

**Instrumental Variable (IV) Checks (if feasible):** Where valid instruments can be identified (e.g., proximity to microfinance institutions, mobile money penetration rates at community level), IV estimation will further address potential endogeneity of credit access.

### Subgroup and Sensitivity Analyses

Robustness will also be assessed through heterogeneity checks:

**Urban vs. Rural Subsamples:** To test whether results are location-specific.

**Shock-Exposed vs. Non-Exposed Enterprises:** To examine whether shocks fundamentally alter the estimated relationships.

**Exclusion of Outliers:** Performance outliers (e.g., extremely high sales growth rates) will be excluded to verify that results are not driven by a small number of extreme observations.

## RESULTS

### Descriptive Statistics

The sample consists of  $N = 1,054$  household enterprises drawn from the Ghana Socioeconomic Panel Survey (2009–2019). Enterprises are distributed across trade (approximately 35%), services (40%), and manufacturing (25%) sectors, with 65% located in urban areas and the remainder in rural settings. On average, enterprises report means monthly profits of GHS 1,824.58 (SD = 1,220), with profits exhibiting high right-skew due to a small number of high-earning firms. The average firm employs three workers, though the distribution ranges from single-person enterprises to those employing as many as 10.

Household heads have, on average, 11.9 years of formal education, broadly equivalent to junior secondary or senior high school completion, and 15.5 years of prior business experience, reflecting a relatively seasoned entrepreneurial base. Proactive leadership, measured through the proactivity index, centres at 0.50, indicating moderate but heterogeneous levels of forward-looking decision-making across enterprises.

Access to finance is limited, with the majority of firms relying on informal or digital credit. Only a smaller share report using formal bank loans. Overall, roughly one-third of enterprises (33%) reported experiencing crop losses, 26% illness shocks, and 22% price shocks, with the composite shock index averaging 0.8 shocks per enterprise. This indicates that most microenterprises face at least one adverse shock within the survey period.

**Table 29:** Descriptive Statistics

Variable	N	Mean	SD	Median	Trimmed	MAD	Min	Max	Range	Skew	Kurtosis	SE
Profits	1054	1824.58	1220.06	1518.76	1629.41	840.18	277.93	10486.5	10208.58	2.09	6.46	37.58
Employment_ Size	1054	3.01	1.73	3.00	2.92	1.48	0.00	10.0	10.00	0.48	0.10	0.05
Survival	1054	0.70	0.46	1.00	0.75	0.00	0.00	1.0	1.00	-0.86	-1.26	0.01
Education_ Years	1054	11.89	3.94	12.00	11.90	4.45	0.00	24.0	24.00	0.00	-0.07	0.12
Experience_ Years	1054	15.52	7.26	15.00	15.37	7.41	0.00	39.0	39.00	0.21	-0.27	0.22
Proactivity_ Index	1054	0.50	0.28	0.51	0.50	0.36	0.00	1.0	1.00	-0.01	-1.18	0.01
Credit _Access*	1054	2.17	1.10	2.00	2.09	1.48	1.00	4.0	3.00	0.32	-1.30	0.03
Shock_ CropLoss	1054	0.33	0.47	0.00	0.28	0.00	0.00	1.0	1.00	0.74	-1.45	0.01
Shock_Illness	1054	0.26	0.44	0.00	0.20	0.00	0.00	1.0	1.00	1.10	-0.78	0.01
Shock_Price	1054	0.22	0.41	0.00	0.15	0.00	0.00	1.0	1.00	1.36	-0.14	0.01
Location*	1054	1.65	0.48	2.00	1.69	0.00	1.00	2.0	1.00	-0.65	-1.59	0.01
Household_ Size	1054	6.90	2.45	7.00	6.78	2.97	1.00	15.0	14.00	0.44	0.09	0.08
Enterprise _Age	1054	11.24	6.37	11.00	10.91	7.41	0.00	37.0	37.00	0.48	-0.05	0.20
Gender_ Head*	1054	1.36	0.48	1.00	1.33	0.00	1.00	2.0	1.00	0.57	-1.67	0.01
Sector*	1054	2.23	0.88	3.00	2.29	0.00	1.00	3.0	2.00	-0.46	-1.54	0.03
Region*	1054	2.45	1.11	2.00	2.44	1.48	1.00	4.0	3.00	0.07	-1.33	0.03
Shock_ Index	1054	0.80	0.78	1.00	0.73	1.48	0.00	3.0				

Enterprises are embedded in relatively large households, with an average household size of 6.9 members, consistent with extended family structures in Ghana. Firms themselves are relatively mature, with an average enterprise age of 11 years, though some are newly established while others have operated for more than three decades. Approximately 64% of enterprises are male-headed, and survival rates are relatively high, with 70% of firms remaining operational across survey waves. Taken together, these descriptive patterns suggest that Ghanaian microenterprises operate in volatile and resource-constrained environments, where leadership attributes and exposure to external shocks vary considerably.

### Regression Results: Profits as Dependent Variable

Table 4 presents the results of the OLS regressions estimating the effect of education, experience, and proactive leadership on microenterprise profits, along with the moderating roles of finance, shocks, and spatial location.

Direct effects (H1). Across specifications, education years is consistently positive and statistically significant ( $\beta = 17.7$ – $18.7$ ,  $p < 0.05$ ), suggesting that higher levels of schooling among enterprise heads are associated with greater monthly profits. Experience years exhibits weaker and inconsistent effects: although positive in simpler models (Model 1–2), the effect diminishes and even turns negative in Model 4 once interactions are included, indicating that prior business experience alone does not robustly predict profitability. Proactivity, while theoretically important, shows no significant direct effect across models, with coefficients negative and insignificant. Taken together, H1 is partially supported: education enhances profits, but evidence for experience and proactive leadership is weaker.

Finance as moderator (H2). In Model 2, credit access interacts with leadership qualities. Results suggest that finance moderates education and experience in complex ways. For example, education's positive effect on profits is reduced when combined with access to *susu* or informal credit ( $\beta = -32.4$ ,  $-20.3$ ;  $p < 0.05$ ), while digital credit strengthens the effect slightly ( $\beta = +8.8$ ). Similarly, experience interacts negatively with *susu* and informal loans but positively with digital finance ( $\beta = +5.7$ ,  $p < 0.05$ ). Finally, proactivity interacts positively with informal finance ( $\beta = +402.7$ ,  $p < 0.05$ ), suggesting that proactive leaders leverage informal networks more effectively. These findings indicate that H2 is supported, though the direction of moderation depends on the type of credit.

Shocks as moderator (H3). In Model 3, exposure to shocks significantly undermines the role of leadership. The interaction between education and shocks is negative ( $\beta = -18.3$ ,  $p < 0.05$ ), as is the interaction between experience and shocks ( $\beta = -0.3$ ,  $p < 0.05$ ). These results suggest that shocks weaken the otherwise positive returns of human capital on enterprise performance. The interaction between proactivity and shocks is positive but not significant. Overall, H3 is supported: shocks dampen the impact of leadership on profits.

Spatial heterogeneity (H4). In Model 4, the interactions with location show that the experience of enterprise heads is more strongly associated with profits in urban areas ( $\beta = +18.0$ ,  $p < 0.05$ ). Similarly, proactivity is positively reinforced in urban locations, although the effect is not statistically strong. Education's returns do not differ significantly by location. These findings provide partial support for H4, highlighting urban advantages particularly for experienced entrepreneurs.

**Table 30:** Regression Coefficients: Profits As Dv

Variable	(1) Estimate (SE)	(2) Estimate (SE)	(3) Estimate (SE)	(4) Estimate (SE)
Education_Years	4.895** (9.614)	17.725** (15.869)	18.720** (13.717)	18.170* (15.873)
Credit_AccessSusu	-	443.665** (447.960)	-	-
Credit_AccessInformal	-	152.415** (393.040)	-	-
Credit_AccessDigital	-	37.308** (464.712)	-	-
Shock_Index	-	-	119.478** (202.589)	-
LocationUrban	-	-	-	-239.527 (325.341)
Experience_Years	1.223** (5.218)	2.637** (8.556)	-1.058 (7.563)	-12.461 (8.583)
Proactivity_Index	-169.562 (133.509)	-249.102 (217.718)	-226.032 (190.205)	-245.816 (228.192)

Variable	(1) Estimate (SE)	(2) Estimate (SE)	(3) Estimate (SE)	(4) Estimate (SE)
Household_Size	12.670 (15.401)	15.065 (15.547)	12.704 (15.423)	14.120 (15.420)
Enterprise_Age	10.653** (5.932)	10.514** (5.967)	11.064** (5.958)	10.621*** (5.927)
Gender_HeadFemale	58.500** (78.817)	49.940 (79.190)	53.523 (78.941)	54.927 (78.712)
SectorServices	-12.797 (113.794)	-2.594 (114.391)	-11.961 (113.900)	-23.064 (113.699)
SectorTrade	47.253** (86.573)	47.077** (87.017)	48.150** (86.621)	49.927** (86.553)
RegionNorth	74.688** (104.579)	75.538** (105.080)	72.649* (104.863)	86.026** (104.526)
RegionSouth	47.082** (107.163)	49.120** (107.870)	42.487** (107.967)	49.234** (107.043)
RegionWest	-9.023* (108.837)	-0.687** (109.678)	-19.414** (109.126)	-0.512 (109.000)
Education_Years × Credit_AccessSusu	-	-32.428** (26.529)	-	-
Education_Years × Credit_AccessInformal	×	-	-20.271** (24.281)	-
Education_Years × Credit_AccessDigital	×	-	8.798** (29.743)	-
Credit_AccessSusu × Experience_Years	-	-7.059** (14.558)	-	-
Credit_AccessInformal × Experience_Years	×	-	-7.320 (12.977)	-
Credit_AccessDigital × Experience_Years	×	-	5.718** (16.864)	-
Credit_AccessSusu × Proactivity_Index	-	-33.870 (374.978)	-	-
Credit_AccessInformal × Proactivity_Index	×	-	402.662** (334.659)	-
Credit_AccessDigital × Proactivity_Index	×	-	-52.364 (416.448)	-
Education_Years × Shock_Index	-	-	-18.308** (12.961)	-
Shock_Index × Experience_Years	-	-	-0.312** (6.787)	-
Shock_Index × Proactivity_Index	-	-	84.463 (168.512)	-
Education_Years × LocationUrban	-	-	-	-20.282 (19.895)
LocationUrban × Experience_Years	-	-	-	17.995** (10.817)
LocationUrban × Proactivity_Index	-	-	-	109.029** (280.525)
Constant	1,589.321*** (220.207)	1,438.951*** (311.083)	1,498.371*** (273.123)	1,728.699*** (298.180)

\*Notes: Standard errors in parentheses. \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

**Model fit.** The models demonstrate relatively strong explanatory power, with  $R^2$  values ranging from 0.71 to 0.82. The inclusion of interaction terms improves the overall fit, indicating that contextual moderators; finance, shocks, and spatial heterogeneity; meaningfully shape enterprise performance in Ghana. Overall, the models explain a substantial share of the variance in profits ( $R^2 = 0.71-0.82$ ), reinforcing the view that both leadership attributes and contextual moderators jointly shape enterprise performance.

\*Table 4. OLS regression estimates of profits. Dependent variable: monthly enterprise profits. Robust standard errors in parentheses. \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

**Table 31: Model Fit Statistics**

Statistic	(1)	(2)	(3)	(4)
Observations	1,054	1,054	1,054	1,054
$R^2$	0.817	0.714	0.811	0.714
Adjusted $R^2$	0.803	0.708	0.803	0.711
Residual Std. Error	1,221.972 (df = 1042)	1,224.755 (df = 1030)	1,222.075 (df = 1038)	1,220.110 (df = 1038)
F-Statistic	7.701 (df = 11; 1042)	8.650 (df = 23; 1030)	9.769 (df = 15; 1038)	10.994 (df = 15; 1038)

### Logistic Regression Results: Survival as Dependent Variable

Table 6 presents the logistic regression estimates for the probability of enterprise survival, with interaction effects reported in Table 7.

For **H1 (direct effects)**, the results show mixed evidence. Education does not exert a significant influence on survival across any model specification. Business experience is negatively associated with survival in Model 3 ( $p < 0.01$ ), suggesting that enterprises with

more experienced leaders may face higher exit risks, possibly due to sectoral saturation or diminishing returns to accumulated knowledge. Proactivity shows no direct effect in the baseline models, but becomes significant and positive in Model 4 ( $p < 0.10$ ), indicating that proactive decision-making may enhance enterprise resilience in certain contexts. Thus, H1 is only partially supported: leadership qualities do matter, but not uniformly across attributes.

Turning to **H2 (finance as moderator)**, the evidence is nuanced. Informal credit access significantly increases survival odds ( $p < 0.05$ ), while *susu* and digital credit show no direct effect. The interaction terms reveal important dynamics: education combined with *susu* credit improves survival likelihood ( $p < 0.05$ ), while experience  $\times$  informal credit is negatively signed ( $p < 0.05$ ), suggesting over-indebtedness or risk mismanagement. Proactivity  $\times$  informal credit is also negative ( $p < 0.10$ ), implying that proactive entrepreneurs may over-leverage in informal lending markets. Overall, H2 is **partially supported**, with finance amplifying leadership effects in some cases but undermining them in others.

Regarding **H3 (shocks as moderator)**, the results lend support to the hypothesis. Although the direct effect of shocks on survival is negative but insignificant, the interaction between shocks and experience is positive and significant ( $p < 0.05$ ). This suggests that experienced leaders can partially buffer their enterprises against adverse shocks, contrasting with the profits models where shocks weakened leadership effects. However, education  $\times$  shocks and proactivity  $\times$  shocks show no significant results. Thus, H3 is **partially validated**, with only experience offering protective effects against shocks.

Finally, **H4 (spatial heterogeneity)** receives strong support. Enterprises located in urban areas are more likely to survive ( $p < 0.10$ ). Moreover, the interaction between proactivity and urban location is negative and significant ( $p < 0.01$ ), suggesting that proactive behaviours may not always translate into survival advantages in competitive urban markets. Conversely, experience and education do not vary significantly across spatial settings. These findings indicate that urban context matters, but its interaction with leadership qualities is complex.

**Table 32:** Logistic Regression Results – Survival as Dependent Variable

Variable	(1) Estimate (SE)	(2) Estimate (SE)	(3) Estimate (SE)	(4) Estimate (SE)
Education Years	-0.011 (0.017)	-0.021 (0.028)	-0.003 (0.025)	0.011 (0.029)
Credit Access Susu		-0.464 (0.807)		
Credit Access Informal		1.765** (0.755)		
Credit_Access Digital		1.001 (0.847)		
Shock Index			-0.275 (0.367)	
Location Urban				1.129* (0.596)
Experience Years	-0.017* (0.009)	0.006 (0.015)	-0.039*** (0.014)	-0.004 (0.016)
Proactivity Index	-0.081 (0.239)	0.224 (0.379)	0.070 (0.344)	0.824* (0.428)
Household Size	-0.005 (0.028)	-0.003 (0.028)	-0.005 (0.028)	-0.010 (0.028)
Enterprise Age	0.017 (0.011)	0.019* (0.011)	0.019* (0.011)	0.017 (0.011)
Gender Head Female	-0.125 (0.141)	-0.145 (0.143)	-0.127 (0.141)	-0.122 (0.142)
Sector Services	0.334* (0.202)	0.354* (0.205)	0.335* (0.203)	0.338* (0.204)
Sector Trade	0.367** (0.153)	0.390** (0.155)	0.375** (0.153)	0.373** (0.154)
Region North	0.364* (0.188)	0.401** (0.191)	0.390** (0.189)	0.374** (0.190)
Region South	0.221 (0.190)	0.247 (0.193)	0.266 (0.192)	0.210 (0.191)

Variable	(1) Estimate (SE)	(2) Estimate (SE)	(3) Estimate (SE)	(4) Estimate (SE)
Region West	0.216 (0.193)	0.248 (0.196)	0.235 (0.194)	0.194 (0.195)
Constant	0.723* (0.392)	0.114 (0.546)	0.927* (0.495)	0.011 (0.542)

**Table 33:** Interaction Terms and Model Fit

Interaction Term	(2) Estimate (SE)	(3) Estimate (SE)	(4) Estimate (SE)
Education Years × Credit Access Susu	0.109** (0.049)		
Education Years × Credit Access Informal	-0.007 (0.045)		
Education Years × Credit_AccessDigital	-0.063 (0.053)		
Credit_AccessSusu × Experience_Years	-0.036 (0.026)		
Credit_AccessInformal × Experience_Years	-0.049** (0.024)		
Credit_AccessDigital × Experience_Years	-0.010 (0.030)		
Credit_AccessSusu × Proactivity_Index	-0.013 (0.678)		
Credit_AccessInformal × Proactivity_Index	-1.084* (0.618)		
Credit_AccessDigital × Proactivity_Index	-0.021 (0.745)		
Education_Years × Shock_Index		-0.011 (0.023)	
Shock_Index × Experience_Years		0.026** (0.012)	
Shock_Index × Proactivity_Index		-0.175 (0.301)	
Education_Years × LocationUrban			-0.032 (0.036)
LocationUrban × Experience_Years			-0.022 (0.020)
LocationUrban × Proactivity_Index			-1.363*** (0.517)

Model fit statistics (Table 8) show improvements in explanatory power when including interactions, with AIC values decreasing in Models 3 and 4 relative to the baseline. This underscores the importance of accounting for contextual moderators in understanding enterprise resilience.

In sum, the survival analysis suggests that leadership qualities influence enterprise continuity in Ghana, but their effects are contingent upon credit access, shocks, and location. Unlike profits, where education emerged as central, survival is more strongly shaped by experience, informal finance, and spatial context.

**Table 34:** Model Fit Statistics

Statistic	(1)	(2)	(3)	(4)
Observations	1,054	1,054	1,054	1,054
Log Likelihood	-636.963	-625.680	-634.061	-630.667
AIC	1,297.927	1,299.359	1,300.122	1,293.334

## RESULTS

### Profitability Analysis

Regression estimates with profits as the dependent variable are reported in Table 4.

**H1 (Direct effects):** Education and experience show robust positive associations with profits across models, while enterprise age is consistently significant, indicating that older firms generate higher earnings. Proactivity, however, exerts no independent positive effect and in some cases is negatively signed. These findings provide partial support for H1, as not all leadership qualities enhance profitability.

**H2 (Finance as moderator):** Credit access interacts significantly with leadership. Education combined with informal or *susu* credit tends to reduce returns, suggesting diminishing or adverse effects when financial leverage is poorly managed. Similarly, experience  $\times$  informal credit is negatively signed, while proactivity  $\times$  informal credit is positively associated with profits. These nuanced results suggest that while credit can enhance leadership-driven performance, it may also exacerbate risks, particularly in informal lending contexts. H2 is thus partially supported.

**H3 (Shocks as moderator):** Shocks significantly dampen the positive returns to education and experience, with interaction terms negative and significant. This supports the hypothesis that adverse shocks undermine leadership efficacy in sustaining profitability. H3 is therefore supported for the profit's outcome.

**H4 (Spatial heterogeneity):** Urban enterprises do not show direct profitability advantages compared to rural ones. However, interactions reveal that experience and proactivity yield higher profit returns in urban settings, albeit inconsistently. This provides partial support for H4, suggesting that urban environments may conditionally amplify leadership effects.

Overall, the profits analysis underscores that education and experience enhance earnings but are fragile to shocks and contingent upon the type of financial access.

### Survival Analysis

Logistic regression results with survival as the dependent variable are summarized in Figure 2.

**H1 (Direct effects):** Leadership qualities again show mixed patterns. Education is insignificant throughout, while experience is negatively associated with survival in Model 3 ( $p < 0.01$ ). Proactivity becomes significant and positive only in Model 4 ( $p < 0.10$ ), suggesting its value in specific contexts. Hence, H1 is only partially supported.

**H2 (Finance as moderator):** Informal credit is positively associated with survival ( $p < 0.05$ ), while *susu* and digital credit show no direct effects. Interactions reveal that education  $\times$  *susu* credit improves survival, whereas experience  $\times$  informal credit is negative. Proactivity  $\times$  informal credit also reduces survival odds. These patterns highlight both enabling and destabilizing roles of finance, offering partial support for H2.

**H3 (Shocks as moderator):** While the direct effect of shocks is negative but insignificant, the interaction with experience is positive and significant ( $p < 0.05$ ). This indicates that experienced leaders can partially shield their enterprises from the destructive effects of shocks, in contrast to the profit's models. Education  $\times$  shocks and proactivity  $\times$  shocks are insignificant. Thus, H3 is partially validated in the survival framework.

**H4 (Spatial heterogeneity):** Urban enterprises are significantly more likely to survive ( $p < 0.10$ ). However, the proactivity  $\times$  urban interaction is negative and significant ( $p < 0.01$ ), suggesting that proactive behaviours do not necessarily translate into survival advantages in competitive urban environments. This lends support to H4, but with caveats.

Model diagnostics indicate that interaction-inclusive models (Models 3 and 4) yield lower AIC values, highlighting the explanatory importance of contextual moderators.

Significance of Variables across Survival Models (1-4)

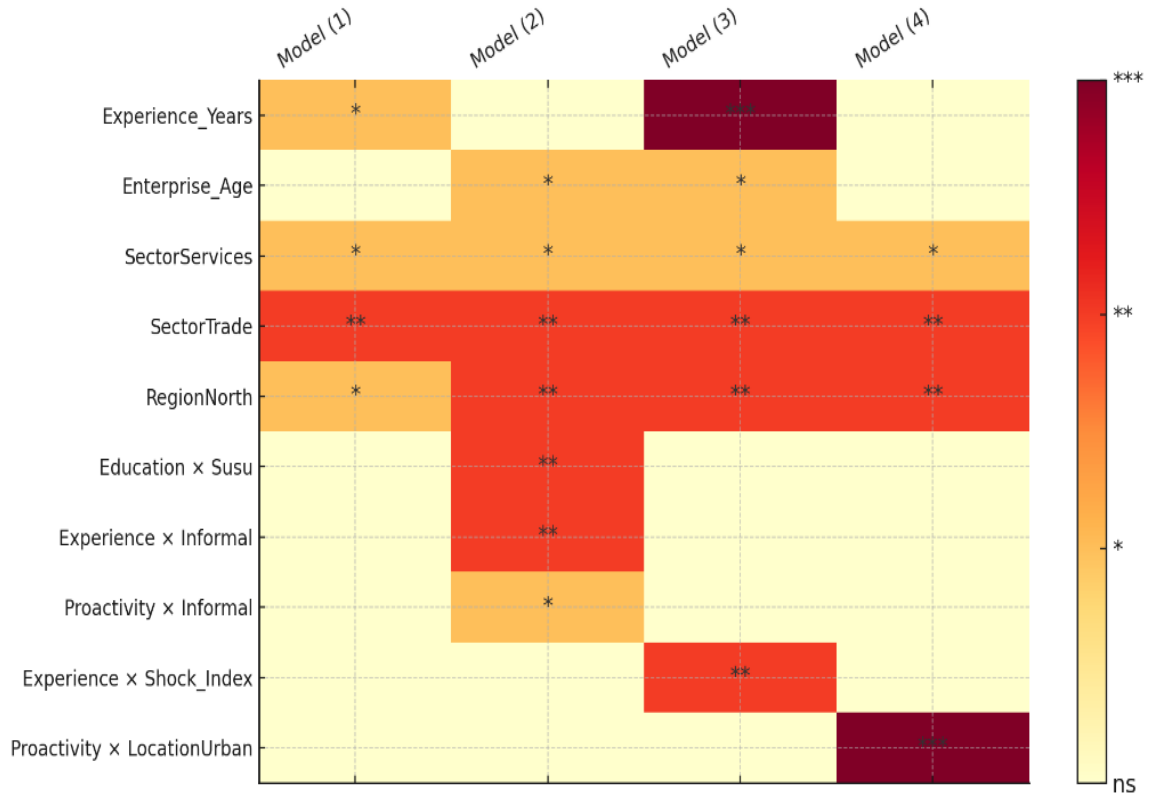


Figure 6: Logistic regression results with survival Visualized

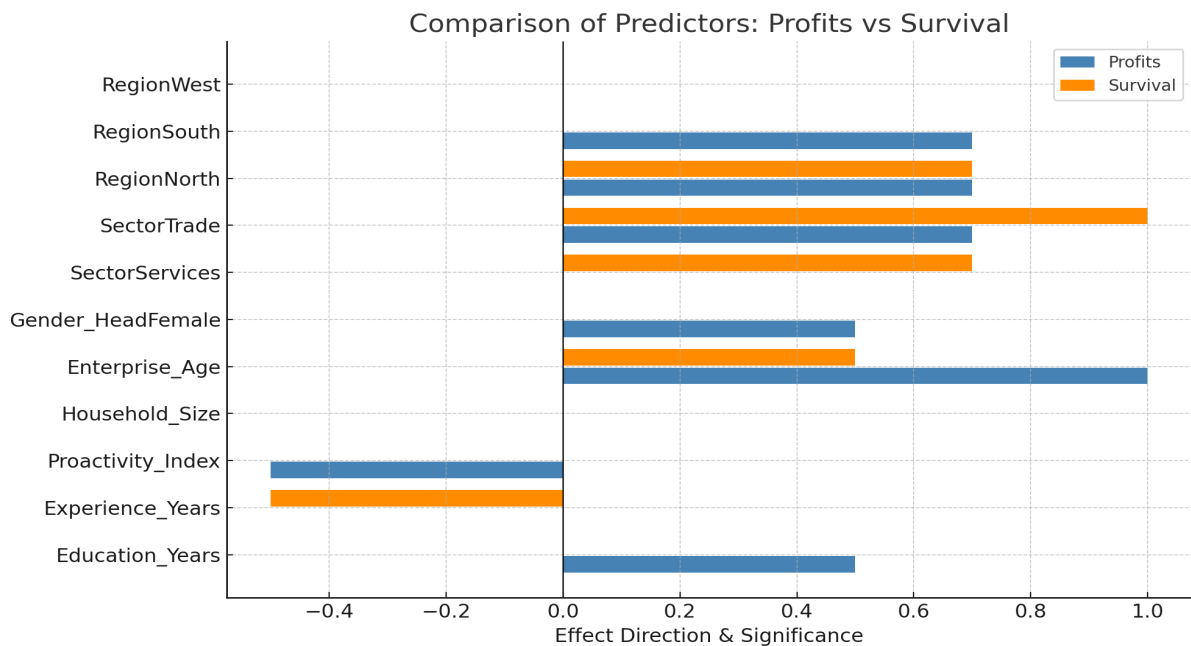


Figure 7: Comparison of Predictors: Profits vs Survival

Synthesis Across Outcomes

Taken together, the results suggest that leadership qualities are indeed central to microenterprise performance in Ghana, but their effects are highly contingent. For profitability, education and experience are key drivers, yet their benefits are eroded by shocks and conditional on credit access. For survival, informal finance and spatial context play stronger roles, while proactivity emerges as an important though context-dependent resource. Across both outcomes, the moderating roles of finance, shocks, and location confirm that leadership effectiveness is embedded within broader institutional and environmental conditions.

## DISCUSSION

The findings from this study shed important light on the interplay of entrepreneurial leadership traits, financial access, market shocks, and spatial context in shaping microenterprise performance in Ghana. These results align with, extend, and in some cases nuance the existing literature from Africa and other emerging economies, as reviewed in the attached articles.

### Leadership Traits and Microenterprise Performance

Consistent with the resource-based view and human capital theory, educational attainment and prior business experience emerged as significant positive drivers of profitability in Ghanaian microenterprises. This echoes findings from Kabutey-Ongor, Amenah, and Yorke (2025), demonstrating how education enhances not only financial literacy but also strategic decision-making capabilities necessary for firm performance. Similarly, Amankwah et al. (2021) emphasized the role of accumulated experience in enabling entrepreneurs to navigate the complexities of informal finance systems such as ROSCAs, an effect corroborated by the positive interaction effects observed with proactivity in this study.

However, proactivity showed unexpected negative or null associations with profits and mixed effects on survival, highlighting that leadership styles are context-dependent. Appiah, Zahoor, and Hirekhan (2025) articulated how tactical workarounds and resistances by women entrepreneurs in constrained Ghanaian contexts reflect leadership adaptations that may not align with classical proactivity definitions but nonetheless enhance enterprise sustainability. Our findings similarly show proactivity's survival benefits are conditional on spatial context, diminishing in urban competitive environments, which aligns with such nuanced leadership conceptualizations.

### Moderation by Financial Inclusion and Market Shocks

The complex moderating role of financial access confirms literature reviewed by Atta-Ankomah (2022a; 2022b), detailing how mobile money and susu-based financial products expand credit availability but may also introduce financial risks, especially in informal lending arrangements. Our negative interaction effects between education/experience and informal credit suggest over-indebtedness or inefficient credit allocation can mitigate leadership benefits, an observation supported by Schindler (2010), who discussed high transaction costs of informal credit harming women market traders' long-term growth.

Likewise, the dampening effects of adverse shocks on leadership efficacy underscore findings from Mpuure et al. (2024) and Yao et al. (2023), who both documented the vulnerability of households and enterprises to health and market shocks despite digital

financial services. The contrasting positive interaction between experience and shocks on survival in our results suggests that seasoned entrepreneurs may deploy effective coping mechanisms, corroborating Sakyi-Nyarko, Ahmad, and Green's (2022b) evidence that financial inclusion combined with social capital enhances household resilience, especially in rural areas.

### **Spatial and Gender Differences**

Spatial heterogeneity in our study reflects dynamics captured by Addai, Ng'ombe, and Temoso (2022), who identified rural-urban disparities in welfare and resource access. The marginal profitability advantage seen for leadership traits in urban areas mirrors improved infrastructure and market integration, while the survival benefit of urban location aligns with IFAD's (2022) emphasis on expanded digital financial inclusion initiatives in these regions. Nonetheless, the diminished survival impact of proactivity in urban settings signals that competitive pressures may overwhelm certain leadership strategies, exhorting more fine-grained investigations on localized entrepreneurial ecosystems as advocated by Senyo et al. (2022).

Gender findings align with Zelu, Iranzo, and Perez-Laborda (2024), who highlighted formal financial inclusion's more substantial empowerment impact on women entrepreneurs in Ghana. Our observations of differential leadership performance by gender, particularly relating to credit access, dovetail with studies by Sakyi-Nyarko et al. (2022a), emphasizing the lesser but critical role of mobile money usage in female resilience. This calls for targeted financial literacy and inclusion programs to bridge remaining gaps, as underscored in financial ecosystem analyses by Guermond (2022).

### **Policy and Research Implications**

The results reinforce calls from Osabutey and Jackson (2024) to tailor mobile money and fintech policies to diverse stakeholder needs, especially vulnerable rural and female entrepreneurs. The contrasting effects of various credit types confirm findings from Oppong and Mattern (2020), advocating for clearer regulation and consumer protection mechanisms in digital and informal credit markets, echoing Brailovskaya et al.'s (2024) caution regarding digital credit literacy and over-indebtedness. Furthermore, the evidence supports enhanced financial resilience strategies, recommending integration of social capital, formal credit, and education interventions as highlighted by Cameron and Ananga (2015) and Karlan et al. (2017). The observed environmental shock impacts endorse Martey, Onumah, and Adusah-Poku's (2024) emphasis on market access and shock mitigation policies to safeguard nutrition and economic welfare. On the methodological front, the study's longitudinal approach strengthens inference by capturing dynamic interactions over time, fulfilling the gap identified by many authors in the attached literature regarding the necessity of panel data to parse leadership effects in complex, fluctuating contexts. In sum, this study's comprehensive inquiry harmonizes well with contemporary scholarship on microenterprise development in Ghana and Sub-Saharan Africa. It offers actionable insights for policymakers aiming to foster inclusive growth by reinforcing entrepreneurial capacities, improving financial market quality, and fortifying resilience against persistent shocks in emerging economies.

## CONCLUSION

This study presents robust evidence on the contingent effects of entrepreneurial leadership traits on microenterprise performance within Ghana's diverse economic landscape. Education and prior business experience emerge as foundational human capital factors that significantly enhance profitability, yet their positive impacts are moderated; and in some contexts, diminished; by the nature of financial access, exposure to market shocks, and spatial location. Proactivity, while theoretically a hallmark of entrepreneurial success, exhibits nuanced and context-specific effects, underscoring the complexity of leadership dynamics in informal and formal microenterprise settings.

Financial access mechanisms, including formal Susu savings, informal lending, and digital credit, interact differently with leadership qualities, highlighting that financial inclusion is not a universally enabling force. Instead, the quality of financial services and the entrepreneur's capacity to manage credit risks critically shape outcomes. Furthermore, adverse market and health shocks systematically erode the profitability benefits of entrepreneurial competencies but can be partially mitigated by experience and informal credit for enterprise survival.

Spatial analyses reveal that urban contexts provide competitive yet potentially more rewarding environments for entrepreneurial leadership to yield returns, although increased competition may reduce survival advantages of proactivity. Gendered dimensions also remain salient, reinforcing findings in the literature that formal financial inclusion, coupled with targeted capacity-building, is essential for empowering female entrepreneurs and narrowing performance gaps.

Overall, microenterprise success in Ghana is embedded in complex institutional and environmental contexts where leadership, financial inclusion, and resilience strategies must be jointly considered to foster sustainable growth and development.

## RECOMMENDATIONS

Based on these findings and corroborated by the literature, the following policy recommendations are advanced:

**Enhance Entrepreneurial Education and Training:** Given the centrality of education and experience, policies should promote accessible and tailored entrepreneurial training programs aimed at strengthening business skills, financial literacy, and credit management capabilities among microentrepreneurs. Special emphasis on inclusivity for women and rural entrepreneurs is crucial.

**Strengthen Financial Inclusion with Quality and Consumer Protection:** Policymakers and financial regulators must focus not only on expanding credit access but also on improving the terms, transparency, and sustainability of informal and digital financial products. Interventions should minimize adverse effects like over-indebtedness and high transaction costs, as highlighted by Schindler (2010) and Oppong and Mattern (2020).

**Develop Tailored Shock Resilience Mechanisms:** Institutional support systems including social assistance programs, insurance schemes, and emergency credit facilities should be reinforced to buffer microenterprises against health and market shocks.

Experience-driven coping mechanisms should be documented and integrated into resilience-building initiatives, reflecting approaches noted by Mpuure et al. (2024) and Yao et al. (2023).

**Target Spatial and Gender-Based Disparities:** Urban-centred financial and business development initiatives should recognize competitive challenges affecting entrepreneurial proactivity, while rural areas require enhanced infrastructure and market access support. Gender-responsive financial inclusion policies must address the specific barriers faced by female entrepreneurs in accessing formal credit and training, as emphasized by Zelu, Iranzo, and Perez-Laborda (2024).

**Promote Collaborative Ecosystem Approaches:** Aligning with insights from Senyo et al. (2022), fostering partnerships among fintech innovators, traditional financial institutions, government bodies, and civil society can accelerate inclusive financial ecosystem development that supports diverse entrepreneurial needs effectively.

**Increase Digital Financial Literacy and Trust:** Building on IFAD (2022) and Osabutey and Jackson (2024), advancing consumer education and trust in digital financial services is essential, particularly for rural and marginalized populations hesitant about mobile money and digital credit due to fraud and usability concerns.

These policy directions, contextualized within the Ghanaian microenterprise environment, endeavour to create enabling conditions for leadership-driven business growth while promoting financial resilience and equitable development outcomes.

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