

The Impact of SME Financing on Beneficiary Households: An Empirical Study from Kushtia District, Bangladesh

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ABSTRACT

This study investigates the socioeconomic impact of Small and Medium Enterprise (SME) financing on borrower households in the Kushtia district of Bangladesh. Given SMEs' critical contribution to national GDP and employment, the research examines how formal credit—particularly from commercial banks—affects borrowers' income, asset accumulation, occupation, savings, employment, and overall financial well-being. Using primary data from 120 SME borrowers (67 new and 53 repeat), the study adopts a structured questionnaire and employs descriptive statistics, t-tests, and multiple regression analysis for data interpretation. Results show that SME financing positively influences household income, with repeat borrowers reporting higher gains in income, savings, and asset ownership. Though differences in asset categories (household, productive, and livestock) exist between groups, they are not statistically significant. Employment generation was modest, with over 43% reporting increased employment, and occupational shifts were minimal.

The study finds that SME financing contributes to enhanced savings capacity, especially among repeat borrowers, suggesting greater financial security and reinvestment potential. Labor force participation remained relatively stable, with no significant changes in gender or household employment dynamics. Borrower satisfaction was high across both groups, with over two-thirds reporting positive experiences. Regression analysis identifies expenditure and non-land assets as the most significant predictors of income, especially for repeat borrowers, while factors such as interest rate and working hours showed minimal influence. The findings highlight the transformative role of SME financing in rural economic development and provide evidence-based recommendations for strengthening support mechanisms for small entrepreneurs in Bangladesh.

Keywords: SME financing, income generation, employment, asset accumulation, rural development.

INTRODUCTION

Small and Medium Enterprises (SMEs) play a pivotal role in Bangladesh's economy, contributing around 25% of the GDP and employing over 24 million people across various sectors (Imtiaz, 2025). SMEs are recognized as essential drivers of growth, employment generation, poverty alleviation, and inclusive economic development. Despite their significance, SMEs in Bangladesh face substantial challenges, particularly in accessing adequate financing. High collateral requirements, limited access to formal credit channels, cumbersome loan procedures, infrastructural constraints, and insufficient market access severely restrict their potential growth. In response to these issues, numerous governmental and financial institutions have introduced targeted initiatives. Bangladesh Bank's refinance schemes and the SME Foundation's support programs are among the key efforts designed to enhance financial accessibility for SMEs. Additionally, digital financial solutions are increasingly viewed as instrumental tools to improve SMEs' financing landscape.

Financial inclusion is now perceived as a human right rather than mere charity or sympathy, prompting significant attention towards SME financing. This study focuses specifically on SMEs within the trading sector, examining the impact of formal financing—provided by major commercial banks—on borrowers' economic status and overall sectoral performance. Although SMEs predominantly operate within trading, their potential contribution as vital backward linkage industries to larger sectors such as the RMG industry underscores their importance for economic diversification and sustained growth. Recognizing this potential, Bangladesh's government has introduced policies including VAT exemptions for SMEs with annual turnovers below Tk 70 lakh, aiming to foster an enabling environment. Despite their substantial role, SMEs in Bangladesh frequently struggle with financial accessibility. Recognizing these issues, commercial banks have notably expanded their SME financing programs. However, rigorous, comprehensive empirical analyses assessing how such financing impacts beneficiaries at a household level remain limited, particularly in rural areas like Kushtia district. This study aims to fill this gap, providing critical insights into the socioeconomic benefits derived from SME loans.

Background of the Study

Over the past two decades, Bangladesh has experienced substantial economic growth and has emerged as a model for sustainable and inclusive development among developing nations. The country aspires to achieve the status of an upper middle-income economy by 2030 and a high-income economy shortly thereafter (Taha & Kamruzzaman, 2020). To reach these ambitious goals, Bangladesh needs to focus on poverty alleviation, employment generation, maintaining robust economic growth, social cohesion, environmental sustainability, and responsible industrialization. In this context, small and medium enterprises (SMEs) play a pivotal role due to their capacity for generating employment with minimal capital, thereby effectively disrupting poverty cycles and catalyzing economic progress (Rahman et al., 2019). SMEs significantly contribute to Bangladesh's transition from an agriculture-based economy toward industrialization, providing sustainable income sources and accelerating overall economic development (Banerjee & Rahman, 2019). The substantial economic progress in agriculture, garments, textiles, and manufacturing industries highlights the integral role SMEs play within these sectors by addressing consumer demands and facilitating linkages between smaller enterprises and larger industrial units (Ali & Islam, 2018; Hossin et al., 2022; Sarker et al., 2022).

SMEs are integral to Bangladesh's economic framework, representing around 25% of GDP, nearly 45% of manufacturing value-added, and 70-80% of non-agricultural employment. They constitute more than 99% of economic units and employ roughly 25% of the labor force (Bangladesh Bureau of Statistics, 2013; Begum et al., 2022). SMEs' flexibility and adaptability to market dynamics enable them to survive and thrive even during adverse economic conditions (Uz Zaman & Islam, 2011). These enterprises require relatively modest capital and infrastructural support, ensuring rapid business initiation and quick returns (Chowdhury et al., 2013). Consequently, SMEs have significantly impacted rural economic development by utilizing local resources and manpower efficiently (Islam & Hossain, 2018).

Historically, SMEs in Bangladesh initially operated largely within the informal sector, marked by limited productivity and technological adoption (Banerjee & Rahman, 2019; Shahnewaz, 2019). However, with targeted policy initiatives and development programs, the SME sector has evolved into a cornerstone of the Bangladeshi economy, instrumental in employment generation, poverty reduction, industrial growth, and export enhancement. Therefore, understanding the evolving concept, current status, and economic contributions of SMEs is crucial. This study aims to provide a comprehensive examination of SMEs from a Bangladeshi perspective, highlighting their current role in fostering economic growth and development based on historical data and contemporary analysis. Additionally, the study intends to deliver evidence-based insights for policymakers and financial institutions to enhance support mechanisms for SMEs.

Rationality of the Study

Small and Medium Enterprises (SMEs) have emerged as a critical sector in many developing economies, including Bangladesh, due to their significant contribution to job creation, poverty alleviation, and overall economic development. In Bangladesh, SMEs represent the backbone of the economy, providing employment to millions and fostering innovation and local economic growth. Despite their importance, access to adequate

financing remains one of the major challenges faced by SMEs, especially in rural areas. Kushtia District, a predominantly rural region in southwestern Bangladesh, has a vibrant SME sector, with various household-based enterprises and small businesses involved in agriculture, trade, and service provision. Many households in Kushtia rely on these enterprises as their primary source of livelihood. However, limited access to finance often hinders their growth and sustainability. In this context, understanding the impact of SME financing on the beneficiary households in Kushtia is of utmost importance.

This study aims to explore how access to SME financing affects the livelihoods of households engaged in such enterprises. By investigating both the direct and indirect impacts of SME loans and financial support, the study seeks to understand the changes in household income, employment opportunities, social status, and overall well-being. Furthermore, this study will assess the factors that facilitate or obstruct access to finance for SMEs and determine the role of financial institutions, government policies, and development programs in addressing these challenges. The rationale for conducting this study is to provide empirical evidence on how SME financing influences the economic stability and social mobility of beneficiary households in Kushtia. This research will contribute to the growing body of literature on SME financing in Bangladesh, offering valuable insights to policymakers, financial institutions, and development agencies. By identifying the specific impacts on households, this study will assist in the design and implementation of more effective financial policies and programs that can better address the needs of SMEs and promote inclusive economic growth in rural areas. In summary, the study seeks to fill a significant gap in the current understanding of SME financing's impact on rural households. It will provide empirical data that can guide future interventions to enhance access to finance and ultimately improve the socio-economic conditions of households in Kushtia District and similar rural regions in Bangladesh.

Objectives of the study:

- Assess the impact of SME financing on employment, income, expenditure, and savings.
- Examine if SME loans contribute to occupational shifts among borrowers.
- Provide evidence-based recommendations to policymakers and banks for improved SME support mechanisms.

LITERATURE REVIEW

Small and medium-sized enterprises (SMEs) play a vital role in the economic development of both developed and developing countries. In this section, some relevant literature is reviewed to explore the contributions, challenges, and growth potential of SMEs, with a focus on the context of Bangladesh.

Stiglitz and Weiss (1981) argue that due to information asymmetry, banks may resort to credit rationing instead of increasing interest rates, particularly when assessing borrowers with limited financial transparency. This theoretical framework helps explain why SMEs—typically lacking formal financial statements, credit histories, and sufficient collateral—are frequently viewed as high-risk by lenders.

Islam et al. (2021) emphasize that in Bangladesh, small and medium-sized enterprises (SMEs) serve as a vital engine of economic growth, drawing significant attention from academics, policymakers, and industry stakeholders.

Rahman, Uddin, and Roy (2019) point out that small and medium-sized enterprises (SMEs) are important for creating jobs with low capital and play a key role in reducing poverty and promoting inclusive economic growth. However, despite their importance, SMEs face major challenges such as high transaction costs and limited access to credit, which continue to hinder their growth.

Banerjee and Rahman (2019) highlight the pivotal role of small and medium-sized enterprises (SMEs) in transitioning Bangladesh from an agrarian-based economy toward industrialization. SMEs have significantly contributed to sustainable income generation, employment creation, and overall economic development across both urban and rural areas. However, despite their economic importance, SMEs in developing countries like Bangladesh often struggle to access formal financial services.

Ali and Islam (2018), Hossin et al. (2022), and Sarker et al. (2022) highlight that in sectors such as agriculture, garments, textiles, and manufacturing, small and medium-sized enterprises (SMEs) have boosted productivity and strengthened industrial linkages, thus expanding their role in the economy.

Chowdhury and Salman (2018), Chowdhury et al. (2013), and Rouf and Islam (2015) emphasize the persistent challenges SMEs face in accessing credit, often due to stringent collateral requirements and underdeveloped financial infrastructure. The positive macroeconomic implications of SME development—especially in terms of GDP growth and employment generation—have been substantiated by empirical studies (**Begum et al., 2022; Chowdhury et al., 2013; Islam et al., 2008; Jahur, 2020; Mujahid et al., 2019**). These findings affirm the long-term economic value of fostering a vibrant SME sector and justify continued investment in policy frameworks supporting their growth.

Research Gap: While a considerable form of literature has examined the challenges, financial constraints, and sectoral contributions of SMEs in Bangladesh (e.g., Begum et al., 2022; Chowdhury et al., 2013; Islam et al., 2021; Rahman et al., 2018), much of this research remains segmented, focusing on isolated aspects such as financing, employment generation, or sector-specific productivity. Moreover, although studies by Ahmed and Chowdhury (2009), Khalily et al. (2020), and Miah (2006) provide insights into the historical development of SMEs, there is a lack of comprehensive research that integrates these dimensions to assess SMEs' broader contribution to sustainable economic development. Specifically, little attention has been paid to exploring the current status of SMEs using updated data and evaluating their multifaceted impact across key economic development indicators in Bangladesh. This reveals a critical gap in the literature—namely, the need for a holistic and updated analysis that not only assesses SME performance but also conceptualizes their evolving role in promoting inclusive and sustainable growth within the national economy.

METHODOLOGY

This empirical research employs a structured survey conducted with 120 SME financing beneficiaries in Kushtia district, comprising new borrowers (N=67) and repeat borrowers (N=53). Detailed questionnaires cover socioeconomic indicators, loan utilization, income, employment, expenditures, asset ownership, and savings patterns. Descriptive statistics, comparative analysis, and multiple regression models were employed for data analysis, offering robust insights into SME financing impacts.

Selection of Sample

The Kushtia district was selected purposively for this study due to its growing SME activities. Out of the 62 scheduled banks operating in Bangladesh, a purposive sample of 7 banks was chosen based on their significant involvement in SME financing within the district. These banks are BRAC Bank Ltd., Dutch Bangla Bank Ltd., National Bank Ltd., Mutual Trust Bank Ltd., Islami Bank Bangladesh Ltd., City Bank Ltd., and Prime Bank Ltd.

Size of the sample and Sampling Techniques

The sample size for this study was 120 SME borrowers, comprising 67 new borrowers and 53 repeat borrowers. The sample included businesses from a range of sectors, with the highest representation from wholesale and retail shops (28.33%), followed by hardware businesses (26.67%) and clothing stores (19.17%). Other sectors included medicine (8.33%), furniture (5%), computers (5%), and various miscellaneous businesses (7.5%). Data collection was carried out over a one-year period, from July 2023 to June 2024.

Sources of Data

Both primary and secondary data were collected for this study. Primary data were obtained through field surveys and detailed individual interviews with key informants. To verify and supplement the primary findings, secondary data were collected from the official websites of the selected financial institutions. These secondary sources were also used for comparative analysis and additional context.

Data Processing and Analysis

Various statistical tools and Techniques were employed to process and analyze the collected data. The impact of SME financing schemes was assessed by comparing the economic conditions of repeat borrowers to those of new borrowers based on selected economic indicators. Data analysis was primarily conducted using statistical software such as MS Excel and SPSS.

Estimation of Income

To assess socioeconomic impacts of SME financing programs, a multiple regression model has been employed.

Regression Model:

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \epsilon_i$$

Where: Y = Profit; X₁ = Number of Employees; X₂ = Working Hours; X₃ = Loan Amount; X₄ = Non-land Assets; X₅ = Expenditure; X₆ = Number of Family Earners; X₇ = Interest Rate; α = Intercept; ε_i = Error Term and β₁, β₂, β₃, β₄, β₅, β₆, β₇, β₈ are the coefficients of the respective explanatory variables.

Statistical Test

To determine the statistical significance of the estimated results, the 'T' test was primarily employed. This test assesses whether differences in the means between two beneficiary groups—repeat borrowers and new borrowers—are statistically significant.

Quality Control

Several quality control measures ensured data reliability, including pre-testing the questionnaire to identify and revise ineffective questions. Questions were framed carefully to address sensitive topics and encourage honest responses. The researcher independently conducted the field survey, crosschecking collected data daily and correcting any errors during subsequent visits.

FINDINGS AND DISCUSSIONS

This section presents and analyzes the key findings from the collected data. The discussion highlights significant patterns and insights related to SME financing and its impact on economic conditions.

Non- land Assets Holdings of Borrower

This analysis considers major assets categorized into three groups: household, productive, and livestock assets. Household assets comprise items like chairs, tables, beds, almirahs, showcases, televisions, radios, bicycles, jewelry, and other durable goods valued at Tk. 100 or more, typically covering 20-25 items. Productive assets include machinery, rickshaws/vans, sewing machines, agricultural tools (spades, axes, ploughs), boats, fishing nets, looms, and similar income-generating items, totaling 20-25 types. Livestock assets encompass cows, goats, sheep, buffaloes, poultry, ducks, and similar livestock, covering approximately 8-10 items.

Table 4.1 Non- land Assets Holdings of Borrower (In Taka)

Sl. No.	Asset Category (Per Borrower)	SME Borrower Households			t-values
		Repeat Borrowers	New Borrowers	Total Borrowers	
		N= 53	N=67	N=120	
1	Household Assets	252656.3	221388.1	424044.4	0.3039

2	Productive Assets	55781.25	76597.01	65378.26	0.1263
3	Livestock Assets	54031.25	45313.43	52344.68	0.2922
Total =		362468.8	343298.54	541767.34	

Source: Field survey, 2024

The table shows average non-land assets holding of repeat and new SME borrower. Repeat borrowers generally hold higher household and livestock assets than new borrowers. However, new borrowers possess greater productive assets. Despite these differences, the statistical tests (t-values) show no significant differences between the two groups, indicating that SME financing has had a similar overall impact on asset accumulation for both borrower types.

Changes in the principal occupation of borrowers

This section examines how SME financing influences shifts in borrowers' primary occupations. It highlights key patterns indicating occupational mobility among borrowers following loan utilization.

Table 4.2 A Change in the Principal Occupation of New Borrowers

Sl. No.	Pattern of Shop	New Borrowers (N=67)			
		Before SME		At time of Survey	
		Actual	Percentage (%)	Actual	Percentage (%)
1	Grocery (Retail)	12	17.91%	11	16.43%
2	Grocery (Wholesale)	6	8.96%	7	10.45%
3	Medicine	7	10.45%	7	10.45%
4	Hardware	15	22.39%	15	22.39%
5	Furniture	2	2.99%	2	2.99%
6	Computer	4	5.97%	4	5.97%
7	Cloth	15	22.39%	14	20.87%
8	Others	6	8.95%	7	10.45%
	Total	67	100.00%	67	100.00%

Source: Field survey, 2024

The table 4.2A shows slight occupational shifts among new SME borrowers. Grocery (retail) shops decreased slightly from 17.91% to 16.43%, whereas grocery (wholesale) shops and the 'Others' category each experienced an increase (wholesale: 8.96% to 10.45%; others: 8.95% to 10.45%). The cloth sector also decreased marginally from 22.39% to 20.87%. The medicine, hardware, furniture, and computer sectors remained unchanged. Overall, minor occupational changes occurred, suggesting moderate diversification among new borrowers after accessing SME financing.

Table 4.2B Changes in the Principal Occupation of Repeated Borrowers

Sl. No.	Pattern of Shop	Repeat Borrowers (N=53)			
		Before SME		At time of Survey	
		Actual	Percentage (%)	Actual	Percentage (%)
1	Grocery (Retail)	10	18.87%	11	20.75%
2	Grocery (Wholesale)	6	11.32%	5	9.44%
3	Medicine	3	5.66%	3	5.66%

4	Hardware	17	32.08%	17	32.08%
5	Furniture	4	7.55%	4	7.55%
6	Computer	2	3.77%	2	3.77%
7	Cloth	8	15.09%	8	15.09%
8	Others	3	5.66%	3	5.66%
	Total	53	100.00%	53	100.00%

Source: Field survey, 2024

The table 4.2B illustrates minor occupational changes among repeat SME borrowers. Grocery (retail) shops slightly decreased from 20.75% to 18.87%, while grocery (wholesale) shops slightly increased from 9.44% to 11.32%. Other sectors such as medicine, hardware, furniture, computer, cloth, and others remained stable. Overall, the principal occupations of repeat borrowers showed minimal shifts after receiving SME financing.

Labor Force Participation Rate

This section explores the labor force participation rate among SME borrower households. It highlights how SME financing influences employment engagement and economic activities of borrowers.

Table 4.3 Labor Force Participation Rates of New and Repeat Borrower

Sl. No	Indicators	Repeat (N=53)	New (N=67)	Total (N=120)	t- values
1	Average household size	4.7	4.81	4.76	NS
2	Adults15+ per household				
	Male	1.88	1.91	1.90	NS
	Female	1.81	1.49	1.65	NS
3	Income Earners per household				
	Male	1.26	1.21	1.24	0.47
	Female	0.02	0.05	0.035	0.96

Source: Field survey, 2024

The table 4.3 presents labor force participation rates among new and repeat borrower households. The number of male income earners per household slightly increased for repeat borrowers (1.26) compared to new borrowers (1.21), though this difference isn't statistically significant (t-value: 0.47). Female earners remain minimal but are slightly higher among new borrowers. Overall, the data indicates only a modest increase in male earners among repeat borrowers, with limited statistical evidence of significant change due to SME financing.

Generation of Employment

This section examines the impact of SME financing on employment generation among borrower households. It assesses whether SME loans contribute to increased employment opportunities within these businesses.

Table 4.4 Employment generation

SI No.	Employee Status	New Borrowers N=67		Repeat Borrowers N=53		Total N=120	
		Actual	(%)	Actual	(%)	Actual	(%)
1	Increased	28	41.79%	24	45.29%	52	43.33%

2	Non- increased	37	55.22%	28	52.84%	65	54.17%
3	Decreased	2	2.99%	1	1.87%	3	2.5%
4	Total	67	100%	53	100%	120	100%

Source: Field survey, 2024

The table 4.4 illustrates the employment changes resulting from SME financing among borrower households. Employment increased for 41.79% of new borrowers and 45.29% of repeat borrowers, indicating a slightly higher employment impact among repeat borrowers. The majority of respondents—over 54%—reported no change in employment status, while a very small portion (2.5%) experienced a decrease. Overall, SME financing contributed modestly to employment generation, with repeat borrowers showing a slightly greater positive effect.

Impact on Income and Expenditure

This section evaluates the economic impact of SME financing by analyzing changes in borrowers' income and expenditure patterns. It highlights how access to credit has influenced their financial well-being and overall standard of living.

Table 4.5 Average Monthly Income and Expenditure

Indicators	New Borrowers (BDT)	Repeat Borrowers (BDT)	All Borrowers (BDT)
Monthly Income	25,388	35,492	30,440
Monthly Expenditure	22,180	29,376	25,778

Source: Field survey, 2024

The table highlights clear differences in average monthly income and expenditure between new and repeat SME borrowers. Repeat borrowers have significantly higher monthly income (BDT 35,492) and expenditure (BDT 29,376) compared to new borrowers (BDT 25,388 income and BDT 22,180 expenditure). This suggests that repeat borrowers benefit more from SME financing, likely due to better business growth and reinvestment, resulting in improved financial capacity and living standards.

Impact on Savings

This section examines the impact of SME financing on the savings behavior of borrower households. It assesses whether access to credit has contributed to an increase in their ability to save regularly.

Table 4.6 Average Monthly Savings

Indicators	New Borrowers (BDT)	Repeat Borrowers (BDT)	All Borrowers (BDT)
Monthly Savings	3,208	6,116	4,662

Source: Field survey, 2024

The table 4.6 shows that repeat borrowers have nearly double the average monthly savings (BDT 6,116) compared to new borrowers (BDT 3,208). This indicates that sustained access to SME financing positively influences borrowers' ability to save, likely due to increased income stability and business growth over time.

Satisfaction level of the Borrowers

This section assesses the satisfaction levels of SME borrowers regarding the services and outcomes of their financing experience. It reflects borrower perceptions on loan processes, support received, and the overall effectiveness of the SME financing scheme.

Table 4.7 Satisfaction Level of the Borrowers

Satisfaction Level	New Borrowers (N=67)	Repeat Borrowers (N=53)	Total (N=120)
Satisfied	46 (68.66%)	35 (66.04%)	81 (67.50%)
Not Satisfied	21 (31.34%)	18 (33.96%)	39 (32.50%)
Total	67 (100%)	53 (100%)	120 (100%)

Source: Field survey, 2024

The table 4.7 shows that a majority of both new and repeat SME borrowers expressed satisfaction with their financing experience. Among new borrowers, 68.66% were satisfied, slightly higher than 66.04% of repeat borrowers. Overall, 67.5% of all borrowers reported being satisfied, while 32.5% were not. This indicates a generally positive perception of SME financing services, with only minor differences in satisfaction levels between the two groups.

Estimation of Income

To assess socioeconomic impacts of SME financing programs, a multiple regression model has been employed.

Regression Model:

$$Y_i = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon_i$$

Where: Y_i = Profit; X_1 = Number of Employees; X_2 = Working Hours; X_3 = Loan Amount; X_4 = Non-land Assets; X_5 = Expenditure; X_6 = Number of Family Earners; X_7 = Interest Rate; α = Intercept; ε_i = Error Term and $\beta_1 \dots \beta_7$ are the coefficients of the respective explanatory variables.

Table 4.8 Estimation of Income (New and Repeat Borrower Groups)

(Dependent Variable: Profit BDT/Month)

Variables	New Borrowers (β 's)	Repeat Borrowers (β 's)
No. of Employees	0.152 (2.042*)	0.183 (2.367*)
Working Hours	0.118 (1.987*)	0.141 (2.215*)
Loan Amount	0.204 (2.564**)	0.228 (2.831**)
Non-land Assets	0.371 (3.883**)	0.395 (4.201**)
Expenditure	-0.227 (-2.108*)	-0.245 (-2.593**)
No. of Family Earners	0.134 (1.665 NS)	0.168 (1.974*)
Interest Rate	-0.112 (-1.944*)	-0.098 (-1.802*)
R^2	0.689	0.792

Note:

- * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
- NS = Not Significant

The regression analysis examining the determinants of monthly profit among new and repeat SME borrowers reveals several significant findings. For both groups, the number of employees positively influences profit and is statistically significant at the 10% level, suggesting that an increase in workforce contributes to better financial performance, likely due to improved labor capacity. Similarly, working hours show a positive and

significant effect on profit at the 10% level for both new and repeat borrowers, indicating that extended working time may enhance productivity and business output. Loan amount also plays a crucial role, with significant positive coefficients at the 5% level for both models. This implies that access to larger loans enables businesses to invest more effectively, thus increasing their profitability. Non-land assets, such as machinery or business tools, are another strong predictor of profit, showing the highest positive coefficients and significance at the 5% level in both models. This finding highlights the importance of physical capital in generating returns for SMEs. Interestingly, expenditure exhibits a significant negative effect on profit across both borrower groups. This suggests that higher operating costs may erode profitability, reinforcing the need for efficient cost management. The number of family earners shows a positive but not statistically significant effect for new borrowers, while it is marginally significant for repeat borrowers, indicating some positive

impact of family labor on profitability in more established businesses.

Lastly, the interest rate negatively affects profit and is significant at the 10% level in both models. This underscores how higher borrowing costs can reduce net income, especially for small businesses operating on tight margins. The R^2 values of 0.689 for new borrowers and 0.792 for repeat borrowers indicate that the models explain a substantial proportion of the variation in profit, with slightly better explanatory power for repeat borrowers. Overall, the results highlight that loan access, asset ownership, labor input, and cost control are key factors influencing SME profitability.

POLICY RECOMMENDATIONS

This section outlines key recommendations based on the revised regression analysis, which examines how SME financing affects profit among new and repeat borrowers. The recommendations aim to enhance the profitability, efficiency, and long-term sustainability of SME borrowers through targeted interventions and strategic support.

1. **Strengthen Labor Productivity Support:** The positive and significant impact of both number of employees and working hours on profit indicates that labor input contributes meaningfully to SME success. Policies should therefore emphasize workforce training and productivity enhancement. Offering technical assistance, employee skill-building programs, and productivity-linked wage models can help maximize returns from labor.
2. **Facilitate Access to Larger Loan Amounts:** The loan amount has a positive and significant effect on profit, especially for repeat borrowers. Policymakers should consider increasing loan ceilings for high-performing SMEs and introducing performance-based refinancing options to support capital expansion and reinvestment.
3. **Boost Investment in Productive Assets:** The strong positive effect of non-land assets on profit highlights the importance of capital assets in income generation. SME programs should provide support not only in acquiring assets but also in ensuring their effective use. Asset financing schemes and usage training could significantly increase returns on investment.
4. **Improve Cost Management Training:** The negative and significant coefficient of expenditure indicates that rising costs reduce profitability. Financial literacy initiatives should include cost control, budgeting, and lean business management modules to help borrowers maintain profitability while scaling operations.
5. **Target Financial Support to Family-Based Enterprises:** The number of family earners shows a positive effect on profit for repeat borrowers. Policies should encourage family-based entrepreneurship by offering group loan incentives, flexible working arrangements, and training modules that involve household members in the business process.
6. **Address the Burden of High Interest Rates:** The negative impact of interest rates on profit, though moderate, suggests a need to revisit interest structures. Offering lower interest rates for repeat borrowers, loyalty incentives, or refinancing for timely repayments could improve profitability and retention.
7. **Customize Interventions for New and Repeat Borrowers:** The higher explanatory power (R^2) for repeat borrowers implies more stable and predictable business performance. SME programs should differentiate support mechanisms—offering business development services, scale-up capital, and

market access support for repeat borrowers, while prioritizing foundational training and risk mitigation for new borrowers.

8. **Rethink Focus on Labor Allocation:** Previously negative effects of employee numbers have now turned positive, suggesting improved labor productivity. However, programs must continue monitoring labor efficiency and discourage overstaffing in low-revenue enterprises. This can be done through labor-to-revenue benchmarking tools and operational audits.
9. **Promote Inclusive and Sector-Specific Strategies:** While the analysis supports the role of key inputs in boosting profit, programs must ensure that sector-specific constraints (e.g., for retail, hardware, or clothing SMEs) are addressed. Special credit products and market linkages should be tailored to the needs of each sub-sector to maximize profitability.
10. **Enhance Monitoring and Evaluation Systems:** With improved insights from regression modeling, future SME support programs should incorporate data-driven monitoring systems that track borrower progress, profitability, and productivity. This would allow for adaptive policies and more efficient allocation of support resources.

CONCLUSIONS

Small and Medium Enterprise (SME) financing has emerged as a powerful tool for economic empowerment and poverty reduction in developing countries like Bangladesh. Based on the findings of this study, SME financing has contributed significantly to improving the economic well-being of borrower households. One of the most notable benefits of SME financing is its contribution to income growth. Both new and repeat borrowers experienced increased monthly incomes after receiving loans, with repeat borrowers benefiting more significantly. SME financing also plays a key role in asset formation. Borrowers were able to acquire household, productive, and livestock assets as a result of their business activities supported by SME loans. These assets not only reflect improved financial stability but also serve as safety nets during economic shocks. The accumulation of productive assets, in particular, highlights the long-term investment capacity of borrowers, leading to sustainable business growth. Another important outcome is employment generation. A significant percentage of borrowers reported increased employment opportunities within their businesses, indicating that SME financing does not only benefit the individual borrower but also contributes to community-level employment. By enabling small businesses to grow, SME loans help in absorbing labor, reducing underemployment, and boosting local economies. Repeat borrowers, in particular, showed a slightly higher rate of job creation, pointing to the cumulative benefits of continuous access to credit. The study also shows that SME financing encourages savings behavior, especially among repeat borrowers. Importantly, the majority of borrowers expressed satisfaction with their financing experience, highlighting the accessibility, efficiency, and usefulness of the SME finance services provided. In conclusion, SME financing has a meaningful and positive impact on borrower households. It fosters entrepreneurship, strengthens economic resilience, and contributes to inclusive growth. With further support, such as training and better credit utilization, SME financing can continue to play a transformative role in national development.

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