

Determinants of Income and Enterprise Performance among MSMEs in Mizoram

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ABSTRACT

The present study examines the determinants of income and enterprise performance among Micro, Small, and Medium Enterprises (MSMEs) in Mizoram using primary survey data from 440 enterprises. Employing Ordinary Least Squares (OLS) regression, correlation analysis, ANOVA, and Chi-square tests, the study investigates the influence of socio-economic characteristics, ownership structure, investment patterns, labour employment, and working hours on enterprise income and annual turnover.

The results reveal that socio-economic factors explain a substantial proportion of income variation. Monthly family income emerges as the strongest predictor of enterprise income, followed by age, education, and engagement in additional occupations. In contrast, gender, marital status, and community do not significantly influence income. Investment plays a decisive role in enterprise performance. Labour employment positively contributes to turnover though capital investment remains the dominant driver. Additionally, working hours show a statistically significant association with turnover.

The study highlight the central role of capital intensity, human capital, and locational advantage in shaping MSME performance in Mizoram and provide important policy implications for targeted enterprise development and financial support mechanisms.

KEYWORDS: MSMEs; Enterprise Performance; Human Capital; Capital Investment; Annual Turnover, Labour Productivity.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play an important role in the economic development of a country. They contribute to employment generation, increase income levels, alleviate poverty, and promote balanced regional development. MSMEs are characterized by relatively low capital and can be started with limited resources. This makes them especially important in developing economies where access to large-scale investment is limited. MSMEs also encourage entrepreneurship by allowing individuals and families to start small businesses and become self-employed. In many countries, including India, MSMEs contribute significantly to production, exports, and employment. They support local supply chains, promote innovation, and provide livelihood opportunities to millions of people.

In India, MSMEs are often called the backbone of the economy because of their large presence and wide

reach. The sector plays a key role in promoting inclusive growth by providing opportunities to women, youth, and socially disadvantaged groups. Because of their flexibility and adaptability, MSMEs can respond quickly to market changes and local demands.

The importance of MSMEs becomes even greater in the North-East region of India. The North-East has unique geographical, social, and economic conditions. The region is largely hilly and has limited infrastructure compared to many other parts of the country. Large industries are fewer due to transportation challenges, high costs, and smaller market size. In such a situation, MSMEs become the main source of economic activity. They help utilize local resources, traditional skills, and community-based networks. Many small enterprises in the North-East are involved in trade, food processing,

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handicrafts, handloom, small manufacturing, and service activities.

Enterprise performance in small-scale businesses is generally influenced by three broad categories of factors: i) Human Capital Factors such as age, education, experience, socio-economic background; ii) Structural and Ownership Characteristics such as location, type of enterprise, ownership form. iii) Capital and Labour Inputs such as level of investment, source of capital, number of workers, working hours.

In the specific context of Mizoram, MSMEs play a central role in the state's economy. Mizoram has limited large-scale industrial development due to its terrain, scattered settlements, and distance from major markets. As a result, small and medium enterprises become the primary drivers of local economic growth. Many households depend directly or indirectly on small businesses for their livelihood. Enterprises in Mizoram operate in sectors such as retail trade, small manufacturing, food processing, tailoring, services, and transport.

Despite their importance, not all MSMEs in Mizoram perform equally. Some enterprises generate higher income and turnover, while others struggle to grow. Differences may arise due to factors such as investment level, education of the entrepreneur, access to capital, labour availability, and location of the enterprise. Understanding these factors is important for designing policies that can improve enterprise performance and strengthen the MSME sector in the state.

Improvement in entrepreneurship under industrial and service sector has been the channel for growth and development of socio-economic condition of Mizoram. Data from various departments showing the contribution of enterprise sector in the state gross domestic products have shown a positive progress. The SSI has shown the highest growth in employment generation even though agricultural is the major occupation. Development in entrepreneurship creates the opportunity of occupational transition from crowded agricultural sector to industrial sector. If the initiatives, policies and schemes of various enterprises are carried out successfully in every district in the state, a more progressive economic growth and better development must be ensured.

Therefore, examining the determinants of income and enterprise performance in Mizoram is both economically and socially important for promoting sustainable development in the region.

Review of Literature

Human capital theory emphasizes that education, skills, and experience enhance productivity and

economic performance (Becker, 1964). Kumar, JS & Vese, K (2024) stated that MSMEs play a significant role in the local economy of the northeastern state of Nagaland, helping to create jobs, generate revenue, and reduce poverty.

Hasanah (2021) examined the joint effect of investment, unemployment, and minimum wage on employment in West Java Province, Indonesia. Using regression analysis, the study found that these variables simultaneously have a significant effect on workforce absorption ($p = 0.002 < 0.05$). The findings indicate that investment, unemployment, and minimum wage collectively influence employment levels in the region. Verma et al. (2023) found a positive relationship between investment and employment in Bihar's MSME sector, noting that higher turnover signals strong potential for self-reliant economic growth.

Hota & Chinmayee (2019) examined job satisfaction among industrial workers and found no significant relationship with education or age. There is a positive relationship between investment and employment in the MSME sector, indicating that higher investment and turnover can drive economic growth and support Bihar's path toward self-reliance. (Verma, Fatima, Mishra, and Sinha, 2023)

MSME units in Assam, particularly microenterprises, have shown increasing trends in number, employment, fixed-asset investment, and gross output. However, average investment per unit in plant and machinery varied across districts and years, reflecting differences in investment capacity and growth potential among enterprises in different locations. (Ghosh and Lama, 2024). Infrastructure gaps, limited finance, and market access significantly affect MSME growth in North-East India, causing disparities in investment and turnover, including in Mizoram. (Goklani and Fulwari, 2024)

Sharma, R and Sharma, A (2022) note that Mizoram faces infrastructure and sociopolitical challenges, and although the state's natural and cultural resources offer strong potential for tourism-driven economic growth, these opportunities remain largely underutilized.

Research on MSMEs in developing economies, including India, suggests that structural characteristics such as location and sector significantly influence enterprise performance, profitability, and turnover. Studies show that enterprises situated in urban or industrial clusters benefit from better infrastructure, market access, and supply-chain linkages, leading to higher income and growth compared to those in rural

or peripheral regions (Beck & Demirgüç-Kunt, 2006; Sarkar & Costa, 2008)

Most of the industrial units found within the state are the small-scale industries, comprised of agro-based, forest based, textile, mineral, metal, chemical industries, etc., (Laskar 2010). Industrial sector in Mizoram is dominated by four major activities viz., food and allied industries, wooden products and textile-based industry and service based, which provides employment to more than 73 per cent of the total industrial workforce in Mizoram. Certain difficulties like lack of demand, uncertainty of marketability, scarcity of raw materials, lack of power and electricity, transport and communication, inefficiency of entrepreneurs' attributes to the most common features of industrial units in Mizoram (Rualkhuma 1997). District Industries Centre in all districts are responsible to implement various schemes and programmes to promote the small-scale industries. The percentage share of MSMEs unit in Mizoram against the country is only 0.07% (Jena et.al 2018).

Few studies have examined the interaction between capital and labour in small enterprises in North-East India. Therefore, understanding the relative contribution of labour and capital in Mizoram provides important empirical insights. Although previous studies have independently examined human capital, ownership structure, capital investment, and labour productivity, limited research has integrated these determinants within a single empirical model in the context of small enterprises in geographically peripheral regions.

While national-level studies have identified capital investment, education, and labour input as major determinants of MSME performance, limited empirical research has examined these relationships in the context of Mizoram. Moreover, existing studies often treat socio-economic characteristics, ownership structure, capital sources, and labour variables separately, without integrating them into a comprehensive empirical framework.

The present study seeks to find out the principal determinants influencing income levels and enterprise performance among MSMEs in Mizoram?

Objectives of the Study

The specific objectives for this study are as follows:

1. To analyse the impact of socio-economic characteristics on enterprise income.
2. To examine the influence of ownership pattern and enterprise characteristics on income generation.

3. To assess the relationship between investment levels and annual turnover.
4. To evaluate the contribution of labour employment to enterprise performance.
5. To examine whether working hours are associated with turnover levels.

Hypothesis of the Study

For the present study the following hypothesis are considered.

1. H₁: Socio-economic characteristics have a significant effect on enterprise income.
2. H₁: Ownership pattern and enterprise characteristics significantly influence enterprise income.
3. H₁: Investment level has a positive and significant effect on annual turnover.
4. H₁: Labour employment positively and significantly influences annual turnover.
5. H₁: Working hours are significantly associated with enterprise performance.

Methodology

The target population of the study consists of all registered and operational Micro, Small, and Medium Enterprises (MSMEs) functioning in Mizoram at the time of the survey. These enterprises operate across various sectors, including manufacturing, trade, and services, and are distributed across different districts of the state.

The data for this study are derived from a structured field survey conducted among MSMEs in Mizoram. A total of 440 enterprises were surveyed. Equal samples were collected from each selected district to ensure balanced district-level representation.

This study adopts a quantitative research design to examine the determinants of income and enterprise performance among MSMEs in Mizoram. The analysis is based on primary survey data collected from micro, small, and medium enterprises operating across selected districts of the state. The study uses statistical techniques to identify the relationship between socio-economic characteristics, enterprise structure, capital investment, labour factors, and enterprise performance. Statistical tools include - Descriptive Statistic; Pearson Correlation Analysis; Multiple Linear Regression (OLS); ANOVA (Analysis of Variance); Chi-Square Test of Independence.

Results

Income and Economic Factors:

Multiple linear regression using Ordinary Least Squares (OLS) is employed to analyse the income of MSME enterprises by estimating how independent variables such as gender, age group, marital status, community, religion, family income, and family size influence enterprise income.

Table 1 Coefficient Table

| Co-efficients ^a | | | | | |
|----------------------------|-------------------------------|------------|--------------------------------|--------|-------|
| Model | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | T | Sig. |
| (Constant) | -1.625 | 0.801 | | -2.030 | 0.043 |
| Gender | -0.038 | 0.071 | -0.015 | -0.534 | 0.593 |
| Age | 0.168 | 0.038 | 0.135 | 4.363 | 0.000 |
| Marital | -0.027 | 0.059 | -0.014 | -0.457 | 0.648 |
| Community | 0.709 | 0.733 | 0.027 | 0.968 | 0.334 |
| Education | 0.164 | 0.049 | 0.099 | 3.341 | 0.001 |
| Others_Occupation | 0.042 | 0.018 | 0.064 | 2.289 | 0.023 |
| Monthly_Family_Income | 0.809 | 0.031 | 0.762 | 26.245 | 0.000 |

a. Dependent Variable: *Income_from_enterprise*

From table 1, the regression results show that among the seven predictors, Monthly Family Income is the strongest and most significant predictor of Income from Enterprise ($\beta = 0.762$, $p < .001$), indicating that higher family income is strongly associated with higher enterprise income. Age ($\beta = 0.135$, $p < .001$), Education ($\beta = 0.099$, $p = .001$), and Others' Occupation ($\beta = 0.064$, $p = .023$) also have significant positive effects. In contrast, Gender, Marital Status, and Community show no statistically significant relationship with income from enterprise, as indicated by their low beta values and insignificant p-values.

Therefore, the null hypothesis is rejected, and the alternative hypothesis is partially accepted, as certain socio-economic characteristics significantly influence enterprise income, while others do not show a statistically significant effect.

Income and Ownership Pattern

This study examines the key enterprise-related factors that influence income generation among local businesses by employing multiple linear regression analysis. Focusing on variables such as classification, location, nature of activity, ownership type, business land status, whether the enterprise is family-run, the type of industry, and the sector, the research seeks to identify how these characteristics contribute to variations in enterprise income.

Table 2 Income and Ownership Pattern: Coefficient

| Coefficients ^a | | | | | |
|---------------------------|-------------------------------|------------|--------------------------------|--------|-------|
| Model | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| (Constant) | 1.859 | 0.699 | | 2.657 | 0.008 |
| Ownership | 0.255 | 0.171 | 0.066 | 1.492 | 0.136 |
| Location | 0.988 | 0.114 | 0.386 | 8.672 | 0.000 |
| Family_run_enterprise | -0.163 | 0.118 | -0.062 | -1.384 | 0.167 |
| Business_Land | -0.035 | 0.115 | -0.014 | -0.307 | 0.759 |
| Nature_of_Activity | -0.234 | 0.528 | -0.020 | -0.444 | 0.657 |
| Type_of_Industry | 0.349 | 0.204 | 0.155 | 1.710 | 0.088 |
| Type_of_Sector | -0.346 | 0.243 | -0.136 | -1.425 | 0.155 |
| Classification | 0.019 | 0.015 | 0.062 | 1.226 | 0.221 |

Dependent Variable: *Income_from_enterprise*

The regression results show that Location (Rural and Urban) is the only statistically significant predictor of *Income from Enterprise* ($\beta = 0.386$, $p < 0.001$), indicating that enterprises situated in more favourable or strategic locations earn significantly higher income compared to those in less favourable areas.

All other variables have p-values greater than 0.05, meaning their effects on income are not statistically significant in this model. Some variables, such as Type of Industry ($\beta = 0.155$, $p = 0.088$) and Ownership ($\beta =$

0.066, $p = 0.136$), show positive coefficients, the evidence is insufficient to conclude that they meaningfully influence enterprise income.

The hypothesis is therefore, partially accepted, as only location has a statistically significant influence on enterprise income, while ownership pattern and other enterprise characteristics do not show significant effects.

Level of Investment and Sources of Capital

To examine the relationship between the level of investment and different sources of capital, the analysis is carried out using both ANOVA and regression coefficients.

Table 3: Level of Investment and Sources of Capital: ANOVA

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|-----|-------------|-------|-------|
| Regression | 52.294 | 3 | 17.431 | 8.973 | .000b |
| Residual | 846.979 | 436 | 1.943 | | |
| Total | 899.273 | 439 | | | |

a. Dependent Variable: Amount_of_Investment

b. Predictors: (Constant), Sources_of_Working_Capital, Fixed_Capital, and Initial_Capital

The F-statistic 8.973 of ANOVA table with a significance value of .000 indicates that the regression model is statistically significant ($p < 0.001$), meaning that at least one of the three capital sources (Initial Capital, Fixed Capital, or Working Capital) has a significant effect on the amount of investment.

Table 4: Level of Investment and Sources of Capital: Coefficient

| Coefficients ^a | | | | | |
|----------------------------|-------------------------------|------------|--------------------------------|--------|-------|
| Model | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
| (Constant) | 2.132 | 0.134 | | 15.866 | 0.000 |
| Sources_of_Initial_Capital | 0.087 | 0.051 | 0.091 | 1.711 | 0.088 |
| Sources_of_Fixed_Capital | 0.102 | 0.036 | 0.151 | 2.870 | 0.004 |
| Sources_of_Working_Capital | 0.047 | 0.029 | 0.078 | 1.615 | 0.107 |

a. Dependent Variable: Amount_of_Investment

From table 4, Sources of Fixed Capital shows a positive and statistically significant effect ($B = 0.102$, $\beta = 0.151$, $t = 2.870$, $p = 0.004$), indicating that greater use of fixed-capital sources is associated with higher investment and that this is the strongest of the three predictors.

Level of Investment and Annual Turnover

This study examines the associations among *Amount of Initial Investment*, *Amount of Investment*, and *Annual Turnover Size* using Pearson correlation analysis to assess how investment levels influence business performance.

Table 5: Annual Turnover and Level of Investment: Pearson Correlation

| | | Amount_of_Initial_Investment | Amount_of_Investment | Annual_Turnover_Size |
|------------------------------|---------------------|------------------------------|----------------------|----------------------|
| Amount_of_Initial_Investment | Pearson Correlation | 1 | .721** | .575** |
| | Sig. (2-tailed) | | .000 | .000 |
| | N | 440 | 440 | 440 |
| Amount_of_Investment | Pearson Correlation | .721** | 1 | .780** |
| | Sig. (2-tailed) | .000 | | .000 |
| | N | 440 | 440 | 440 |
| Annual_Turnover_Size | Pearson Correlation | .575** | .780** | 1 |
| | Sig. (2-tailed) | .000 | .000 | |
| | N | 440 | 440 | 440 |

** . Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation analysis indicates strong and statistically significant positive relationships among the three variables viz., Amount of Initial Investment, Amount of Investment, and Annual Turnover Size.

There is a strong positive correlation, suggesting that enterprises with larger investments generally achieve higher annual turnover, i.e., $r = 0.780$, $p < 0.01$. A strong positive correlation, suggesting that enterprises with

higher initial investments tend to make higher total investments over time i.e., $r = 0.721$, $p < 0.01$. A moderate to strong positive correlation, indicating that higher initial investment is associated with larger annual turnover, i.e., $r = 0.575$, $p < 0.01$.

Table 6: ANOVA Table for Annual Turnover and Level of Investment:

| ANOVA ^a | | | | | | |
|--------------------|----------------|---------|-------------|---------|---------|-------|
| Model | Sum of Squares | df | Mean Square | F | Sig. | |
| 1 | Regression | 515.064 | 2 | 257.532 | 339.334 | .000b |
| | Residual | 331.654 | 437 | 0.759 | | |
| | Total | 846.718 | 439 | | | |

a. Dependent Variable: Annual_Turnover_Size

b. Predictors: (Constant), Amount_of_Investment, Amount_of_Initial_Investment

The ANOVA results show that the two predictors, viz., Amount of Initial Investment and Amount of Investment together explain a significant amount of the variation in Annual Turnover Size. The resulting F-value of 339.334 is very large, and the p-value (.000) indicates that the model is highly significant at the 1% level. The level of investment made by an enterprise has a meaningful impact on its annual turnover.

Table 7: Annual Turnover and Level of Investment: Regression Coefficient

| Model | Unstandardized Coefficients | Std. Error | Standardized Coefficients | t | Sig. | |
|-------|------------------------------|------------|---------------------------|---|-------|-------|
| | | | | | | B |
| 1 | (Constant) | 0.618 | 0.09 | | 6.881 | 0 |
| | Amount_of_Initial_Investment | 0.029 | 0.045 | | 0.65 | 0.516 |
| | Amount_of_Investment | 0.737 | 0.042 | | 17.59 | 0 |

Dependent Variable: Annual_Turnover_Size

The regression coefficients show that the amount of Investment is a strong and significant predictor ($B = 0.737$, $\beta = 0.759$, $p < .001$), meaning that enterprises with higher total investment tend to generate a higher annual turnover. This variable has the largest standardized coefficient ($\beta = 0.759$), showing it is the most influential factor.

In contrast, Amount of Initial Investment is not a significant predictor of annual turnover ($B = 0.029$, $\beta = 0.028$, $p = .516$). This means that after accounting for total investment, initial investment alone does not significantly contribute to differences in annual turnover.

It, therefore, can be stated that the level of investment has a positive and statistically significant effect on annual turnover.

Labour Employment and Turnover

By taking the regression coefficients showing that both Capital Investment and Amount of Labour are independent variables while Annual Turnover Size as the predictor or dependent variable.

Table 8: Annual Turnover and Number of Labour

| Coefficients ^a | | | | | | |
|---------------------------|-----------------------------|------------|---------------------------|---|--------|------|
| Model | Unstandardized Coefficients | Std. Error | Standardized Coefficients | t | Sig. | |
| | | | | | | B |
| 1 | (Constant) | .341 | .099 | | 3.454 | .001 |
| | Capital Investment | .682 | .031 | | 22.220 | .000 |
| | Amount of Labour | .227 | .039 | | 5.877 | .000 |

a. Dependent Variable: Annual Turnover Size

The regression coefficients show that both the Capital Invested and Number of labours are statistically significant predictors of Annual Turnover Size ($p < 0.001$ for both). The level of capital investment has a stronger effect, with a standardized beta coefficient of 0.703, indicating that businesses with higher investment tend to generate significantly more revenue. The amount of labour, although significant, has a smaller impact ($Beta = 0.186$), suggesting it also contributes positively but less strongly.

The intercept (constant) is 0.341, which indicates the expected turnover when both Capital Investment and Number of labours are zero. The coefficient for Capital Investment is 0.682 stated that for every one-unit

increase in investment, the annual turnover increases by 0.682 units, assuming the number of workers remains constant. The standardized Beta of 0.703 further confirms that investment is the strongest predictor in the model. The coefficient for Number of Labour is 0.227, meaning each additional worker contributes to an increase of 0.227 units in turnover, controlling for investment. Although its effect is smaller than that of investment, it is still statistically significant ($p < 0.001$).

Since the coefficient of labour employment is positive and statistically significant ($\beta = 0.186$, $p < 0.001$), the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, labour employment has a positive and significant influence on annual turnover.

Labour Working Hours and Turnover

Chi-Square test of independence is an appropriate statistical tool to examine whether the labour working hours is significantly associated with levels of annual turnover. The Chi-Square test helps determine whether variations in turnover occur independently of labour working hours or whether a meaningful relationship exists between these two variables.

Table 9: Working hours & Annual Turnover Size Crosstabulation

| | | Annual Turnover Size | | | | | | |
|---------------|-------------------|----------------------|--------|--------|---------|----------|--------------|-------|
| | | Only 1 | 2 to 3 | 4 to 6 | 7 to 10 | 10 to 20 | More than 20 | Total |
| Working hours | More than 12 hrs | 5 | 9 | 3 | 1 | 0 | 0 | 18 |
| | 8 to 12 hours | 59 | 89 | 31 | 9 | 17 | 2 | 207 |
| | 6 to 8 hours | 63 | 70 | 37 | 13 | 4 | 2 | 189 |
| | Less than 6 hours | 17 | 5 | 2 | 1 | 1 | 0 | 26 |
| Total | | 144 | 173 | 73 | 24 | 22 | 4 | 440 |

Table 8.6.1 Working hours & Annual Turnover - Chi Square Test

| Chi-Square Tests | | | |
|------------------------------|---------------------|----|-----------------------------------|
| | Value | df | Asymptotic Significance (2-sided) |
| Pearson Chi-Square | 26.622 ^a | 15 | .032 |
| Likelihood Ratio | 27.068 | 15 | .028 |
| Linear-by-Linear Association | 3.496 | 1 | .062 |
| N of Valid Cases | 440 | | |

a. 10 cells (41.7%) have expected count less than 5. The minimum expected count is .16.

The cross-tabulation of Table 8.6. shows how enterprises with different daily working hours are distributed across various turnover categories. The Chi-square statistic in Table 8.6.1 is statistically significant at the 5% level ($p = .032 < .05$).

Since the Chi-square test is statistically significant ($\chi^2 = 26.622$, $p = 0.032 < 0.05$), the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, working hours are significantly associated with enterprise performance.

Discussion

Findings from the study provide clear evidence that enterprise income in Mizoram is shaped primarily by economic capacity and human capital rather than by demographic identity. The influence of monthly family income suggests that entrepreneurs from economically stable families are likely to face fewer liquidity constraints, possess greater risk-bearing ability, and have better access to informal capital support. This indicates that enterprise performance in the state is closely linked to broader household economic conditions, highlighting the importance of financial inclusion and access to credit for first-generation entrepreneurs.

Human capital factors also emerge as important contributors to income variation. The positive

influence of age and education reflects the value of managerial maturity, accumulated experience, and cognitive skills in running enterprises effectively. Education enhances the ability to manage accounts, assess market opportunities, and adopt improved business practices. Engagement in additional occupations further suggests that income diversification can strengthen enterprise sustainability, possibly by reducing financial vulnerability and enabling reinvestment. In contrast, demographic attributes such as gender, marital status, and community do not appear to exert a meaningful influence on enterprise income.

Enterprises operating in more favourable or urban locations benefit from improved market access, infrastructure availability, and customer

concentration. The absence of strong effects from ownership form, family-run status, sector, or classification suggests that structural organization alone does not guarantee higher income unless supported by favourable market conditions.

The analysis shows that fixed capital sources are particularly important in determining overall investment levels, indicating that asset accumulation and long-term capital formation are key to enterprise expansion. While initial and working capital are necessary for starting and maintaining operations, sustained growth appears to depend more heavily on fixed asset investment. This highlights the structural importance of access to long-term financial instruments.

The relationship between investment and turnover strongly supports the capital–output framework. Total investment emerges as the principal driver of annual turnover, while initial investment alone does not sustain performance once ongoing capital accumulation is considered.

When labour input is introduced alongside capital, both factors contribute to turnover, though capital remains the more influential determinant. The findings imply that MSMEs in Mizoram operate in a semi-capital-intensive environment where financial resources generate stronger returns than labour augmentation alone. Nonetheless, labour remains a meaningful complementary input.

Operational intensity, measured through working hours, is also associated with turnover levels. Enterprises operating longer hours are more likely to achieve higher revenue categories, suggesting that extended business engagement increases market interaction and sales opportunities. However, working hours alone do not determine performance; rather, they appear to complement capital and labour inputs.

The findings, thus reveal that enterprise performance in Mizoram is predominantly shaped by financial strength, capital investment, human capital attributes, and locational advantage. Among these, capital intensity and household economic background emerge as the most powerful determinants. These results highlight the need for policies that strengthen access to long-term finance, improve entrepreneurial skills, and reduce spatial disadvantages to promote sustainable MSME growth in the state.

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