Table: Impact of MGP Loans on Enterprise Financing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Any Loan | Number of Loans | Formal Loan Source | Log Outstanding Loan | Interest Rate (%) |
| Panel A: PDS-Lasso | 0.655\*\*\* | 0.683\*\*\* | 0.158\*\*\* | 0.220\*\* | 3.147\*\* |
|  | (0.019) | (0.021) | (0.022) | (0.104) | (1.510) |
| Mean of Dependent Variable | 0.754 | 0.769 | 0.973 | 11.761 | 17.051 |
| SD of Dependent Variable | 0.431 | 0.476 | 0.161 | 1.040 | 33.881 |
| Observations | 2147 | 2147 | 1619 | 1479 | 1594 |
| P-value | 0.000 | 0.000 | 0.000 | 0.034 | 0.037 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.654\*\*\* | 0.677\*\*\* | 0.159\*\*\* | 0.274\*\*\* | 2.939\* |
|  | (0.021) | (0.022) | (0.022) | (0.097) | (1.532) |
| Mean of Dependent Variable | 0.754 | 0.769 | 0.973 | 11.764 | 17.188 |
| SD of Dependent Variable | 0.431 | 0.474 | 0.161 | 1.037 | 34.301 |
| Observations | 2148 | 2375 | 1794 | 1641 | 1765 |
| P-value | 0.000 | 0.000 | 0.000 | 0.005 | 0.057 |
| PDS-Lasso Selected Controls | Yes | Yes | No | No | No |
| Block Fixed Effects | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses

Panel B uses only the covariates selected by PDS-Lasso in Panel A.

All specifications include Block fixed effects with standard errors clustered at the Block level.

Variables selected by PDS-Lasso for each outcome: Column 1 (Any Loan): Age of the enterprise (years), Marriage age if ever married; Column 2 (Number of Loans): Age of the enterprise (years); Column 3 (Formal Loan Source): None; Column 4 (Log Outstanding Loan): None; Column 5 (Interest Rate): None;

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

Table: Impact of MGP on Enterprise Investment Behavior

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Any Investment | Investment Amount | Investment Types | Working Capital | WC Share |
| Panel A: PDS-Lasso | 0.092\*\*\* | 40412.992\*\*\* | -0.011 | -0.026\*\*\* | -0.036\*\*\* |
|  | (0.018) | (8724.805) | (0.026) | (0.009) | (0.011) |
| Mean of Dependent Variable | 0.906 | 2.19e+05 | 0.722 | 0.963 | 0.953 |
| SD of Dependent Variable | 0.292 | 1.65e+05 | 0.516 | 0.189 | 0.199 |
| Observations | 2130 | 1481 | 2147 | 1481 | 1481 |
| P-value | 0.000 | 0.000 | 0.677 | 0.005 | 0.001 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.087\*\*\* | 24745.665\*\*\* | -0.018 | -0.024\*\* | -0.034\*\* |
|  | (0.015) | (9244.496) | (0.023) | (0.011) | (0.013) |
| Mean of Dependent Variable | 0.906 | 2.22e+05 | 0.726 | 0.965 | 0.955 |
| SD of Dependent Variable | 0.292 | 1.66e+05 | 0.516 | 0.184 | 0.195 |
| Observations | 2356 | 1645 | 2375 | 1645 | 1645 |
| P-value | 0.000 | 0.008 | 0.441 | 0.030 | 0.012 |
| PDS-Lasso Selected Controls | Yes | Yes | Yes | No | No |
| Block Fixed Effects | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses

Panel B uses only the covariates selected by PDS-Lasso in Panel A.

All specifications include Block fixed effects with standard errors clustered at the Block level.

All investment variables measured for 2024.

Variables selected by PDS-Lasso for each outcome: Column 1 (Any Investment): Age of the enterprise (years); Column 2 (Investment Amount): sec2\_q2==Services (E.g.: Repairs, transportation, beauty parlours, tailoring, pr, sec3\_q5==Located in a main marketplace; Column 3 (Investment Types): Age of the enterprise (years), Female entrepreneur, sec3\_q5==Located on a quiet street with other businesses around; Column 4 (Working Capital): None; Column 5 (WC Share): None;

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

Table: Impact of MGP on Loan Repayment Behavior

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Any Delay | Frequent Delays | Long Delay | Repayment Difficult | Total Delays | Max Delay Length | Behavior Score |
| Panel A: PDS-Lasso | 0.052\*\*\* | 0.008 | 0.003 | 0.020 | 0.105\*\*\* | 1.013 | 0.022\*\* |
|  | (0.018) | (0.008) | (0.008) | (0.019) | (0.041) | (0.634) | (0.009) |
| Mean of Dependent Variable | 0.107 | 0.025 | 0.018 | 0.126 | 0.227 | 2.319 | 0.069 |
| SD of Dependent Variable | 0.309 | 0.157 | 0.133 | 0.332 | 0.908 | 11.556 | 0.159 |
| Observations | 1619 | 1619 | 1619 | 1619 | 1619 | 1619 | 1619 |
| P-value | 0.004 | 0.320 | 0.684 | 0.274 | 0.010 | 0.110 | 0.022 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

Sample restricted to enterprises with at least one loan.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.040\*\* | 0.009 | -0.001 | 0.020 | 0.111\* | 0.507 | 0.017\* |
|  | (0.019) | (0.008) | (0.007) | (0.023) | (0.059) | (0.652) | (0.010) |
| Mean of Dependent Variable | 0.103 | 0.025 | 0.016 | 0.124 | 0.219 | 2.203 | 0.067 |
| SD of Dependent Variable | 0.304 | 0.155 | 0.126 | 0.329 | 0.882 | 11.101 | 0.156 |
| Observations | 1794 | 1794 | 1794 | 1794 | 1794 | 1794 | 1794 |
| P-value | 0.040 | 0.309 | 0.908 | 0.393 | 0.063 | 0.438 | 0.086 |
| PDS-Lasso Selected Controls | No | No | No | Yes | No | No | No |
| Block Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses. Panel B uses only the covariates selected by PDS-Lasso in Panel A. Sample restricted to enterprises with at least one loan. All specifications include Block fixed effects with standard errors clustered at the Block level. Variable definitions: Any Delay = any payment delay across loans; Frequent Delays = 3+ delays on any loan; Long Delay = any delay >30 days; Repayment Difficult = self-reported difficulty with repayment; Total Delays = count of payment delays; Max Delay Length = maximum length of delay in days;

Behavior Score = average of four binary indicators (higher score indicates more repayment problems).

Variables selected by PDS-Lasso for each outcome: Column 1 (Any Delay): None; Column 2 (Frequent Delays): None; Column 3 (Long Delay): None; Column 4 (Repayment Difficult): sec3\_q5==Located on a quiet street with other businesses around; Column 5 (Total Delays): None; Column 6 (Max Delay Length): None; Column 7 (Behavior Score): None; \* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

Table: Impact of MGP on Business Practices

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Marketing | Stock Control | Record Keeping | Financial Planning | Total Score |
| Panel A: PDS-Lasso | 0.021 | 0.028\*\* | 0.041\*\*\* | 0.016 | 0.025\*\* |
|  | (0.017) | (0.014) | (0.014) | (0.011) | (0.011) |
| Mean of Dependent Variable | 0.604 | 0.689 | 0.682 | 0.416 | 0.584 |
| SD of Dependent Variable | 0.299 | 0.290 | 0.310 | 0.223 | 0.210 |
| Observations | 2147 | 2147 | 2147 | 2147 | 2147 |
| P-value | 0.234 | 0.044 | 0.003 | 0.134 | 0.017 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

All scores represent the proportion of good business practices adopted in each category.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.020 | 0.022\* | 0.032\*\* | 0.011 | 0.020\*\* |
|  | (0.016) | (0.012) | (0.013) | (0.009) | (0.008) |
| Mean of Dependent Variable | 0.606 | 0.689 | 0.685 | 0.419 | 0.587 |
| SD of Dependent Variable | 0.298 | 0.289 | 0.308 | 0.224 | 0.208 |
| Observations | 2375 | 2375 | 2375 | 2375 | 2375 |
| P-value | 0.213 | 0.075 | 0.018 | 0.241 | 0.013 |
| PDS-Lasso Selected Controls | Yes | Yes | Yes | Yes | Yes |
| Block Fixed Effects | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses

Panel B uses only the covariates selected by PDS-Lasso in Panel A.

All specifications include Block fixed effects with standard errors clustered at the Block level.

Business practice scores developed using 26 binary indicators across four domains: marketing (7 practices),

buying and stock control (3 practices), record-keeping (8 practices), and financial planning (8 practices).

Each domain score represents the proportion of practices adopted, and the total score is the average of all domains.

Variables selected by PDS-Lasso for each outcome: Column 1 (Marketing): Age of the enterprise (years), Years of education of the enterprise owner, sec3\_q5==Located in a main marketplace, sec3\_q5==Located in a secondary marketplace, sec3\_q5==Located in a residential area; Column 2 (Stock Control): Age of the enterprise (years), sec3\_q5==Located in a main marketplace, sec3\_q5==Located in a secondary marketplace; Column 3 (Record Keeping): Age of the enterprise (years), Years of education of the enterprise owner, sec3\_q5==Located in a secondary marketplace, sec3\_q5==Located in a residential area; Column 4 (Financial Planning): Age of the enterprise (years), Years of education of the enterprise owner, sec3\_q5==Located in a residential area; Column 5 (Total Score): Age of the enterprise (years), Years of education of the enterprise owner, sec3\_q5==Located in a main marketplace, sec3\_q5==Located in a secondary marketplace, sec3\_q5==Located in a residential area;

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

Table: Impact of MGP on Labor Outcomes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Any Employment | Total Employment | Paid Employment | Unpaid Employment | Paid Employment Share | Unpaid Employment Share |
| Panel A: PDS-Lasso | 0.096\*\*\* | 0.408\*\*\* | 0.508\*\*\* | -0.039 | 0.062\*\*\* | -0.062\*\*\* |
|  | (0.021) | (0.107) | (0.132) | (0.035) | (0.014) | (0.014) |
| Mean of Dependent Variable | 0.391 | 1.927 | 1.096 | 1.794 | 0.197 | 0.803 |
| SD of Dependent Variable | 0.488 | 2.224 | 2.660 | 0.846 | 0.299 | 0.299 |
| Observations | 2130 | 2121 | 2121 | 2121 | 2121 | 2121 |
| P-value | 0.000 | 0.000 | 0.000 | 0.262 | 0.000 | 0.000 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.064\*\*\* | 0.335\*\*\* | 0.421\*\*\* | -0.035 | 0.043\*\*\* | -0.043\*\*\* |
|  | (0.022) | (0.119) | (0.139) | (0.037) | (0.014) | (0.014) |
| Mean of Dependent Variable | 0.390 | 1.912 | 1.073 | 1.779 | 0.195 | 0.805 |
| SD of Dependent Variable | 0.488 | 2.191 | 2.602 | 0.841 | 0.299 | 0.298 |
| Observations | 2356 | 2346 | 2346 | 2346 | 2346 | 2346 |
| P-value | 0.004 | 0.006 | 0.003 | 0.344 | 0.002 | 0.002 |
| PDS-Lasso Selected Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Block Fixed Effects | Yes | Yes | Yes | Yes | Yes | Yes |

Standard errors in parentheses

Panel B uses only the covariates selected by PDS-Lasso in Panel A.

All specifications include Block fixed effects with standard errors clustered at the Block level.

Labor outcomes include: any worker employment (2022-2024), total employment in 2024 (including owner),

paid employment (2024), unpaid employment (2024, including owner and family workers),

and the shares of paid and unpaid workers in total employment (2024).

Variables selected by PDS-Lasso for each outcome: Column 1 (Any Employment): Age of the enterprise (years), Entrepreneur is SHG member, sec2\_q2==Trade/Retail/Sales (E.g. Shop keeping, wholesale trading, selling goods, sec3\_q5==Located in a residential area; Column 2 (Total Employment): Age of the enterprise (years), Entrepreneur is SHG member, sec2\_q2==Trade/Retail/Sales (E.g. Shop keeping, wholesale trading, selling goods; Column 3 (Paid Employment): Age of the enterprise (years), Entrepreneur is SHG member, sec2\_q2==Trade/Retail/Sales (E.g. Shop keeping, wholesale trading, selling goods; Column 4 (Unpaid Employment): Age of the enterprise (years), Female entrepreneur, Entrepreneur is SHG member, sec2\_q2==Services (E.g.: Repairs, transportation, beauty parlours, tailoring, pr, sec3\_q5==Located on a quiet street with other businesses around; Column 5 (Paid Employment Share): Age of the enterprise (years), Entrepreneur is SHG member, sec2\_q2==Trade/Retail/Sales (E.g. Shop keeping, wholesale trading, selling goods; Column 6 (Unpaid Employment Share): Age of the enterprise (years), Entrepreneur is SHG member, sec2\_q2==Trade/Retail/Sales (E.g. Shop keeping, wholesale trading, selling goods;

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

Table: Impact of MGP on Business Outcomes

|  |  |  |  |
| --- | --- | --- | --- |
|  | Log Monthly Profit | Log Monthly Sales | Innovation Score |
| Panel A: PDS-Lasso | 0.089 | 0.081\* | 0.012\* |
|  | (0.055) | (0.043) | (0.006) |
| Mean of Dependent Variable | 9.506 | 10.311 | 0.109 |
| SD of Dependent Variable | 1.058 | 0.928 | 0.141 |
| Observations | 2066 | 2111 | 2147 |
| P-value | 0.107 | 0.062 | 0.065 |

Standard errors in parentheses

Panel A displays results from PDS-Lasso model for covariate selection.

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01

|  |  |  |  |
| --- | --- | --- | --- |
| Panel B: OLS with PDS-Lasso Selected Covariates | 0.018 | 0.062 | 0.010\* |
|  | (0.054) | (0.043) | (0.006) |
| Mean of Dependent Variable | 9.523 | 10.324 | 0.112 |
| SD of Dependent Variable | 1.053 | 0.916 | 0.143 |
| Observations | 2290 | 2336 | 2375 |
| P-value | 0.739 | 0.149 | 0.089 |
| PDS-Lasso Selected Controls | Yes | Yes | Yes |
| Block Fixed Effects | Yes | Yes | Yes |

Standard errors in parentheses

Panel B uses only the covariates selected by PDS-Lasso in Panel A.

All specifications include Block fixed effects with standard errors clustered at the Block level.

Variables selected by PDS-Lasso for each outcome: Column 1 (Log Monthly Profit): Age of the enterprise (years), Female entrepreneur, sec3\_q5==Located in a main marketplace, sec3\_q5==Located in a residential area; Column 2 (Log Monthly Sales): Age of the enterprise (years), Female entrepreneur, sec3\_q5==Located in a main marketplace, sec3\_q5==Located in a residential area; Column 3 (Innovation Score): Age of the enterprise (years), Years of education of the enterprise owner, sec3\_q5==Located in a residential area;

\* *p* < 0.10, \*\* *p* < 0.05, \*\*\* *p* < 0.01