**Financial Infrastructure and Micro-enterprise Performance: Evidence from India**

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**Introduction**
- Micro-enterprises hindered by credit constraints
- Micro-enterprises have high returns to capital
- Does financial infrastructure affect micro-enterprise performance?

**Primary Research Questions**
- Do bank branch expansions affect micro-enterprise performance?
- Mechanism through which banks affects micro-enterprises

**Branch Expansion Policy in India**
- Flexible branch expansion policy in 2006, incentivizing private banks to open branches in “underbanked” districts
- District is “underbanked” if district bank branch density less than national average
- 364 out of 559 districts “underbanked” in 2006
- National average serves as an arbitrary threshold
- Compare micro-enterprise outcomes in observationally equivalent districts, on either side of threshold

**Data**
- Nationally representative survey in 2010 covering 300,000 informal micro-enterprises
- Data on enterprise expenses, revenues, capital, credit and workers
- 86% micro-enterprises are own-account enterprises
- 91% micro-enterprises have no outstanding credit

**Pre-Treatment Covariate Balance**

**Micro-enterprise Performance**

**Mechanisms**
- Potential channels: access to credit, access to savings, aggregate demand and industry linkages
- No evidence of direct credit channel: branch expansion does not affect micro-enterprise credit
- Savings channel: increase in private bank deposits in underbanked regions
- Aggregate demand channel: household per capita expenditures increase in underbanked regions
- Consumption increase driven by higher clothing and food expenditures

**Private Bank Branch Openings**

**Empirical specification**
\[ Y_{ijds} = \alpha + \delta U_{nderbanked_d} + f(Runvar_{ds}) + \psi f(Runvar_{ds}) \times U_{nderbanked_d} + \lambda x_{ijds} + \epsilon_{ds} \]

**Bandwidth of 15 (231 districts)**

**Table 1 Branch Expansion and Micro-Enterprise Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Value Addition (Log)</th>
<th>Revenue (Log)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unbanked</td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>(1.38)</td>
<td>(0.72)</td>
</tr>
<tr>
<td>Observations</td>
<td>133454</td>
<td>133454</td>
</tr>
<tr>
<td>R²</td>
<td>.35</td>
<td>.51</td>
</tr>
<tr>
<td>Control Mean</td>
<td>7295</td>
<td>29192</td>
</tr>
<tr>
<td>Notes: *10%, **5%, ***1%</td>
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</tbody>
</table>

**Conclusions**
- Financial infrastructure has a large positive impact on micro-enterprise performance
- Positive impact driven by aggregate demand channel
- Results point to the pro-poor role played by banks

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Notes: *10%, **5%, ***1%