

# Role of government in improving SME access to financing: Credit guarantee schemes and the way forward

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Bank of Thailand Symposium 2014

# The Study

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- The question:
  - What are the effects of government-provided credit guarantee on SMEs?
- The approach:
  - Using loan-firm-year level data to study Portfolio Guarantee Schemes provided by Thai Credit Guarantee Corporate (TCG) on SMEs and their bank loans
- The findings:
  - The availability of loan guarantee is related to credit additionality, subsequent asset growth, and incentive misalignment
  - Results are diverse across sectors

# Appraisal

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- Unique detailed data
- Interesting findings
- Important policy implications

# Discussions

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- Data and Method
- Findings and Interpretations
- Extension

# Data & Method

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- Data
  - Monthly loan-level data on bank lending to a single borrower during 2008-2013 (from Bank of Thailand)
  - Yearly firm characteristic data during 2008-2011 (from Ministry of Commerce)
  - Yearly data of firms joining PGS during 2009-2012 (from Thai Credit Guarantee Corporation, TCG)
  - Juristic IDs of SMEs according to Ministry of Industry definition (from Office of Small and Medium Enterprises Promotion, OSMEP)
- Eliminate financial firms, government agencies, and international organizations
- Eliminate observations from banks not participating in any PGS and banks without firms joining any PGS

# Data & Method - 2

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- Final data for analysis: 64,011 observations
  - 63,336 control observations (non-PGS)
  - 675 (1.05%) treated observation (PGS, i.e., bank-firm-year observations that participated in PGS)
- Very unbalanced non-PGS versus PGS observations
  - Vulnerable to different distributions of relevant variables for PGS and non-PGS groups
  - Alternative methods: Matching, Regression Discontinuity?

# Data & Method - 3

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- Who are the non-PGS?
  - Firms with sufficient collaterals
  - Firms with insufficient collaterals but not *eligible* for PGS (net fixed asset >200 MB)
- Who are not in the data?
  - Firms that did not get bank loans
    - No need for bank loans (have alternative financing, no need for expansion, etc.) => These firms were not financially constrained
    - Need bank loans, but did not get ones
    - Need bank loans, expected not to get ones hence not applying
- What are the appropriate counterfactuals we should look for? What are the appropriate control groups?

# Some Findings & Interpretations

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- (1) Effects of PGS for services sector:
  - Credit additionality
    - Credit addition
    - Decrease in collateral pledged to credit line ratio
  - Contribution to the economy
    - Asset growth
  - Incentive misalignment
    - NOT significant effect (no moral hazard)
- Implication from the findings:
  - Services sector should be targeted (the impact from asset growth is the highest while the cost from incentive misalignment is not significant)



# Some Findings & Interpretations - 2

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- Comments:
  - Who are these firms in services sector? What do they do?
  - Only 0.78% of PGS in total observations from services sector (1.59 for construction; 1.40% for utility; 1.24% manufacturing)
    - Why is the percentage so low for services? Are they less financially constrained (i.e. sufficient collaterals)? Are they financially constrained but not eligible for PGS (i.e. firms too large)?

# Some Findings & Interpretations - 3

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- (2) Effects of PGS for manufacturing, commerce, and construction/real estates/utility (C/R/U) sectors:
  - Credit additionality
    - Credit addition (manufacturing and commerce, but not C/R/U)
    - Decrease in collateral pledged to credit line ratio (all sectors)
    - Decrease in average interest rate (all sectors)
  - Contribution to the economy
    - NOT significant effect on asset growth
  - Incentive misalignment
    - Become *more* delinquency

# Some Findings & Interpretations - 4

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- Comments:
  - Why is there no effect on growth of fixed assets? Where do the loans go?
    - Financing current assets (e.g. working capital) instead of fixed assets?
      - Check: Effect on revenue (expansion of production) rather than investment in fixed assets
    - Repaying or substituting other existing loans (crowd out effect)? => These firms already have access to finance
    - Using loans on other risky activities (high delinquency)?
  - Also, is the absence of growth of fixed assets for manufacturing and C/R/U (more physical capital intensive sectors) while there is a positive effect for services (less physical capital intensive) counterintuitive?

# Some Findings & Interpretations - 5

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- (3) Effects on delinquency are heterogeneous across banks!
  - The authors can identify the banks that PGS is associated with higher delinquency
  - Possible explanation: Decrease in screening and monitoring of loan
  - Do the banks with higher delinquency (Bank A and Bank F) have larger loan portfolio under PGS as well?
- (4) Year fixed effect on delinquency?
  - Declining or increasing as PGS grows over time?