Discussion of :

# "Short-term Finance, Long-term Effects: Theory and Evidence from Morocco"

by Kenza Benhima, Omar Chafik, Min Fang, Wenxia Tang

Francesco Pappadà
*Paris School of Economics and Banque de France*

USC/Unil/Bank-Al-Maghrib "Small Business, Development and Growth"
October, 2022

# Research question

- Do guaranteed short-term loans allow SME to get access to credit and allow them to grow more?
- To what extent relaxing these constraints in a EM increases growth and aggregate welfare? The case of Morocco

# Summary

1. This paper explores the effects of a working capital loan guarantee program implemented in Morocco on firm characteristics – such as size, growth, cash holdings – and the aggregate implications
2. First, it provides evidence of three empirical facts about the effects of this loan guarantee program using firm-level data on 2009-2019
3. Second, it builds a model with heterogeneous firms, collateral and working capital constraints to rationalize the main empirical findings
4. Third, it exploits the model to run counterfactuals that highlight the benefits of lifting each constraint across the firm size distribution and for the entire economy

# Summary

1. This paper explores the effects of a working capital loan guarantee program implemented in Morocco on firm characteristics – such as size, growth, cash holdings – and the aggregate implications

2. First, it provides evidence of three empirical facts about the effects of this loan guarantee program using firm-level data on 2009-2019

3. Second, it builds a model with heterogeneous firms, collateral and working capital constraints to rationalize the main empirical findings

4. Third, it exploits the model to run counterfactuals that highlight the benefits of lifting each constraint across the firm size distribution and for the entire economy

# Summary

1. This paper explores the effects of a working capital loan guarantee program implemented in Morocco on firm characteristics – such as size, growth, cash holdings – and the aggregate implications
2. First, it provides evidence of three empirical facts about the effects of this loan guarantee program using firm-level data on 2009-2019
3. Second, it builds a model with heterogeneous firms, collateral and working capital constraints to rationalize the main empirical findings
4. Third, it exploits the model to run counterfactuals that highlight the benefits of lifting each constraint across the firm size distribution and for the entire economy

# Summary

1. This paper explores the effects of a working capital loan guarantee program implemented in Morocco on firm characteristics – such as size, growth, cash holdings – and the aggregate implications
2. First, it provides evidence of three empirical facts about the effects of this loan guarantee program using firm-level data on 2009-2019
3. Second, it builds a model with heterogeneous firms, collateral and working capital constraints to rationalize the main empirical findings
4. Third, it exploits the model to run counterfactuals that highlight the benefits of lifting each constraint across the firm size distribution and for the entire economy

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Key results

Empirical findings

1. Firms that have access to the guaranteed short-term loans decrease their cash ratio
2. and expand their production scale on impact and over time
3. The participation to the guarantee program is hump-shaped in firm size

Model results

- Size dependent collateral constraints and a fixed participation cost may explain the hump shape participation
- Expanding credit guarantee programs - by increasing the amount guaranteed and by decreasing the participation cost - increase growth and generates welfare gains

# Main comments

**Cash holdings**

- Large cash holdings by firms may denote the presence of credit frictions but this is not a specific feature of emerging economies
- Figure 1 seems to suggest that in terms of cash, control and treated firms differ regardless of the guaranteed loans received
- Table 3: "we observe a stagnation and even a weak decline in cash for guaranteed firms"; is this result really established (barely significant at t+2)?

# Main comments

**Cash holdings**

- Large cash holdings by firms may denote the presence of credit frictions but this is not a specific feature of emerging economies
- Figure 1 seems to suggest that in terms of cash, control and treated firms differ regardless of the guaranteed loans received
- Table 3: "we observe a stagnation and even a weak decline in cash for guaranteed firms"; is this result really established (barely significant at t+2)?

# Main comments

**Cash holdings**

- Large cash holdings by firms may denote the presence of credit frictions but this is not a specific feature of emerging economies
- Figure 1 seems to suggest that in terms of cash, control and treated firms differ regardless of the guaranteed loans received
- Table 3: "we observe a stagnation and even a weak decline in cash for guaranteed firms"; is this result really established (barely significant at t+2)?

# Main comments

**Cash holdings**

- Large cash holdings by firms may denote the presence of credit frictions but this is not a specific feature of emerging economies
- Figure 1 seems to suggest that in terms of cash, control and treated firms differ regardless of the guaranteed loans received
- Table 3: "we observe a stagnation and even a weak decline in cash for guaranteed firms"; is this result really established (barely significant at t+2)?

# Main comments

**Informal economy**

- Informality is instead a big issue for EME. For small firms *at the margin of formality*, the access to financial market is subject to the trade-off with the higher transparency required
- In presence of credit frictions, the benefit of getting access to credit for a small firm may be offset by the costs of becoming formal (tax burden)
    - control for contemporaneous tax reforms, e.g. corporate tax?
- Could the presence of informal economy explain the hump-shaped participation in firm size?
    - Figure 2 shows the final outcome: to what extent this is determined by the supply/demand of guaranteed loans? And the eligibility?

# Main comments

**Informal economy**

- Informality is instead a big issue for EME. For small firms *at the margin of formality*, the access to financial market is subject to the trade-off with the higher transparency required
- In presence of credit frictions, the benefit of getting access to credit for a small firm may be offset by the costs of becoming formal (tax burden)
  - control for contemporaneous tax reforms, e.g. corporate tax?
- Could the presence of informal economy explain the hump-shaped participation in firm size?
  - Figure 2 shows the final outcome: to what extent this is determined by the supply/demand of guaranteed loans? And the eligibility?

# Main comments

**Informal economy**

- Informality is instead a big issue for EME. For small firms *at the margin of formality*, the access to financial market is subject to the trade-off with the higher transparency required
- In presence of credit frictions, the benefit of getting access to credit for a small firm may be offset by the costs of becoming formal (tax burden)
  - control for contemporaneous tax reforms, e.g. corporate tax?
- Could the presence of informal economy explain the hump-shaped participation in firm size?
  - Figure 2 shows the final outcome: to what extent this is determined by the supply/demand of guaranteed loans? And the eligibility?

# Main comments

**Informal economy**

- Informality is instead a big issue for EME. For small firms *at the margin of formality*, the access to financial market is subject to the trade-off with the higher transparency required
- In presence of credit frictions, the benefit of getting access to credit for a small firm may be offset by the costs of becoming formal (tax burden)
  - control for contemporaneous tax reforms, e.g. corporate tax?
- Could the presence of informal economy explain the hump-shaped participation in firm size?
  - Figure 2 shows the final outcome: to what extent this is determined by the supply/demand of guaranteed loans? And the eligibility?

# Main comments

The **eligibility** to the guaranteed short-term loans

- what determines the eligibility to the credit guarantee program? Are there conditions to be fulfilled? What is the pattern of firms that applied to the program but are not considered eligible?
- these questions are relevant for your model, for instance:
  - if the selection into the guarantee program is not orthogonal to some firm characteristics
  - the hypothesis of an uniform fixed participation cost is probably not appropriate, and other mechanisms may deliver the hump-shape participation in firm size

# Main comments

The **eligibility** to the guaranteed short-term loans

- what determines the eligibility to the credit guarantee program? Are there conditions to be fulfilled? What is the pattern of firms that applied to the program but are not considered eligible?

- these questions are relevant for your model, for instance:
  - if the selection into the guarantee program is not orthogonal to some firm characteristics
  - the hypothesis of an uniform fixed participation cost is probably not appropriate, and other mechanisms may deliver the hump-shape participation in firm size

# Main comments

The **eligibility** to the guaranteed short-term loans

- what determines the eligibility to the credit guarantee program? Are there conditions to be fulfilled? What is the pattern of firms that applied to the program but are not considered eligible?
- these questions are relevant for your model, for instance:
  - if the selection into the guarantee program is not orthogonal to some firm characteristics
  - the hypothesis of an uniform fixed participation cost is probably not appropriate, and other mechanisms may deliver the hump-shape participation in firm size

# Additional comments

Expanding credit guarantees increases firm growth and welfare, but are there any adverse selection effects that one should consider for the stability of credit markets, and for the welfare analysis?

Table 2 on Asset growth: is there a reason why there is a gap between t+1 and t+2?

Minor typos in redaction, e.g. $\theta$ being disutility of labor first, then the degree of collateral ability, etc

# Additional comments

Expanding credit guarantees increases firm growth and welfare, but are there any adverse selection effects that one should consider for the stability of credit markets, and for the welfare analysis?

Table 2 on Asset growth: is there a reason why there is a gap between t+1 and t+2?

Minor typos in redaction, e.g. $\theta$ being disutility of labor first, then the degree of collateral ability, etc

# Additional comments

Expanding credit guarantees increases firm growth and welfare, but are there any adverse selection effects that one should consider for the stability of credit markets, and for the welfare analysis?

Table 2 on Asset growth: is there a reason why there is a gap between t+1 and t+2?

Minor typos in redaction, e.g. $\theta$ being disutility of labor first, then the degree of collateral ability, etc

# Concluding remarks

This paper exploits firm-level data for an EM economy to explore the effect of larger guarantees on short-term credit of firms

The research question is relevant, the paper is well executed, the model is able to replicate the empirical findings and provides a useful tool to run policy counterfactuals

Raising guaranteed credit to all firms increases their short and long-run growth fostering the development of the economy: does this come at no cost?

# Concluding remarks

This paper exploits firm-level data for an EM economy to explore the effect of larger guarantees on short-term credit of firms

The research question is relevant, the paper is well executed, the model is able to replicate the empirical findings and provides a useful tool to run policy counterfactuals

Raising guaranteed credit to all firms increases their short and long-run growth fostering the development of the economy: does this come at no cost?

# Concluding remarks

This paper exploits firm-level data for an EM economy to explore the effect of larger guarantees on short-term credit of firms

The research question is relevant, the paper is well executed, the model is able to replicate the empirical findings and provides a useful tool to run policy counterfactuals

Raising guaranteed credit to all firms increases their short and long-run growth fostering the development of the economy: does this come at no cost?