The Impact of Government-backed Lending to Corporates: The Role of Firm Size, Age and Regional Development

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Discussion by
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The paper in one slide

- This paper examines the impact of EIB intermediated loans on the performance of SMEs.
- It shows that the beneficiaries of the loans experience higher employment growth, firm growth, and investment.
- It shows heterogeneity in the impact across different subgroups (size, age, regional development) of loan beneficiaries.
- Very interesting paper, very easy to read (I am a lucky discussant).

Forces of the paper

- **1. Very relevant research question**
- Government-backed intermediated lending programs are widely implemented all over the world

- **2. Excellent dataset**
- Huge dataset of loans to 100,000 SMEs in the EU over the period 2008-2017

- **3. Methodology**
- Diff in diff to investigate the effect of intermediated lending at the firm level.

The introduction

- **It is not an introduction: it is a non-technical summary.**

- Consequence: many key elements are missing.

- **Remember**: the reader always reads the title, usually the abstract and the introduction, sometimes the rest of the paper
- => the introduction is fundamental

- **3 concerns.**

The introduction

- **1. No explanation of what the EIB intermediated loans are exactly**
- *"the impact of the European Investment Bank (EIB) her intermediated loans for SMEs in the EU, so-called multi-beneficiary intermediated loans (MBILs), on firms' performance"*

- What are these loans?
- How are they provided to banks?
- To which banks?
- To which firms on which criteria?

- We do not know after reading the introduction (and not much more after reading the paper).

The introduction

- **2. No complete and convincing contribution**
- *“The analysis builds on earlier work by Barbera et al. (2022) and Amamou et al. (2023) by significantly extending the time and country coverage, to close to 100,000 beneficiaries over the period 2008-2017, and by zooming in on the difference in impact across different beneficiary groups.”*
- First, say more about the contents of these papers.
- Second, give more justifications about your contribution.

The introduction

- **Barbera et al. (2022):** 22 countries; 2008-2015; impact by firm age, by firm size, by loan maturity, by loan amount.
- **Amamou et al. (2023)**: 28 countries; 2008-2014; impact by vulnerability to funding shocks.
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- *“significantly extending the (…) country coverage”* No.
- *“significantly extending the time (…) coverage”* No.
- *“by zooming in on the difference in impact across different beneficiary groups”* Limited.

The introduction

- Be more convincing about the contribution.
- I also have some ideas later that might improve the contribution.

The introduction

- **3. No hypotheses at all: why can we expect these loans to have an impact on firm performance?**
- It may be obvious to EIB guys. It is not obvious to readers of finance journals (because nothing is obvious to such readers).
- We can expect EIB intermediated loans to promote access to credit, but why should they favor performance?

The introduction

- **3. No hypotheses at all: why can we expect these loans to have an impact on firm performance?**

- <u>Suggestion:</u>
- Add references on the effect of access to credit on productivity and innovation:
  - Butler, A., Cornaggia, J. (2011). Does Access to External Finance Improve Productivity? Evidence from a Natural Experiment. *Journal of Financial Economics*, 99(1), 184-203.
  - Gorodnichenko, Y., & Schnitzer, M. (2013). Financial constraints and innovation: why poor countries don't catch up. Journal of the European Economic Association, 11(5): 1115-52.
  - Popov, A. (2014). Credit constraints and investment in human capital: training evidence from transition economies. Journal of Financial Intermediation, 23(1): 76-100.

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- It is a provocative remark, based on my possible misunderstanding of the whole process.
- Let me explain.

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- The control group consists of *"firms similar to the MBIL recipients, but that did not receive any government-backed intermediated loan".*
- OK. So it means that these firms may not have received ANY loan.

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- Let me explain.

- The control group consists of *“firms similar to the MBIL recipients, but that did not receive any government-backed intermediated loan”.*
- OK. So it means that these firms may not have received ANY loan.

- So, if we compare firms that received loans and firms that may not have received loans, isn’t it obvious that the first ones have a higher leverage ratio, higher total assets, higher tangible fixed assets?

One firm characteristic to test

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- Three characteristics are considered for heterogeneity: firm size, firm age, regional development.

One firm characteristic to test

- Three characteristics are considered for heterogeneity: firm size, firm age, regional development.

- Why not considering **CEO gender**?
- You have this information in the dataset
- Evidence that female-led firms are more credit-constrained

- To me it would strengthen the paper.
- That’s new, that’s a contribution, that’s in the zeitgeist.

And why not taking into account the lending bank?

- We have information on the main bank in the dataset.
- If it is the bank giving the intermediated loan, we can check whether the bank characteristics matter.

- How is decided the lending bank?
- How does the lending bank decide to give the intermediated loan?
- These elements can give ideas to investigate bank characteristics.

- Also banking sectors characteristics (e.g., bank competition) can affect the effect of intermediated lending on firm performance.
- It can matter.

A puzzling result

- Let's look at Table 1

- Treated: dummy=1 if the firm received EIB financing, 0 otherwise
- Post: dummy=1 if post-period, 0 if pre-period

A puzzling result

Table 1: Difference-in-differences estimation results

	(1) Employment (log)	(2) Total assets (log)	(3) Tangible fixed assets (log)	(4) Profit to shareholder funds ratio	(5) Leverage ratio	(6) Earnings (log)	(7) Value added (log)	(8) Patents filed
Post	-0.065***	-0.090***	-0.174***	0.006***	-0.010***	-0.067***	-0.069***	-0.010***
	(0.001)	(0.001)	(0.003)	(0.002)	(0.001)	(0.003)	(0.002)	(0.003)
Treated x Post	0.054***	0.060***	0.153***	-0.001	0.018***	0.047***	0.053***	0.011***
	(0.002)	(0.002)	(0.004)	(0.002)	(0.001)	(0.004)	(0.002)	(0.004)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country x Year x Sector	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.949	0.971	0.924	0.268	0.821	0.880	0.964	0.943
Observations	1,296,337	1,302,480	1,285,955	1,300,327	1,301,386	1,133,915	977,528	1,303,184

Notes: Estimation results of the main treatment effects model. Employment is measured as the number of employees. The leverage ratio is measured as a share of current and non-current liabilities to total assets. Earnings are measured by the earnings before income, taxes, depreciation and amortization (EBITDA).Value added is defined as the sum of a firm's net income, taxation, cost of materials, cost of labour, depreciation and interests paid. Patents are measured asthe number of patent applications in a given year. Standard errors, clustered at the firm level, in parentheses: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

A puzzling result

- You comment:
- *“The baseline results show a significant and positive impact of intermediated lending on beneficiaries’ employment, growth, investment…”*

- It is true that *Treated x Post* is positive and significant in most estimations…

A puzzling result

- …but at the same time *Post* is negative and significant in most estimations.
- … and the overall effect of *Post* (*Post*+ *Treated x Post*) is negative in most estimations.

- So in the years after signature of the loan, the general trend is negative for all firms.
- When you receive a loan, it is less negative but still negative.

- Why?

- I am not aware of any big economic slowdown in the EU for the period of the study.

Minor comments

- 1. You alternate “government-backed lending” and “EIB-backed lending” in the paper (including the title of the paper).
- To me, only “EIB-backed lending” is correct because EIB is not a state.

- 2. The variables Post and Treated in the tables are called I and T in the equation

The title

- “The Impact of Government-backed Lending to Corporates: The Role of Firm Size, Age and Regional Development”
- 2 remarks.

The title

- "The Impact of Government-backed Lending to Corporates: The Role of Firm Size, Age and Regional Development"

- **1. Too long**

- Paper published in Journal of Economic Behavior & Organization (2018) : "Title length"

- Finding: articles with shorter titles tend to be published in better journals and to be more cited.

The title

- “The Impact of Government-backed Lending to Corporates: The Role of Firm Size, Age and Regional Development”
- **2. Too boring**
- Many people (including my mother) consider that research in finance is boring.
- Your title does not help.

The title

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- **2. Too boring**

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- <u>Suggestions:</u>
- "Unleashing the Potential: How EIB Lending Fosters Firm Performance"
- "Not All Firms Benefits Equally: Heterogeneity in the Impact of EIB Lending to SMEs"

Thank you for your attention