Banc Ceannais na hÉireann
Central Bank of Ireland
Eurosystem

Discussion of Balduzzi, Brancati, Brianti, Schianterelli (*COVID-19 and Credit Constraints: Survey Evidence from Italian Firms*)

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Overview (… for those not listening)

1. *Thematic*
   - Credit constraints affect firms' real decisions in the face of a shock, i.e. they amplify shocks
2. *Identification*
   A. The COVID-19 shock was unanticipated and exogenous to firms and their Jan 2020 financing
   B. A group of financially-constrained firms can be compared to a control group for causal effects
   C. Two survey waves are conducted within two months either side of "case zero" in Italy – no role for confounding macroeconomic developments.
3. *Measurement*
   A. Firms' expectations respond rapidly to the shock – no issue with lagging P&L indicators
   B. Strong set of balance sheet controls merged to the survey
4. *Key findings*
   A. Credit constraints have real effects: Lower E(Sales, Orders, Employment), higher E(prices)

My comments will cover

- The paper does a really good job at explaining its findings. The data are excellent and the empirics are simple and clear.
- I am here to be picky!! Six themes I'll talk about, based on classic applied micro issues, and lessons from COVID's financial transmission in Ireland

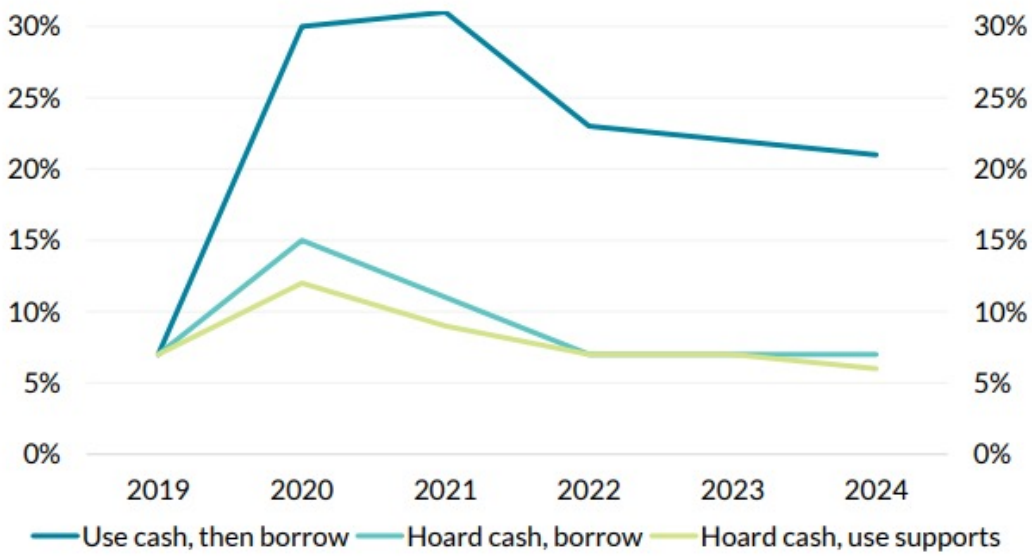
1. "Cash is king"
2. Some questions about government support
3. Measurement issues
4. The "Bartik-style" nature of the identification
5. The economic mechanisms behind the effect
6. Classic "causation versus selection" concerns

1: "Cash is King"

- ***What is the pandemic for a firm? A "sudden stop" liquidity crisis.***
- Very short-run implications for covering fixed costs in absence of either cash or government intervention.
- Work on SMEs during pandemic (*McCann-McGeever-Yao*)

  Model: firms can use cash, hoard it, borrow from banks, or tap direct government grants.
- The rub: Where firms are forced to use cash rather than forborne and allowed hoard it, financial distress estimates >double
- **Relevance here**→
  - Cash is more than "just another control"
  - Same mechanism as above? for turnover expectations?
  - Can authors make more of their findings around liquid assets?
  - Does liquidity interact with credit constraints?

Figure 7: Proportion of firms in financial distress



Notes: Financial distress rates under alternative firm tactics. First, firms use their cash holdings to finance losses and then borrow the remaining deficit. Second, firms borrow the full deficit. Third, firms claim grant support and then borrow any remaining deficit.

2: a question on governmental support

- Authors state that during survey window in late March, there was no information on Italian government support for businesses.
- First support, via state loan guarantees, was only discussed in April.
- My question: can this really be true?
- What about salaries? Were SMEs expected to simply pay them via bank borrowing? No grant aid?
- Paper would benefit from a clearer rundown of the full suite of enterprise support measures in Italy, and their timing.
- Example in Ireland of breakdown of government support: Wage subsidies ~€10bn, grants ~2bn, borrowing ~ 2bb, tax warehousing ~3bn (McGeever-Durante 2022)

3: a question on measurement

- Authors make a big play for expectations being a desirable Y variable.
- They are immediately adjustable in face of the shock, so do not suffer from reporting delays that would lead to "Macro pollution" of effects.
- However, expectations are also just a guess!
- Empirical question: how accurate are managers' expectations of their sales growth (a) in general (b) in the face of once-in-a-century uncertainty?
  - The paper would benefit from at least a discussion of some literature on how useful a measure expectations really are of firm performance.
- Broader question: are expectations correlated with personal characteristics of owners? Like optimism?
  - Maybe risk-takers are "hopeless optimists" have better expectations, and stronger-performing realists have weaker expectations?

4: some thoughts on the "Bartik-style" identification

- Not exactly framed this way because data are collapsed from two survey waves into a Delta, but:
- *[Pandemic*Credit_Constrain]* is akin to a "shift share instrument", where
- *Pandemic* is a time dummy, "the shift"; *Credit_Constrain* is continuous ex-ante exposure to shock, "the share"
- In this set-up, you are imposing that *Credit_Constrain* is now exogenously driving real outcomes, in a quasi-experimental type setting
- In Bartik-type approaches, always worry about **correlation between ex-ante exposure and error term**
- What drives SME behaviour (and growth expectations) during a shock of this nature?

1. unprecedented level of uncertainty (policy, demand)… and
2. **capacity+willingness** to respond to that uncertainty

- Risk for paper: is (2) correlated with ex-ante credit constraints? And can it be ruled out empirically?

Is the "Bartik share" (credit constraints) really orthogonal to the error?

- What determines **capacity** at firm level, to respond to the shock? Here's my laundry list
  1. Managerial capacity
  2. Agility
  3. Technological capacity
  4. Worker "effort"
  5. Within-firm "ties that bind"/culture
- Are 1-6 correlated with Jan 2020 credit constraints? Almost certainly yes.
- Can they all be measured accurately by the set of controls in the regression, so that they are not in the regression error term? Probably not.
- Do the authors need to do more to convince the reader that they're **really estimating the causal effect of credit constraints?** Probably.

Sectoral revenue shocks in Ireland by autumn 2020
Key point: wide interquartile range, ***even within sector*** (*Kren et al*)
Key question for ID strategy in this paper: what explains this degree of heterogeneity within a sector-specific exogenous shock? Similar stuff to last slide?

Table 4. Change in turnover between mid-March and October 2020 compared to 2019

	Freq.	Mean	Q_1	Med.	Q_3
Manufacturing	181	-20.4	-40	-20	0
Construction	134	-25.3	-40	-30	0
Wholesale	466	-19.6	-40	-25	0
Hotels & restaurants	167	-60.8	-80	-65	-40
Business services	333	-25.0	-40	-25	0
Other	211	-22.9	-35	-15	0
Self-employed	155	-33.9	-70	-35	0
Micro	424	-25.9	-50	-25	0
Small	567	-25.0	-40	-27	0
Medium	346	-26.6	-40	-20	0
Total	1492	-26.5	-50	-25	0

Firms' cost adjustment in Ireland by autumn 2020
Key point: wide interquartile range, ***even within sector (Kren et al)***
Question: how should we think about capacity to adjust cost base among Italian SMEs in this paper? Is it related to "agility", or "managerial capacity" or some other unobserved factor? Is it likely to inform survey responses on revenue expectations?

Table 8. Change in expenditure

	Change in expenditure					Expenditure elasticity	
	Freq.	Mean	Q_1	Med.	Q_3	Constant	Slope
Manufacturing	179	-8.7	-20	0	1	3.929^{**}	0.560^{***}
Construction	130	-8.6	-20	0	0	0.892	0.351^{***}
Wholesale	452	-6.2	-10	0	0	0.104	0.326^{***}
Hotels & restaurants	159	-18.4	-40	-10	5	13.766^{***}	0.512^{***}
Business services	323	-11.1	-20	0	0	0.598	0.419^{***}
Other	205	-1.6	-3	0	5	3.850^{**}	0.198^{***}
Self-employed	153	-13.2	-20	0	0	−2.022	0.370^{***}
Micro	408	-8.3	-15	0	0	1.809	0.360^{***}
Small	552	-7.5	-15	0	4	3.530^{***}	0.357^{***}
Medium	335	-8.3	-15	0	0	2.004	0.355^{***}
Total	1448	-8.5	-15	0	0	2.173^{***}	0.366^{***}

Slope coefficients, β_1 from equation 1, are expenditure elasticity of turnover. Significance levels (*** p<0.01, ** p<0.05, * p<0.1) estimated using robust standard errors. Regressions exclude outliers with changes greater than 100%.

Relationship Banking and Unobserved Confounders

- The authors have rich data on firm characteristics and expectations. This is a big help in solving issues from the previous slide!!
- ***However***, large empirical literature: Relationship lending to smaller businesses is very important in Italy
- Relationship bans probably know things that we cannot measure in the data about firm quality
  - Does this increase the risk that "selection on unobservables" is behind your finding?
  - Did the banks know something in 2019 that would explain why constrained businesses are less able to adapt to the pandemic?

5: Economics: The mechanism

- **Why** do credit constraints weaken sales expectations?
- I am no expert, but link from Financial Frictions theories to this paper's Credit Constraints not clear. They are used almost interchangeably in paper currently
- Where does the estimated effect come from?
  1. Lack of capacity to smooth reduced revenue by meeting fixed costs or salaries through revolving credit?
  2. Lack of capacity to react to shock, e.g. invest in teleworking, without investment financing?
- Could the authors write down even a conceptual framework for exactly the kind of mechanisms they have in mind that link their measure of credit constraints to post-shock outcomes?
- Does credit product type matter? Particularly given the loan agreements were made pre-shock?
  - Read John Krainer and Pascal Paul's work on usage of credit lines for most obvious mechanism
- Empirics: could you distinguish on either
  - *Credit Constrained, no other credit VERSUS Credit constrained, but overdraft available*
  - *Usage of term loans v revolving facilities*

6: Classic "Causation versus selection" issue

- Summary of all previous arguments!
- Imagine banks discriminated perfectly on basis of *Managerial Quality*, a true unobservable
- The 18% of firms with the lowest *Managerial Quality* were given a 1 for the variable *Credit Constraint*
- The other 82% were given a zero
- You could run your entire paper, identical empirics and drafting, and CTRL+H *Credit Constraint* with *Managerial Quality* *and the whole story would hold up*
- This seems flippant!! But it suggests there is a risk that there's "nothing special" about credit constraints per se
- Maybe credit constraints are just a "marker" for the lowest-quality businesses, it's a pure selection effect, and you're estimating the effect of firm quality. Can you rule it out?
- Recommend taking this worry seriously, even if it sounds picky! State clearly the assumptions throughout