The Flow Approach to Credit Markets:
Methodology, Measurement, and Macro Perspectives

Discussion by Victoria Ivashina

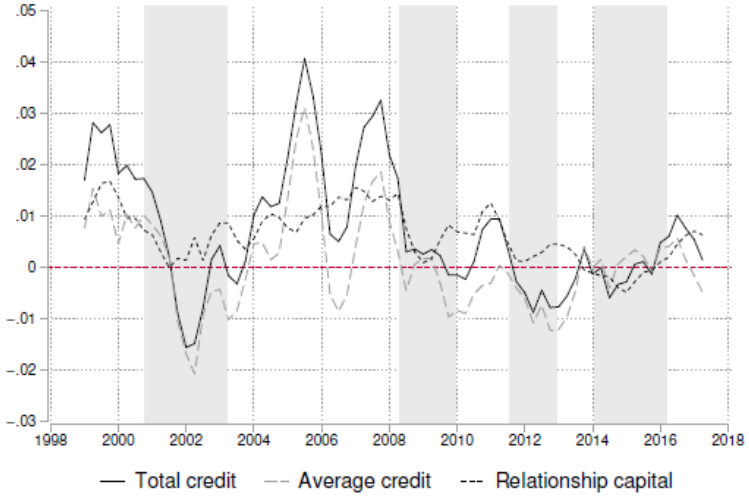
On Motivation (Take 1):

There is a bit of ambiguity on the research question/motivation:

- It might be that we are looking at a purely descriptive paper, which has an objective of establishing salient time-series patterns in the behavior of the extensive margin of credit (i.e., decision to lend to a given borrower), without any intention of separating supply and demand of credit
    - It is standard to look at credit flow in terms of dollar volume and number of loans, the difference here is that we look at reallocation within extensive margin (creation and severance of lending/borrowing relationships)
- If so, the authors need to think more about why this set of *equilibrium* statistics is relevant:
    - What are the hypotheses?
        - E.g., why should we be surprised that acquisition of new clients is more volatile than attrition of existing clients? Isn't this what the banking literature would say? Also, could it be mechanical? (It wasn't clear whether attrition was conditional on maturing loans.)
    - If we cannot isolate the supply effect, is it clear that it is relevant for theory? And in which way? (Section 7 is not very clear)
    - Does it affect policy implications?

Descriptive Route:

Figure 10: Extensive vs. Intensive Margins of Credit – Decomposition 1



(a) First-difference approach

Figure 10a illustrates the evolution of the aggregate credit (log-growth) in addition to its two extensive and intensive margin components over the sample period. For the most part, the large credit declines observed during crisis periods are due to the joint effect of both margins. In addition, the extensive margin seems to exhibit a "smoother" pattern and maybe a slower reaction over time, which highlights possible differences in adjustment behaviors and costs for each margin. In addition, such decomposition can also help characterize credit recoveries. For example, the nearly creditless recovery observed in 2010-2012 was due to a relatively subdued average credit per bank-firm pair, while the number of bank-firm relationships was actually growing over the same period.

On Motivation (Take 2):

[redacted] We start with a simple credit market identity, which represents aggregate credit supplied by banks, C_t, as the product of the number of credit relationships (i.e., extensive margin), N_t, which we refer to as *relationship capital*, and the average credit exposure per relationship (i.e., intensive margin), $\bar{c}_t$:

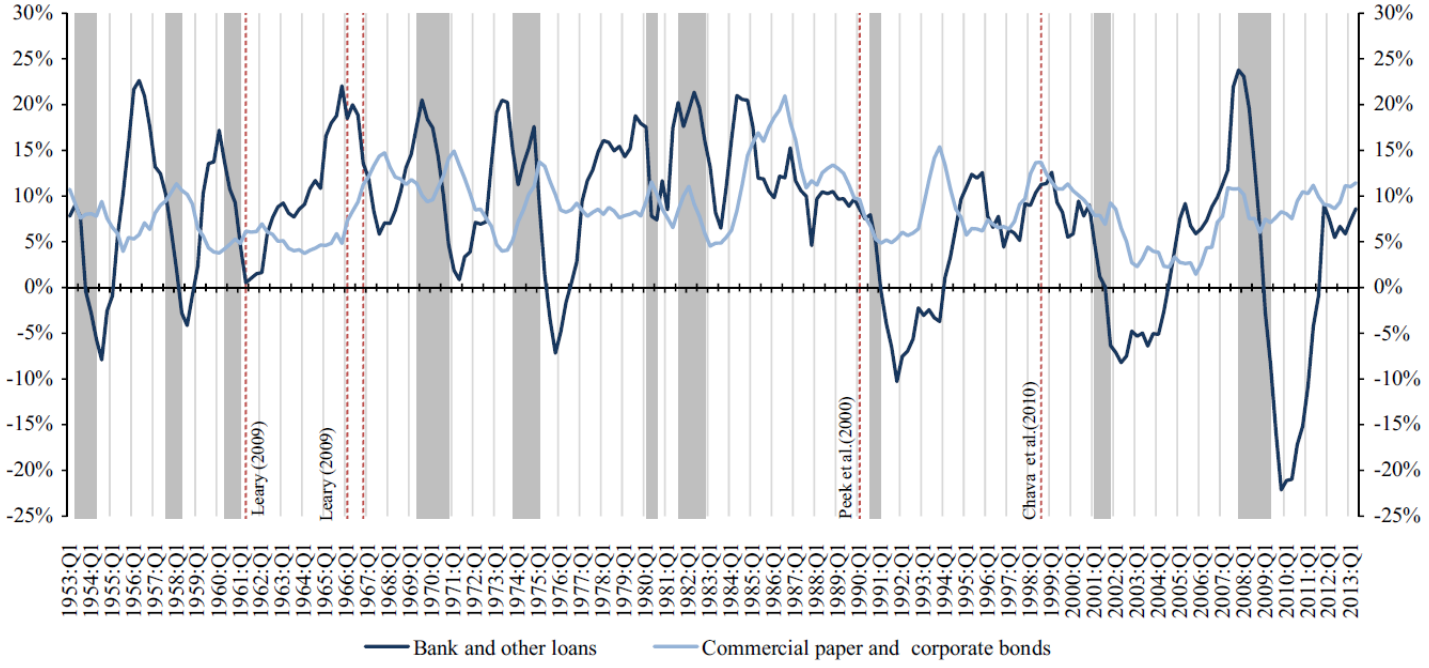
$$C_t = N_t \times \bar{c}_t. \quad (1)$$

[redacted] In that sense, the underlying changes in the extensive and intensive margins shape the dynamics of aggregate credit. [redacted]

- Labor literature referenced in the paper is unambiguously about the separation of supply and demand of labor
- If this is about supply, this is a big and important question: Measurement of the corporate bank credit supply fluctuations in the time series

On Motivation:

- Measurement of the corporate bank credit supply fluctuations in the time series
- In the time series, there is a strong relationship between corporate bank credit growth and economic cycles. But is there a supply effect?

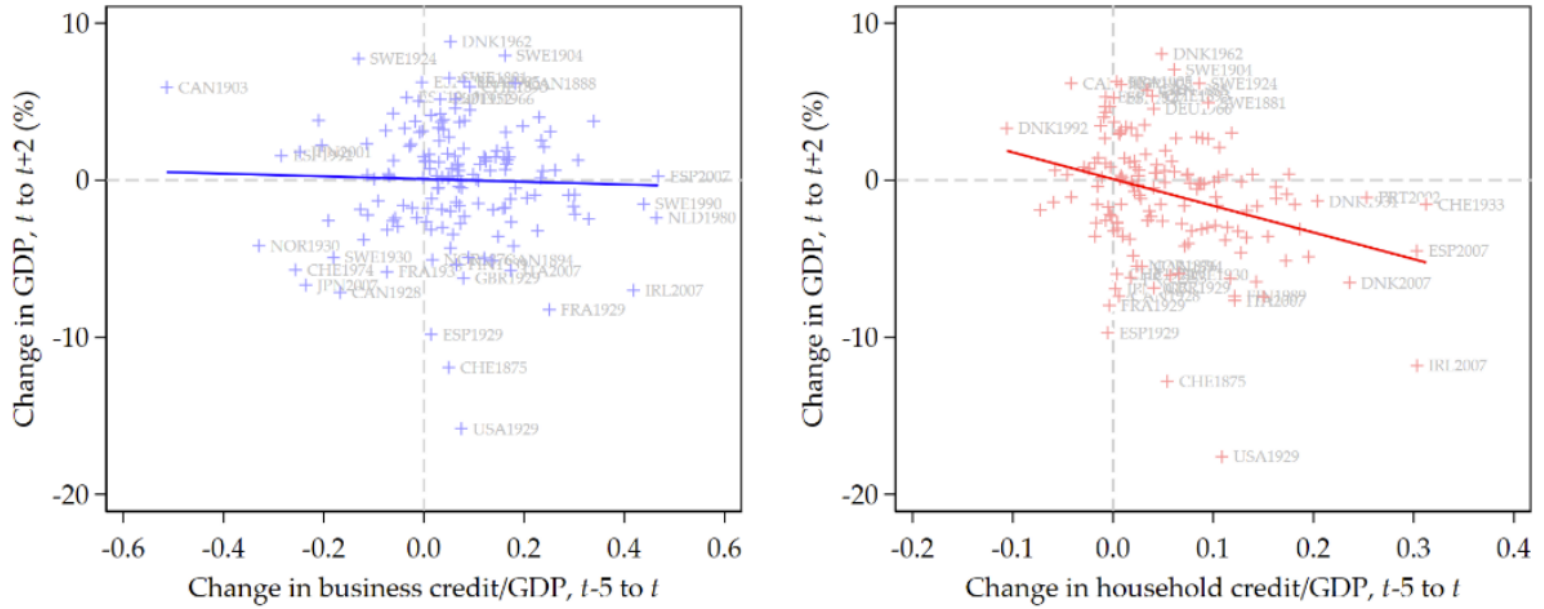


Becker and Ivashina (2014)

On Motivation

- For all the research relying on the cross-sectional identification, a widespread macro view is that corporate credit fluctuations (bank or otherwise) simply do not matter

Business credit booms and recession depth



"[T]his paper revisited the evidence on the macroeconomic after-effects of corporate debt booms. The bottom-line is straight forward. Corporate indebtedness and debt overhang problems in the corporate sector are often conjured as key risks for a quick rebound from the pandemic, but recent insights from macro-financial research do not raise alarm bells."

Notes: Reproduced from Jordà, Kornejew, Schularick and Taylor (2020). Scatterplot of business cycle peaks, arranged according to the preceding business credit boom (x-axis) and the subsequent recession trajectory (y-axis). Based on a sample of 18 advanced economies over the time span 1870-2020.

https://www.ecb.europa.eu/pub/conferences/ecbforum/shared/pdf/2021/Schularick_paper.en.pdf

This Paper:

(In what follows, I will focus on whether this approach can help us quantify the aggregate *supply* effect)

- A new approach inspired by (old) labor literature (specifically, Davis and Haltiwanger, 1992)
  - We are going to leave aside cross-sectional variation and focus exclusively on the extensive margin

- Key concept: *excess credit reallocation* or *credit market fluidity*

- So, what exactly is it? Importantly, what assumptions are embedded in the construction of these variables
  - Comment: It is central to the paper to have a clear account of assumptions (and their validation); currently, there is little guidance for the reader
  - Of course, if this is purely descriptive, no assumptions are necessary

Labor Literature:

- Variable of interest: Total worker reallocation (LTM)

Year *t*	Possible states, Year *t+1*		
	Employed (Old Job)	Employed (New Job)	Unemployed
Employed		Total worker reallocation	

I am making a few simplifications here

- Quest: separate job creation/distraction (labor demand) from labor supply ("reallocation of jobs" from "reallocation of workers")

- The idea is that we can do so with the Census data, because: "*year-to-year changes in establishment-level employment are largely influenced by changes in desired establishment size rather than by temporary movement in the stock of unfilled positions*" – i.e.., changes in the size of the establishment (# of employees) measure a *net* shift in labor demand (by the firm)/establishment-level labor demand is inelastic

Labor Literature:

- Quest: separate job creation/distraction (labor demand) from labor supply ("reallocation of jobs" from "reallocation of workers")

- Example:

Jobs "birth"	Jobs "death"
9%	11%

Labor demand effect	
At least	At most
11% =max(9%, 11%)	20% = 9% + 11%

- If total worker reallocation is 40% of employment, then between $\frac{11\%}{40\%}$ & $\frac{20\%}{40\%}$ is due to labor demand reallocation across work cites

This Paper:

Lingo

We want to isolate:

- previously, "labor demand" (by firms)
- now, "credit supply" (by banks)

- Variable of interest: Total credit reallocation

Year *t*	Possible states, Year *t+1*		
	Borrowing (Old Bank)	Borrowing (New Bank)	Not Borrowing
Borrower		Total credit reallocation	

- Quest: separate credit supply effect

- At the bank level, the number of new and discontinued lending relationships is not necessarily attributable to credit supply, i.e., it is far from clear that the credit supply is inelastic (and on top of that, inelastic on the extensive margin)
- The way we think about firm production & labor input seems to be very different from the way we would think about credit "production" by a bank

This paper

Relationship "birth"	Relationship "death"
9%	11%

- Excess credit reallocation/"credit market fluidity"= 9%+11%-2%=18% is built from the blocks that don't have clear supply or demand attribution.
  - Side point: Isn't this an upper bound? More "hand-holding" on the economics of the constructed variables would be helpful

In Sum:

- Fresh and intriguing approach to an important question: behavior of aggregate banks' credit

- Central comment: Fine-tuning the value of the contribution
  - First, which one is it?
  - If it is descriptive: in which way should we update it?
  - If it is a new methodology about the behavior of bank credit supply in the time series: Under which assumptions this is a valid approach? Are these assumptions realistic?