#### Perceived Precautionary Savings Motives: Evidence from FinTech

Francesco D'Acunto, Thomas Rauter, Christoph Scheuch, and Michael Weber

Discussant: Wenlan Qian, NUS & ABFER



ASIA'S GLOBAL BUSINESS SCHOOL

## **Paper Summary**

- Research Question: how consumers respond to the introduction of a mobile overdraft facility on a FinTech app
- Data: administrative checking account data from a major European FinTech bank
  - Monthly information about all financial transactions, including spending in different categories, inflows, fees, credit line application/balance etc.
  - (to mitigate selection issue) restrict to 40,979 individuals who obtained a mobile credit line between February 2015 and October 2017



## **Paper Summary**

- Identification:
  - Staggered treatment: compare users after activating the overdraft facility relative to before and relative to users whose overdraft facilities are not yet activated
    - conditional on consumers who are granted with mobile overdraft to mitigate endogeneity issue
  - -Regression discontinuity
    - The maximum limit of the overdraft facility jumps at several prespecified income cutoff, which users are not aware.



## **Paper Summary**

- Consumers increase their spending after receiving the creditS line
  - Magnitude is large: MPC out of granted credit is about 81%
  - Response concentrated on the first two month after credit access
  - Response is larger for discretionary spending
- Consumers with highest ratios of deposits to income flows have the largest response
  - However, they have low income vol, and less likely to use the overdraft credit
  - Those with lowest deposits do not respond at all
  - Results seem to be more consistent with the "perceived precautionary savings motive"



# Highlights

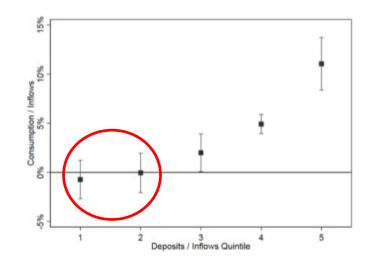
- Very impressive data
- Clean estimate of MPC out of credit based on the RDD
- Very intriguing results on the heterogeneity analysis— "perceived precautionary savings"



- Consumption response to mobile overdraft facility (on FinTech app)
- Overdraft is a form of credit line
- Questions to consider:
  - –How different from variation in traditional credit access?
    - Gross and Souleles (2002)
    - Leth-Petersen (2010)
  - -What is the special role of FinTech/mobile app
    - Exploiting more FinTech feature? E.g., discretionary choice over the credit limit, reminder notification



- The authors show that consumers in the bottom two deposits/inflows quintiles (in the month immediately before the overdraft activation) do not response at all
- Based on which the authors ruled out a serious possible explanations





# Comment 2 (cont.)

- They are more likely to use the overdraft credit after activation
  - 66.8% (42.4%) of the consumers from the 1<sup>st</sup> (2<sup>nd</sup>) quantile had negative deposits during the following quarter
- However, their consumption did not increase at all
- Where did the money go?



## Comment 2 (cont.)

- Consumers could have other bank or credit card accounts
  - This dataset only cover checking accounts; consumers have credit score
  - Savings rate in sample much higher than the average savings rate (10%) in Germany
- Is it possible they borrow against the overdraft credit and spend through credit card/payoff debts?
  - The interest rate of the credit line is 10%, lower than the interest rate of credit cards
- Or they simply face a negative income shock?



# Comment 2 (cont.)

- Suggestions:
  - Check whether there are abnormal outward transfer among these least liquid consumers after the overdraft activation
  - Better yet, incorporate other (credit card) spending in the analysis
    - Obtain access e.g., from credit bureau data



- In MPC and mechanism analysis, tests did not condition on the actual use of the overdraft
  - MPC out of the granted credit instead of used credit
  - Heterogeneity analysis also did not take into account of the differences in utilization
- In sample, 50% of the observations use the granted credit
  - How to interpret the results for a large group who activated overdraft but never used the credit?
  - The utilization propensity appears especially low for the high deposit-to-income consumers



- Recall that the heterogeneity analysis is based on DID analysis
  - Identifying assumption is the random timing of activation

	Deposit/Inflows quintiles				
	(1)	(2)	(3)	(4)	(5)
Deposit <sub>t-1</sub>	32.596	439.433	1078.545	1909.177	4124.7
Deposit <sub>t-12,t-</sub>	316.625	541.457	891.213	1258.738	2362.494
Income <sub>t-1</sub>	1309.255	1815.831	1865.397	2009.052	1321.96
Income <sub>t-12,t-</sub>	1188.622	1335.739	1522.682	1383.086	1143.447

 For consumers from the top quintile, their deposit increased rapidly, but their income did not: they are saving immediately before the credit line activation



## Comment 3 (cont.)

- What are they saving for?
  - It is possible they anticipated a large expenditure in the future, therefore save and at the same time activate the credit line
- Suggestions:
  - -Explicitly test the pre-trend of deposit
  - Construct the grouping variable based on t-12~t-3, to mitigate the anticipation concern
  - Repeat this analysis using RDD to get rid of potential endogeneity concern



- Mobile overdraft seems to be very cheap
  - Very convenient to apply; no application fee
  - Annualized interest rate of credit line is only 10%, no penalty if credit is not used
- However, only 32% of the consumers applied for mobile overdraft
  - On average consumers apply about 9 months after account opening
- What prevent them from applying?

