# Household Debt and Business Cycles Worldwide

(Atif Mian, Amir Sufi and Emil Verner)

discussion by Victoria Ivashina

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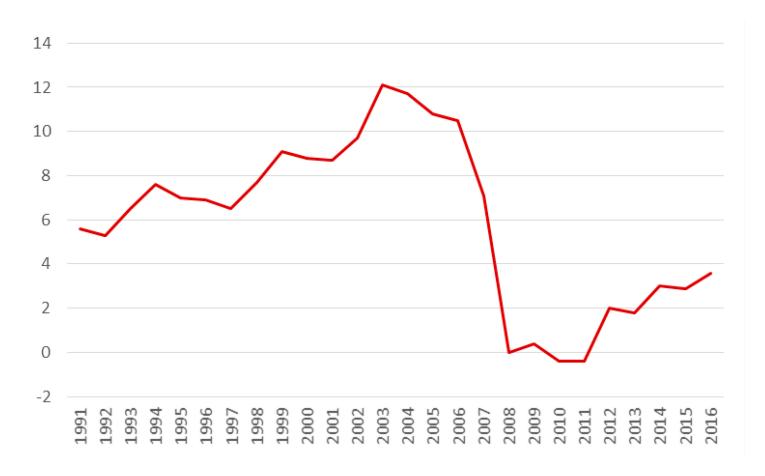
# Key result:

 ${\it TABLE~II} \\ {\it Credit~Expansion~and~Contemporaneous~and~Future~Three-Year~GDP~Growth}$ 

		Dependent variable: $\Delta_3 y_{it+k}, k = -1, 0,, 5$						
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
		$\Delta_3 y_{it-1}$	$\Delta_3 y_{it}$	$\Delta_3 y_{it+1}$	$\Delta_3 y_{it+2}$	$\Delta_3 y_{it+3}$	$\Delta_3 y_{it+4}$	$\Delta_3 y_{it+5}$
Households debt	$\Delta_3 d_{it-1}^{HH}$	0.176*	0.121	-0.0136	-0.178**	-0.337**	-0.410**	-0.405**
		(0.0793)	(0.0810)	(0.0680)	(0.0629)	(0.0779)	(0.0905)	(0.102)
Firm/corporate debt	$\Delta_3 d^F_{it-1}$	-0.0430	-0.140*	-0.159**	-0.108**	-0.0411	0.0327	0.0876*
		(0.0556)	(0.0550)	(0.0437)	(0.0362)	(0.0349)	(0.0395)	(0.0373)
	Country fixed effects	✓	✓	✓	✓	✓	✓	✓
	Test for equality of							
	$\beta_{HH}$ and $\beta_F$ , p-value	.0465	.0184	.0905	.3558	.0017	.0002	.0002
	$R^2$	0.0256	0.0631	0.0999	0.103	0.128	0.138	0.128
	Observations	815	785	755	725	695	665	635

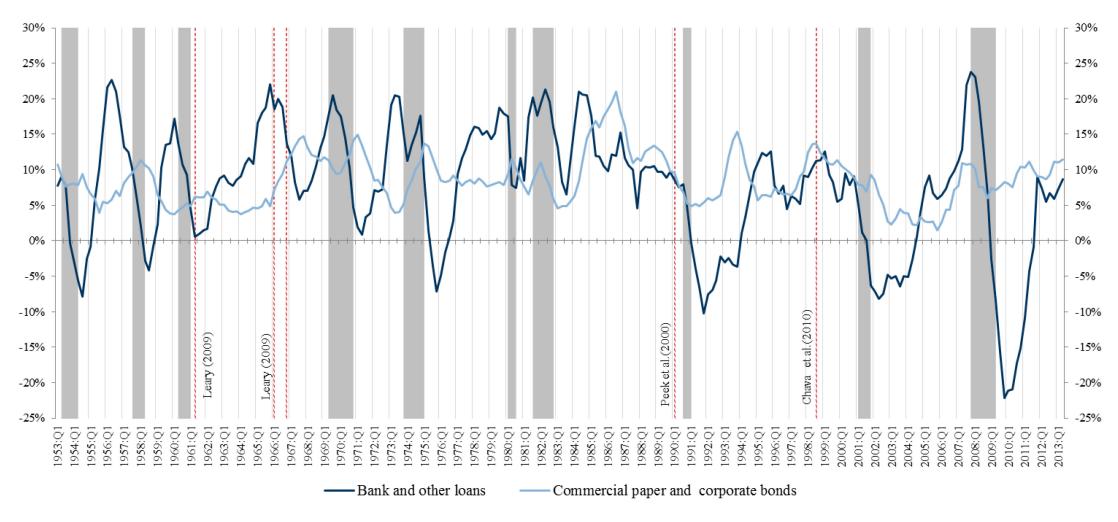
## Strong connection between HH debt & the Great Recession

U.S. Household Credit Growth (Source: U.S. Financial Accounts)



### U.S. Non-Financial Corporate Credit vs. Household Credit Growth

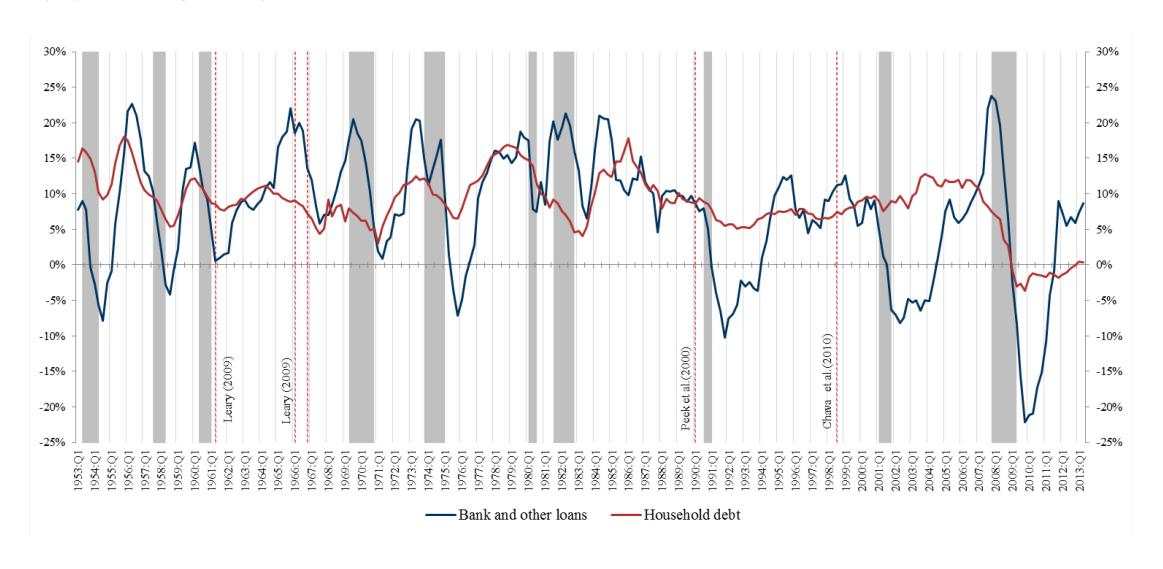
(4-quarter rolling window)



(Becker and Ivashina, 2014)

#### U.S. Non-Financial Corporate Credit vs. Household Credit Growth

(4-quarter rolling window)



#### Call for the micro foundations

 Accordingly, for the U.S. (which is where we have the micro foundations of the role of the HH debt), the result does not hold outside of the most recent period... despite the fact that U.S. is the one with GSEs, mass securitization, and large institutional base

So, what are the micro foundations of the cross-country result that we see here?
In particular, outside of the most recent 15 years

That said, I would expect to find this pattern in the next 30 years

# What to make out of this pattern?

- In thinking about theoretical framework that encompasses the behavior of  $d^{HH}$  and  $d^F$ , we cannot put aside the role of corporate credit  $d^F$  as the central driving force/trigger
  - The two are not independent
  - Connection to consumption and consumer credit: More highly levered firms experience significantly larger job losses (Giroud and Mueller, 2017)
- The use of Greenwood and Hanson (2013) in this paper reinforces this point