



**Discussion of**  
**“The Financing of Local Government in China:  
Stimulus Loan Wanes and Shadow Banking Waxes”**

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# Core Story

2009 4T¥ post-crisis stimulus financed largely by bank loans to LGs/ LGFVs to fund infrastructure investment

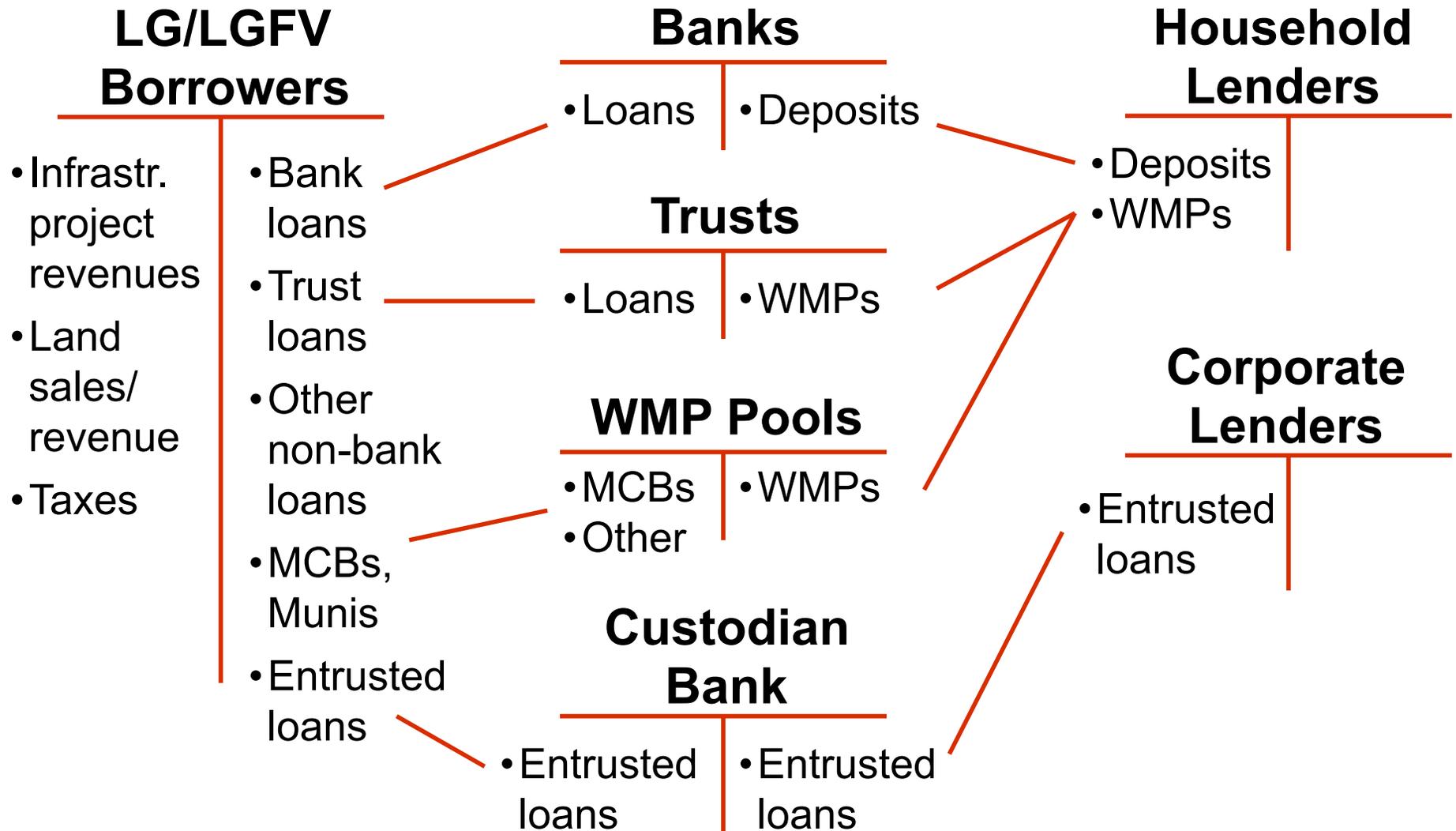


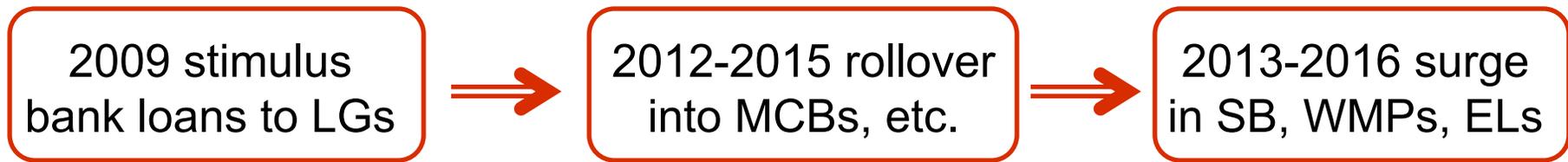
2012-2015 rollover of maturing bank loans by LGs/ LGFVs into non-bank financing, especially MCBs



2013-2016 surge in SB, WMPs, and ELs, and the opening up and modernization of interbank market

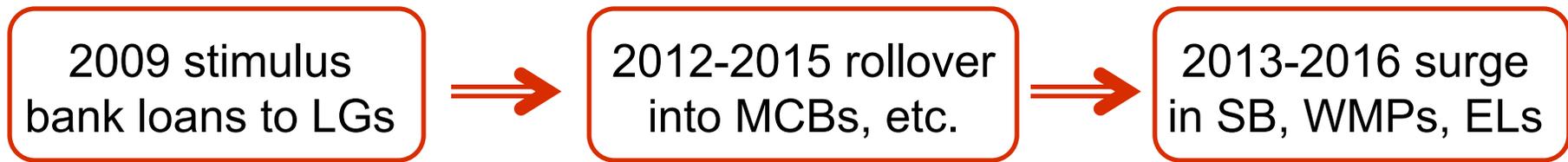
# Financial System Picture





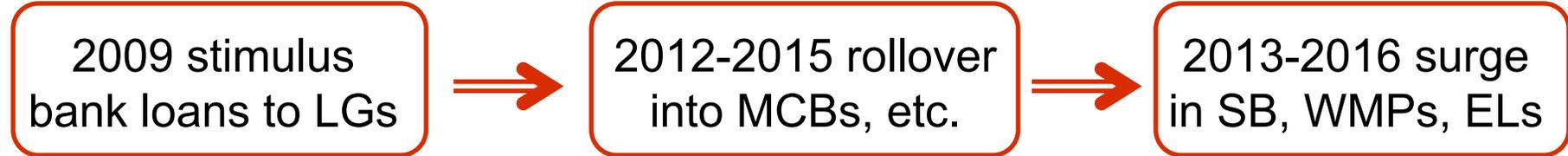
## Summary of Evidence

1. F4 - Change in composition of aggregate LG debt 2008-2015: bank loans down from 80% to 30%, MCBs+Munibonds+Trust up from ~0 to 20%.
2. F5 - Growth in MCB issuance from 2004 from ~0 to 2% of GDP, Repay MCBs grow especially fast after 2012.
3. T3,4,5 - Cross-regional/cross-province evidence from regressions of “abnormal 201t MCB issuance/GDP” on “2009 abnormal BL/GDP.” Province level controls to address endogeneity of BL. Placebo test with 2008 BL. Panel regression is consistent with year-by-year regressions, panel coefficient is 0.10, statistically significant.
4. T7 - Cross-sectional regressions with 2013-2015 ELs on the left instead of MCBs. Panel regression coefficient is 0.20, statistically significant.
5. F8 - Aggregate WMP pool holdings of MCBs rises from 40% to 50% over 2014-2016.



## Comments

1. Title - MCBs and Munibonds are not “shadow banking” products
2. T5 – cut by purpose – Coefficient on  $MCB_{\text{repay}}$  drops to 0.03, t-stat falls. Restricting to Repay bonds should sustain coefficient, increase t-stat.
3. Economic magnitudes and MCB vs. EL stories don’t quite add up
  - S4.3.4 on p30 argues that MCBs fully repaid bank loans (T8 panel,  $MCB10_{\text{repay}}$  coefficient = 0.13.  $0.13 \times 2 \times 4 \text{ yrs} \sim 100\%$ ).
  - But this suggests that they couldn’t have been refinanced with ELs.
  - Indeed, the surge in ELs is not directly linked to LG/LGFV borrowing.
  - Yet T7 panel regression coefficient on 2009 BL/GDP with ELs on the left side is 0.20, vs. the 0.10 coefficient when MCBs are on the left.
4. T2A reports that only 25% of new MCB issuance is for “repay” (1477.5 out of 5927.3). This suggests “repay” is small part of the MCB surge story.



## Comments, cont'd

1. Taken together, the results don't strongly support the refinancing story as the main explanation for the surge in SB, but rather open the door for some other channel.
2. The identification issue is important because other papers propose different mechanisms.
3. Chen, Ren, Zha (2017) and Hachem and Song (2015) essentially argue that the 2011 surge in shadow banking was driven by financial intermediaries vying for alternative profit sources after the post-stimulus regulatory clampdown reduced the profitability of traditional banking.
4. Was the shadow banking surge primarily LG-borrower-driven? Or SB-lender-driven? Or both? What is the relative importance?
5. The policy implications of these alternative stories could be very different. I.e., should the regulators rein in the LGs? Or the Shadow Bankers?

# Bigger Picture

**China has a really important economy...**

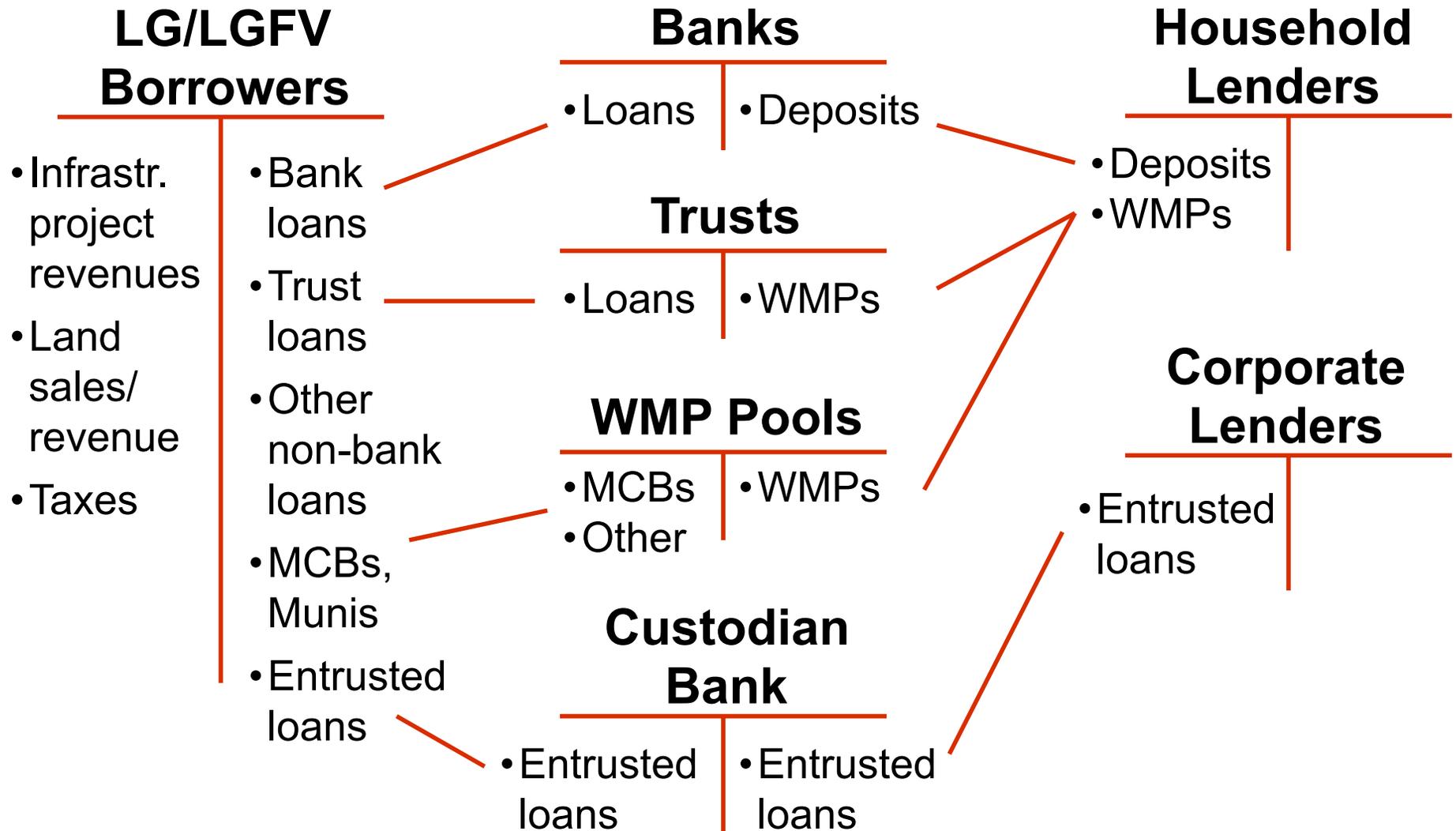
Country	2017 GDP \$T	2022 GDP \$T	% of Global Growth	Population Billions	Millions Lifted from Poverty 2005-2015
US	19	24	20%	0.32	
China	12	18	27%	1.38	203
Japan	5	5	2%	0.13	
Germany	3	4	2%	0.08	
UK	2	3	2%	0.07	
India	2	4	7%	1.33	368

**with a really important financial system...**

Country	Bank Assets \$T	Bond Mkt \$T	Stock Mkt \$T	Total \$T
US	16	30	27	73
China	33	9	8	50

**that's really different from the one we usually study in finance.**

# Financial System Picture



## Concluding Remarks

1. Despite the increasingly urgent need for more research on China, the field of finance still focuses overwhelmingly on the US.
2. Where it ventures outside the US, it seeks parallels and similarities with the US context, in the quest for “external validity.”
3. But China is now important enough that research in finance on China is valid even when it has no direct application to the US.
4. China’s banking/shadow banking sector is one of its financial system’s most important components, and has no real US counterpart.
5. Groundbreaking research on this topic is a messy, professional risky business that needs leadership from senior people.
6. This paper delivers a wealth of new institutional detail and insight, and makes a significant contribution to an important, growing literature on China’s banking/shadow banking sector. Thank you!