

In The Shadow of Banks: Wealth Management Products and Bank Risk



Viral Acharya
New York University

Jun 'QJ' Qian
Shanghai Advanced Inst of Fin.

Zhishu Yang
Tsinghua University

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Motivation

- Shadow banking and financial system:
 - Common properties: 'regulatory arbitrage' by financial institutions
 - Not as easy to regulate and monitor
 - May increase the overall risk of the financial system
 - "Shadow always touches the feet!"
 - ▣ Shadow banking connected to banks due to regulatory arbitrage motive
- Little empirical work to examine the large shadow banking sector in China:
 - Determinants
 - Risks
 - Largest component of shadow banking is "wealth management products" (WMPs) issued by banks

This Paper

- Use detailed info from 25 large Chinese banks:
 - All Wealth Management Products (WMPs)
 - Information on the issuing banks

- Research questions:
 - Regulatory arbitrage: How do the WMPs relate to interest rate policies and other banking regulations?
 - Deposit-rate ceilings, capital requirements and loan-to-deposit ratios should give rise to off-balance-sheet deposits
 - Similar in the US to the growth of money-market funds around Reg Q and the growth of asset-backed commercial (ABCP) paper around capital requirements
 - How do the WMPs relate to bank health?
 - Under-capitalized and too-big-to-fail banks should engage in more regulatory arbitrage
 - How do the WMPs affect bank health?
 - Impact of a “credit” event (SHIBOR spike in summer of 2013)

Banking Sector Regulations

- 'Standard' banking regulations:
 - Capital requirements; macro-prudential regulations
 - Very high reserve ratios (21.5% in June 2011, part of the 'sterilization' of very large inflows of 'hot money' since 2009)
- Regulation of interest rates:
 - PBOC sets base-line interest rates (vary with business cycles and maturities) and upper and lower bounds on rates
 - Lending rates have been liberalized
 - Upper bound of deposit rates still binding (up to 1.5 times of base rates; forced transfers from savers to borrowers)
- Other lending restrictions:
 - Lending-deposit ratio (L/D; lending \leq 75% of deposits)
 - Banks cannot invest in certain sectors (stock market) or conduct I-bank services (e.g., underwriting/trading)

Regulatory 'arbitrage' by Chinese banks

- Regulations give rise to the emergence of 'shadow banking':
 - Demand for low risk investment products that offer higher returns than (regulated) deposit rates
 - Banks' incentive to offer off-balance sheet products (not subject to L/D ratio and capital requirements) and earn higher profits
- Broadest definition of 'shadow banking':
 - All investment products that are off-the-balance sheet of banks
 - Largest component: banks' WMPs
 - ▣ similar products such as Yu'e'Bao (by Alibaba);
 - Products offered by non-bank institutions: Entrusted loans
 - ▣ banks can invest in some sectors that they cannot directly do so
 - Informal credit/lending agencies

A 'dual-track' system of intermediation

- Regulated deposits and on-the-balance sheet lending activities:
 - Funding costs low on regulated deposits
 - Majority of corporate lending goes to SOEs and large firms
 - Balance-sheet lending constrained by L/D ratio and capital requirements
 - Greater leverage would require unregulated deposits
- When regulated rates are low, savers are more "repressed" and seek higher yields
 - Worse-capitalized banks, wanting to seek leverage, more likely to issue WMPs by offering higher yields
- 'Shadow banking' activities are linked to banks' overall risks:
 - WMPs offer a better alternative for depositors
 - WMPs can allow banks to invest in sectors that they cannot do otherwise (through on-balance-sheet lending)
 - WMPs' returns and principal may or may not be guaranteed: different risk and maturity profiles

Implications of the 'dual-track' system

Risk-taking:

- Banks with more "skin in the game" (better-capitalized banks) have greater incentives to take risks and leverage; hence, issue more WMPs

Taking advantage of repressed savers:

- When (regulated) rates are low, such banks more likely to issue WMPs and offer (relatively) higher yields on WMPs

Moral hazard:

- Too-big-to-fail banks compete more aggressively in WMPs issuance and offer higher yields, especially in low regulated-rate environments

Low capital, high WMPs -> Exposure to "tail risk"

Data (for the period 2007-2014)

- Data on WMPs from 25 large banks at quarterly frequency:
 - Balance outstanding (Dec 2011-14), Source: CBRC
 - Yield on newly issued products, by maturity (2007-14), Source: WIND
 - [NOT YET EXPLORED] Return: guaranteed or not; Type of investment

- Information on the banks:
 - Ownership type (owned by central or local govt)
 - Accounting and financial figures
 - For listed banks:
 - ▣ Stock prices (some banks are cross listed in China and abroad)
 - ▣ [NOT YET EXPLORED] Standard and other risk measures (from NYU Stern V-lab)

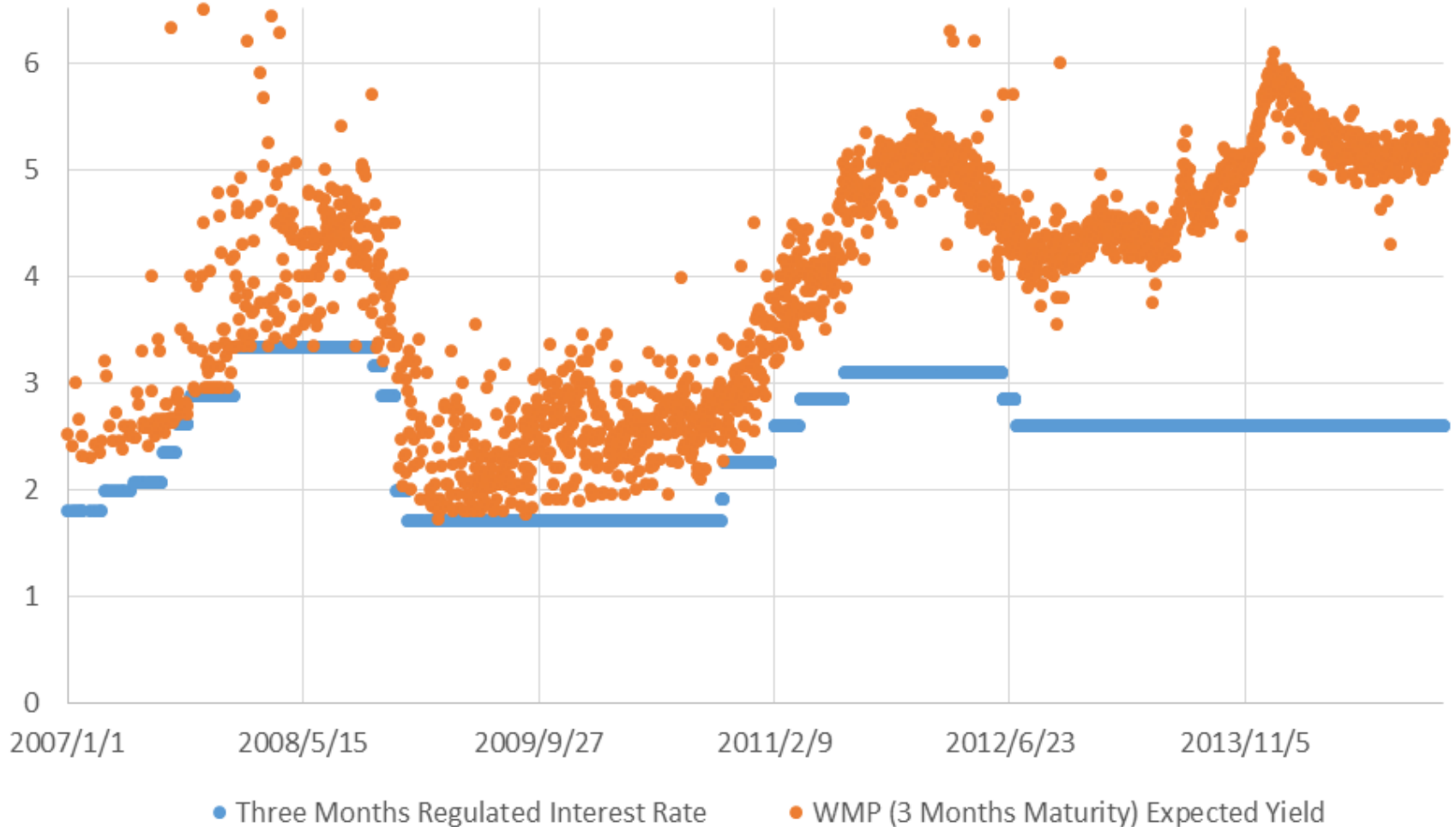
- Other information:
 - Regulated interest rates set by PBOC
 - Interbank rates (SHIBOR)

WMP variables, rates, bank condition

WMP Yield (%)	Measured as the expected yield ceiling of a certain product.
WMP Maturity (months)	Measured in terms of months, from 0 to 12 months (13 groups).
WMP Total Balance	Measured as the total WMP balance at the end of each quarter.
WMP Guarantee Balance	The guaranteed yield and the guaranteed principal products make up the total guarantee balance.
WMP Floating Balance	Only the floating yield products make up the total floating balance.
Regulated Interest Rate	The PBOC (central bank) controls the regulated interest rate and sets a baseline for different terms of maturity.
SHIBOR Rate	The Shanghai Interbank Offer Rate, similar to the LIBOR, and typically used as a measure of market liquidity.
Capital Ratio	The bank's capital to risk weighted assets.
Capital Ratio Threshold	Measured as the difference between the capital ratio and the regulated threshold. Prior to 2013, all banks are regulated at threshold 8%. After 2013, for the systematically important banks, the threshold is 11.5%, and for others it is 10.5%.
Ln(Total Assets)	The natural log of the bank's total asset at each quarter.
ROA	The bank's net income divided by its total assets.
Total Deposit / Total Liability	The bank's total deposit divided by total liability.
Percentage of Floating Yield Product	The number of the floating yield product divided by the total number of WMP issued within a certain quarter.

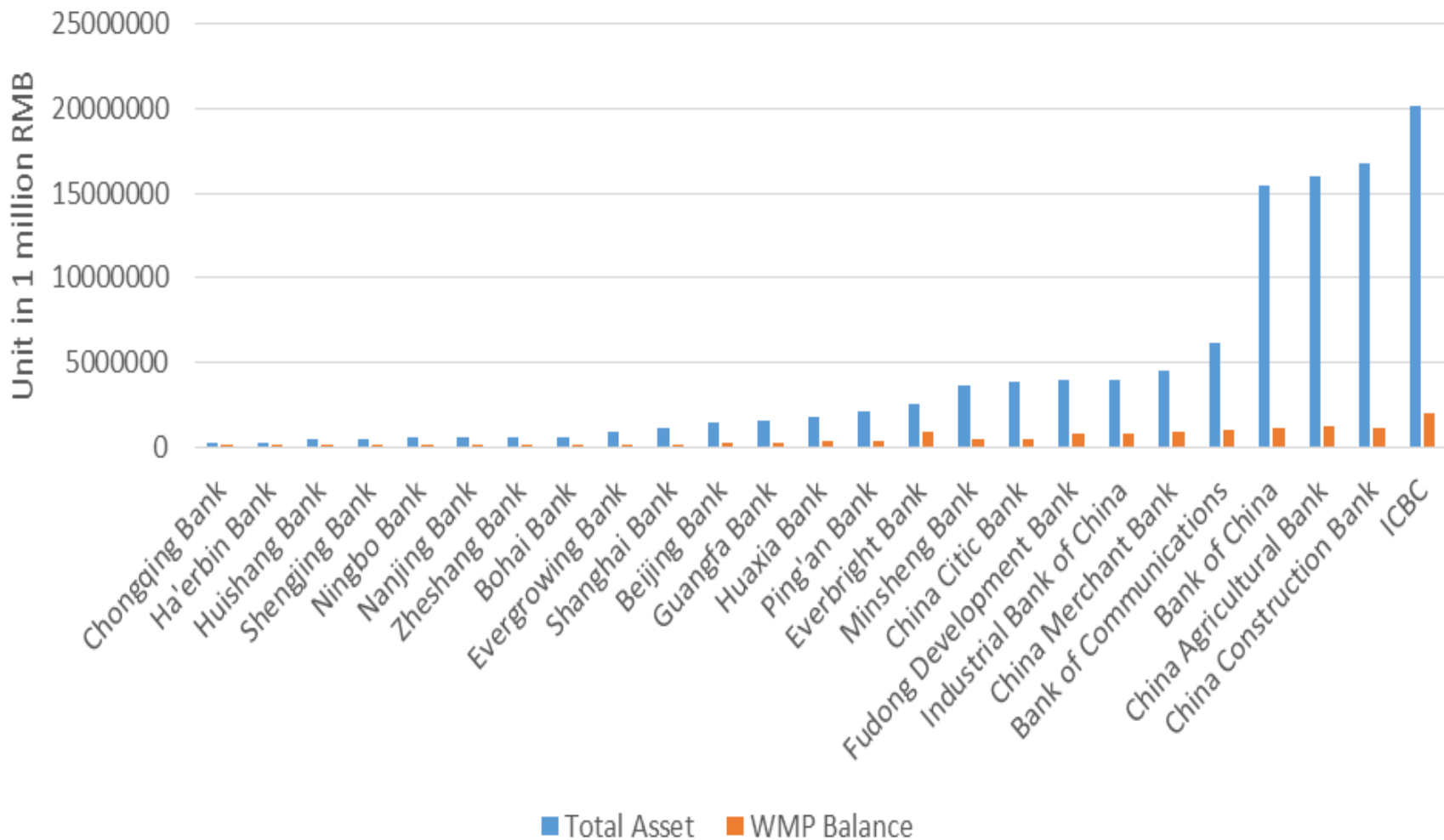
WMP rates and regulated rates

Relationship Between 3 Months Regulated Interest Rate and The 3 Months WMP Product Expected Yield



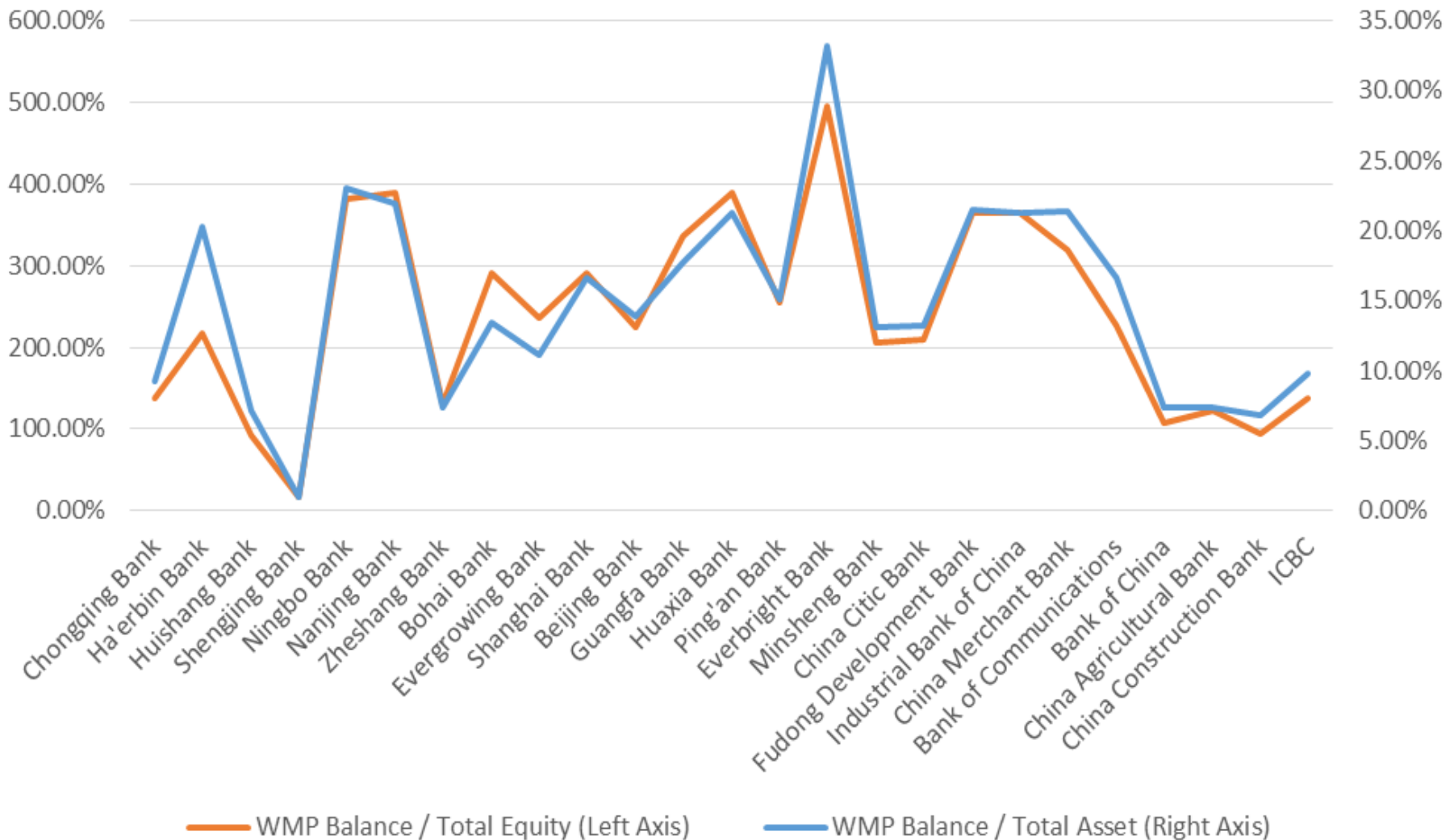
WMP Issuance and Bank Size (Top 4!)

WMP Total Balance and Bank Asset as of 2014-12-31



WMP balances large relative to equity

WMP Balance Percentages as of 2014-12-31



Summary Statistics I

As of 2014-12-31	# Products	Total Size (mil RMB)	Mean by Bank (mil RMB)	S.d. (by bank)
All WMP	29,598	12,909,432	516,374	512,632
All WMP (Big Four)	11,717	6,470,000	1,290,000	388,209
Risk Transfer				
Guarantee Yield	4,288	1,445,548	57,822	104,253
Guarantee Principal	9,108	2,600,826	104,033	127,297
Floating Yield	16,202	8,862,921	354,519	370,607
Duration				
T+0	230	2,085,579	83,423	96,576
7d	155	435,313	17,413	42,978
7d-1m	830	418,540	16,742	26,111
1m-3m	7,322	3,261,624	130,465	147,999
3m-6m	7,581	2,703,998	108,160	125,443
6m-12m	10,368	2,852,610	114,104	102,700
12m	3,112	1,151,678	46,067	71,819
Clientele				
Individual	13,833	7,585,077	303,403	322,542
Private Banking	2,502	1,185,493	47,420	79,081
Institution	13,263	4,138,772	165,551	151,717

Summary Statistics II

Overall 25 Banks

	Mean	Median	Std.	Min	Max
Panel A: WMP-related Variables (2007-2014, with Balance-related variables 2011-2014)					
WMP Yield (%)	4.64	4.80	1.14	1.40	30.00
WMP Maturity (months)	3.52	3.00	3.14	0	12.00
WMP Total Balance (mil RMB)	322,351	170,718	373,184	0	2,038,467
WMP Balance / Total Asset	10%	10%	5%	0	33%
WMP Balance / Total Equity	176%	164%	95%	0	494%
WMP Guarantee Balance (mil RMB)	111,346	51,655	152,836	0	837,378
WMP G. Balance / Total Asset	3%	3%	3%	0	13%
WMP G. Balance / Total Equity	56%	42%	47%	0	252%
WMP Floating Balance (mil RMB)	211,005	95,329	256,757	0	1,487,336
WMP F. Balance / Total Asset	7%	6%	4%	0	24%
WMP F. Balance / Total Equity	120%	106%	78%	0	374%

Summary Statistics II (cont'd)

Overall 25 Banks

	Mean	Median	Std.	Min	Max
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Panel B: Regulated Interest Rate (2007-2014) (do not vary by banks)

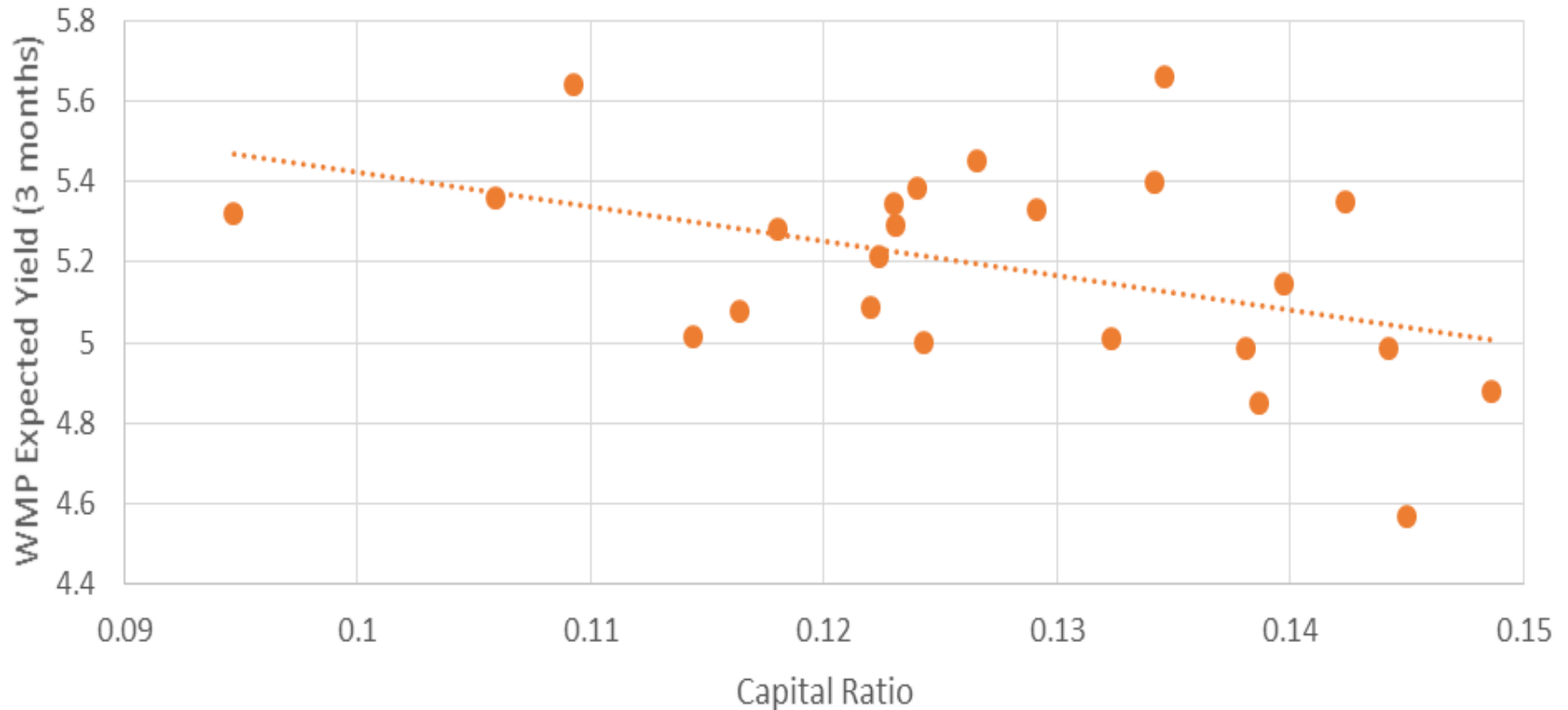
Demand Deposit Rate (%)	0.58	0.63	0.18	0.35	0.81
Three Months Deposit Rate (%)	2.53	2.60	0.49	1.71	3.33
Six Months Deposit Rate (%)	2.88	2.88	0.50	1.98	3.78
One Year Deposit Rate (%)	3.19	3.25	0.53	2.25	4.14

Panel C: Bank-related Variables (2007-2014)

Capital Ratio	0.12	0.12	0.02	0.07	0.21
Ln(Total Assets)	28.08	28.05	1.45	24.05	30.64
ROA	0.0070	0.0069	0.0031	0.0001	0.0169
Total Deposit / Total Liability	0.77	0.77	0.09	0.48	0.95
Percentage of Floating Yield Product	0.86	1.00	0.29	0.00	1.00

Yield greater for worse capitalization

WMP Expected Yield vs. Capital Ratio as of 2014-12-31



● WMP Expected Yield vs. Capital Ratio as of 2014-12-31

..... Linear (WMP Expected Yield vs. Capital Ratio as of 2014-12-31)

WMP yield vs bank capital, reg rates

Dependent: WMP Mean Yield	Reg1	Reg2	Reg3	Reg4	Reg5	Reg6
Panel A: 25 Banks: Overall Result						
Capital Ratio	-2.103***	-6.224***		-1.824***	-11.43***	
<i>t-stats</i>	(-2.908)	(-3.148)		(-3.019)	(-6.633)	
Capital Ratio*Regulated Rate		1.591**			3.815***	
<i>t-stats</i>		(2.239)			(5.949)	
Capital Ratio Threshold			-6.312***			-15.66***
<i>t-stats</i>			(-3.151)			(-7.841)
Capital Ratio Thr.*Regulated Rate			1.647**			5.399***
<i>t-stats</i>			(2.296)			(7.195)
Controls	√	√	√	√	√	√
Maturity*Time Fixed Effect	√	√	√	√	√	√
Observations	5044	5044	5044	4863	4863	4863
Adjusted-R Square	0.760	0.760	0.760	0.851	0.853	0.853
Regression Method	OLS	OLS	OLS	WLS	WLS	WLS

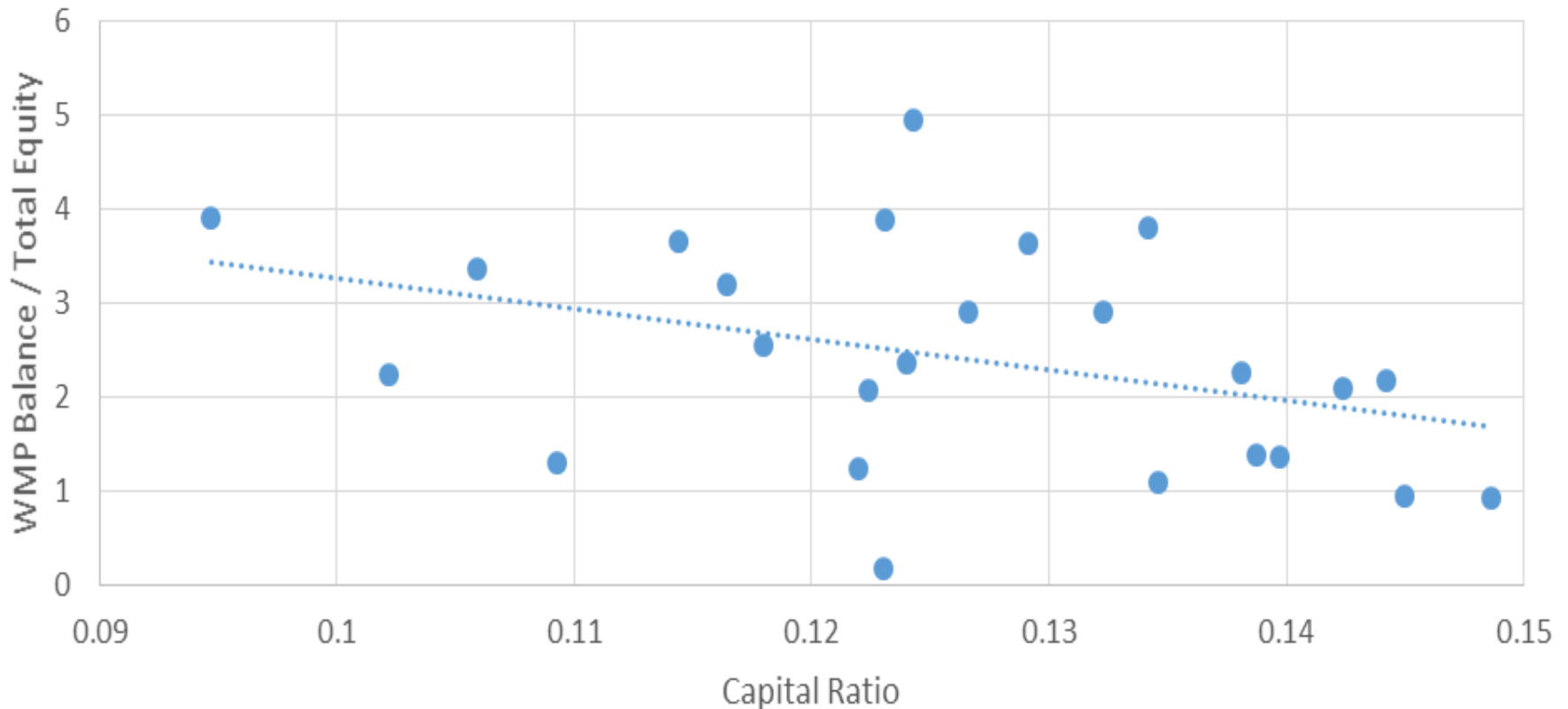
Weight in WLS based on Total WMP balance for each bank

Differential impact of TBTF banks

Dependent: WMP Mean Yield	Reg1	Reg2	Reg3	Reg4	Reg5	Reg6
Panel B: Big Four Banks and 21 other Banks						
Capital Ratio	-1.169	-6.107***		0.196	-15.23***	
<i>t-stats</i>	(-1.545)	(-2.978)		(0.290)	(-7.290)	
Interaction with Big Four Bank Dummy	-1.305	2.56		-6.235***	-4.049***	
<i>t-stats</i>	(-0.381)	(0.706)		(-4.290)	(-2.675)	
Capital Ratio*Regulated Rate		1.864**			6.107***	
<i>t-stats</i>		(2.558)			(7.795)	
Interaction with Big Four Bank Dummy		-0.837***			-0.653***	
<i>t-stats</i>		(-3.093)			(-4.889)	
Capital Ratio Threshold			-6.192***			-19.83***
<i>t-stats</i>			(-3.003)			(-8.666)
Interaction with Big Four Bank Dummy			7.718***			4.215***
<i>t-stats</i>			(2.630)			(2.904)
Capital Ratio Thr.*Regulated Rate			1.836**			7.611***
<i>t-stats</i>			(2.511)			(8.793)
Interaction with Big Four Bank Dummy			-2.351***			-2.404***
<i>t-stats</i>			(-2.761)			(-5.024)
Controls and Interactions	√	√	√	√	√	√
Maturity*Time Fixed Effect	√	√	√	√	√	√
Observations	5044	5044	5044	4863	4863	4863
Adjusted-R Square	0.761	0.762	0.762	0.855	0.857	0.858
Regression Method	OLS	OLS	OLS	WLS	WLS	WLS

WMP risk greater for worse capitalizn

WMP Balance / Total Equity vs. Capital Ratio as of 2014-12-31



- WMP Balance / Total Equity vs. Capital Ratio as of 2014-12-31
- Linear (WMP Balance / Total Equity vs. Capital Ratio as of 2014-12-31)

WMP balance vs bank capital, reg rates

Dependent: WMP Balance/Total Equity	Reg1	Reg2	Reg3	Reg4	Reg5	Reg6
Panel A: 25 Banks						
Capital Ratio	-16.68***	-137.6***		-27.97***	-209.3***	
<i>t-stats</i>	(-5.025)	(-2.975)		(-8.395)	(-3.636)	
Capital Ratio*Regulated Rate		38.95***			59.67***	
<i>t-stats</i>		(2.621)			(3.155)	
Capital Ratio Threshold			-119.8**			-227.6***
<i>t-stats</i>			(-2.498)			(-3.605)
Capital Ratio Thr.*Regulated Rate			33.94**			67.07***
<i>t-stats</i>			(2.213)			(3.261)
Controls	√	√	√	√	√	√
Time Fixed Effect	√	√	√	√	√	√
Observations	324	324	324	323	323	323
Adjusted-R Square	0.529	0.539	0.522	0.722	0.731	0.702
Regression Method	OLS	OLS	OLS	WLS	WLS	WLS

Differential impact of TBTF banks

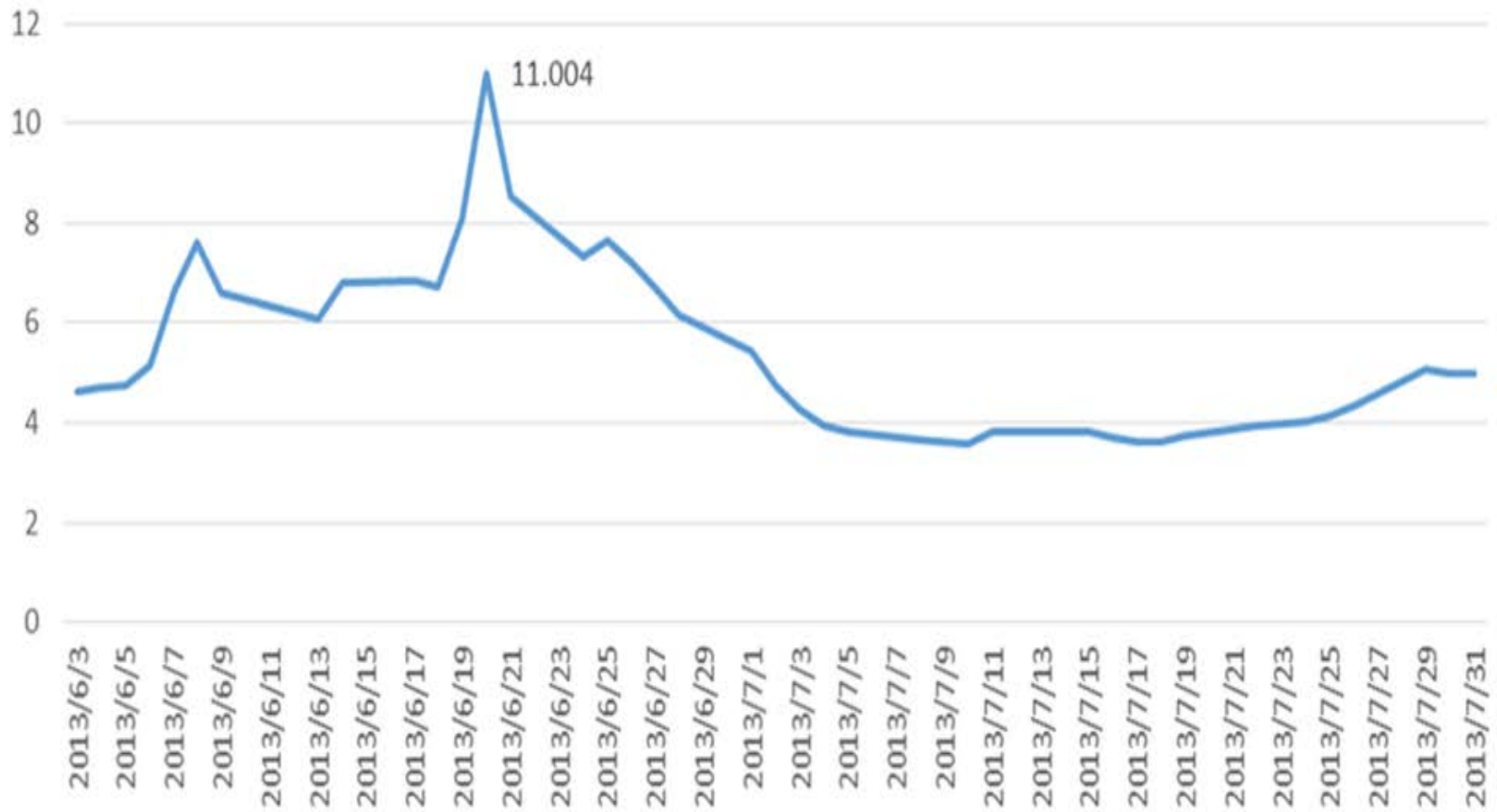
Dependent: WMP Balance/Total Equity	Reg1	Reg2	Reg3	Reg4	Reg5	Reg6
Panel B: Big Four Banks and 21 other Banks						
Capital Ratio	-6.926**	-113.2**		-22.93***	-61.99	
<i>t-stats</i>	(-2.007)	(-2.574)		(-6.354)	(-0.855)	
Interaction with Big Four Bank Dummy	-0.323	-3.437		5.775	-19.85	
<i>t-stats</i>	(-0.0181)	(-0.186)		(0.614)	(-1.549)	
Capital Ratio*Regulated Rate		34.17**			12.6	
<i>t-stats</i>		(2.421)			(0.528)	
Interaction with Big Four Bank Dummy		6.287			12.06***	
<i>t-stats</i>		(1.565)			(3.381)	
Capital Ratio Threshold			-107.6**			-56.02
<i>t-stats</i>			(-2.419)			(-0.732)
Interaction with Big Four Bank Dummy			-31.1			-40.66
<i>t-stats</i>			(-0.715)			(-1.176)
Capital Ratio Thr.*Regulated Rate			32.57**			10.69
<i>t-stats</i>			(2.287)			(0.425)
Interaction with Big Four Bank Dummy			12.17			19.12*
<i>t-stats</i>			(0.959)			(1.787)
Controls and Interactions	√	√	√	√	√	√
Time Fixed Effect	√	√	√	√	√	√
Observations	324	324	324	323	323	323
Adjusted-R Square	0.601	0.614	0.612	0.774	0.793	0.791
Regression Method	OLS	OLS	OLS	WLS	WLS	WLS

The SHIBOR “Event”

- Due to the maturity mismatch of asset side and liability side, liquidity problems emerged in some banks. Meanwhile, banks needed to preserve more capital due to the regulation requirements at the end of half year 2013.
- The interbank lending rate began to climb in June 2013.
- Also, on 17th June-2013, PBOC issued an announcement requiring commercial banks to strengthen their liquidity management. PBOC tightened the monetary policy during this period, and didn't provide liquidity to the market. Further PBOC issued a total of 2 billion RMB central bank papers to indicate that it is tightening liquidity.
- Then on 20th June 2013, the interbank rate spiked, with an overnight rate over 13%.

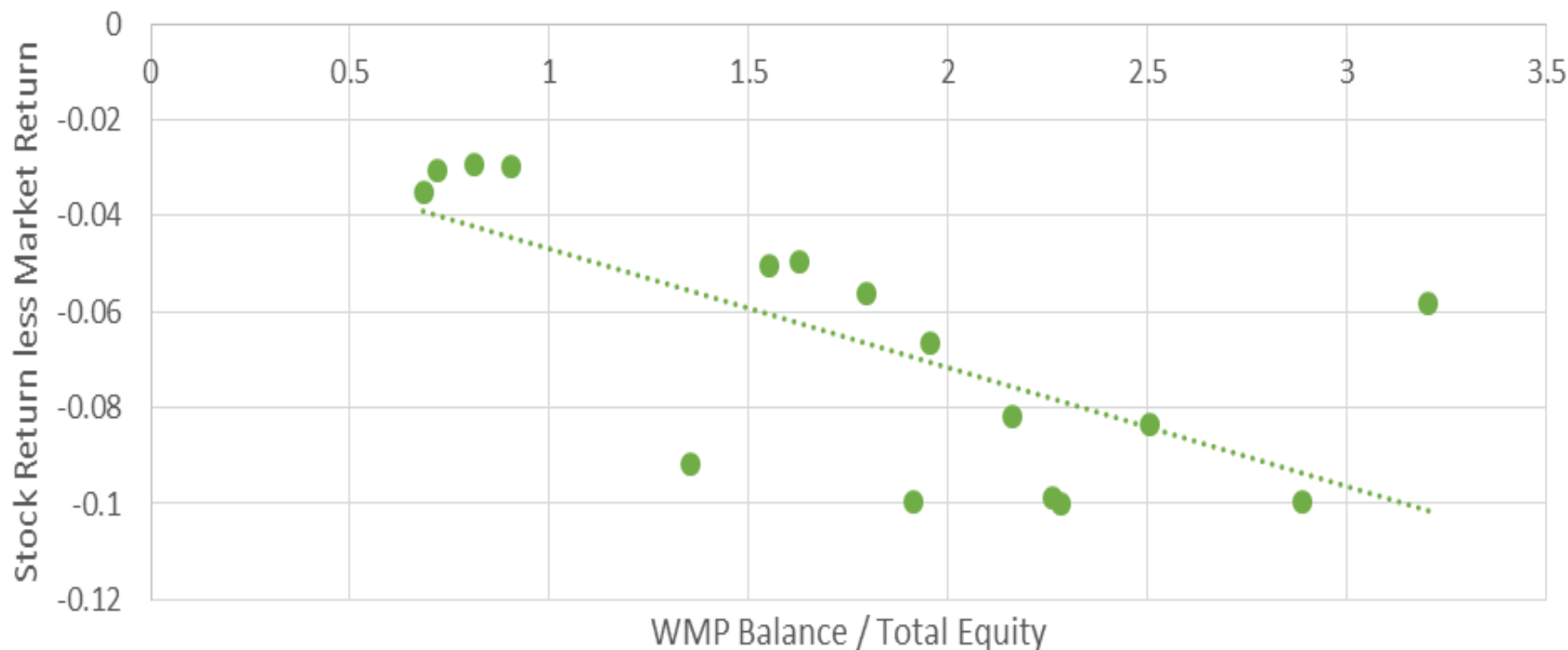
The SHIBOR spike

One Week Shibor Rate over Time



Realized shadow-banking risk vs WMP

The First Day (2013-06-21) Stock Return Less The Market Return vs. WMP Balance / Total Equity



- The First Day Stock Return Less The Market Return vs. WMP Balance / Total Equity
- Linear (The First Day Stock Return less The Market Return vs. WMP Balance / Total Equity)

Event return vs WMP balance, bank capital

Dependent: Raw Return - Mkt Return	Reg1 (1,1)	Reg2 (1,1)	Reg3 (1,1)
WMP Balance / Total Equity	-0.0247***		-0.0224**
<i>t stats</i>	(-3.566)		(-2.609)
Capital Ratio		0.951*	0.242
<i>t stats</i>		(1.966)	(0.494)
Observations	16	16	16
Adjusted-R Square	0.476	0.216	0.486

Summary

- Growth in Chinese shadow banking, in particular, Wealth Management Products, a reflection of
 - Regulatory constraints on banks
 - Leverage/risk-seeking by worse-capitalized banks and yield-chasing by repressed investors
- Growth similar to that of the money-market funds and especially ABCP growth and crash in the United States
- WMP magnitudes are large in absolute sense as well as relative to bank capital
- A (first!) source of vulnerability in future?

Policy Implications

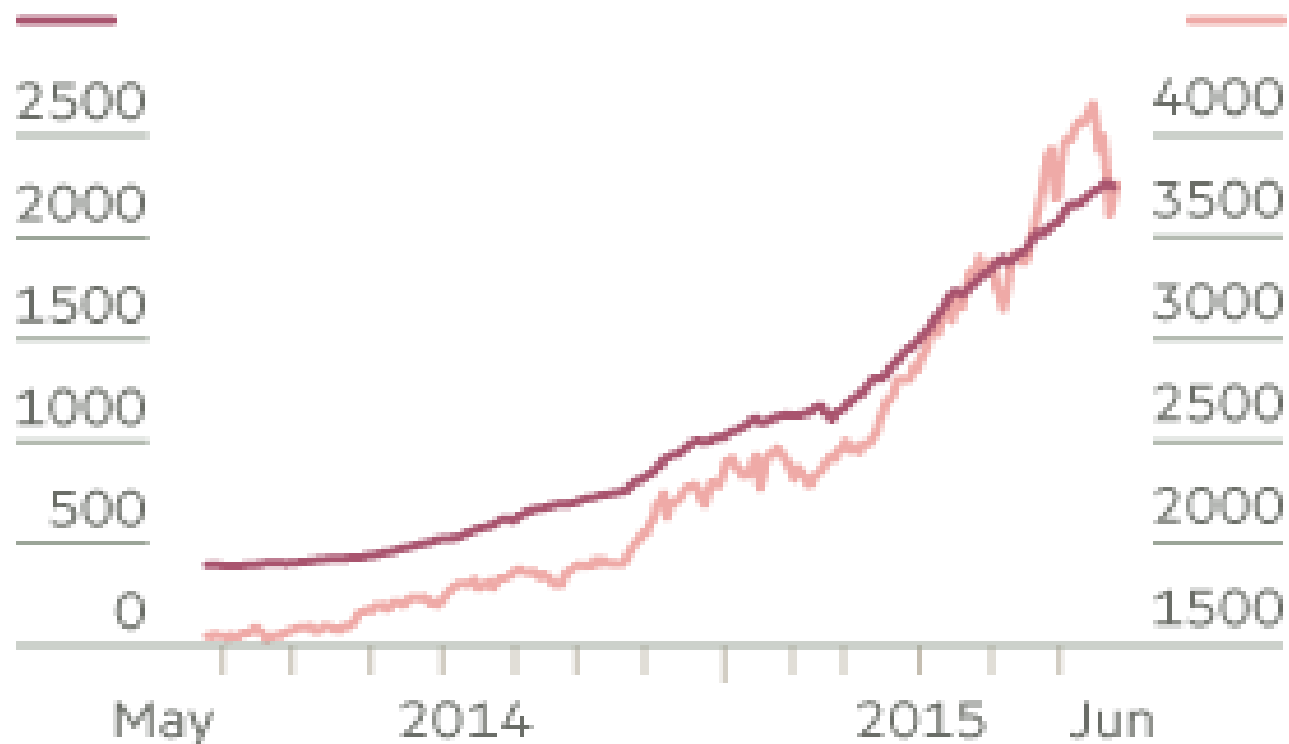
- Market observers attribute the recent stock market gyrations, in part, to the WMP growth and crackdown
- Slowdown in real estate market; QE by the central bank
 - Further yield-seeking by investors
- Growth in margin lending in stock market; in “grey-market” margin lending, leverage can be as high as 5:1
- Money for this lending comes from WMPs and has recently been “structured” into leveraged bets on stock market

Rise in margin lending in stocks

Margin loans fuel China equity rally

Margin loans
outstanding (Rmb bn)

Shanghai + Shenzhen
composite (index points)



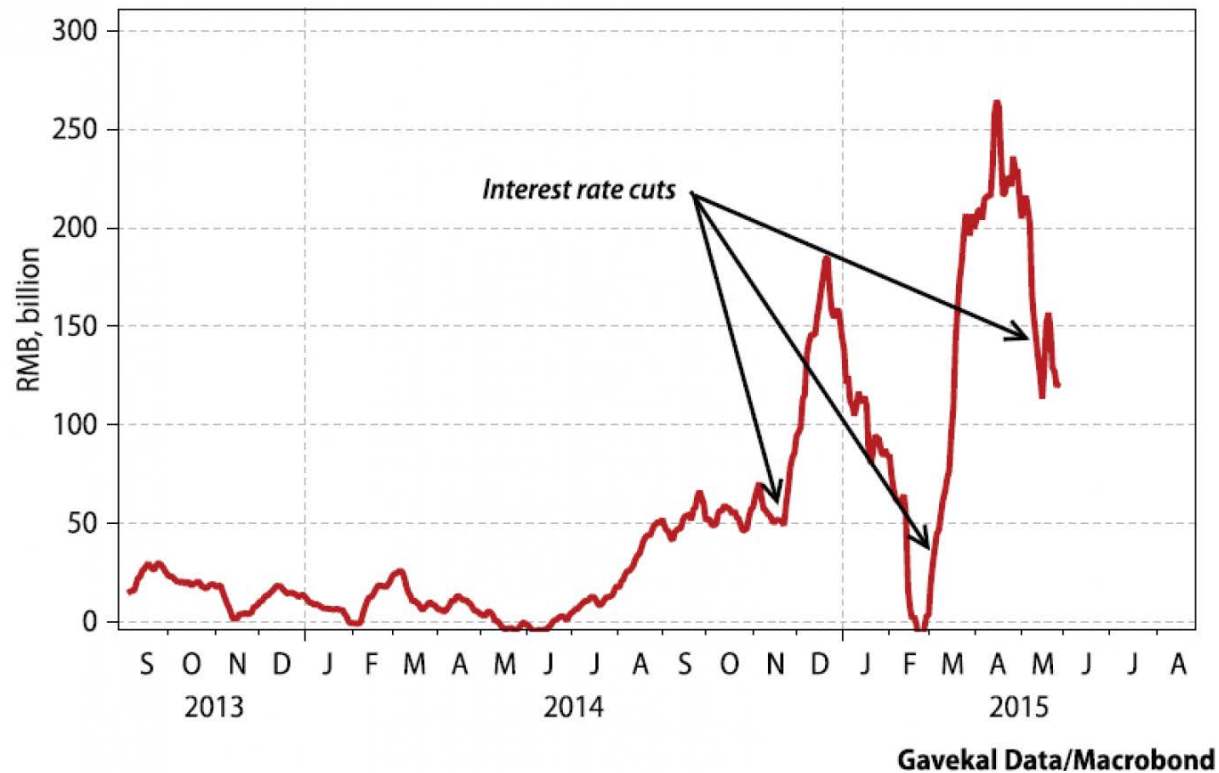
Source: Choice

FT

Interest-rate cuts and margin lending

China's easing cycle has encouraged risk-taking

Margin debt balances on the Shanghai Stock Exchange, MoM changes



Gabriel Wildau in FT, 25th June 2015

<http://www.ft.com/cms/s/0/6963a7c6-1a5a-11e5-a130-2e7db721f996.html#ixzz3eDAcUR6A>

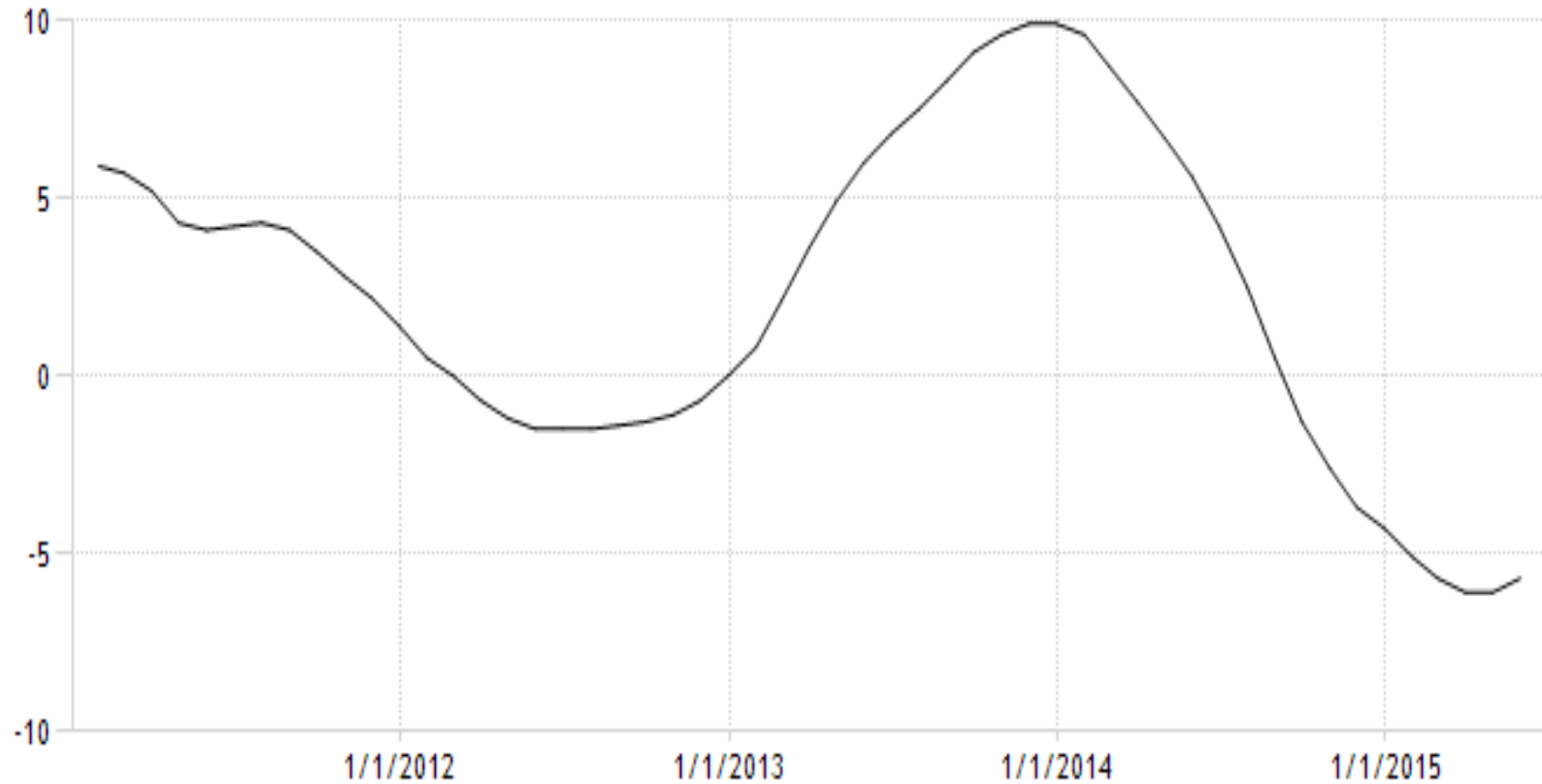
“China’s shadow banks, increasingly wary of lending into a slowing economy, have turned to the stock market, fuelling a surge in unregulated margin lending that has driven the market’s dizzying gains over the past year.

Now regulators are cracking down on shadow lending to stock investors, a campaign analysts say is partly to blame for last week’s 13 per cent fall in the Shanghai Composite Index — the largest weekly drop since the global financial crisis in 2008.”

Shanghai index was down another 7.5% today!

Chinese real estate market

CHINA NEWLY BUILT HOUSE PRICES YOY CHANGE



SOURCE: WWW.TRADINGECONOMICS.COM | NATIONAL BUREAU OF STATISTICS OF CHINA

Chinese stock market (27th June '15)

6/26/2015

000001.SS Interactive Stock Chart | Yahoo! Inc. Stock - Yahoo! Finance

SSE Composite Index (000001.SS) ★ Watchlist

4,192.87 -334.91 (-7.40%) Shanghai - As of 3:01AM EDT



Structured products & margin lending

“With a touch of financial alchemy, trusts transform an equity investment into a structured product that yields a fixed return — that is, unless something goes wrong.... In the case of umbrella trusts, banks purchase the senior tranche, which guarantees a fixed return. They then slice up this tranche and distribute it to clients as WMPs.

Hedge funds, brokerages and other institutions subscribe to the subordinate tranche, which absorbs the first losses from stock investments but also enjoys all profits once the senior tranche holders have received their fixed return...

Subordinate-tranche investors are effectively borrowing money from senior tranche-holders to make leveraged stock bets. The interest that subordinate tranche-holders pay on the margin loans comprises the fixed returns paid to the senior tranche. “

What should regulators do?

- Inject further liquidity in the market?
 - NO!
- Crack down on shadow banking?
 - OK, but unintended consequences...
- Liberalize the deposit rates?
 - YES!
- RECAPITALIZE BANKS!!!

SRISK: A measure of bank vulnerability to future crisis

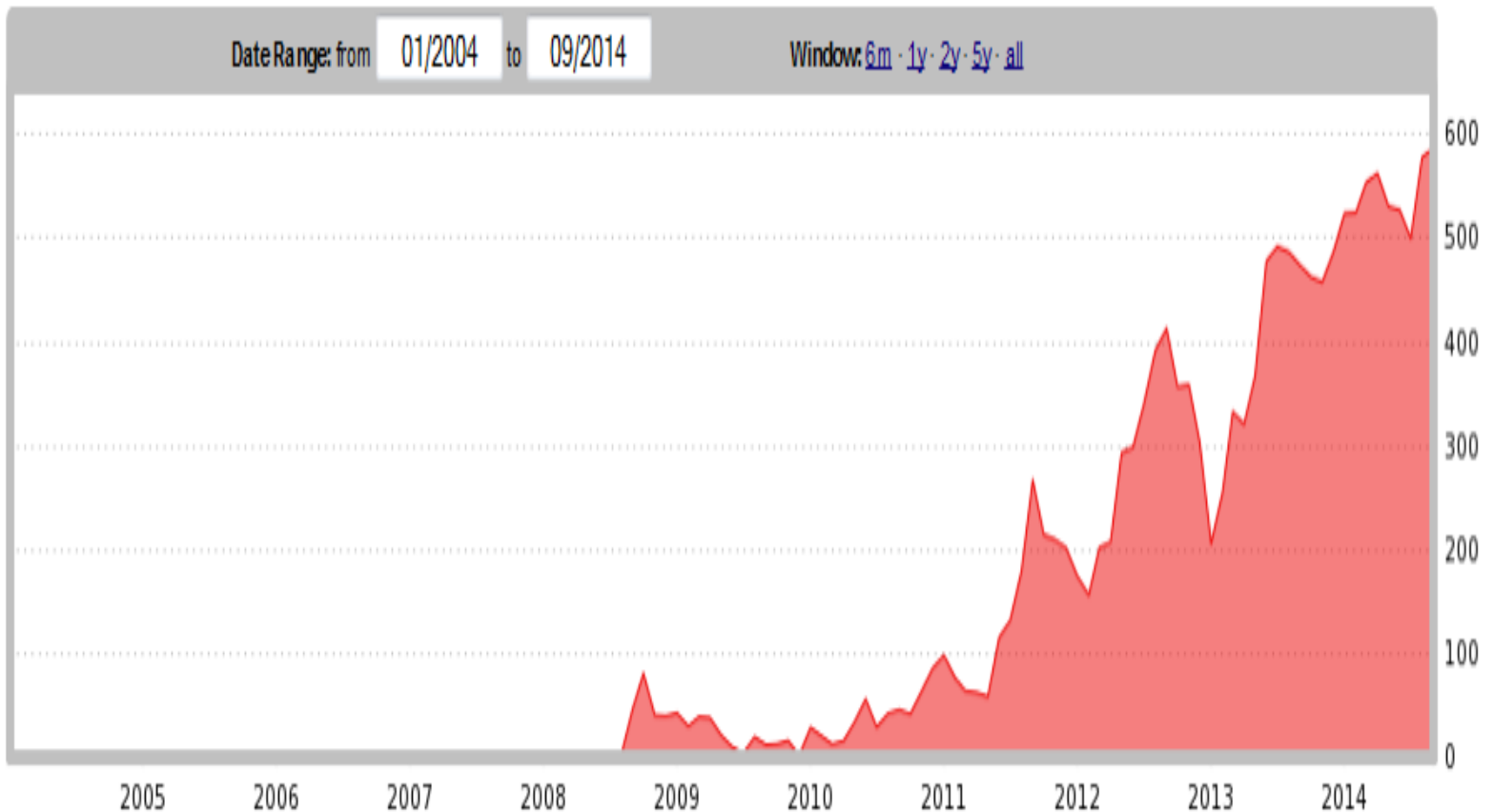
- *How much capital would a financial institution need to raise in order to function normally if we have another financial crisis?*
- We measure this econometrically based on market data on equities and balance sheet data on liabilities. We update weekly on V-LAB for US and Global financial firms. We call this *SRISK*.
- [Vlab.stern.nyu.edu/welcome/risk](http://vlab.stern.nyu.edu/welcome/risk)

SRISK is a market-based stress test

- The stress scenario is a 40% collapse in the global equity market over six months.
- The capital requirement is that, under stress, equity exceed 8% of total assets
- Total Assets are measured as Quasi Assets which are accounting liabilities plus market equity

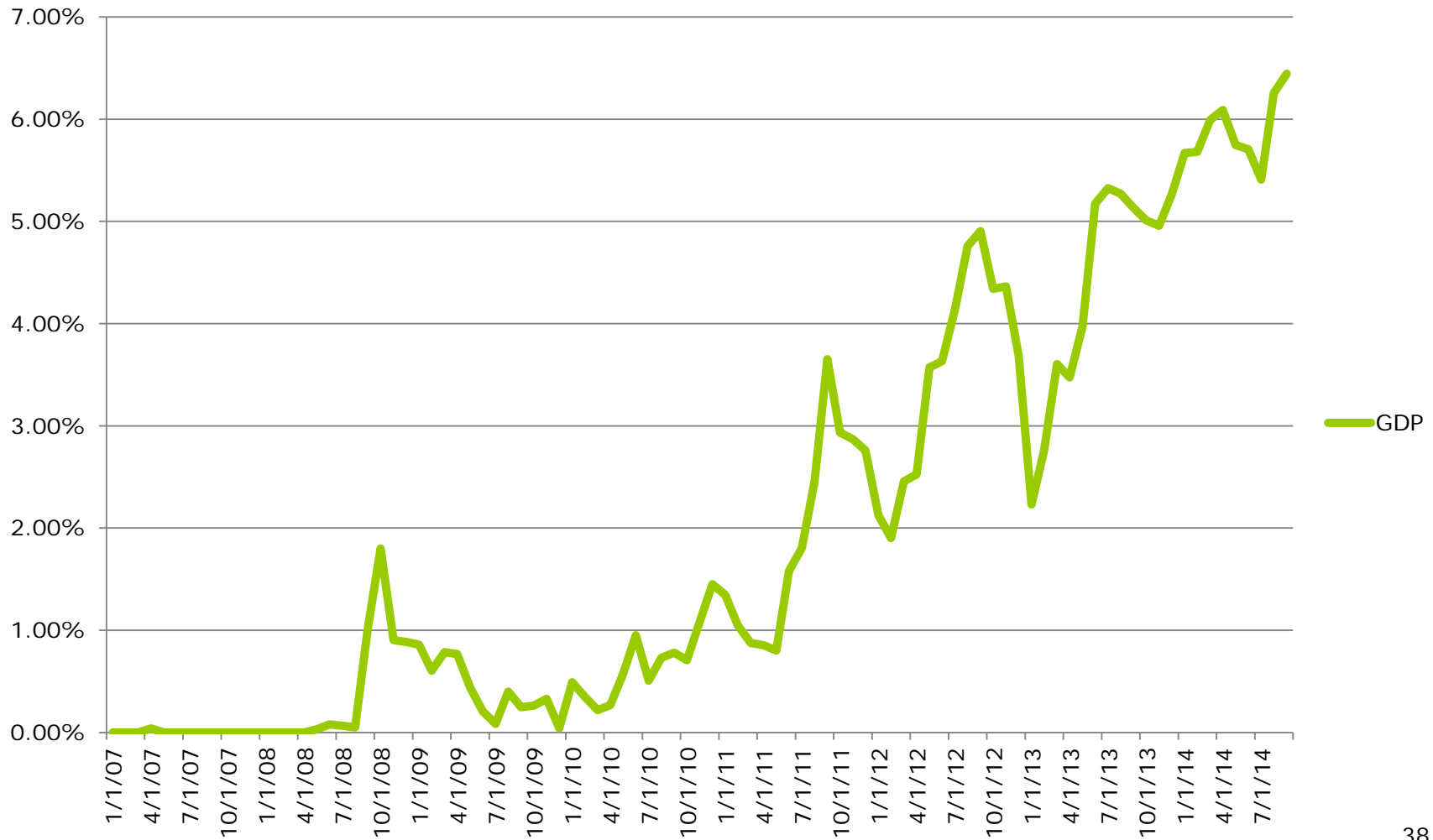
CHINA SRISK rising since 2010

Risk Analysis Overview - China Financials Total SRISK (US\$ billion)

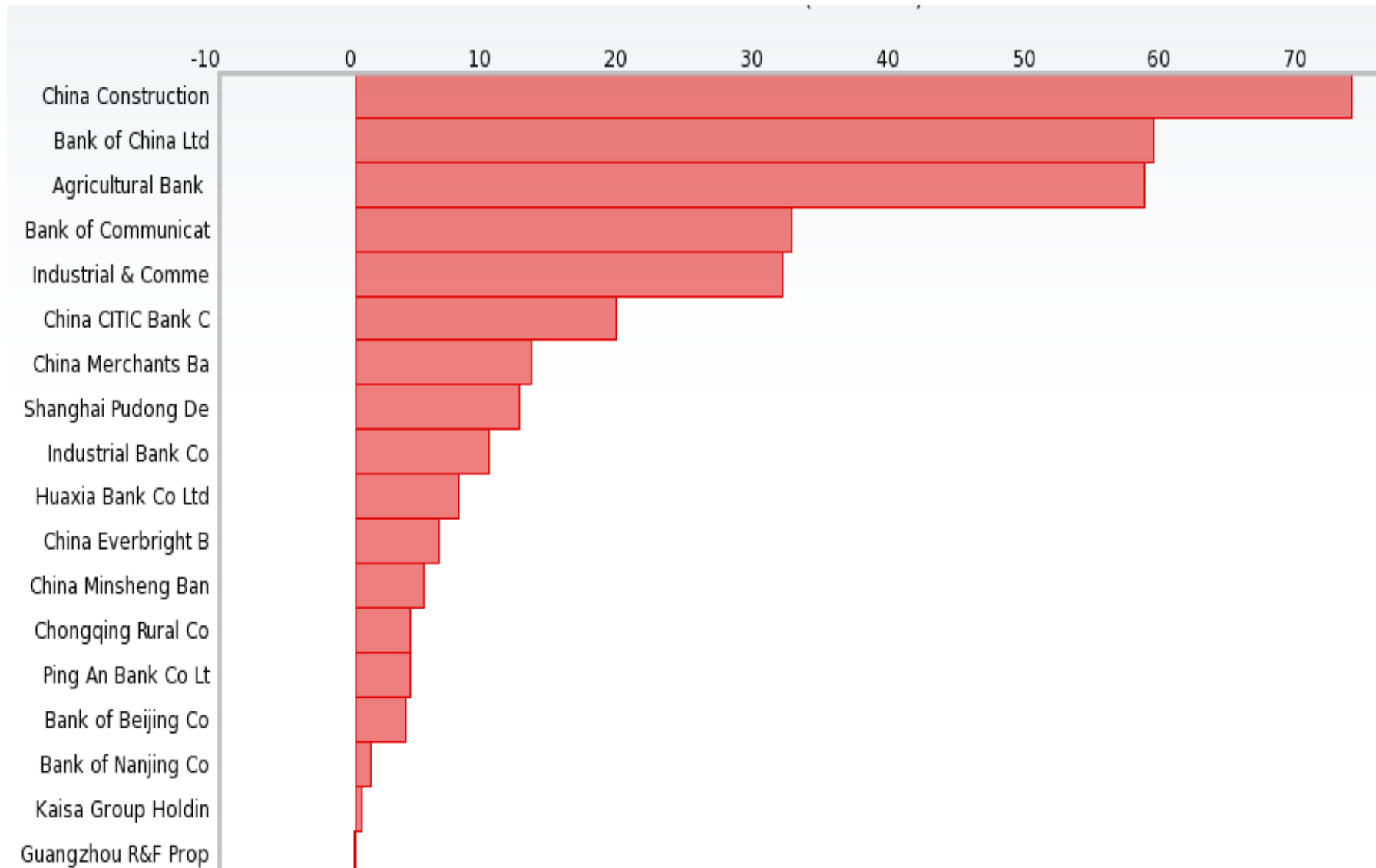


China SRISK Normalized by GDP

China



Contributors to SRISK (Top 5!)



Conclusion

- Financial crises occur due to coincidence of large asset-price crash (housing, stock market, ...) and leverage
- WMPs are a manifestation of household savings-rate repression and leveraging of the Chinese banking sector
- Further repression (loose monetary policy) likely to make things worse; Bank recapitalization more robust policy response

Appendix



China's Banking Sector

- Financial system dominated by a large banking sector
 - Bank loans remain the most important source of financing for firms
 - Large portion of loans goes to SOEs
- Structure of banking sector:
 - Largest state-owned banks are listed (in HK and domestic exchanges) with the government as the large shareholder;
 - Entrance of non-state owned banks and non-bank FIs (including foreign FIs) in recent years
- Regulators of the banking sector:
 - PBOC (central bank); CBRC (banking sector); CSRC (listed firms)
- Other relevant facts about the financial system:
 - Few investment products: stock and real estate markets are both speculative
 - Closed capital account with limited channels of flows in and out of China

Related Work

- Work on shadow banking in developed markets:
- Work on financial system in China:
 - Shadow banking: a related paper is by **Song et al. (2015)**: they model the interactions between large and small banks in terms of their activities both on- and off-balance sheets
 - Empirical facts: 1) Big Four banks' loan/deposit ratios are much lower than those of smaller banks; 2) Big Four banks are also the main liquidity providers of China's interbank market
 - Two types of interactions between large and small banks:
 - In the WMPs market: high-return WMPs issued by cap-constrained banks poach deposits from the Big Four, which respond by issuing WMPs with competitive returns; this, in turn, push small banks to be even more aggressive (issuing riskier WMPs)
 - In the interbank market: most WMPs are short-term, while investment projects are much longer term, and banks rely on the interbank market to solve the maturity mismatch problem
 - Big Four's dual reaction (issuing WMPs and cut liquidity provision in the interbank market => higher rates) forces small banks to cut back on WMPs issuance

Related Work (cont'd)

- More on Song et al. (2015):
 - Model assumption: big banks are not constrained by the loan/deposit cap b/c they internalize the effect of their reserve holdings on the interbank market
 - Key results:
 - Effects of tighter cap: 1) pushes cap-constrained banks to issue more WMPs and fuels a credit expansion; 2) more aggressive on balance sheet lending by big banks as they try to fend the cap-constrained banks by reducing interbank liquidity. The net effect is an increase in overall credit and an increase in the equilibrium interbank rate.
 - The above findings can explain: regulators have increased liquidity standards and tightened L/D ratios yet debt-to-GDP has grown faster.
 - Another puzzle is convergence in the L/D ratios of different banks: 1) falling ratios among small banks are explained by the regulatory tightening above, 2) rising ratios among the Big Four: they put pressure on interbank markets to protect their deposit base; this helps regulators to curtail shadow banking that would have otherwise been pursued by cap-constrained banks. But in order to manipulate the interbank market, the Big Four are approaching their own L/D constraint. If this constraint becomes binding on them, then China's financial system will become more fragile.

Summary Statistics II (Top 4)

Big Four Banks

	Mean	Median	Std.
Panel A: WMP-related Variables (2007-2014, with Balance-related variables 2011-2014)			
WMP Yield (%)	4.51	4.55	0.99
WMP Maturity (months)	3.51	3.00	3.10
WMP Total Balance (mil RMB)	943,251	900,461	361,107
WMP Balance / Total Asset	6%	6%	2%
WMP Balance / Total Equity	96%	97%	23%
WMP Guarantee Balance (mil RMB)	327,717	337,523	184,664
WMP G. Balance / Total Asset	2%	2%	1%
WMP G. Balance / Total Equity	35%	35%	21%
WMP Floating Balance (mil RMB)	615,535	634,703	306,256
WMP F. Balance / Total Asset	4%	4%	2%
WMP F. Balance / Total Equity	61%	66%	21%

Summary Statistics II (Top 4, cont'd)

Big Four Banks			
	Mean	Median	Std.
Panel B: Regulated Interest Rate (2007-2014) (do not vary by banks)			
Demand Deposit Rate (%)	0.58	0.63	0.18
Three Months Deposit Rate (%)	2.53	2.6	0.49
Six Months Deposit Rate (%)	2.88	2.88	0.5
One Year Deposit Rate (%)	3.19	3.25	0.53
Panel C: Bank-related Variables (2007-2014)			
Capital Ratio	0.13	0.13	0.01
Ln(Total Assets)	30.12	30.18	0.30
ROA	0.0079	0.0081	0.0033
Total Deposit / Total Liability	0.85	0.86	0.04
Percentage of Floating Yield Product	0.89	1.00	0.24

