

## XI Emerging Markets Workshop

Discussion of “Does bank liquidity creation contribute to economic growth?”

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# Outline

1. Context
2. What the paper does
3. Discussion
4. Suggestions
5. Concluding remarks

# Context



- Financial development contribution to economic growth (Rajan and Zingales, 1998).
- Simple ‘liquidity creation’ measure (Berger and Bowman, 2009).
- Broad theme: how to ensure ‘well-developed growth-enhancing’ financial systems.

# What the paper does



- Research question: Is ‘liquidity creation’ growth enhancing?
- Data: Bank and economic variables, 64 Russian regions, 2004-2011
- LHS: Annual growth of Gross Regional Product (GRP)
- RHS: Liquidity Creation indexes (LC1, LC2) and controls
  - ✓ LC1: based on behaviour of assets and liabilities (ie: ‘category classification’); LC2: based on maturities (ie: ‘maturity classification’)
  - ✓ Controls: Education, Openness, Government expenditures, Inflation, Oil price
- Panel estimations: (Time) Fixed effects and Dynamic model
- Robustness: crisis dummy, exclude Moscow and St. Petersburg

# Liquidity creation metric1 (LC1)



	Weight	Liabilities	Assets	Weight	
More liquid liabilities	-0.5	Equity, other liabilities, term deposits (>1 year) and other deposits	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1Y)	0.5	More liquid assets
	0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, Loans (< 1Y)	0	
	0.5	Demand deposits, accounts of other firms, bonds issued	Cash, account with Banks, investments in liquid securities	-0.5	
		<b>Total Liabilities</b>	<b>Total Assets</b>		

$$LC1 = \sum \text{Weighted Liabilities} + \sum \text{Weighted Assets}$$

# Liquidity creation metric1 (LC2)



	Weight	Liabilities	Assets	Weight	
More liquid liabilities	-0.5	Equity, other liabilities, <b>term deposits (&gt;1 year)</b> and other deposits	Loans to firms, fixed and intangible assets, other loans and assets, <b>loans (&gt; 1Y)</b>	0.5	More liquid assets
	0	Term and other deposits, CDs and CSs issued, <b>term deposits (&lt;1y)</b>	Loans to HH, interbank loans, loans to gov, <b>Loans (&lt; 1Y)</b>	0	
	0.5	Demand deposits, accounts of other firms, bonds issued	Cash, account with Banks, investments in liquid securities	-0.5	
		<b>Total Liabilities</b>	<b>Total Assets</b>		

$$LC1 = \sum \text{Weighted Liabilities} + \sum \text{Weighted Assets}$$

# Key messages from the paper



- LC2 (the maturity-based metric) have a positive effect on growth.  
Although LC1 (the category-based metric) is not significant.
- Conclusion: liquidity creation of banks is beneficial for economic growth.
- And by extension: positive message on the impact of financial development in Russia.

# Discussion



- Concise, clear and easy to read...immensely helpful!
- Useful estimations both for academics and for policy making:
  - ✓ Role of liquidity and maturity transformation.
  - ✓ How we can ensure that financial systems contributes positively to economic growth?
  - ✓ Design of micro-prudential standards and possible macro-prudential liquidity instruments (eg: assessing trade-offs in resilience and growth).
- Nice cross section (regional). Not so nice, very few years...

# Suggestions



- 1) Tweak to the research question from a ‘sustainable growth’ mindset:
  - ✓ What is the contribution of ‘liquidity creation’ to sustainable economic growth?
  - ✓ What are the risks of ‘excessive liquidity creation’? Growth pace, limits?

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*My 2 cents:*

- 2) LHS: Try GDP Gap (relevant to consider stage of the cycle). Also interesting see effects on Credit growth and Credit-to-GDP Gap.

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*My 2½ cents:*

- 3) RHS: Try some other simple liquidity metrics. (I get on this)

# LHS: Example as in the paper



	Weight	Liabilities	Assets	Weight	
<i>More liquid liabilities</i> ↓	-0.5	Equity, other liabilities, term deposits (>1 year) and other deposits	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1Y)	0.5	↓ <i>More liquid assets</i>
	0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, Loans (< 1Y)	0	
	0.5	Demand deposits, accounts of other firms, bonds issued	Cash, account with Banks, investments in liquid securities	-0.5	
		<b>Total Liabilities</b>	<b>Total Assets</b>		

Max liquidity creation: 'banks transform **illiquid assets** to **liquid liabilities**'

# LHS (1): A complementary view



	Weight	Liabilities	Assets	Weight	
<div style="writing-mode: vertical-rl; transform: rotate(180deg);">More stable funding</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">More liquid assets</div>	-0.5	Equity, <del>other liabilities</del> , term deposits (>1 y) 'stable' deposits (eg: retail), LT debt	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1y)	0.5	<div style="writing-mode: vertical-rl; transform: rotate(180deg);">More liquid assets</div>
	0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, loans (< 1y)	0	
	0.5	<del>Demand deposits</del> , Unsecured ST funding, accounts of other firms, <del>ST debt, other liabilities</del>	Cash, account with banks, investments in liquid securities	-0.5	
		<b>Total Liabilities</b>	<b>Total Assets</b>		

Max liquidity/mat transformation: banks transform **unstable/ST liabilities** to **illiquid/LT assets**

# LHS (2): Net Stable Funding Ratio (NSFR)



Weight Factor	Liabilities	Assets	Weight Factor
-0.5 100%- 80%	Equity, <del>other liabilities</del> , term deposits (>1 y) 'stable' deposits (eg: retail), LT debt	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1y)	0.5 100%- 65%
0 50%	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, loans (< 1y)	0 50%
0.5 0%	<del>Demand deposits</del> , Unsecured ST funding, accounts of other firms, ST debt, other liabilities	Cash, account with banks, investments in liquid securities	-0.5 0%

More stable funding

More liquid assets

**Total Liabilities**

**Total Assets**

$$\text{NSFR} = \frac{\text{Available Stable Funding}}{\text{Required Stable Funding}} = \frac{\sum \text{Weighted Liabilities}}{\sum \text{Weighted Assets}}$$

# LHS (3): Core Funding Ratio



Weight	Liabilities	Assets	Weight
-0.5	Equity, <del>other liabilities</del> , term deposits (>1 y) <b>'stable' deposits (eg: retail), LT debt</b>	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1y)	0.5
0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, loans (< 1y)	0
0.5	<del>Demand deposits</del> , <b>Unsecured ST funding</b> , accounts of other firms, <b>ST debt, other liabilities</b>	Cash, account with banks, investments in liquid securities	-0.5
	<b>Total Liabilities</b>	<b>Total Assets</b>	

# LHS (4): Liquid Asset Ratio



Weight	Liabilities	Assets	Weight
-0.5	Equity, <del>other liabilities</del> , term deposits (>1 y) <b>'stable' deposits (eg: retail), LT debt</b>	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1y)	0.5
0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, loans (< 1y)	0
0.5	<del>Demand deposits</del> , <b>Unsecured ST funding</b> , accounts of other firms, <b>ST debt, other liabilities</b>	<b>Cash, account with banks, investments in liquid securities</b>	-0.5
<b>Total Liabilities</b>		<b>Total Assets</b>	

# LHS (5): Loans-to-stable funding



Weight	Liabilities	Assets	Weight
-0.5	Equity, <del>other liabilities,</del> term deposits (>1 y) 'stable' deposits (eg: retail), LT debt	Loans to firms, fixed and intangible assets, other loans and assets, loans (> 1y)	0.5
0	Term and other deposits, CDs and CSs issued, term deposits (<1y)	Loans to HH, interbank loans, loans to gov, loans (< 1y)	0
0.5	<del>Demand deposits,</del> Unsecured ST funding , accounts of other firms, ST debt, other liabilities	Cash, account with banks, investments in liquid securities	-0.5
<b>Total Liabilities</b>		<b>Total Assets</b>	

# Other suggestions



- Clarify that liquidity transformation is closely related to financial development but it is not the same.
- Explain further calculation of LC2.
- Explain mechanism of banks' liquidity transformation.
- Try banks' controls.
- Check actual stability of the liabilities items used.
- Could inflation be capturing effect from GNP?
- Experiences from other countries with perhaps more developed financial systems (and with crises!) may also help to get the full picture.

# Concluding remarks



- Useful estimations. With limitations in terms of time dimension.
- Possible improvements to RHS and LHS variables. Some ideas from a ‘sustainable growth’ approach.
- A ‘full assessment’ would need to consider contribution to economic growth and effect on financial stability, as financial crises have very large effects on the economy.



Many thanks!!!