Should We Focus on Money or Credit When Crafting LOLR and Bailouts?

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Comments on Lacker Paper

- Lacker undertakes a remarkably comprehensive review of the issues and the specific positions of SOMC members.

- He did the SOMC a great service, and it is impossible to do justice to all of it as a discussant.

- In my comments, I will first show that, with respect to the LOLR and bailout policy advocacy, there is a deep historical division within the committee on the question of whether pure monetary policy (OMO operations with Treasuries) are a sufficient tool for dealing with major shocks to the banking system. I will distinguish the Shwartz and Goodfriend view from the Calomiris (and perhaps Meltzer) view.

Theory and Its Implications for LOLR and Bailouts

- Theoretical foundations of the "Credit View" are found in the banking literature, which was revolutionized by the asymmetric-information revolution in the 1970s and 1980s.
- Because of asymmetric information, banks as private-information-reliant credit intermediaries play a unique role in providing credit to certain firms and individuals, and disruptions to the credit relationships don't have immediate substitutes, especially if other banks are also squeezed.
- Equity of banking system is expensive to raise and can be constrained in short run.

Implications of the Credit View

1. A negative shock to banks' net worth cannot be undone with a monetary expansion (example of NYC in 1930s, Calomiris and Wilson JB 2004, and nationwide supply of credit in 1930s, Calomiris and Mason AER 2003).

2. A sudden shock to **borrowers'** preexisting credit supply may be better dealt with using LOLR pass through rather than OMO (Penn Central).

3. Shocks to banks can produce withdrawal risk from asymmetric information about incidence (Canada evidence, Calomiris and Haber). Optimal LOLR mechanism depends on severity of shock (Calomiris, Flandreau and Laeven JFI 2016), OMO generally can't solve problem; solution may require Lifeboat, or TARP, etc. (example of RFC in 1930s, Calomiris et al. EEH 2013).

Table 2: NYC Banks' Loans/Cash, Risk, Equity, Dividends

	Loans/(R+T)	Ass.Risk	Equity/Ass.	p	Dividends
1923	2.2	1.9	0.20	0.0	
1929	3.3	17.5	0.33	33.5	$392m
1933	1.0	6.1	0.15	41.7	
1936	0.6	4.3	0.17	1.3	
1940	0.3	2.0	0.10	2.1	$162m

Source: Calomiris and Wilson (2004).

Calomiris and Mason "Consequences..." AER 2003

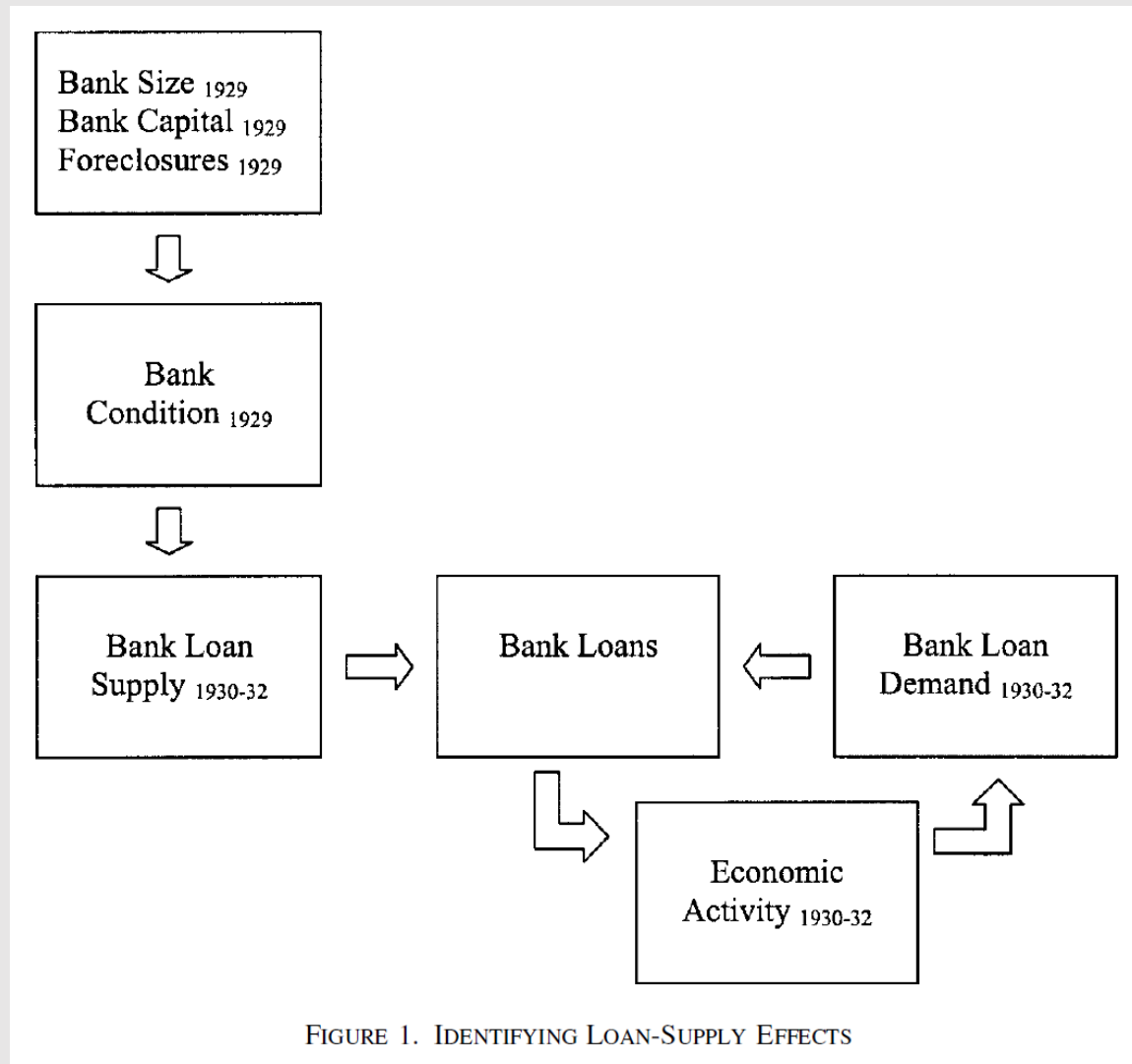FIGURE 1. IDENTIFYING LOAN-SUPPLY EFFECTS

Calomiris and Mason "Consequences..." AER 2003

TABLE 2—OLS AND 2SLS REGRESSIONS, DEPENDENT VARIABLE: STATE-LEVEL INCOME GROWTH, 1930–1932

Estimation method	OLS		2SLS using instrumented deposit growth, 1930–1932		2SLS using instrumented loan growth, 1930–1932	
Constant	−0.294***	−0.336***	−0.282***	−0.310***	−0.300***	−0.279***
	(0.036)	(0.048)	(0.053)	(0.057)	(0.054)	(0.089)
Growth in production income over	0.058	0.038		0.052		0.008
1929–1930 (log difference)	(0.149)	(0.200)		(0.142)		(0.211)
Growth in bank deposits from end of	0.468***		0.522***	0.484***		
1930 to end of 1932 (log difference)	(0.073)		(0.140)	(0.124)		
Growth in bank loans from end of 1930		0.233***			0.403***	0.448***
to end of 1932 (log difference)		(0.080)			(0.121)	(0.157)
Growth in building permits over 1930–	0.004	0.017		−0.609		−0.961
1932 (log difference)	(0.021)	(0.027)		(1.117)		(1.670)
Growth in liabilities of failed businesses	−0.022	−0.038*		2.697		2.313
over 1930–1932 (log difference)	(0.019)	(0.025)		(2.580)		(3.786)
Number of observations	45	45	47	45	47	45
Adjusted R^2	0.493	0.156	0.220	0.298	0.179	0.148

Penn Central Crisis of 1970 (Calomiris, "Is the Discount Window Necessary?" St. Louis Fed Review, 1994)

- Commercial paper market was developing in 1960s (CP was and is risk intolerant), Penn Central default was a major shock to market perceptions of risk, and led to concerns about others. Paper was not rolled over. NYC banks substituted loans for paper temporarily, and were told there would be no penalty for their use of discount window to fund the substituting loans. This solved problem, which otherwise would have produced a rising cost of credit supply.

- Credit markets are highly segmented (banks, bonds, CP). Solving the CP problem by expanding OMO would have distorted overall credit to deal with a narrow part of the credit market. LOLR was a well-targeted solution.

- CP market equilibrium was restored afterwards with a new institutional arrangement (backup lines of credit from commercial banks).

Canada: Coordinating Responses to Shocks, and the Bailout Role of Bank of Montreal

- Under asymmetric information, sometimes a few bank failures is no systemic threat because implications for other banks are clear. But sometimes that is not the case: failures can create systemic risk.

- Bank of Montreal's role (Calomiris and Haber 2014): generally, allows banks to fail (market discipline), but intervenes to combat systemic risk, as needed (1906, 1908). Collective funding of failure diversifies risk and removes effect of asymmetric information.

Optimal Response Depends on Shock Size

- Calomiris, Flandreau and Laeven (JFI 2016) review global history of LOLR, and propose a pecking order of interventions. OMO, normal discount window lending, expanded discount window lending, preferred stock, lifeboat or common equity injections.

- Example of RFC in 1933-1935 (Calomiris et al. EEH 2013): Lost bank equity meant credit contraction and bank runs/failures. Lending via a discount window or similar RFC loan could spur runs. RFC instead provided preferred stock, along with new governance discipline and capital plan. Recipients showed major improvements in survival probability and in supply of credit (using instruments based on position of banks in networks, which RFC took into account).

Faster RFC Preferred Stock Reduces Failure

Variables	Mar33–Dec36	Mar33–Dec36
	Parsimonious	Parsimonious
	2 IV	3 IV
Log of days to RFC assistance	−1.7556**	−1.6873**
	(0.8075)	(0.7568)
Log of total assets	−0.1317**	−0.1305**
	(0.0661)	(0.0638)
Illiquid assets to total assets	0.5367	0.5245
	(1.2022)	(1.1613)
Interest and discounts on loans over total earnings	−0.8474*	−0.8236*
	(0.5035)	(0.4821)
Real estate owned to illiquid assets	−2.6020	−2.8022
	(5.2347)	(5.0281)
Net worth over total assets	3.6486	3.5743
	(2.2986)	(2.2118)
Bills payable and rediscounts over total debt	−0.2477	−0.3126
	(1.7896)	(1.7200)
National bank dummy	−0.8441***	−0.8311***
	(0.2393)	(0.2284)

RFC Preferred Stock Effects on Loan Growth

Dep Var: Loan growth	Full	Parsimonious
RFC assistance dummy	1.0431***	0.9972***
	(0.1523)	(0.1946)
RFC_dur_log		
Log of total assets	−0.0150	−0.0902*
	(0.0645)	(0.0517)
Illiquid assets to total assets	−2.3996***	−2.1749***
	(0.8925)	(0.7683)
Interest and discounts on loans over total earnings	−0.5892*	−0.4657
	(0.3550)	(0.2992)
Real estate owned to illiquid assets	0.5478	−1.7401
	(3.9316)	(3.5976)
Net worth over total assets	3.1119*	2.6576*
	(1.6515)	(1.3633)
Bills payable and rediscounts over total debt	−0.8783	−0.4577
	(1.2004)	(1.1661)
National bank dummy	−0.1743	−0.1870
	(0.1568)	(0.1270)

Conclusions

- OMO are not an effective countercyclical tool when systemic loss of bank equity reduces banks' capacity to provide credit.

- LOLR policy must include many tools (discount window, preferred stock, lifeboats) so that policy can respond to shocks of different severity to banking system, and different information asymmetry.

- SOMC rules-based perspective: policy rule should be explicit and agreed in advance (Calomiris, Flandreau and Laeven JFI 2016, and Calomiris, Holtz-Eakin, Hubbard and Meltzer, JFEP 2018)