Establishing Credible Rules for Fed Emergency Lending *

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Abstract

The current framework governing emergency lending – including reforms to Federal Reserve lending enacted after the recent crisis – are inadequate and not credible. We propose reforms that would establish a credible framework of rules to constrain and guide emergency lending by the Federal Reserve and by fiscal authorities during a future financial crisis. Our proposed framework follows five overarching rules, informed by history, empirical evidence and theory, which would serve as the foundation on which detailed legislation should be constructed. Adequate assistance to financial institutions would be provided in systemic crises but would be limited in its form, and by the process that would govern its provision. Our framework would serve as a basis for establishing effective rules that would be credible, and that would properly balance the moral-hazard costs of emergency lending against the gains from avoiding systemic collapse of the financial system.

Keywords – Lender of last resort, central bank, emergency lending, bailouts, moral hazard, systemic risk, financial crisis, Federal Reserve, Fed Oversight Reform and Modernization Act, Dodd-Frank Act

Paper Type – Viewpoint

JEL Classification – E58, G28

* This paper is forthcoming in the *Journal of Financial Economic Policy*.

I. Introduction

We propose to strengthen the Federal Reserve's ability to lend to non-banks in a financial crisis while at the same time requiring the Fed to use its lender of last resort (LOLR) powers to banks and non-banks in a transparent and rule-based manner. Governments, including ours in the United States, have failed to establish a policy framework to determine credibly what sort of assistance will be supplied by the LOLR, and the process that will determine how assistance will be provided. Rules matter because they affect the incentives of market participants (e.g., by limiting moral hazard). If banks know that assistance will be limited to certain circumstances and provided according to pre-established rules, that creates an incentive for banks to manage risk and maintain liquidity and capital to protect themselves from risks that are not protected by the government. Furthermore, if market participants are aware of a commitment by the government or the central bank to provide LOLR assistance to address systemic risks, the expectation of assistance can help to stabilize the financial system by acting on market participants' expectations. At the same time, if the rules that govern assistance are unrealistic (e.g., rules that deny the provision of necessary assistance), they will not be credible, and, therefore, they will not be effective. The challenge is to construct a framework that properly defines the purposes and circumstances of appropriate assistance, prevents inappropriate assistance, and accomplishes those objectives credibly.

The recent global financial crisis demonstrated that large shocks to the financial system can produce systemic disruptions to the funding of financial institutions and their ability to provide credit to the economy. Such systemic events can and should be addressed by establishing an effective mechanism for government intervention in response to financial crises, which includes potentially both a central bank response and a government response. Regulatory policy responses to the recent global financial crisis, unfortunately, have been too prescriptive, reactive, and punitive, while at the same time being too generous in other respects. Post-crisis policy has focused on the specific alleged shortcomings of the pre-crisis environment to justify some limits on assistance that are neither desirable nor credible. What has been lacking is a sufficiently-broad and forward-looking approach to financial stability that is flexible enough to respond to unforeseen exigencies, but that is also rules-based, predictable in its responses, and informed by appropriate divisions of power under our political system.

The Federal Reserve's role as LOLR to the financial system is of paramount importance in maintaining financial stability. Section 13(3) of the Federal Reserve Act provides the Federal Reserve with the power to lend to non-bank institutions in response to "unusual and exigent circumstances."[i] The financial crisis of 2007-2008 clearly qualified as "unusual and exigent circumstances" and the Fed exercised its § 13(3) authority to lend to non-banks through a variety of lending facilities. However, despite the relative success of the Federal Reserve's use of § 13(3) to respond to the crisis, its § 13(3) powers were cut back by Dodd-Frank.[ii] In particular, post-Dodd-Frank: (1) no loans can be made to single institutions—they must be part of a broad program; (2) all nonbank loans must be approved by the Secretary of the Treasury; (3) loans can only be made to solvent institutions; (4) banks are severely limited in using discount window loans to channel funds to nonbank affiliates, like broker-dealers—instead loans to those affiliates must be authorized under §13(3); (5) heightened collateral requirements are imposed, preventing inter alia the purchase of unsecured commercial paper, as done in the crisis; and (6) all loans must be publicly disclosed within one year and disclosed to congressional leaders within seven days.[iii]

And further restrictions have been proposed. Most recently, under the Fed Oversight Reform and Modernization (FORM) Act,[iv] which passed the House in November 2015,[v] emergency 13(3) lending would require the affirmative vote of 9 of the 12 Federal Reserve Bank Presidents and require certification from all federal regulators with jurisdiction over the borrower that the borrower is solvent.[vi] The bill also prohibits lending to non-financial institutions, including the purchases by the Fed of even secured non-financial commercial paper.[vii]

These restrictions present numerous challenges in a financial system where nonbank financial institutions are of increasing importance.[viii] The Financial Stability Board (FSB) reports that the overall size of the nonbank financial sector stands at $80 trillion as of its November 2015 report.[ix] In addition, nonbank financial assets have consistently increased by over $1 trillion annually from 2011 through 2015, and, on a percentage basis, the FSB finds that assets of nonbank financial intermediaries has reached 59 percent of aggregate GDP.[x] Furthermore, nonbank financial institutions in the U.S in aggregate rely upon nearly $5 trillion of uninsured short-term funding, or 60 percent of all such funding, which is vulnerable to runs.[xi]

2. Shortcomings of the Current Framework

To the extent that individual nonbank institutions are not systemically-important providers of essential payments and credit services to a broad group of consumers and businesses, failures of such nonbanks should not be prevented by government interventions. But when nonbanks become, like banks, important providers of liquidity and credit in the market, systemic events that threaten them as a group can create negative externalities that motivate intervention to strengthen them, in order to preserve the orderly flow of payments and credit or to prevent a widening contagion that could destroy the financial system.

We believe the restrictions on the Fed's powers to lend to nonbanks imposed by Dodd-Frank should be reformed. Dodd-Frank's 13(3) broad-based lending program requirement could compromise the ability of the Federal Reserve to prevent an incipient run emanating from a single institution.

A general requirement of the approval of the Treasury Secretary, without placing that requirement within a clear framework (as discussed below), would delay and politicize lending decisions, increase uncertainty among holders of short-term debt, and potentially raise borrowing costs.

The prohibition against lending to an insolvent nonbank is likely to act as a political deterrent against the Fed lending to nonbanks, because it could be determined in hindsight that the nonbank should have been judged insolvent. The concern arises because the distinction between solvency problems and liquidity problems is difficult to make in the middle of a crisis. If the borrower turns out to be insolvent, then Congress will have grounds to be highly critical of the Fed's decision to lend.

The Dodd-Frank 13(3) collateral limit lacks an exception for repo transactions and purchases of highly-rated unsecured commercial paper, and affiliates will now have to go to the Fed directly as nonbanks for loans under §13(3), subject to all the new Fed restrictions.

Finally, the new disclosure rules are detrimental, as evidenced during the crisis by the stigma attached to discount window borrowing (which was not disclosed), which dissuaded banks from obtaining discount window liquidity during the crisis even when they needed it.[xii] Publicly announcing the names and amounts of borrowers, even with a one-year lag, might exacerbate stigma concerns and increase avoidance. And disclosing these loans to congressional leaders within seven days could risk leakage, further discouraging borrowers in need from going to the Fed.

However, while a strong LOLR is necessary, both to respond to and to deter a financial crisis from arising in the first place, this power needs to be used in a more transparent and rule-based manner than it has in the past.[xiii] It is important to establish a detailed LOLR framework, so that the possible actions of the Fed are clear and not unbounded. The Fed should set this framework forth in a regulation governing lending to banks as well as nonbanks.

In promulgating a set of rules, it is important to consider the problem of "time inconsistency," whereby rules that are established during normal times are discarded in the midst of a crisis.[xiv] Adherence to the prescribed rules in the future is critical, lest the attacks on the Federal Reserve's emergency authority only increase. Therefore, the rules should be specific enough to provide credible parameters for emergency lending, but not overly restrictive as to lead to problems of "time inconsistency."

3. The Way Forward

The following proposed rules seek to establish such a balanced approach:

Rule 1: Require the Federal Reserve to outline in detail its crisis management procedures, including the specific courses of action it would take as part of future lending to banks under §10 (the discount window) or to nonbanks under §13(3) so that those plans can be reviewed by Congress and subjected to Congressional oversight.

The Federal Reserve's LOLR authority was used in the 2007-2008 financial crisis largely on an *ad hoc* basis under severe time pressure as the crisis evolved. While no two financial crises play out in the same manner, and the next crisis will surely look different than the prior one, the Fed should pre-plan its crisis management procedures as much as possible. It has rescinded almost all the facilities it used during the crisis.[xv] Instead, it should set forth in a regulation all the facilities it may use in another crisis. Not only will an outline of the specific courses of actions likely improve the efficiency of such actions with a well-thought out approach, but setting forth its possible responses could also deter future contagious runs. The Fed should enumerate the facilities, the contracts and the means through which its assistance will be provided and the principles that will guide selection of eligible participants. Specifically, the Fed should clarify whether it intends to engage exclusively in fully collateralized lending or whether other forms of emergency assistance will be considered, including unsecured lending, purchases of preferred stock and/or common stock, or credit guarantees. Such measures would likely require additional authorizing legislation that would clarify the lines that divide Federal Reserve lending from policies that go beyond Federal Reserve authority.

The rationales that support this enumerated approach are twofold. First, public accountability is established if the Fed lays out its principles ex-ante and can credibly commit to following such principles. Any effective emergency assistance will involve some degree of risk, so it is important that the Fed acknowledge the boundaries of the potential risk. Committing to exclusively riskless positions would not be credible, but allowing the potential for boundless risk taking would remove accountability. Therefore, the Fed should establish clear boundaries ex ante. Second, the clearer the crisis management procedures, the more stable the financial markets. While constructive ambiguity may play a role for central banks during normal times, any ambiguity during a crisis will only serve to exacerbate financial panic and further destabilize the markets. Clear crisis management procedures with specific plans of actions is therefore crucial to maintaining financial market stability.

Rule 2: Establish specific, observable criteria that will be used to determine whether emergency lending by the Federal Reserve becomes fiscal policy that should involve the Treasury.

While the Federal Reserve should be a "lender of last resort," lending facilities may shift from pure liquidity provision, which should be the sole purview of the Federal Reserve, into fiscal intervention, which should involve the Treasury, either exclusively or in conjunction with the Fed.[xvi] Loans to insolvent institutions or loans to institutions that have a substantial likelihood of becoming insolvent should be regarded as implicating fiscal policy. The borderline could be set by using algorithmic triggers to determine the threshold at which a lending facility becomes a fiscal mechanism. One possible trigger could entail a risk-based analysis of the lending program. As the riskiness of the liquidity provision increases, it will become a matter of fiscal policy at greater levels of risk. The riskiness would not only involve an analysis of the solvency of the borrower, but also the type of collateral, maturity of the loan, or terms. While overnight collateralized lending is pure liquidity provision, other facilities that involve preferred stock, warrants, or debt guarantees would become fiscal responses.

Overall, criteria should be threefold for determination of traditional LOLR activities versus fiscal action. First, the subordination level of the Fed's claim on the assisted institution will dictate whether emergency assistance becomes fiscal policy. Equity injections, i.e. preferred or common stock, should unequivocally be considered fiscal policy that requires approval of the Treasury. Regarding debt claims, the Fed should establish a clear line where the level of subordination becomes risky enough to warrant Treasury approval. Second, the size of the Fed's subsidy to the borrowers is a relevant factor. The Bagehot requirement that central bank liquidity be provided at a high rate of interest serves to limit the subsidy provided. However, the rate of interest must not be so high as to chill participation in the liquidity facility entirely. As the implicit subsidy increases, the emergency assistance becomes more in the realm of fiscal action. The Fed should be clear in establishing this line, so that Treasury involvement is not ambiguous. Third, the eligibility requirements for participation in a lending facility are also relevant. Lending to clearly insolvent institutions by the Federal Reserve, solely on its own authority, should be prohibited. A related concern is the debt overhang problem, whereby lending to firms already overburdened by debt will create distorted incentives. To the extent that emergency assistance is provided to such firms, the Fed should be clear that it will not be done so as part of its 13(3) lending, but rather through fiscal action at the direction of the Treasury.

Furthermore, it may be desirable to limit the duration of any Federal Reserve interventions involving the purchases of private securities, such as mortgage-backed securities (MBS). For example, while it may be reasonable for the Fed to purchase high-quality MBS tranches as part of a response to a crisis, continuing this practice during normal times is a form of fiscal policy that subsidizes mortgage lending and is outside the proper practice of monetary policy.

Rule 3: Establish a clearly defined protocol for proceeding in the case that government intervention is deemed fiscal by the Fed.

When potential Federal Reserve action is determined to involve fiscal intervention, as opposed to pure liquidity provision, procedures for such fiscal action should be outlined in advance.[xvii] The protocol should entail two key features: (i) requirement of Treasury approval with indemnification of any Fed loans and (ii) possible use of a pre-established standing TARP authority. This would require legislation which would give the opportunity to design a better TARP than was invented under the gun in the crisis. For standing TARP, there should be an accelerated procedure for congressional approval to trigger funding. We would expect that insolvent institutions would go into resolution rather than receive government support. The feasibility of using resolution rather than public support is greatly improved by having s strong lender of last resort that can credibly stem a panic caused by a financial institution going into resolution. Thus, a strong lender of last resort actually reduces the need for public support.

In the unusual case where government fiscal support is extended to weak financial institutions, accountability of the management of assisted financial institutions must be a central feature. That is, management of any financial institution receiving Treasury assistance should be replaced. In addition, the claims received in exchange for TARP funds must be subordinated to runnable liabilities. If the adverse macro conditions are sufficiently severe, the purchase of preferred stock may not be enough. In such cases, injections of capital in the form of common stock may warranted along with possible guarantees of asset prices or classes of liabilities. In terms of recipients, it should be made clear that assistance is only given to firms that can be reasonably expected to have going concern value. Any firm that cannot recover, even with TARP assistance, should be wound down. Finally, time is of the essence is the case of emergency TARP funding, so a rule should be established ex ante that dictates which classes of institutions will be eligible for funding and what the criteria will be for determining whether and how much a firm will receive.

Rule 4: Require non-banks that receive funding from the Fed to submit to Fed examination and capital requirements going forward for the duration of the period they receive assistance.

One concern with the liquidity available through a market-wide lending facility is that non-depository financial institutions choose to remain undercapitalized, relying on the potential Federal Reserve liquidity.[xviii] Therefore, nonbanks that do get loans from the Fed should become subject to Fed examination and capital requirements for the duration of their participation in the lending program. Once the loan is repaid, the borrower would no longer be subject to Fed supervision. It may be desirable for some minimum capital and liquidity requirements to persist beyond the period of assistance.

Rule 5: Require that Treasury have access to supervisory information necessary to make fiscal decisions.

For the Treasury to take appropriate fiscal action in the midst of a crisis, it is crucial that the Treasury have all relevant supervisory information in a timely manner. Sufficient time must be given for the Treasury to make a fully-informed decision about a possible fiscal response. To this end, the Federal Reserve should provide the Treasury with all such information. In addition, as a secondary matter, the Federal Reserve should provide the Treasury with (i) a set of options that could be taken to mitigate systemic risk concerns, (ii) an assessment of the effectiveness of each of the options, and (iii) an estimate of the risk to taxpayer funds that each option would impose. An estimate of the risk to taxpayers and the overall economy that would result from inaction should also be provided to the extent feasible.

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Notes

[i] 12 U.S.C. § 343 (2006) (providing that "[i]n unusual and exigent circumstances, the Board of Governors of the Federal Reserve System . . . may authorize any Federal Reserve bank . . . to discount for any participant in any program or facility with broad-based eligibility, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank").

[ii] For a detailed discussion of the importance of the Federal Reserve's role during the 2007-2008 financial crisis and the impact of Dodd-Frank reforms, see Scott (2016).

[iii] Dodd-Frank Wall Street Reform and Consumer Protection Act § 1101.

[iv] H.R. 3189, the Federal Reserve Oversight Reform and Modernization (FORM) Act.

[v] *U.S. House passes Federal Reserve reform legislation*, Holland Sentinel (Nov. 19, 2015), *available at* http://www.hollandsentinel.com/article/20151119/NEWS/151118963.

[vi] *See* H.R. 3189, the Federal Reserve Oversight Reform and Modernization (FORM) Act.

[vii] *Id.* at § 11.

[viii] Financial Stability Board (2015).

[ix] *Id.* at 2.

[x] *Id.* at 10.

[xi] Committee on Capital Market Regulation estimate.

[xii] Armantier, Ghysels, Sarkar, and Shrader (2015).

[xiii] On the desirability of introducing rules into Fed governance, see Meltzer (2013) and Taylor (2015).

[xiv] For discussions of the "time inconsistency" problem, *see e.g.*, Athreya (2015) and Acharya (2015).

[xv] For a comparison of the relative strengths of international central banks as lenders of last resort, see Scott (2015).

[xvi] In U.S. history, the Reconstruction Finance Corporation (RFC) and TARP are two examples of different policy approaches to such fiscal intervention. For a review of the RFC experience, see Calomiris, Mason, Weidenmier and Babroff (2013). For a review of TARP assistance to financial institutions, see Calomiris and Khan (2015). For a review of the experiences of other countries, Calomiris, Klingebiel, and Laeven (2005).

[xvii] All assistance must balance the potential gains from providing assistance against the moral-hazard consequences of doing so. History provides ample evidence that such a balance can be struck, and theory offers insights on the guiding principles of how to maintain market discipline while still responding to systemic threats. The key to implementing such an approach is rolling back unconditional protection of each bank's debts during normal times (such as unlimited deposit insurance protection), and relying more on interventions that are limited to moments of clear systemic risk. On the historical evidence, see Calomiris, Flandreau, and Laeven (2016). On the theory of such assistance, see Acharya and Thakor (2016).

[xviii] *See* Acharya (2015).

References

Acharya, V. (2015), "Financial stability in the broader mandate for central banks: A political economy perspective," Hutchins Center on Fiscal & Monetary Policy, Working Paper #11, Brooking Institution, April 14.

Acharya, V., and Thakor, A. (2016), "The dark side of liquidity creation: Leverage and systemic risk," *Journal of Financial Intermediation*, Vol. 28 No. C.

Armantier, O., Ghysels, E., Sarkar, A.,and Shrader, J. (2015), "Discount window stigma during the 2007-2008 financial crisis," Staff Report No. 483, Revised August 2015, Federal Reserve Bank of New York.

Athreya, K. (2015), Systemic Risk and the Pursuit of Efficiency, *Federal Reserve Bankk of Richmond Economic Quarterly,* Vol. 101 No. 1.

Calomiris, C.W., Flandreau, M., and Laeven, L. (2016), "The political foundations of the lender of last resort: A global historical narrative," *Journal of Financial Intermediation*, Vol. 28, No. C.

Calomiris, C.W., and Khan, U. (2015), "An assessment of TARP assistance to financial institutions," *Journal of Economic Perspectives,* Vol. 29 No. 2.

Calomiris, C.W., Klingebiel, D., and Laeven, L. (2005), "Financial crisis policies and resolution mechanisms: A taxonomy from cross-country experience," in Honohan, P., and Laeven, L. (Eds.), *Systemic Financial Crises: Containment and Resolution*, Cambridge University Press, New York.

Calomiris, C.W., Mason, J.R., Weidenmier, M., and Babroff, K. (2013), "The effects of Reconstruction Finance Corporation assistance on Michigan banks," *Explorations in Economic History,* Vol. 50 No. 4.

Financial Stability Board (2015), *Global Shadow Banking Monitoring Report 2015,* (November), available at http://www.fsb.org/wp-content/uploads/global-shadow-banking-monitoring-report-2015.pdf.

Meltzer, A.H. (2013), "What's wrong with the Federal Reserve: What would restore independence?" *Business Economics,* Vol. 48 No. 2.

Scott, H.S. (2015), "The Federal Reserve: The weakest lender of last resort among its peers," *International Finance,* Vol. 18 No. 3.

Scott, H.S. (2016), *Connectedness and Contagion: Protecting the Financial System from Panics*, MIT Press, Cambridge, Massachusetts.

Taylor, J.B. (2015), "Getting back to a rules-based monetary strategy," Keynote Address for the Conference, "Getting Monetary Policy Back on Track," Shadow Open Market Committee, New York, March 20, available at http://web.stanford.edu/~johntayl/2015_pdfs/SOMC-talk%20_Taylor-3-20-15.pdf