



3-1-2018

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Recommended Citation

John C. Dugan, *Addressing the Fundamental Banking Policy Problem of Runs: Effectively Subordinating Large Amounts of Long-Term Debt to Short-Term Debt to End "Too-Big-To-Fail"*, 22 N.C. BANKING INST. 11 (2018).

Available at: <http://scholarship.law.unc.edu/ncbi/vol22/iss1/6>

**ADDRESSING THE FUNDAMENTAL BANKING
POLICY PROBLEM OF RUNS: EFFECTIVELY
SUBORDINATING LARGE AMOUNTS OF LONG-
TERM DEBT TO SHORT-TERM DEBT TO END
“TOO-BIG-TO-FAIL”**

JOHN C. DUGAN*

I. INTRODUCTION

The recent financial crisis violently reintroduced markets, regulators, and policymakers to the destructive power of runs. We painfully learned once again that runs can cause not only the failure of individual financial institutions, but also financial panic and systemic economic damage. And we also re-learned that once runs and financial panic get started, they can be shockingly expensive and difficult to stop.

Much has been written about the contribution of the run problem to the financial crisis and the failure of regulatory regimes to adequately anticipate or address that problem.¹ And while not necessarily stated this way, much of the policy response by governments around the world has included either direct or indirect measures that reduce the risk of runs.

In my view, however, there has still been too little focus on the centrality of the run problem in the policy response—especially in assessing measures to end the so-called “Too-Big-to-Fail” problem that has plagued policymakers for at least the last thirty years. Fundamentally, as the crisis demonstrated, both the occurrence and threat of runs and financial panic caused by the failure or possible failure of one

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1. *See, e.g.*, TIMOTHY F. GEITHNER, STRESS TEST: REFLECTIONS ON FINANCIAL CRISES (2014) (reflecting on the 2008 financial crisis from the perspective of the Secretary of the Treasury during the Obama Administration); GARY GORTON, MISUNDERSTANDING FINANCIAL CRISES: WHY WE DON'T SEE THEM COMING (2012) (discussing an industry-wide misunderstanding by economists of financial crises and their causes).

or more large financial institutions have been the driving force for governments to take expensive and controversial emergency measures to prevent such failures. Therefore, I believe, the central question that must be answered to assess the adequacy of any Too-Big-to-Fail policy prescription is this: *will it prevent runs?* If it does not, then the problem will not have been solved.

That is the context for this article. Part II provides a “back to basics” overview of the following: (1) the fundamental problem of runs and their role in bank failures; (2) how governments designed regulatory measures before the crisis to address that problem; (3) how those measures proved inadequate during the crisis; (4) how governments responded during the crisis with emergency, *ad hoc* measures designed to quell the runs and panic, including measures to prevent large financial institution failures; and (5) how policymakers’ subsequent measures to prevent a recurrence of the crisis, including the Dodd-Frank Act,² have increased or reduced the ability of governments to address the run problem.³ Against this backdrop, Part III focuses on what has become the most promising initiative to address the run conundrum that has been at the center of the Too-Big-to-Fail controversy: the so-called Single Point of Entry (“SPOE”) approach to handling the failure of a large financial institution.⁴ The SPOE approach is fundamentally based on *subordination*, that is, the subordination of large amounts of an institution’s long-term debt, which is not “runnable,” to *all* of its short-term debt, which is—and to achieve that subordination during a failure event in a speedy, practical manner that allows the operations of financial institutions to stay open for business.

Again, the prism for assessing this new SPOE approach is this: will it allow a large financial institution to fail without causing runs? I believe it will, though only markets will be able to make that judgment if and when the time comes to use the SPOE approach.

2. Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”), 12 U.S.C. § 5301–5641 (2016).

3. *See infra* Part II.

4. *See infra* Part III.

II. THE RUN PROBLEM AND THE POLICY RESPONSE

In the absence of special government regulation, why can't a bank experience failure and bankruptcy the way commercial companies do—*i.e.*, without causing serious economic disruptions? After all, an airline can enter a bankruptcy reorganization under Chapter 11 of the U.S. Bankruptcy Code⁵ with the airline continuing to operate and customers thinking nothing of getting on the airline's planes despite the company's financial problems. Governments, however, would never let a bank fail in the same way, for one fundamental reason: the problem of runs.

To illustrate, consider a world in which there is no government regulation of banks. As in the real world, here a typical bank engages in "maturity transformation" to provide credit to the real economy: the bank transforms short-term, highly liquid liabilities like deposits into illiquid assets like bank loans to businesses, and these bank loans are critical to fueling economic growth. Without government regulation, however, the "maturity mismatch" inherent in maturity transformation makes such a bank highly vulnerable to runs.

That is, if depositors think their bank is in trouble, they will have a powerful incentive to run. On the one hand, it is costless for depositors to immediately withdraw all of their funds so long as the bank has enough cash to meet their demands. On the other hand, it could be very costly if they don't: if the bank fails, it very likely won't be able to pay back its remaining depositors in full, if at all.

Moreover, the very act of increased withdrawals of funds can precipitate a sudden failure of a bank, creating even more of an incentive for a depositor to be "first in line" to withdraw funds rather than be stuck at the back of the line when the bank fails.⁶ This precipitation of failure occurs because loans, the bulk of a bank's assets, are illiquid and therefore difficult to turn into cash quickly in order to meet increased depositor withdrawals. "Fire sales" of such loans can produce some of that cash quickly, but only at the cost of heavy losses resulting from the reduction in the loans' sale price that would be necessary to induce buyers to purchase the illiquid, hard-to-value loans. Thus, the more that

5. 11 U.S.C. § 1101–1174 (2016).

6. See Douglas W. Diamond & Phillip H. Dybvig, *Bank Runs, Deposit Insurance, and Liquidity*, 91 J. POL. ECON. 401, 401 (1983) ("During a bank run, depositors rush to withdraw their deposits because they expect the bank to fail. In fact, the sudden withdrawals can force the bank to liquidate many of its assets at a loss and to fail.").

depositors withdraw cash, the more the bank would have to engage in fire sales to produce that cash, and the more losses the bank would have to sustain, eventually causing insolvency and failure. Depositors appreciate this vicious cycle, which unfortunately reinforces their incentive to run as quickly as possible.

Making matters worse, in the absence of regulation, the run that occurs at a troubled bank can easily spread to healthy banks, swiftly causing panic and systemic damage. This can occur for a variety of reasons. It is difficult for depositors to distinguish strong banks from weak ones due to the fact that a bank's illiquid loan assets are very hard for third parties to value; given any uncertainty, a depositor would have an incentive to run. Reinforcing this incentive is the well-known fact that banks extend credit to one another, so that a failure at a weak bank could cause losses and even failure of a strong bank that made loans to the weak bank—which in turn could cause a chain reaction of losses and failures at still other banks. In addition, fire-sales of assets at weak banks can cause a decline in the market value of similar assets held by otherwise strong banks, thereby generating substantial losses for those banks. Thus, once a perception of trouble exists at banks generally, depositors have a very strong incentive to run on seemingly healthy banks as well as weak ones—which is exactly what happened in the 1920s and 1930s, where “[a]ny runs on banks for whatever reason became to some extent self-justifying, whatever the quality of assets held by banks.”⁷

Moreover, the run problem is magnified at the largest institutions, which typically have concentrations of short-term credit extended to large, institutional investors. These sophisticated investors are in a position to withdraw large amounts of funds quickly, and they closely monitor their large banking institution counterparties in order to be able to do so at the first signs of distress.

And of most consequence, in order to preserve liquid assets to meet increased demand from depositors and other short-term creditors, all banks confronting these circumstances would cut back sharply on new loans and refuse to “roll over” old loans as they became due. This in turn would choke off funding to businesses and consumers, leading to severe economic contraction. And this is exactly what occurred in the wake of

7. MILTON FRIEDMAN & ANNA SCHWARTZ, *A MONETARY HISTORY OF THE UNITED STATES, 1867–1960* 355 (1963).

various financial panics that occurred in the late 19th and early 20th centuries.⁸

A. *The Absence of Market Solutions to the Run Problem*

In the absence of government regulation, the marketplace by itself has never found a truly workable way for banks to address the run problem. For example, banks could hold a much higher proportion of their assets in cash rather than illiquid loans in order to meet the spike in deposit withdrawals that would occur with a run. This would result, however, in the overall return to bank investors declining, as liquid assets generate low returns. More important from a public policy perspective, if banks greatly increased the proportion of liquid assets they held, they would not be making the volume of loans to businesses that has long been thought necessary to fund adequate levels of economic activity.⁹ So long as societies believe that short-term liabilities must fund illiquid loans and other illiquid assets in order to fuel economic growth—as societies have long believed—we will be saddled with the problem of runs.¹⁰

The run problem also explains why a bank is not able to engage in a bankruptcy reorganization the way an airline can, with the bank continuing to engage in business-as-usual with its customers: a huge number of the bank's customers are in fact its depositors, which in a business-as-usual bankruptcy would have a strong incentive to run and discontinue doing business with the bank—not just because of the losses that might be sustained, but also because the “automatic stay” imposed in a bankruptcy proceeding would prevent a depositor from using any of its funds for a very long period of time. In addition, as previously described, the disorderly bankruptcy of a bank can cause a contagious run on other banks that in turn can cause systemic economic damage.

8. See, e.g., Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., *The Crisis as a Classic Financial Panic*, Speech at the Fourteenth Jacques Polak Annual Research Conference, Washington, D.C. (Nov. 8, 2013), <https://www.federalreserve.gov/newsevents/speech/bernanke20131108a.htm>.

9. A very high proportion of bank assets in cash rather than loans would also blunt the ability of central banks to effect economic stimulus through traditional monetary policy tools designed to stimulate or restrict bank lending.

10. Private market efforts did develop the bank clearinghouse (New York 1853), industry monitoring (the Suffolk Bank, 19th Century), and bank note reporters and the financial press (late 19th Century), all of which were intended either directly or indirectly to make banks safer and less prone to runs. Clearly, however, none of these private market solutions proved able to prevent systemic instability as banks and the financial sector grew in size and complexity.

B. *The Government's Pre-Crisis Responses to Address the Run Problem*

Over a long period of time, governments and policymakers developed a number of regulatory tools to try to address the run problem while still allowing banks to engage in maturity transformation. These tools included, but were not limited to, the following:

- **Prudential Regulation.** A panoply of regulatory and supervisory measures have been designed to make banks much less likely to either fail or be perceived by depositors as being likely to fail, even during periods of economic stress, thereby reducing the incentive to run. Such measures include restrictions on riskier activities perceived as exposing banks to large losses (such as real estate development);¹¹ examination and supervision by government regulators to ensure “sound banking practices” and the avoidance of excessively risky loans; and requirements to hold sufficient levels of reserves and capital to absorb both expected losses and some amount of unexpected losses without becoming insolvent.¹² All of these aspects of prudential regulation—as well as the traditional physical design of banking structures as strong, granite buildings—are intended to provide depositors with *confidence* in their banks and the banking system. With confidence that their banks are safe and their deposits are safe, depositors have no incentive to run.
- **Liquidity Regulation.** Regulators and supervisors have required banks to hold minimum amounts of liquid assets, especially cash, in order to meet periodic spikes in depositor withdrawals without needing to engage in loss-generating fire-sales of assets to produce such cash.¹³ Other requirements have reduced the proportion of a bank’s liabilities that are short-term and especially prone to runs, like brokered deposits, while increasing the proportion of liabilities that are longer term and/or less likely to run, such as longer-term funding or “sticky” core deposits.¹⁴ While liquidity measures like these

11. *See, e.g.*, 12 U.S.C. § 1843 (2016) (restricting the nonbanking activities of a bank holding company).

12. *See, e.g.*, 12 C.F.R. § 217 (2017) (establishing Federal Reserve capital requirements); 12 C.F.R. § 204 (2017) (establishing reserve requirements for insured depository institutions).

13. *See, e.g.*, 12 C.F.R. § 249 (2017) (establishing liquidity coverage ratio requirement).

14. *See, e.g.*, BASEL COMMITTEE ON BANKING SUPERVISION, BASEL III: THE NET STABLE FUNDING RATIO 1–2 (2014), <https://www.bis.org/bcbs/publ/d295.htm> (“The [net stable funding ratio] will require banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A sustainable funding structure is intended to reduce the likelihood that disruptions to a bank’s regular sources of funding

directly address and partially mitigate the run problem, they are constrained, as previously noted, by the market-driven need for banks to hold large amounts of readily accessible deposits as liabilities and to make and hold large amounts of illiquid loans as assets.

- ***Temporary Suspension of Convertibility of Deposits to Cash.*** In response to runs—especially in the period before the establishment of central banks—banks (sometimes at the direction of governmental authorities) suspended the ability of customers to convert some or all of their demand deposits to cash in the hope of confidence returning to the bank or banking system over time, whereupon the suspension would be lifted. This tactic sometimes worked and sometimes did not, and of course, the prospect of such a suspension occurring could have the counterproductive effect of helping to precipitate a run.¹⁵
- ***Central Bank Lending.*** A central bank like the Federal Reserve can lend cash to banks when: they have insufficient cash on hand to meet spikes in depositor withdrawals; cannot borrow such cash in the private market; and seek to avoid loss-generating fire sales of illiquid assets to produce such cash.¹⁶ Such “discount window” loans can help tide a bank over with the cash needed to stay in business until a run subsides.
- ***Government Deposit Insurance.*** With deposit insurance, a government explicitly guarantees that it will repay some or all of a deposit if a bank cannot.¹⁷ Depending on how it is structured, government deposit insurance can effectively remove the incentive to run with respect to those deposits that are insured, because in those circumstances depositors can rely on the full faith and credit of their government that their funds will be available when needed, rather

will erode its liquidity position in a way that would increase the risk of its failure and potentially lead to broader systemic stress.”).

15. The European Commission has proposed to give European regulators the power to suspend payment obligations of a bank to its counterparties and customers (including its depositors) for several days. *See Commission Proposal for a Directive of the European Parliament and of the Council Amending Directive 2014/59/EU on Loss-Absorbing and Recapitalisation Capacity of Credit Institutions and Investment Firms and Amending Directive 98/26/EC, Directive 2002/47/EC, Directive 2012/30/EU, Directive 2011/35/EU, Directive 2005/56/EC, Directive 2004/25/EC and Directive 2007/36/EC*, at 12, COM (2016) 852 final (Nov. 23, 2016) (“The amendment . . . introduces among the general resolution powers the power to suspend payments when this is needed for the effective application of one or more resolution tools It specifies the scope of the suspension power and its duration, which cannot exceed five working days.”).

16. *See* 12 C.F.R. § 201 (2017) (implementing discount window provisions of the Federal Reserve Act).

17. 12 U.S.C. § 1821(a)(1)(E) (2016).

than rely on the sometimes risky financial position of their bank. However, deposit insurance can also prove very expensive for governments and taxpayers in the event of large or widespread bank failures. As a result, there are practical limits on the proportion of bank deposits that governments have been willing to insure, leaving the remaining uninsured deposits vulnerable to runs.

- ***Government Inducements for Healthy Banks to Purchase Troubled Banks.*** Where a healthy bank buys a sick bank and agrees to guarantee all the deposits of the sick bank, the incentive for depositors of the sick bank to run is removed. Governments have at times been willing to provide financial incentives to healthy banks to encourage such acquisitions.¹⁸ Again, however, as with deposit insurance, there are budgetary constraints, legal constraints, and other practical limits on the extent to which governments have been willing to provide such financial incentives.
- ***Specially Tailored Bankruptcy Regimes for Banks.*** Some failure “resolution” regimes, like the receivership regime of the Federal Deposit Insurance Corporation (FDIC),¹⁹ have been expressly designed to try to avoid depositor disruption and dislocations that might otherwise occur if a failed bank were subject to the generally applicable bankruptcy regime, such as delays in deposit availability or limits on the ability to engage in banking transactions associated with such deposits.
- ***Nationalization.*** The government takeover of a troubled bank, where the government effectively guarantees all the liabilities of the bank while absorbing all or a substantial amount of its losses, is a drastic measure of last resort that some countries have resorted to in order to prevent runs and financial panic. While it can achieve that result effectively, nationalization can be extremely controversial and costly for taxpayers, while at the same time creating severe distortions in the marketplace.

C. *Mixed Results from Pre-Crisis Government Measures to Address Run Problem*

The combination of measures described above proved very successful in the United States from the 1930s to 2008 in preventing

18. See 12 U.S.C. § 1823(c)(2) (2016) (enabling assistance by FDIC to facilitate acquisitions of failed or failing insured depository institutions).

19. See 12 U.S.C. §§ 1821, 1823 (2016) (setting out the main provisions affecting receivership).

runs—sometimes referred to as the “Quiet Period” in banking.²⁰ While there were episodes in which the U.S. government was forced to take some extraordinary measures to deal with bank failures—most notably in the context of two very large failures described below and with respect to widespread savings and loan failures in the late 1980s—significant runs and financial panic were avoided.

In particular, federal deposit insurance and the FDIC receivership regime effectively ended runs at smaller U.S. banks, where a very high proportion of deposits are federally insured. Because of their lack of geographic and product diversification, smaller banks are much more vulnerable to failure in times of economic stress than are larger banks, and consequently, the number of troubled and failing smaller banks has been large and much greater than the number of troubled and failing larger banks. Nevertheless, the U.S. deposit insurance system has been finely tuned over the years to generally allow a smaller bank to fail and be taken over by another bank so that its depositors keep doing “business as usual” with the new bank—not exactly the same as a U.S. Bankruptcy Code reorganization of a company like a failed airline, but a process that produces similar results in terms of business continuity. As a result, despite thousands of resolutions of failed smaller banks over the years, the corresponding incidence of runs of any significance has been extremely low. Of course, the cost to the federal deposit insurance fund, which is borne in the first instance by the banking industry through the payment of insurance premiums to the FDIC, has been substantial. And that cost would be even greater—and the taxpayers’ exposure correspondingly greater—if deposit insurance were extended to a larger proportion of deposits in the system than is currently the case.

Similarly, in general, the FDIC’s resolutions of troubled and failing larger institutions during the Quiet Period—much smaller in number but much more consequential in size—were also executed in an orderly manner where both insured and uninsured depositors were shielded from loss. First, the smaller deposits at larger banks, often held by unsophisticated individuals, were expressly covered by deposit

20. See, e.g., GARY B. GORTON & ANDREW METRICK, *REGULATING THE SHADOW BANKING SYSTEM* 261 (2010), https://www.brookings.edu/wp-content/uploads/2010/09/2010b_bpea_gorton.pdf (“After the Great Depression, by some combination of luck and genius, the United States created a bank regulatory system that oversaw a period of about [seventy-five] years free of financial panics, considerably longer than any such period since the founding of the republic.”).

insurance up to statutory limits. Second, because of geographic restrictions on the expansion of banks, even the larger institutions in the United States tended to be relatively smaller than in other countries and therefore easier and less costly for the FDIC to resolve when they got in trouble. Third, as geographic restrictions began to ease over time, larger banks were eager to expand through acquisitions; as a result, the pool of interested acquirers for troubled large banks was larger than it would have been otherwise. This made it easier and less costly for the FDIC to use its resources to facilitate the acquisitions of troubled larger banks by healthy larger banks, which it was authorized to do so long as the resolutions were judged to meet certain cost constraints imposed by statute.²¹ Importantly, in such facilitated acquisitions both insured and uninsured depositors maintained full access to their deposits once assumed by the acquirer. For all these reasons, even the failures of larger banks with substantial amounts of uninsured deposits were typically resolved in a manner that avoided runs, financial panic, taxpayer losses, and political controversy.

There were two notable exceptions, however, that generated considerable controversy: the resolutions of Continental Illinois in 1984 and Bank of New England in 1991. In both cases, the institutions were relatively large and had large amounts of uninsured deposits. And in both cases, the problems at the institutions were sufficiently large that the normal amount of assistance that the FDIC could legally provide was not sufficient to induce any healthy institution to buy either of them (at least not initially). As a result, in both cases the FDIC confronted the possibility of having to liquidate the banks involved and pay off only the insured depositors, with uninsured depositors suffering the same proportion of losses as uninsured creditors would sustain in a typical bankruptcy. Fearing that that course of action would precipitate runs and possibly systemic panic, the FDIC resorted to emergency measures that directly or indirectly served to effectively keep the institutions open (at least for a time) and shield uninsured depositors from loss—even where

21. Before the enactment of the Federal Deposit Insurance Corporation Improvement Act of 1991 (“FDICIA”), an assisted acquisition was generally permitted only if the cost to the FDIC was lower than the cost of liquidating the bank and paying off only its insured deposits. FDICIA imposed a more stringent test: the FDIC was required to implement the least costly resolution method, with an exception for cases of systemic risk. *See* 12 U.S.C. § 1823(c)(4) (2016).

the estimated cost of doing so appeared to be greater to the FDIC than if it liquidated the institutions and only protected the insured deposits.²²

Both resolutions were extremely controversial. Critics, especially smaller banks, bitterly complained that these much larger troubled banks were protected in ways that prevented their uninsured depositors and certain other uninsured creditors from sustaining any losses, while smaller troubled banks were never similarly protected—or, in shorthand, that large banks were unfairly protected as “Too-Big-to-Fail,” while smaller banks were not.

In addition, critics argued that the government’s “bail out” of uninsured creditors and shareholders of larger banks created “moral hazard”: future uninsured creditors and shareholders of large banks would begin making the assumption that they, too, would be bailed out by the government in the event of financial troubles at such banks, thereby diminishing the market discipline that these stakeholders would otherwise exert over such banks. Critics further argued that that reduction in market discipline would allow larger banks to fund themselves more inexpensively than smaller banks, creating an unfair competitive advantage, while at the same time incenting management of larger banks to take undue risks, thereby having the perverse effect of increasing the likelihood of future financial stress and bailouts.

Thus, the “Too-Big-to-Fail” controversy was born, generating considerable debate and calls for legislation to prohibit such disparate treatment. No such legislation was enacted, however, as there remained great concern about constraining the government’s discretion to take emergency actions to prevent runs and financial panic, even if such actions disparately protected the uninsured stakeholders of larger institutions and ran the risk of creating moral hazard. Indeed, despite the Too-Big-to-Fail controversy, when legislation was enacted in 1991 to respond to a wave of bank failures, the FDIC was expressly authorized to protect uninsured creditors in extraordinary circumstances where the

22. See FED. DEPOSIT. INS. CORP., *MANAGING THE CRISIS: THE FDIC AND RTC EXPERIENCE, 1980–1994* 82 (1998), <https://www.fdic.gov/bank/historical/managing/documents/history-consolidated.pdf> (“[I]n a significant departure from its approach to failed bank resolutions, the FDIC announced that all depositors, both insured and uninsured, would be protected in any subsequent resolution of [Continental Illinois National Bank and Trust Company].”). While the Bank of New England resolution technically involved the closure of three depository institutions by converting them into so-called bridge banks, the effect was to keep the institutions operating as going concerns until the resolution was effected.

distress and potential failure of a troubled bank was likely to cause damage to the financial system.²³

While the Too-Big-to-Fail debate was certainly contentious, the controversy was mitigated by the fact that the criticized actions had only occurred on isolated occasions, and in these “one-off” instances such actions had succeeded in avoiding systemic runs and panic without cost to taxpayers—though there were substantial losses to the deposit insurance fund that were borne by the banking industry. Gradually the controversy subsided as almost no large institutions teetered on the brink of failure between 1992 and 2008, while at the same time the number of smaller institution failures declined precipitously—to the point where the FDIC had the longest period in its history without the failure of a single federally insured depository institution.²⁴

Nevertheless, the conundrum of Too-Big-to-Fail loomed in the background. Despite all the efforts of governments to address run problems before the financial crisis, which had certainly reduced the risk of failure and mitigated the problem of runs, no credible policy was established *ex ante* for dealing with the failure of one or more large banking organizations that had large amounts of uninsured, runnable liabilities in a manner that would avoid runs—especially where it was not possible to induce healthy financial institutions to acquire such troubled institutions. Even more problematic, a number of large *nonbanking* financial institutions began to engage in substantial amounts of maturity transformation by using massive quantities of short-term, runnable liabilities to fund illiquid assets, reflecting a general, market-wide increase in the use of short-term funding²⁵—yet these institutions had virtually none of the protections against run risk that had developed for banks over the years, such as deposit insurance, access to the discount window, and prudential regulation. In addition, the long Quiet Period without runs and financial panics, combined with a more recent period of unusually benign credit conditions, had resulted in exceptionally liquid markets that created the illusion of readily available liquidity at all times—and that in turn resulted in financial institutions holding relatively

23. See 12 U.S.C. § 1823(c) (2016).

24. See FED. DEPOSIT INS. CORP., 2008 ANNUAL REPORT 15 (2008), <https://www.fdic.gov/about/strategic/report/2008annualreport/arfinal.pdf>.

25. See MORGAN RICKS, THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION 33 (2008).

lower levels of liquidity than they had previously, making them even more susceptible to runs.

As we now know, the tinder of all of that run risk was ignited by the recent financial crisis.

D. Financial Crisis: Runs, Panic, and the Government's Response

The financial crisis of 2007–2009 had many causes, symptoms, and effects, and it is not my intent to describe all of them here. It is indisputable, however, that runs were a central feature of the crisis: runs on individual troubled institutions like Bear Stearns and Lehman Brothers; more general runs across the system that caused banks and other financial institutions to drastically reduce their lending to one another while at the same time hoarding cash and liquid assets; runs at the thrift institution IndyMac when the FDIC's resolution of that institution resulted in losses for uninsured depositors; and the general perception at the very highest levels of government that a failure to take extraordinary actions to save or shore up the largest financial institutions that held large amounts of runnable liabilities would lead to even more damaging runs.²⁶ The runs in the crisis started outside the banking system on, among other organizations, investment banks, certain insurance companies, and Structured Investment Vehicles ("SIVs") that relied heavily on runnable, short-term funding; as previously noted, these institutions were subject to few of the bank-oriented regulatory tools that were designed to prevent or mitigate runs, such as discount window lending or prudential regulation. However, the runs and anticipation of runs eventually spread to the banking system as well, including to some very large banking institutions.²⁷ It was, in short, a run-fueled financial panic.

In response to the panic, governments took a number of extraordinary, emergency actions to quell both the runs that were

26. See generally FIN. CRISIS INQUIRY COMM'N, THE FINANCIAL CRISIS INQUIRY REPORT: FINAL REPORT OF THE NATIONAL COMMISSION ON THE CAUSES OF FINANCIAL AND ECONOMIC CRISIS IN THE UNITED STATES 233–353 (2011), <https://www.gpo.gov/fdsys/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf> [hereinafter FCIC REPORT] (“[I]n just one week in March 2008, a run by . . . lenders, hedge fund customers, and derivatives counterparties led to Bear’s having to be taken over in a government-backed rescue.”).

27. *Id.* at 306 (describing runs on IndyMac, a large California-based thrift institution, and Wachovia Corp., a large commercial banking organization).

occurring and the potential for additional runs. In the United States, these actions included the following:

- ***Discount window loans to troubled nonbanks*** via section 13(3) of Federal Reserve Act (e.g., loans to the insurance company, AIG);²⁸
- ***Expanded federal deposit insurance*** (e.g., FDIC guarantee of all amounts in bank checking and transactions accounts, with no dollar limits, under its Transaction Account Guarantee Program);²⁹
- ***Government guarantee of longer term borrowing by a broad range of financial institutions*** (i.e., FDIC's Debt Guarantee Program);³⁰
- ***Broad-based government liquidity programs*** for banks and commercial companies (e.g., Term Asset-Backed Securities Liquidity Facility or "TALF");³¹
- ***Asset price guarantee at individual troubled banking organizations*** (e.g., "ring fences" at Citigroup and Bank of America);³²
- ***Direct government investments in banking organizations*** (i.e., U.S. Treasury Department's Capital Purchase Program, which was one part of the government's Troubled Asset Relief Program ("TARP"));³³

28. 12 U.S.C. § 343(3) (2016); FCIC REPORT, *supra* note 26, at 344–352 (describing assistance to AIG).

29. See FED. DEPOSIT INS. CORP., TEMPORARY LIQUIDITY GUARANTEE PROGRAM (2013), <https://www.fdic.gov/regulations/resources/tlgp/> (explaining FDIC's implementation of the Temporary Liquidity Guarantee Program to calm market fears and encourage lending).

30. *Id.*

31. See Press Release, Bd. of Governors of the Fed. Reserve Sys., Treasury and Federal Reserve Announce Launch of Term Asset-Backed Securities Loan Facility (TALF) (Mar. 3, 2009) ("The TALF is designed to catalyze the securitization markets by providing financing to investors to support their purchases of certain AAA-rated asset-backed securities (ABS).").

32. See OFFICE OF THE SPECIAL INSPECTOR GEN. FOR THE TROUBLED ASSET RELIEF PROGRAM, EXTRAORDINARY FINANCIAL ASSISTANCE PROVIDED TO CITIGROUP, INC. 19 (2011), <https://online.wsj.com/public/resources/documents/CitiOIG.pdf> ("In response to Citigroup's proposals, the Government ultimately agreed to guarantee possible losses to a ring-fence or pool of assets of roughly \$300 billion—but only if Citigroup would be responsible for the first \$37 billion of losses, which was approximately what the Government 'pegged' as the expected loss for the ring-fence and is described below.").

33. See U.S. DEP'T OF THE TREASURY, CAPITAL PURCHASE PROGRAM (2015), <https://www.treasury.gov/initiatives/financial-stability/TARP-Programs/bank-investment-programs/cap/Pages/overview.aspx> ("The Capital Purchase Program (CPP) was launched to stabilize the financial system by providing capital to viable financial institutions of all sizes throughout the nation.").

- **Facilitated acquisitions of weaker large firms by stronger ones** (e.g., Bear Stearns by JP Morgan Chase, Merrill Lynch by Bank of America, and National City by PNC);³⁴
- **Conversion of remaining large investment banks to prudentially regulated bank holding companies** (i.e., Goldman Sachs and Morgan Stanley);³⁵ and
- **Nationalization** (e.g., conservatorships of Fannie Mae and Freddie Mac; and arguably as a practical matter, AIG due to the huge amount of Federal Reserve discount window assistance it received).³⁶

These and other emergency government measures ultimately proved successful in quelling the runs and panic and preventing a true economic depression. But they did not stop the crisis from causing a serious, global economic contraction, sometimes referred to as the “Great Recession.” In the wake of the upheaval caused by the crisis, policymakers sought to make a number of changes to prevent its recurrence. In addition, the serious economic damage caused by large financial institutions, the massive taxpayer exposure caused by emergency government actions, and the perceived unfairness of “bailing out” big financial institutions all combined to generate a severe, populist, anti-big bank political backlash. It was in both these contexts that policymakers, in responding to the crisis, took a number of legislative, regulatory, and enforcement actions.

Given the centrality of the run problem that I have described in this article, I think it is important to assess these actions through that prism—that is, does a particular post-crisis reform help or hurt the ability to prevent runs or mitigate run risk? I would argue that in the case of U.S. reforms, some clearly do address run risk, such as the following:

34. See John C. Dugan, Partner, Covington & Burling LLP and Comptroller of the Currency 2005-10, *Three Years Later: Reflections on the Financial Crisis and the OCC*, Remarks at the George Washington University Law School 8–9 (Oct. 26, 2012), https://www.cov.com/%7E/media/files/corporate/publications/2012/10/gw_speech_1026.pdf (describing a purchase of National City by PNC, made possible by the utilization of TARP funding available to incentivize healthy banks to bid for failing institutions).

35. FCIC REPORT, *supra* note 26, at 362–63.

36. See FCIC REPORT, *supra* note 26, at 323 (“The Commission concludes that the business model of Fannie Mae and Freddie Mac (the GSEs), as private-sector, publicly traded, profit-making companies with implicit government backing and a public mission, was fundamentally flawed.”).

- **Higher equity capital requirements**, which make banks safer and therefore less likely during times of stress to be in the kind of weakened financial condition that triggers run risk;³⁷
- **Stronger liquidity requirements**, which make banks less susceptible to runs and facilitate their ability to better address spikes in withdrawals or funding volatility;³⁸
- **Stress testing**, which forces banks to plan for anticipated stressful periods that would include heightened run risk;³⁹
- **Backstop receivership regime for Systemically Important Financial Institutions (“SIFIs”)**, which like the depository institution receivership regime is designed to facilitate orderly resolutions that avoid runs;⁴⁰
- **Orderly Liquidation Fund**, which allows the Treasury Department to extend emergency liquidity to facilitate the resolution of a failed SIFI, which would be a critical tool to mitigate runs and potential runs;⁴¹ and
- **Resolution Planning**, which through “living wills” compels institutions to engage in detailed planning and restructuring to maximize the prospects of an orderly failure that would avoid runs.⁴²

I would also argue that some post-crisis reforms and actions increase the risk of runs by reducing the flexibility of the government to deal with them,⁴³ including the following:

37. See, e.g., BASEL COMMITTEE ON BANKING SUPERVISION, *BASEL III: A GLOBAL REGULATORY FRAMEWORK FOR MORE RESILIENT BANKS AND BANKING SYSTEMS 2* (2010), <http://www.bis.org/publ/bcbs189.pdf>.

38. See *supra* note 9 and note 10.

39. See generally, e.g., BD. OF GOVERNORS OF THE FED. RESERVE SYS., *STRESS TESTS AND CAPITAL PLANNING*, <https://www.federalreserve.gov/supervisionreg/stress-tests-capital-planning.htm> (describing testing exercises that assess whether institutions have sufficient capital to absorb losses during adverse economic conditions).

40. See Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”) § 203, 12 U.S.C. § 5383 (2016) (describing the determination of when a financial company should be placed in receivership).

41. Dodd-Frank Act, § 210(n), 12 U.S.C. § 5390(n) (2016).

42. Dodd-Frank Act, § 165(d), 12 U.S.C. § 5365(d) (2016).

43. See generally JOHN C. DUGAN ET AL., BIPARTISAN POLICY CENTER, *RESPONDING TO SYSTEMIC RISK: RESTORING THE BALANCE* 38 (Sept. 2014), <https://bipartisanpolicy.org/wp-content/uploads/sites/default/files/BPC%20Responding%20to%20Systemic%20Risk.pdf> [hereinafter BPC REPORT] (“Congress should restore important authorities that existed prior to the financial crisis. It should allow the Federal Reserve to make emergency loans to individual institutions and the FDIC to once again guarantee the debt of healthy financial

- ***Restrictions on the Federal Reserve’s emergency authority to lend to nonbanks***, which will make it more difficult to use the discount window to lend to nonbank institutions experiencing an actual or anticipated run;⁴⁴
- ***Prior congressional approval requirement for the FDIC to guarantee debt issued by financial institutions***, which will make it more difficult to provide the types of guarantees that were extremely effective during the crisis in giving financial institutions access to stable, longer-term, non-runnable funding;⁴⁵
- ***Limitation on the FDIC’s authority to protect uninsured creditors in times of systemic risk***, which now can be used only when a depository institution fails;⁴⁶ and
- ***Severe enforcement actions taken against healthy bank acquirers of troubled banks based on previous conduct of the troubled bank***,⁴⁷ which in the future will make healthy banks far less likely to acquire troubled banks and guarantee their liabilities, thereby increasing run risk.

companies without congressional approval. Reversing these Dodd-Frank Act provisions will return to these two agencies the power and flexibility that they effectively used to prevent a far deeper economic downturn during the financial crisis.”).

44. See Donald Kohn, Senior Fellow, Brookings Institute, Remarks at Brookings Institute Event: Liquidity and the Role of the Lender of Last Resort 3 (Apr. 30, 2014), <https://www.brookings.edu/wp-content/uploads/2014/04/liquidity-lender-of-last-resort-event.pdf> (discussing Dodd-Frank changes to Section 13(3) of the Federal Reserve Act that restricted certain lending to distressed institutions that had previously been permissible).

45. See BPC REPORT, *supra* note 43, at 8–9 (“[B]efore any specific guarantee may be issued, the FDIC must obtain a joint resolution of approval from Congress.”).

46. See BPC REPORT, *supra* note 43, at 8–9 (“Dodd-Frank curtailed the ability of the FDIC to use the systemic risk exception in such a broad manner; instead, going forward it may only be used in circumstances where an insured depository institution has failed, and only ‘for the purpose of winding up the insured depository institution.’”).

47. For example, it was estimated in 2014 that Bank of America had up until then paid more than \$90 billion in fines and settlements in the wake of the financial crisis, much of which was related to the activities of Countrywide, the mortgage lender it purchased in 2008. See John Maxfield, *The Complete List: Bank of America’s Legal Fines and Settlements Since 2008*, THE MOTLEY FOOL (Oct. 1, 2014, 9:59 AM), <https://www.fool.com/investing/general/2014/10/01/the-complete-list-bank-of-americas-legal-fines-and.aspx> (“Over the past six years, Bank of America has entered into or been subject to 51 major legal settlements, judgments, and regulatory fines. Taken together, they add up to \$91.2 billion in monetary and nonmonetary damages.”).

Neither of these lists is exhaustive. Instead, they are merely intended to be illustrative of the type of analysis that I believe would be useful going forward in assessing the desirability of any particular reform initiative: *does it increase or decrease the government's ability to address runs or the risk of runs?* And that is exactly the context for the next section of this article, which considers what I believe is the most important new reform to tackle the Too-Big-to-Fail problem.

III. PROPOSED SOLUTION TO THE RUN PROBLEM CAUSING TOO-BIG-TO-FAIL: *EFFECTIVE SUBORDINATION OF ALL LONG-TERM DEBT TO SHORT-TERM DEBT THROUGH SINGLE POINT OF ENTRY*

Let me restate what I call the “Persistent Conundrum of Runs” that has caused the Too-Big-to-Fail problem:

- We need financial intermediaries, including very large ones, to provide credit to the economy.
- Large financial intermediaries can be especially vulnerable to the types of runs that can cause systemic economic damage.
- Emergency regulatory tools to address runs at large financial intermediaries have been imperfect or highly controversial due to extraordinary state intervention, taxpayer exposure to loss, perceived unfairness, and moral hazard.

Thus, the post-crisis challenge: Is it possible to design a system where a large financial institution can fail (1) without runs, and (2) without taxpayer exposure to severe losses—and that has market credibility?

A proposed solution to this conundrum has emerged, partly based on new regulatory tools provided by the Dodd-Frank Act in the wake of the crisis; partly based on traditional corporate reorganization principles under U.S. bankruptcy laws; and partly based on new thinking.⁴⁸ The

48. The contributions to new thinking and SPOE have been especially notable from Randall D. Gynn and Donald S. Bernstein of Davis Polk & Wardwell LLP. See generally SHEILA C. BAIR ET AL., HOOVER INST., *ACROSS THE GREAT DIVIDE: NEW PERSPECTIVES ON THE FINANCIAL CRISIS* (Martin Neil Baily & John B. Taylor, eds., 2014); *The Bankruptcy Code and Financial Institution Insolvencies Before the Subcomm. on Regulatory Reform, Commercial and Antitrust Law of the H. Comm. on the Judiciary*, 113th Cong. (2013) (statement of Donald S. Bernstein, Co-Chair, Insolvency and Restructuring Group, Davis Polk & Wardwell LLP); JOHN F. BOVENZI ET AL., BIPARTISAN POLICY CENTER, *TOO BIG TO FAIL: THE PATH TO A SOLUTION* (May 2013), <http://bipartisanpolicy.org/wp-content/uploads/>

basic concept, which is explained in more detail below, is to make a large financial institution failure behave like an airline failure and reorganization in Chapter 11 of the Bankruptcy Code, such that:

- The company fails;
- Shareholders and long-term creditors that cannot run (1) absorb losses *first*, ahead of *all* depositors and other short-term creditors, and (2) swiftly and effectively recapitalize the operations part of the company in a corporate reorganization; and
- Depositors and other short-term creditors that can run choose not to do so, instead continuing to do business with the operating parts of the company during the reorganization and recapitalization.

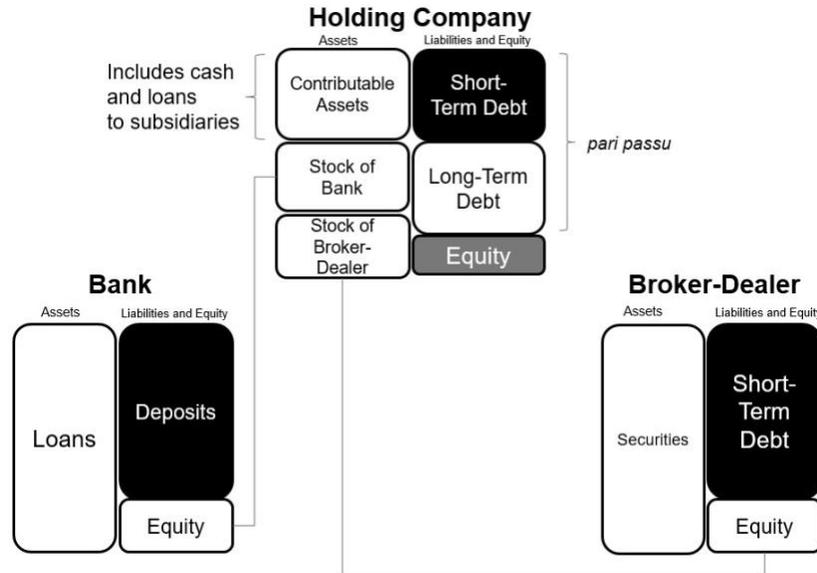
That is, the system is designed so that depositors and other short-term creditors do not have an incentive to run, and as a result, they in fact do not run. And without runs, there is no panic, no economic contraction, no taxpayer bailouts, no perception of unfairness, and no political backlash.

For reasons that will become apparent in the discussion below, this new proposal is called the “Single Point of Entry” approach to failure resolution, and is best understood in the context of large banking organizations.⁴⁹ Set forth below is an extremely simplified description of how such organizations were typically structured before the financial crisis, making them very vulnerable to runs. This is followed by an equally simplified description of how such organizations have been restructured recently under the SPOE approach in an effort to eliminate that vulnerability.

For historical reasons, in the United States, large banking organizations have operated using a holding company structure, as shown in a very simplified manner in Figure 1:

sites/default/files/TooBigToFail.pdf (discussing new thinking regarding a system designed to eliminate runs and taxpayer loss in the post-crisis era).

49. *See, e.g.*, Notice, Resolution of Systemically Important Financial Institutions: The Single Point of Entry Strategy, 78 Fed. Reg. 76614 (Dec. 18, 2013) (“This notice describes in greater detail the Single Point of Entry strategy, highlights some of the issues identified in connection with the strategy, and requests public comment on various aspects of the strategy.”).

Figure 1 - Pre-Crisis Corporate Structure⁵⁰

Under this structure, the holding company at the top wholly owns subsidiaries that each engage in different types of operations, such as a bank operating subsidiary that engages in lending and deposit-taking functions, and a broker-dealer operating subsidiary that engages in securities brokerage and trading operations. The holding company, while it engages in no such operations directly, issues equity and debt to investors in public markets, as shown on the right side of its balance sheet. The holding company also, in addition to holding stock in its subsidiaries, has assets on the left side of its balance sheet that include cash and loans to subsidiaries—shown on the chart as “contributable assets” because the holding company typically manages a centralized treasury function to use such assets to distribute funds to its subsidiaries as needed. Meanwhile, the operating subsidiaries also typically issue their own debt to the public and counterparties to help fund their operations, *e.g.*, deposits by bank subsidiaries and repurchase agreements by broker-dealers.

Importantly, before the crisis the holding company issued a mixture of short-term debt that could run and long-term debt that could

50. The dark shading in this figure (and the subsequent two figures) denotes runnable liabilities. The gray shading denotes equity and liabilities that absorb losses ahead of runnable liabilities, which, as explained below, are collectively referred to as Total Loss Absorbing Capacity or TLAC.

not run.⁵¹ Also importantly, before the crisis there was great uncertainty about what the holding company would do—or would be legally obligated to do—if one of its operating subsidiaries sustained losses that triggered solvency concerns or runs on its short-term liabilities: would the holding company absorb those losses by recapitalizing the subsidiary in a timely fashion, and would it provide all the liquidity necessary to stave off the subsidiary’s runs? What if the holding company were experiencing runs on its own short-term liabilities—would it then hoard cash that could otherwise be downstreamed to its troubled subsidiary?

This pre-crisis structure and its uncertainties gave depositors and other short-term creditors a very strong incentive to run in times of financial stress. This is so because under this structure, only the equity of the operating subsidiary and the parent absorbs first losses before runnable, short-term creditors would sustain losses, due to the fact that both short-term and long-term creditors absorb losses *pari passu* immediately after the equity is exhausted. Since equity by itself typically represents less than 15% of on-balance sheet assets at large banking organizations, any loss approaching a significant fraction of that magnitude would threaten to cause a loss to creditors—clearly creating an incentive for the short-term creditors to run.

The SPOE approach fundamentally changes this equation by effectively restructuring the company’s capital structure so that a far larger amount of non-runnable resources would absorb losses before *any* short-term creditor would sustain *any* loss, thereby substantially mitigating the incentive of the short-term creditor to run. It does this through the power of *subordination*—that is, by “structurally subordinating” all of the parent holding company’s long-term debt to *all* of the consolidated organization’s short-term debt, which would only be issued by subsidiaries of the parent holding company.⁵² As a result, rather than sustaining losses *pari passu* with the holding company’s long-term creditors once that company’s equity were exhausted, the organization’s short-term creditors—all of which would be at the subsidiary level—would not sustain any losses until *both* the holding company’s equity *and* its long-term debt were first exhausted—and of course, neither equity nor

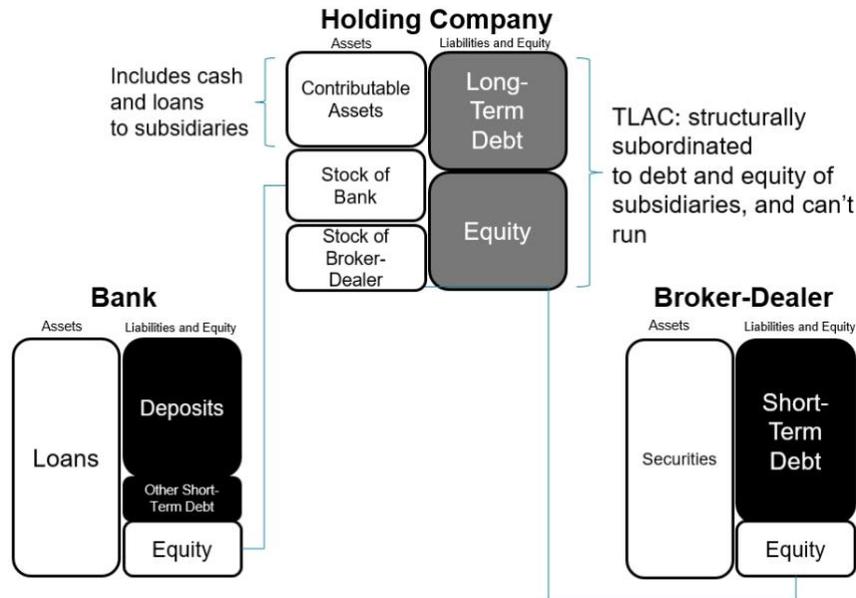
51. The operating subsidiaries issued a mixture of short and long-term debt as well, though for simplicity’s sake the chart shows such entities issuing only short-term debt.

52. This is not to be confused with contractually subordinated debt, which financial institutions have issued in limited quantities to expressly subordinate certain long-term debt to more senior debt instruments.

long-term debt can run. Put another way, pre-crisis, *before* taking the necessary steps to ready itself for the SPOE approach to resolution, a banking organization's Total Loss Absorbing Capacity ("TLAC") to absorb losses with non-runnable capital instruments ahead of runnable short-term creditors consisted only of the equity capital of its holding company. Post-crisis, *after* readying itself for SPOE, the holding company's TLAC consists of both its equity *and* its long-term debt, providing a far bigger buffer before short-term creditors would sustain losses.

Figure 2 illustrates how the SPOE approach works to achieve structural subordination:

Figure 2 - SPOE Corporate Structure



Under SPOE, the bank holding company must be a "clean" company that has no operations of its own; it does not itself engage in activities like banking or securities activities, which are instead conducted in operating subsidiaries. In addition, the holding company may not issue short-term debt;⁵³ instead, the right side of its balance sheet

53. See 12 C.F.R. § 252.64(a)(1) (2017) (prohibiting a global systemically important bank holding company from issuing any debt instrument with an original maturity of less than

consists entirely of shareholders' equity and long-term debt—its TLAC, which cannot run. And, the holding company is required to have outstanding a large minimum amount of long-term debt. Meanwhile, the operating subsidiaries of the clean holding company—here, the broker-dealer and the bank—may issue large amounts of short-term debt to fund their operations, like deposits and repurchase agreements, just as they have always done.⁵⁴

This restructuring required by the SPOE approach would not, however, be sufficient by itself to address the run problem of a distressed large banking organization entering bankruptcy or FDIC resolution proceedings. That is, the subordination, by itself, of a large amount of non-runnable TLAC equity and long-term debt at the holding company to all of the consolidated organization's runnable short-term debt would merely ensure that, by the *end* of the bankruptcy or resolution process, the TLAC stakeholders would indeed absorb losses first—and assuming the TLAC cushion were large enough, the short-term debt holders would be made whole. The problem is that the bankruptcy/resolution process could occur over a very long period, and during that period, the claims of all creditors of any entity in bankruptcy or receivership—including uninsured depositors, other short-term creditors, and other debt-holders—would likely be stayed in whole or in part pending determination of the final amount of the organization's loss. And of course, the *ex ante* prospect of such a stay and “freezing” of funds is the very type of circumstance that would precipitate a run—even if the short-term creditors were confident that the full amount of their funds ultimately would be returned at the end of the process.

Thus, for subordination of TLAC equity and long-term debt to short-term debt to *effectively* address run risk, a mechanism needed to be established for these subordinated resources to absorb first losses quickly so that short-term creditors are not realistically threatened by *either* losses *or* the prospect of frozen funds. The SPOE approach provides just such a mechanism, and here is how it works.

As is typically the case for banking organizations, under conditions of financial stress, such an organization would initially sustain

one year, including short term deposits and demand deposits, to any person that is not a subsidiary of the bank holding company).

54. While the operating subsidiaries are not prohibited from issuing longer-term debt, the important point for SPOE purposes is that only the operating subsidiaries may issue short-term debt.

losses at one or more of its operating companies—through loan losses at its bank subsidiary, for example—which would also be reflected on the holding company’s balance sheet as a reduction in the value of the stock that the holding company owns in such subsidiaries. Under SPOE, however, the organization would take further actions to ensure that the losses would ultimately be sustained *only* at the holding company, and *not* at the operating subsidiaries. To ensure this outcome, the holding company would be required, before any losses occur, to enter into a binding contractual commitment with each of its subsidiaries, called a secured support agreement, to effectively reimburse or cover that subsidiary for the full amount of any losses that the subsidiary sustains—and that binding contractual commitment would be required to be structured in such a way that it would withstand challenges from other creditors in a bankruptcy proceeding.⁵⁵ When an operating subsidiary subsequently sustains losses, the holding company would, pursuant to its secured support agreement, cover such losses by swiftly contributing assets to the operating subsidiary—*before the commencement of bankruptcy/resolution proceedings and the imposition of creditor stays*. These contributable assets could take the form of cash, or they could take the form of loans to the subsidiary that the holding company forgives—either way, the operating subsidiary would be swiftly and completely recapitalized, while the holding company alone would bear the losses. And of course, providing cash to the operating subsidiary would also “re-liquify” it to the extent that its cash resources had been depleted by departing creditors.

Note also that the restructuring of the holding company’s balance sheet required by SPOE—in particular the prohibition on issuing short-term credit to unaffiliated third parties—facilitates its ability to downstream contributable assets to its subsidiaries during periods of stress. That is, during such stress periods, the holding company would not need to deplete its contributable assets to meet demands for cash from its own short-term third party creditors, because there would be no such creditors; instead, such assets would be fully available to downstream to subsidiaries to recapitalize their balance sheets and help meet any demands for cash from their short-term creditors.

55. A substantial part of the resolution planning process has been devoted to addressing the possibility of creditor challenges, with detailed advice from legal counsel.

Thus, by being swiftly and fully recapitalized and re-liquified, the operating subsidiaries would avoid failure and be able to stay open and operating, engaging in “business as usual”; they would not enter bankruptcy/resolution proceedings, and therefore the short-term creditors of such subsidiaries would not be subject to any sort of stay. At the same time, however, the holding company, having absorbed all the losses of its operating subsidiaries, would fail and enter bankruptcy or FDIC resolution proceedings—but *only* the holding company would fail and enter such proceedings, becoming the “single point of entry” for these purposes. In such proceedings, the holding company would be reorganized and recapitalized by converting its remaining long-term debt into equity.

The powerful practical effect of the combination of the clean holding company structure, the absence of short-term debt at the holding company, and the holding company’s binding contractual commitment to swiftly cover losses at its operating subsidiaries pre-bankruptcy is this: the TLAC equity and long-term debt of the holding company are structurally subordinated to all of the liabilities of the operating subsidiaries, which most importantly include all of the short-term debt of the entire organization, and such subordination can be implemented in a manner that greatly reduces or eliminates the threat of loss or restricted access to funds for short-term creditors. As a result:

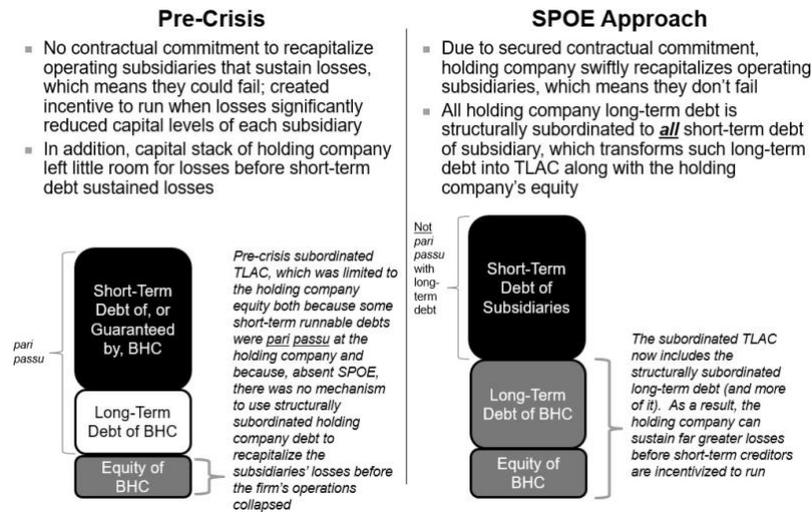
- The TLAC at the holding company absorbs losses first, and TLAC cannot run;
- No depositor or short-term creditor of the entire organization—all of which are at the operating subsidiaries—can sustain *any* loss until *all* of the TLAC at the holding company is exhausted;
- Due to the combination of strong minimum requirements for equity and long-term debt at the holding company, there will be a great deal of very visible TLAC there to absorb first losses ahead of the runnable, short-term creditors, all of which are at the operating subsidiaries;
- The incentive of the short-term creditors at the operating subsidiaries to run should be substantially reduced or eliminated to the extent that such creditors perceive that their funds are not at significant risk of loss or restricted access because (1) the amount of first-loss-absorbing TLAC is far greater than the amount of anticipated losses at the operating subsidiaries, and (2) the holding company has ample

resources to downstream to its subsidiaries to cover such losses, and is required by contract (and its regulators) to take such downstreaming actions swiftly; and

- The holding company alone should be able to enter into bankruptcy/ resolution proceedings in an orderly manner, without taxpayer assistance or extraordinary governmental actions, while depositors and short-term creditors continue to engage in business-as-usual with the solvent, recapitalized operating subsidiaries—just like the airline customers who continue to get on the planes of an airline that enters into Chapter 11 proceedings under the U.S. Bankruptcy Code.

In a very simplified manner, Figure 3 illustrates how the structural subordination of TLAC directly reduces the incentive for short-term creditors to run:

Figure 3 - TLAC Before and After SPOE's Structural Subordination of Long-Term Debt



The SPOE approach is no longer merely a theoretical construct. Pursuant to the Dodd-Frank Act, the Federal Deposit Insurance Corporation and the Federal Reserve have required the eight large bank holding companies deemed to be “Global Systemically Important Banks” (“G-SIBs”) to submit resolution plans describing how each company could fail in an orderly manner without extraordinary government assistance and the steps that each company has taken and plans to take to

achieve that objective.⁵⁶ As a result of this requirement, all eight of the companies have adopted or are in process of adopting the SPOE approach,⁵⁷ and all have made (1) the structural changes necessary to become clean holding companies without short-term debt, and (2) the contractual commitments via secured support agreements believed necessary to require timely coverage of losses at operating subsidiaries, thereby achieving timely structural subordination of their holding company equity and long-term debt to all of the consolidated organization's short-term, runnable debt, which, as previously noted, is entirely issued by the operating subsidiaries.⁵⁸ In addition, all eight have become subject to minimum TLAC and long-term debt requirements to ensure that their total TLAC is sufficiently large both to cover anticipated losses at their operating subsidiaries in the event of failure, and to have enough remaining long-term debt to convert to the equity necessary to recapitalize their holding companies.⁵⁹ In other words, the companies have already taken the fundamental steps necessary to facilitate an orderly reorganization akin to the Chapter 11 proceedings for an airline, with large subordinated TLAC buffers in place as a frontal assault on the run risk that has plagued the failures or near failures of large banking organizations.⁶⁰

56. See 12 C.F.R. Part 243 (2017); 12 C.F.R. Part 381 (2017) (requiring resolution plans).

57. See Paul L. Lee, *A Paradigm's Progress: The Single Point of Entry in Bank Resolution Planning*, THE CLS BLUE SKY BLOG (Jan. 18, 2017), <http://clsbluesky.law.columbia.edu/2017/01/18/a-paradigms-progress-the-single-point-of-entry-in-bank-resolution-planning> (reporting all of the U.S. G-SIBs except for Wells Fargo had adopted the SPOE approach by the 2016 resolution plan cycle); Wells Fargo Q3 2017 Earnings Conference Call Transcript (WFC), THE MOTLEY FOOL (Oct. 16, 2017), <https://www.fool.com/earnings/call-transcripts/2017/10/16/wells-fargo-q3-2017-earnings-conference-call-trans.aspx> (“[Wells Fargo has] made a decision to move from a multiple point-of-entry resolution strategies to a single point-of-entry preferred resolution strategy for our next resolution plan submission.”).

58. See generally PwC, 2017 Public Sections: The Resolution Evolution, PwC (2017), <https://www.pwc.com/us/en/financial-services/regulatory-services/publications/assets/resolution-plans-2017.pdf> (“[A]ll but one of the banks have adopted a Single Point of Entry (SPOE) strategy.”).

59. See 12 C.F.R. §§ 252.60–252.65 (2017) (setting out the external long-term debt requirement, external total loss-absorbing capacity requirement, and restrictions on corporate practices for U.S. global systemically important banking organizations).

60. Of course, the TLAC requirement to issue more long-term debt than companies would otherwise do results in more expense, since long-term debt often is more expensive than short-term debt. In addition, one would expect that, once market participants fully understand that holding company debt is structurally subordinated to debt issued by subsidiaries, it would become relatively more expensive (beyond the amount by which holding company debt has typically been more expensive than debt issued by regulated subsidiaries such as banks).

Moreover, the size of the TLAC buffers already resulting from SPOE's structural subordination are indeed large—far larger than the comparable buffers were pre-crisis. As previously described, before the development of the SPOE approach to facilitate the timely and practical structural subordination of long-term debt to short-term runnable debt, the only TLAC that was practically available and usable pre-crisis to absorb losses before short-term creditors was equity. Using one anonymized (but real) G-SIB as an example, its structurally subordinated TLAC at year-end 2007, consisting only of Tier 1 capital, was \$67 billion. As the result of SPOE, stronger minimum capital requirements, and new minimum TLAC and long-term debt requirements, its structurally subordinated TLAC at year-end 2016 was \$340 billion—constituting more than a 500% increase.

Another indication of the magnitude of today's TLAC buffer comes from the letter to shareholders accompanying JP Morgan's 2015 Annual Report.⁶¹ There CEO Jamie Dimon included a table essentially comparing the company's total TLAC to the losses estimated to occur under the severely adverse scenario in the Federal Reserve's stress testing regime, the Comprehensive Capital Analysis and Review (CCAR), for 2015. The table showed that "JPMorgan Chase alone has enough loss absorbing resources to bear all the losses, assumed by CCAR, of the thirty-one largest banks in the United States."⁶² The "loss absorbing resources" he referred to were essentially non-runnable, structurally subordinated TLAC: Tier 1 capital and long-term debt (plus a relatively small amount of reserves). The table showed that JPM's total amount of such loss absorbing resources was \$350 billion, while under the 2015 severely adverse CCAR scenario, the total assumed losses of all the thirty-one largest U.S. banks combined was only \$222 billion.⁶³

61. JPMORGAN CHASE, ANNUAL REPORT 2015 2 (2015), <https://www.jpmorganchase.com/corporate/investor-relations/document/2015-annualreport.pdf>.

62. *Id.* at 13.

63. *Id.*

IV. CONCLUSION: CAN SPOE AND SUBORDINATED TLAC WORK TO PREVENT RUNS?

Even taking account of the context described in this article and the substantial, concrete progress made in implementing the SPOE approach, some essential questions remain:

- Post-SPOE, could the holding company of a huge banking organization really fail without its subsidiary bank or broker-dealer experiencing a run?
- Put differently, is the subordinated TLAC buffer really big enough, and the contractual promise to swiftly recapitalize operating subsidiaries credible enough, to remove the incentive to run?
- In the examples just provided, if an uninsured depositor or other short-term creditor of an operating subsidiary knew—really knew—that the holding company would have to lose \$340–\$350 billion before the short-term creditor could sustain *any* loss, shouldn't that substantially eliminate the incentive to run except in cataclysmic circumstances? Especially where mechanisms were transparently in place to swiftly cover losses in subsidiaries to keep them operating? And especially if the bank were willing to pay a somewhat higher interest rate to induce the short-term creditor to stay?

Obviously, for SPOE and subordinated TLAC to work as intended to prevent runs, it will take some significant *ex ante* education of uninsured depositors and short-term creditors to demonstrate plainly how the new regime would really work. These stakeholders typically are, however, financially sophisticated creditors that should be easier to educate than unsophisticated retail depositors.

That said, the critical test of SPOE is likely to be the first time that it is used. In that first application, it may not be possible to avoid runs until short-term creditors are able to observe that, despite the holding company's failure, the operating subsidiaries really will stay in business. For that to happen, it may be necessary for the government to provide substantial amounts of temporary, secured liquidity funding until confidence returns. Such temporary funding should be available to bank operating subsidiaries through Federal Reserve discount window lending. And while post-Dodd-Frank that type of emergency discount window funding is no longer available to nonbank operating subsidiaries like broker-dealers, the backstop receivership regime in Title II of Dodd-

Frank establishes the Orderly Liquidation Fund. This emergency liquidity backstop is expressly intended to perform the same temporary liquidity and stabilizing function for nonbank subsidiaries like broker-dealers as the discount window does for bank subsidiaries.

Ultimately, the market will be the judge. But the combination of SPOE, large amounts of subordinated TLAC, and available temporary liquidity from the government should make even the first application of this new resolution approach possible to execute without generating widespread runs or the need for extraordinary government measures of the type employed in the financial crisis. And if the first such resolution succeeds in this manner, subsequent resolutions should be considerably easier to execute while maintaining confidence in the financial system. If that should occur, the persistent problem of Too-Big-to-Fail will have been solved.

There are no guarantees, of course. If and when the next big failure of a large institution confronts the system, only the market will decide whether SPOE, subordinated TLAC, and (if necessary) government-provided liquidity will prevent individual or systemwide runs on a sustained basis. Nevertheless, the crucial point is that the new regime, unlike pre-crisis government policy, expressly recognizes the centrality of runs to the Too-Big-to-Fail problem—and it constitutes a thoughtful, well-developed response that squarely attempts to address run risk. That is as it should be, since the Too-Big-to-Fail problem simply cannot be solved without addressing the fundamental banking policy problem of runs.