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Deposit Insurance: Fund Management and Risk-Based Deposit Insurance Assessments

Introduction

The 2008 financial crisis and economic downturn precipitated a banking crisis, causing a sharp increase in the number of failures of FDIC-insured institutions. After several years in which there had been few or no failures, between 2008 and 2013 a total of 489 banks and thrifts failed, 157 during 2010 alone (the most since 1992).[1] In 2008 and 2009, as the number of bank failures increased, losses incurred by the Deposit Insurance Fund (DIF, or the fund) to close failing banks and protect insured depositors significantly exceeded fund revenue. The FDIC took several steps intended to keep the fund in the black. When these efforts failed, the FDIC turned to ensuring that the fund had sufficient liquid assets to continue to protect insured depositors at failed banks. In this effort, the FDIC was successful. From 2011 through 2016, the FDIC used the expanded authority granted in the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010 (Dodd-Frank) to substantially revise both its fund management strategy and its methodology for risk-based deposit insurance assessments. (For definitions of key terms, see the box.)

The FDIC's approach to deposit insurance fund management and risk-based pricing is governed by statute. This chapter traces the evolution of the statutory framework and—within that framework—the evolution of the FDIC's fund management strategy and risk-based pricing methods, beginning as the banking crisis was about to erupt, passing through a period of adaptive responses, and culminating with implementation of the deposit insurance reforms authorized by Dodd-Frank.

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[1] Bank and thrift failures, here and elsewhere in this chapter, exclude instances where open-bank assistance was provided in conjunction with a systemic risk exception. See chapter 3 for more details. In 1992, 179 banks and thrifts failed, including thrift failures handled by the Resolution Trust Corporation (which was created by Congress in 1989 to resolve insolvent thrifts).

Definitions of Key Terms

The **Deposit Insurance Fund (DIF)** is used to protect insured depositors and to close failing banks. It was formed in 2006 from the merger of two predecessor funds, the Bank Insurance Fund and the Savings Association Insurance Fund. In this chapter, references to the DIF before 2006 refer to a hypothetical combination of the two funds.

Fund management consists, first, of determining the proper size of the DIF and, second, setting overall assessment rates that are sufficient to maintain or achieve the proper fund size. (The appendix of this chapter traces the evolution of the assessment rate schedules from Q1 2009 to the present.)

The critical measure of the adequacy of the DIF is the **reserve ratio**, which is the ratio of the fund balance (or net worth) to estimated insured deposits. The **designated reserve ratio** (DRR) has generally been defined as the minimum target for the reserve ratio, but for a period of about ten years it also effectively served to restrain growth above the target. Under the current statute, the FDIC views the DRR—which the FDIC must set each year—as a long-term minimum target ratio.

Risk-based pricing refers to the way the FDIC charges banks different assessment rates for the differing risks they pose to the DIF, given the overall level of assessment rates the FDIC has set to attain its fund management goals. To calculate a bank's deposit insurance assessment, the bank's **assessment rate** is multiplied by its **assessment base**.

Background: Fund Management and Risk-Based Pricing at the Beginning of the Banking Crisis

When the banking crisis erupted in 2008, the framework for fund management and risk-based deposit insurance pricing was one that had been put in place by the Federal Deposit Insurance Reform Act of 2005 (FDIRA), enacted in February 2006 on the recommendation of the FDIC.[2] FDIRA ended a ten-year-old statutory restriction (1996–2006) on the FDIC's authority to assess most banks—specifically, those well capitalized and highly rated by their supervisors—as long as the reserve ratio was at or above 1.25 percent. As a result of this restriction, growth in the fund balance failed to keep pace with insured deposit growth, leaving the reserve ratio at year-end 2006 (1.21 percent) 12 basis points lower than it had been at the end of 1996 (1.33 percent). (A basis point is one one-hundredth of a percent.)

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2 Federal Deposit Insurance Reform Act of 2005, Pub. L. No. 109-171, 120 Stat. 9 (2006). The reason for the discrepancy in dates is that the act was included as Title 2 in the Deficit Reduction Act of 2005, which was signed into law in February 2006.

Managing the Size of the DIF

FDIRA, in contrast to the law it replaced, permitted the FDIC to set the target reserve ratio (the DRR) each year between 1.15 and 1.50 percent. If the actual reserve ratio exceeded 1.50 percent, however, the FDIC was required to return amounts in the fund above 1.50 percent to the industry through "dividends." Thus the fund had a hard cap of 1.50 percent. In addition, if the reserve ratio was between 1.35 and 1.50 percent, the FDIC was required to pay dividends to the industry equal to half of all amounts above 1.35 percent. FDIRA did allow the FDIC to suspend dividends temporarily if the DIF faced a significant risk of high losses. (During the period when this provision of FDIRA was in effect, the reserve ratio never reached 1.35 percent, so no dividends were paid.) FDIRA also directed the FDIC's Board of Directors, when setting the DRR for any year, to consider various factors with the general objective of increasing the fund under more favorable economic conditions so that the fund could withstand declines under adverse conditions without the need for sharp, procyclical increases in assessments.[3] ("Procyclical" assessments increase when banking conditions are bad and decrease when they are good.)

Under the authority granted by FDIRA, the FDIC set the DRR at 1.25 percent for 2007 and 2008 (the same target that had been in effect since 1989) and began charging every bank, including the least risky, an insurance premium, which the FDIC had not been able to do for about 10 years, as explained above. The Corporation's intent was to have the reserve ratio increase gradually, consistent with FDIRA's objective that the fund be allowed to increase when conditions were favorable so that it could decline under adverse conditions without the need for sharp increases in assessments.[4] In 2007, the outlook for economic conditions affecting banks was favorable, and no bank had failed in two years. But FDIRA included one requirement that had a fundamentally limiting effect on reserve ratio growth: it required the Corporation to provide credits to offset the premiums of banks that had helped rebuild the insurance funds in the early to middle 1990s. These credits, combined with insured deposit growth, resulted in a reserve ratio at the end of 2007—just before the crisis—that was virtually unchanged from its level a year earlier: 1.21 percent at year-end 2006, 1.22 percent at year-end 2007.

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[3] Under FDIRA, the factors that the Board is required to consider are (1) the risk of losses to the DIF in the current and future years, historic experience, and potential and estimated losses from insured depository institutions; (2) economic conditions generally affecting insured depository institutions; (3) the importance of preventing sharp swings in assessment rates for insured depository institutions; and (4) other factors deemed by the Board to be appropriate, consistent with FDIRA's requirements. See Section 2105 of FDIRA, codified at 12 U.S.C. § 1817(b)(3)(C).

[4] 71 Fed. Reg. 69282, 69305 (Nov. 30, 2006).

Implementing Risk-Based Pricing

The ten-year restriction on the FDIC's ability to charge assessments to healthy banks as long as the reserve ratio was at or above the statutory 1.25 percent reserve ratio target[5] effectively eliminated assessments for at least 90 percent of insured institutions at any given time during the ten years—even though during that period the banking industry was generally prosperous and healthy. FDIRA restored the FDIC's discretion to price deposit insurance according to risk for *all* insured institutions regardless of the level of the reserve ratio.

With its discretion to price for risk restored, the FDIC updated its risk-based pricing methods. The original risk-based method, which was required by statute, used a bank's capital level and supervisory rating[6] to place the bank into one of nine risk categories that determined the bank's assessment rate. This method took effect in 1993. Effective at the beginning of 2007, the FDIC collapsed the nine risk-based pricing categories into four (Risk Categories I through IV, with I being the lowest risk). A 2 basis point range of assessment rates applied to Risk Category I, which contained the greatest number of banks. Banks in this risk category that did not pay the minimum or maximum rates paid rates that varied between the minimum and maximum. Banks in one of the other risk categories paid a single rate applicable to that category.

At the same time, the FDIC adopted separate pricing methods for small banks and large banks to differentiate risk within Risk Category I. (Generally, a small bank is defined as having less than $10 billion in assets, and a large bank as having at least $10 billion in assets.)[7]

For small banks within Risk Category I, the FDIC used a combination of CAMELS component ratings and financial ratios[8] to estimate the probability that a bank's CAMELS composite rating would be downgraded to 3, 4, or 5 at the bank's next examination (such a downgrade would signal deterioration in the bank's condition), and thereby determine the bank's assessment rate.

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[5]   Deposit Insurance Funds Act, Pub. L. No. 104-208, 60 Stat. 446 (1996).

[6]   These bank supervisory ratings are known as CAMELS ratings. CAMELS stands for **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings, **L**iquidity, and **S**ensitivity to market risk. CAMELS ratings are on a scale of 1 to 5, with a 1-rating indicating greatest strength in performance and risk management and the lowest level of supervisory concern. At the other end of the scale, a 5-rating indicates the weakest performance, inadequate risk management, and the highest level of supervisory concern. The CAMELS composite rating is derived from an evaluation of the six CAMELS components; although the composite rating is generally a close reflection of the assigned component ratings, it is not an arithmetic average of the component ratings. The original risk-based method actually used a bank's CAMEL composite rating, since the "S" rating was not created until 1995.

[7]   12 CFR § 327.8(e) and (f).

[8]   The financial ratios included the Tier 1 leverage ratio, a ratio of net income to assets, and several asset performance ratios.

For large banks within Risk Category I, the FDIC used a combination of CAMELS component ratings and long-term-debt issuer ratings to determine assessment rates. For large banks in Risk Category I that did not have long-term-debt issuer ratings, financial ratios were used instead.

Fund Management and Risk-Based Pricing during the Banking Crisis, 2008–2009

After no banks failed in 2005 and 2006 and only three failed in 2007, failures began to climb in 2008, marking the onset of the banking crisis. The DIF balance shrank from $52.8 billion on March 31, 2008, to $45.2 billion on June 30 as a result of losses from actual bank failures as well as an increase in loss reserves for expected bank failures. (Just as banks reserve for losses on troubled loans, the FDIC reserves for anticipated losses to the DIF from insured institution failures. An increase in these reserves, which are known as the contingent loss reserve, reduces the fund balance, or net worth.) The fund's contingent loss reserve increased from $583 million on March 31 to $10.59 billion at June 30. The largest contributor to the increase in the contingent loss reserve during the second quarter was the reserve for estimated losses associated with the failure of IndyMac (which was closed in July).[9] Primarily as a result of the increase in the contingent loss reserve, the reserve ratio fell from 1.19 percent at March 31 to 1.01 percent at June 30.[10] (See Figure 5.1.) The DIF balance and reserve ratio fell throughout the rest of 2008 and 2009 as losses from actual and expected failures mounted. A total of 25 banks failed in 2008, and 140 in 2009, leaving the fund balance negative. Mounting failures also began draining the fund's liquid assets, which the FDIC needed to close failing banks in a timely manner and to protect insured depositors.

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[9] For more detail about the IndyMac resolution, see chapter 6.

[10] This was the lowest reserve ratio since March 31, 1995, when the combined reserve ratio of the Bank Insurance Fund and the Savings Association Insurance Fund (see box above) was 0.98 percent.

Figure 5.1. Timeline of Events and Reserve Ratio Trends Q1 2007–Q3 2016
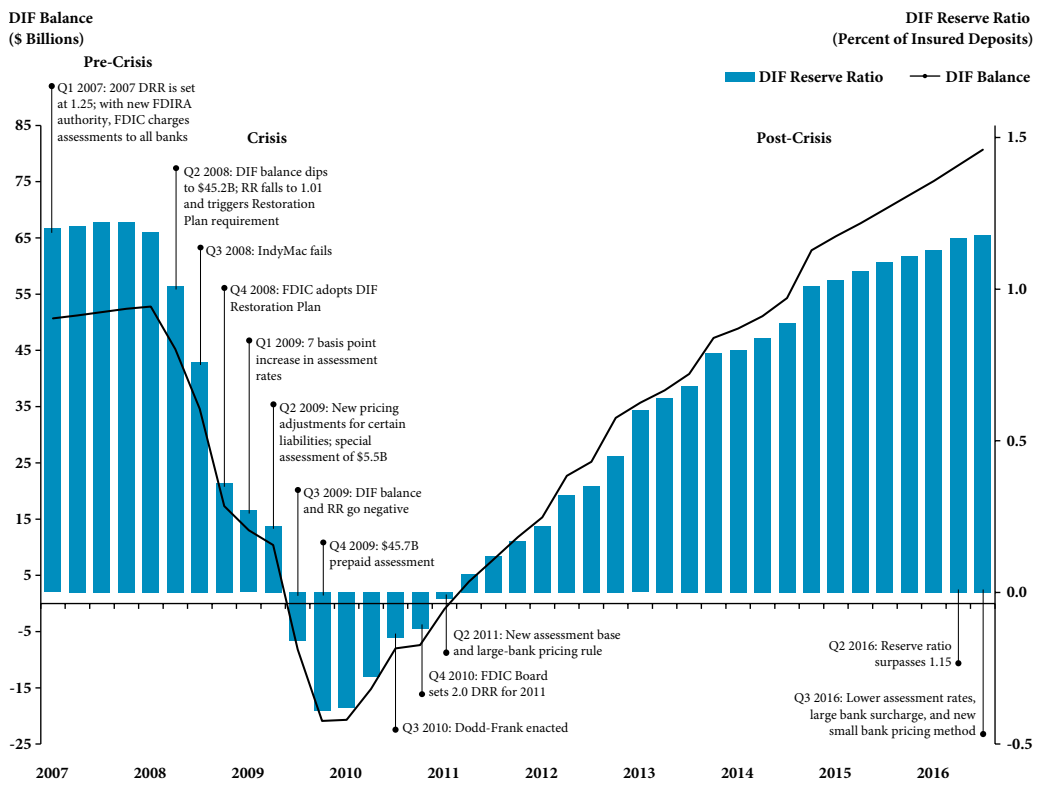
Fund Management: Attempting to Maintain a Positive Fund Balance

The reserve ratio's decline below 1.15 percent in the second quarter of 2008 triggered a requirement under FDIRA that the FDIC adopt a restoration plan to restore the reserve ratio to 1.15 percent within five years. (Under "extraordinary circumstances," the FDIC Board was allowed to extend the restoration period beyond five years.)[11] During the second half of 2008, estimated losses from actual failures and reserves set aside for anticipated failures increased, and the fund balance and reserve ratio continued to decline.

In October 2008, the FDIC finalized a restoration plan under which assessment rates would be increased to raise the fund balance and the reserve ratio.[12] In the same month, pursuant to the plan, the FDIC proposed a rate increase of 7 basis points for all banks, and the increased rates became effective in the first quarter of 2009.[13] (See Table 5.A.1.) In February 2009, given the enormous stresses on financial institutions and the likelihood of a prolonged and severe economic recession, the FDIC extended

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[11] 12 U.S.C. § 1817(b)(3)(E).

[12] 73 Fed. Reg. 61598 (Oct. 16, 2008).

[13] 73 Fed. Reg. 78155 (Dec. 22, 2008).

the time frame of the restoration plan from five years to seven, as FDIRA permitted under extraordinary circumstances.

In 2009, with bank failures accelerating, the FDIC took a series of additional actions designed to keep the DIF balance positive and increase the DIF's liquidity. (Attempts to keep the DIF balance positive are discussed in this section; increasing the fund's liquidity, in the next section.) In an attempt to maintain a positive fund balance, the agency imposed a one-time special assessment. The agency was concerned that a fund balance and reserve ratio near or below zero might create public confusion about the FDIC's ability to move quickly to resolve problem institutions and protect insured depositors. The FDIC's statutory authority permitted it to borrow from the Treasury,[14] which it had done in the early 1990s during the bank and thrift crisis, but in 2009 it elected not to. Its borrowing in the early 1990s had been from the Treasury's Federal Financing Bank (FFB), and the purpose had been to obtain working capital.[15] Borrowing from the Treasury, however, while ensuring that sufficient liquid funds are available to resolve failing banks quickly, does not shore up the fund balance (the net worth of the DIF) and the reserve ratio. In addition, the FDIC viewed its line of credit at the Treasury not as a source of financing for projected losses but as a means of covering unforeseen losses.[16] In contrast to borrowing from the Treasury, a special assessment would increase the fund balance by raising revenue.

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[14] The FDIC may borrow from the Treasury under two statutory provisions. First, the FDIC has statutory authority to borrow on an interest-bearing basis from the Treasury, with the Secretary's approval. In 2009, Congress permanently increased the maximum amount of borrowing under this authority from $30 billion to $100 billion, and temporarily increased it to $500 billion through 2010. (Amounts borrowed under this authority in excess of the $100 billion permanent maximum required the concurrence of the FDIC Board, the Federal Reserve Board, and the Secretary of the Treasury in consultation with the President.) The enabling legislation was the Helping Families Save Their Homes Act of 2009, Pub. L. 111-22, §204(b), 123 Stat. 1632 (2009). The industry is required to repay any borrowings under this authority through assessments (which can include special assessments) pursuant to a repayment schedule agreed to by the Secretary of the Treasury and the FDIC Board after consultation with the Financial Services Committee of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate. 12 U.S.C. § 1824(a). In addition to this borrowing line from the Treasury, the FDIC may also borrow from the Treasury Department's Federal Financing Bank (FFB), subject to a "maximum obligation limitation" that depends in part on the value of DIF assets. 12 U.S.C. §§1824(b) and 1825(c).

[15] 12 U.S.C. § 1824(b). On January 8, 1991, the FDIC and the FFB entered into a Note Purchase Agreement, renewable annually, permitting the FDIC to borrow. The FDIC first borrowed under the agreement on June 30, 1991. The date of the peak amount outstanding on the debt ($15 billion) was June 15, 1992. FDIC, *1993 Annual Report*, p. 1. The debt was repaid in full on August 6, 1993. In addition, the Resolution Trust Corporation borrowed from the FFB for working capital; the maximum amount borrowed was $63 billion, and the amount was repaid in full in 1998. Resolution Trust Corporation (U.S.), Office of Planning, Research, and Statistics, *Statistical Abstract: August 1989/September 1995* (Washington, DC, 1995), 64, https://fraser.stlouisfed.org/scribd/?title_id=851&filepath=/files/docs/publications/statabsrtc/statabs_rtc_1989-1995.pdf.

[16] For a more detailed discussion of resolutions, losses, and cash management, see chapter 6.

In June 2009, therefore, the FDIC imposed a $5.5 billion special assessment that was collected on September 30, 2009.[17] (The final rule had been adopted in May.) In addition, the FDIC reserved the authority to impose a second special assessment if the DIF was later projected to fall to a level that the Corporation believed would adversely affect public confidence or if the fund was close to or below zero. (The second special assessment could equal up to 5 basis points on each bank's assets minus Tier 1 capital.)

In the meantime, in May 2009 Congress had amended the statute governing the establishment and implementation of the restoration plan and now allowed the FDIC up to eight years to return the DIF reserve ratio to 1.15 percent (although, as before the amendment, the period could be extended because of extraordinary circumstances).[18] Following up on Congress's action, in September 2009 the FDIC amended the restoration plan, extending the period to return the reserve ratio to 1.15 percent to eight years.[19] In the amended plan, the FDIC stated that it would not impose the additional special assessments that had been allowed under the May 2009 final rule imposing the special assessment. The FDIC planned to maintain assessment rates at their existing levels through the end of 2010 and, to ensure that the fund would return to 1.15 percent within eight years from when it fell below that threshold (i.e., by 2016), the Corporation adopted a uniform 3 basis point increase in assessment rates effective January 1, 2011.

The special assessment did not achieve its objective of maintaining a positive fund balance. In fact, the DIF balance fell below zero at the end of the next quarter (the third quarter of 2009). The fund ended the year with a negative $20.9 billion balance and remained negative for a total of seven quarters. (Since then, however, the DIF has grown every quarter [see Figure 5.1] and became positive in the second quarter of 2011.)

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[17] The special assessment equaled 5 basis points of each bank's assets minus Tier 1 capital as of June 30, 2009, but was capped at 10 basis points of a bank's second quarter 2009 regular assessment base. At that time, banks' regular assessment bases were approximately equal to their domestic deposits. The FDIC initially adopted an interim rule imposing a special assessment of 20 basis points of each bank's regular assessment base, but in the final rule, in response to comments on the interim rule, the Corporation revised the assessment base for the special assessment so as to "better balance... the burden of the special assessment." 74 Fed. Reg. 25639, 25641 (May 29, 2009). The revised assessment base meant that large banks, which tend to rely proportionally less on domestic deposits than do small banks, paid a larger share of the special assessment than they would have under the special assessment as originally proposed.

Two developments enabled the FDIC to reduce the size of the special assessment. First, funds collected and expected to be collected from a surcharge on senior unsecured debt guaranteed under the Temporary Liquidity Guarantee Program (see chapter 2) provided additional resources to the FDIC. Second, between the adoption of the interim rule and the adoption of the final rule, Congress acted on the FDIC's request to increase the FDIC's authority to borrow from the Treasury (see footnote 14). The increase in the FDIC's borrowing authority gave the Corporation a larger cushion against unforeseen bank failures.

[18] 12 U.S.C. §1817(b)(3)(E), as amended by the Helping Families Save Their Homes Act of 2009, Pub. L. No. 111-22, §204(b), 123 Stat. 1649 (2009).

[19] 74 Fed. Reg. 51062 (Oct. 2, 2009).

Fund Management: Increasing Fund Liquidity

The DIF's negative balance itself did not mean that the fund lacked the liquid assets necessary to quickly resolve failing banks and pay insured depositors. The fund balance, or net worth, equals the fund's assets minus its liabilities. Among the assets are cash and Treasury securities, which are liquid assets that enable the FDIC to promptly resolve failing banks and protect insured depositors. Among the DIF's liabilities is the contingent loss reserve. The negative fund balance at the end of the third quarter 2009 resulted from the increase in the contingent loss reserve as expected failures rose sharply, from $24 billion at the end of 2008 to a peak of $44 billion at the end of 2009. (Figure 5.2 charts the contingent loss reserve, portfolio liquidity, and fund balance for the years 2007 through 2010.)

Figure 5.2. Contingent Loss Reserve, DIF Portfolio Liquidity, and DIF Balance, Q1 2007–Q4 2010
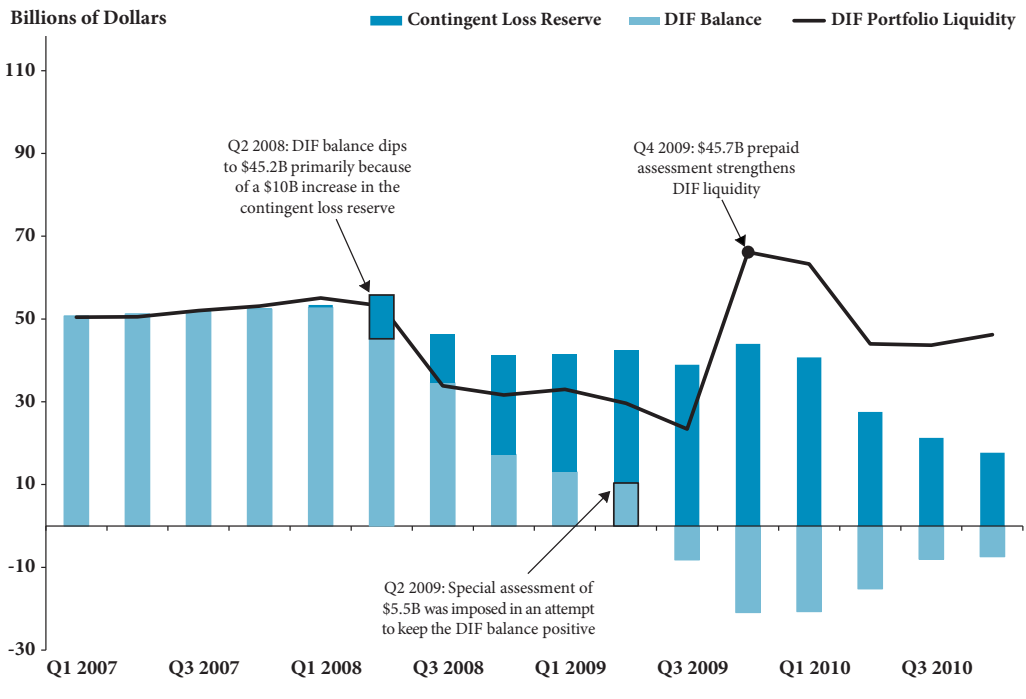
Even though an increase in the contingent loss reserve lowers the fund balance, it does not reduce the liquid assets of the fund unless and until the liabilities are paid. As expected failures materialized throughout 2009, however, the DIF's liquid assets declined sharply. As of June 30, 2009, the DIF's liquid assets had fallen to a little under $30 billion from slightly over $53 billion one year earlier. In September 2009, the FDIC projected that liquidity needs would exceed liquid assets beginning in the first quarter of 2010 and, furthermore, that liquidity needs could significantly exceed liquid assets through 2010 and 2011.[20] If

[20] FDIC, "Memorandum to the FDIC Board of Directors: Special Assessment, Restoration Plan and Proposal

not addressed, this potential squeeze on the liquid assets of the DIF threatened the FDIC's ability to pay depositors promptly.

To strengthen the DIF's liquidity, the FDIC adopted a novel approach. In November 2009, the FDIC required the banking industry to prepay their quarterly assessments for the fourth quarter of 2009 and for all of 2010, 2011, and 2012.[21] On December 30, 2009, the FDIC collected $45.7 billion of prepaid assessments, which boosted the fund's liquidity significantly (as Figure 5.2 illustrates).[22]

The FDIC chose to require prepayment of assessments rather than imposing additional special assessments for two main reasons. First, the FDIC wanted to avoid increasing assessments when bank earnings and capital were already under stress. In the second quarter of 2009, when the special assessment was charged, FDIC-insured commercial banks and savings institutions reported an aggregate net loss of $3.7 billion.[23] In contrast to a special assessment, which immediately affects a bank's earnings and capital, a prepaid assessment does not. Banks book a prepayment as an asset (prepaid expense) with a zero percent risk weight (meaning that the asset will not affect a bank's risk-based capital levels), and they expense it as they are charged their quarterly assessments. Industry trade groups such as the Independent Community Bankers Association and the American Bankers Association supported the prepaid assessment, the American Bankers Association stating that the assessment "strike[s] the right balance at this time to assure that the FDIC has the cash necessary to meet its obligations without impairing banks' ability to meet their obligations to their communities."[24]

The second reason for preferring prepayment to additional special assessments was to avoid discouraging the extension of credit. When the prepayment was collected in December 2009, bank lending was already on the decline,[25] and throughout 2009 public scrutiny had focused on banks' ability and willingness to lend to consumers; in addition, government assistance programs that focused specifically on lending were underway. The Corporation, knowing that banks were holding significant amounts of cash in response to the freeze in short-term lending markets in the fall of 2008, believed that most of the

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for Maintaining Fund Liquidity," September 28, 2009, https://www.fdic.gov/news/board/Sept29no1.pdf.

[21] 74 Fed. Reg. 59056 (Nov. 17, 2009).

[22] FDIC, *2009 Annual Report*, 20.

[23] FDIC, *Quarterly Banking Profile*, June 30, 2009, https://www5-qa.fdic.gov/qbp/2009jun/qbp.pdf.

[24] American Bankers Association, Comment letter on proposed rulemaking on prepaid assessments, 75 Fed. Reg. 51063 (Oct. 2, 2009), Oct. 28, 2009, https://www.fdic.gov/regulations/laws/federal/2009/09c109ad49.pdf; see also, Independent Community Bankers of America, Comment letter on proposed rulemaking on prepaid assessments, 74 Fed. Reg. 51063 (Oct. 2, 2009), Oct. 27, 2009, https://www.fdic.gov/regulations/laws/federal/2009/09c82ad49.pdf.

[25] The banking industry's ratio of total loans and leases to total assets had declined from a peak of 61.8 percent at the end of 2005 to 55.6 percent at the end of 2009. The ratio continued to trend downward and reached a low of 53.0 percent at the end of March 2015.

prepaid assessments would be drawn from banks' available cash and excess reserves at the Federal Reserve without significantly affecting banks' lending activities. And in fact, by the end of 2009—even after the prepayment of assessments—banks on average had a much higher ratio of cash and balances due from other depository institutions to total assets than they did before the crisis. (Cash and balances due from other depository institutions include excess balances at the Federal Reserve.) On average, the ratio of cash and balances due from other depository institutions to total assets at the end of 2009 was 8.0 percent, which was considerably higher than the 5.0 percent average from 2003 through 2007. (The ratio continued to remain considerably higher during the rest of the banking crisis and beyond.)

Just as the FDIC had opted not to borrow from the Treasury earlier in 2009 to strengthen the fund balance and the reserve ratio, the FDIC decided in late 2009 not to borrow from the Treasury to increase fund liquidity. One reason the FDIC turned to prepaid assessments was that prepaid assessments ensured that the DIF remained directly industry funded, whereas borrowing from the Treasury would not. Another reason was that, unlike the prepaid assessments, borrowings from the Treasury would bear interest, which the banking industry would have had to pay eventually through higher assessments.

In the end, the FDIC was successful in maintaining sufficient DIF liquidity throughout the crisis. After the prepaid assessment was collected at the end of 2009, liquid assets (as measured at month-end) never fell below $34 billion. (This month-end low was reached on August 31, 2013.) The prepaid assessment was buttressed by the use of loss-sharing agreements to resolve most failed banks, and these agreements greatly reduced the Corporation's cash outflows. (Loss-sharing agreements are discussed in detail in chapter 6.)

Adjusting Risk-Based Assessments

Effective the second quarter of 2009, the FDIC made several major changes to risk-based pricing and also adjusted assessment rates to reflect these changes (see Table 5.A.2).[26]

First, to make assessment rates more accurately reflect the risk that banks posed to the fund, the FDIC widened the range of assessment rates applicable to Risk Category I from a 2 basis point spread to a 4 basis point spread.

Second, the FDIC introduced three possible adjustments to a bank's assessment rate: the secured liability adjustment, the brokered deposit adjustment, and the unsecured debt adjustment.[27] These adjustments were intended to account both for liabilities that would increase the loss to the fund when a bank failed (secured liabilities and brokered deposits) and for liabilities that would reduce the loss (unsecured debt). The secured liability adjustment increased assessment rates for banks that held large amounts of

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[26] 74 Fed. Reg. 9525 (Mar. 4, 2009).

[27] Ibid.

secured debt. When a bank fails, secured debt reduces the assets available to repay the FDIC for its outlays to protect insured deposits. At that time, however, secured debt was not part of the assessment base, so banks paid no more in assessments for issuing debt that would increase the DIF's losses if the bank were to fail.[28] The brokered deposit adjustment increased assessment rates for riskier banks that held large amounts of brokered deposits relative to their total domestic deposits, since brokered deposits tend to increase both a bank's probability of failure and the DIF's losses when a bank does fail.[29] (For the least risky banks, those in Risk Category I, the FDIC added a new ratio to the financial ratios used to determine assessment rates. The new ratio increased assessment rates for banks that used relatively large amounts of brokered deposits to fund rapid asset growth.)[30] The unsecured debt adjustment lowered assessment rates for banks with long-term, unsecured debt, since unsecured debt tends to reduce the DIF's losses when a bank fails.[31]

Finally, the FDIC revised the assessment methodology for large banks in Risk Category I so that assessment rates were based not only on CAMELS component ratings and long-term-debt issuer ratings (as they had been since the beginning of 2007), but also on the same financial ratios that applied to small banks. This change, like the other two, was meant to make assessment rates reflect risk more accurately, but had another purpose as well: to have rates respond to changing risk profiles sooner, since the methodology being replaced (using only CAMELS component ratings and long-term-debt issuer ratings) had often not fully reflected large banks' deteriorating conditions quickly enough.

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[28] The secured liability adjustment was eliminated in 2011 when the assessment base was broadened to average consolidated total assets minus average tangible equity. The new assessment base encompasses all liabilities— including secured debt. The change in base is discussed in detail below in the section "Reallocating the Costs of Supporting the DIF between Small and Large Banks."

[29] Beginning with the third quarter of 2016 the FDIC revised the treatment of brokered deposits in the risk-based pricing method applicable to an established small bank (generally, a bank with less than $10 billion in total assets that has been federally insured for at least five years) so that holding large amounts of brokered deposits relative to assets can directly increase the assessment rate of any established small bank.

[30] The ratio applicable to Risk Category I banks excluded reciprocal deposits. Reciprocal deposits are deposits that a bank receives through a deposit placement network on a reciprocal basis, such that (1) for any deposit received, the institution (as agent for depositors) places the same amount with other banks through the network; and (2) each member of the network sets the interest rate to be paid on the entire amount of funds it places with other network members.

[31] When an institution fails, holders of unsecured claims, including subordinated debt, do not receive distributions from the receivership estate unless and until all secured claims, administrative claims, and deposit claims have been paid in full. Consequently, greater amounts of long-term unsecured claims provide a cushion that can reduce the FDIC's loss in the event of failure.

Reforms to Fund Management and Risk-Based Pricing, 2010–2016

The Dodd-Frank Wall Street Reform and Consumer Protection Act, enacted on July 21, 2010, contained several provisions designed to strengthen the DIF. In the years since the law's enactment, the FDIC has drawn on the authorities in these provisions to develop a comprehensive, long-term fund management plan. In addition to provisions strengthening the DIF, Dodd-Frank also included provisions designed to reallocate the costs of supporting the fund between large and small banks, and these provisions, too, the FDIC has implemented.[32] Finally, and independent of Dodd-Frank, the FDIC has updated its risk-based pricing methods for small and large banks, incorporating data and experience from the banking crisis to better estimate the risks that banks pose to the DIF.

Strengthening the DIF: The Long-Term Fund Management Plan
To strengthen the DIF, Dodd-Frank raised the minimum DRR from 1.15 percent to 1.35 percent and required that the reserve ratio reach this new minimum by September 30, 2020. Dodd-Frank also eliminated the upper limit on the reserve ratio (and therefore on the size of the fund), and it eliminated the requirement that the FDIC pay dividends to banks when the reserve ratio is between 1.35 and 1.50 percent. And when the reserve ratio exceeds 1.50 percent, the FDIC has sole discretion in determining whether to suspend or limit dividends.

The FDIC took advantage of Dodd-Frank's grant of greater authority to manage the fund by developing a comprehensive, long-term DIF management plan in 2010. The plan is designed to reduce procyclical volatility in the assessment system and keep assessment rates moderate and steady throughout economic and credit cycles, while also maintaining a positive fund balance even during a banking crisis. In developing the plan, the FDIC sought industry input and, in addition, undertook a historical analysis to determine the reserve ratio that would have been required to maintain both a positive balance and stable assessment rates from 1950 through 2010.

To get industry input, the FDIC organized a roundtable that was held September 24, 2010. At the roundtable, bank executives and industry trade group representatives uniformly favored steady, predictable assessments and objected to high assessment rates during crises.[33]

Using historical DIF losses and simulated income data on DIF investments from 1950 through 2010, the analysis in the FDIC's historical study varied assessment rates and dividends paid from the DIF to banks to determine what would have happened to a simulated fund balance and reserve ratio during the same period. The study concluded that moderate, long-term industry average assessment rates, combined with

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[32] Pub. L. 111-203, 331-334, 124 Stat. 1376, 1539 (12 U.S.C. §§ 1813(y)(3), and 1817(a)(2)(B), (b)(1)(E), (b)(2), (b)(3)(B), (b)(3)(E)(ii) and (note)).

[33] 76 Fed. Reg. 79286 (Dec. 20, 2010). 76 Fed. Reg. 10672, 10,683 (Feb. 25, 2011).

an appropriate dividend or an appropriate assessment rate reduction policy, would have suffced to prevent the fund from becoming negative during the two banking crises that occurred during the 60-year period covered by the analysis—but only if the reserve ratio had exceeded 2.0 percent before the onset of each crisis.[34]

To increase the probability that the reserve ratio would reach a level sufficient to withstand a future crisis, the FDIC Board set the DRR for 2011 at 2.0 percent, consistent with the FDIC's historical analysis.[35] The FDIC Board has voted annually since then to maintain the 2.0 percent DRR, viewing it as the minimum level needed to withstand future crises of the magnitude of past crises and as a long-term goal.

In another provision of the long-term DIF management plan and consistent with the authority granted under Dodd-Frank, the FDIC suspended dividends indefinitely (FDIRA had required that dividends be returned to the industry when the fund reserve ratio exceeds 1.5 percent). Instead, consistent with the historical analysis, the plan prescribed (and the FDIC Board adopted) assessment rates that become progressively lower when the reserve ratio exceeds 1.15, 2.0, and 2.5 percent (see Tables 5.A.4, 5.A.5, and 5.A.6).

In addition, consistent with Dodd-Frank's requirement that the reserve ratio reach the new minimum level of 1.35 percent by that date, the FDIC extended the termination of the restoration plan from the end of 2016 to September 30, 2020.[36]

Reallocating the Costs of Supporting the DIF between Small and Large Banks
Other provisions of Dodd-Frank, as noted above, aimed to reallocate the costs of supporting the deposit insurance fund between small and large banks. The reallocation required the FDIC to amend its regulations in two ways.

First, seeking to ensure that, in the aggregate, large and small banks' shares of assessments were proportionate to their shares of industry assets, Dodd-Frank required the FDIC to amend its regulations to redefine the assessment base by broadening it from domestic deposits to average consolidated total assets minus average tangible equity. Since a bank's assessment is the product of its assessment rate and its assessment base, changing the assessment base changes a bank's assessment, all else equal. The new assessment base became effective April 1, 2011.[37] The rule also adjusted risk-based rates

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[34] 75 Fed. Reg. 66272 (Oct. 27, 2010); 76 Fed. Reg. 79286 (Dec. 20, 2010); 76 Fed. Reg. 10672, 10674 (Feb. 25, 2011). For more on the historical analysis, see Lee K. Davison and Ashley M. Carreon, "Toward a Long-Term Strategy for Deposit Insurance Fund Management," *FDIC Quarterly* 4, no. 4 (2010), https://www.fdic.gov/bank/analytical/quarterly/2010-vol4-4/fdic-quarterly-v4n4-fundmgmt-121610.pdf.

[35] 75 Fed. Reg. 79286 (Dec. 20, 2010).

[36] 75 Fed. Reg. 66293 (Oct. 27, 2010). Given the continuing stresses on the earnings of insured depository institutions and the additional time allowed for reaching the minimum reserve ratio, the FDIC decided to forego the uniform 3 basis point increase in initial assessment rates that, pursuant to the amended plan adopted in September 2009, had been scheduled to take effect on January 1, 2011.

[37] 76 Fed. Reg. 10672 (Feb. 28, 2011). As permitted by statute, the assessment base for banker's banks and custodial banks is subject to reductions not applicable to other banks. The rule also eliminated the secured

to raise approximately the same aggregate amount of revenue on the new assessment base as would have been raised on the old base. (See Table 5.A.3.) While aggregate assessments remained unchanged, the proportion of total industry assessments paid by small banks decreased and the proportion paid by large banks increased, consistent with congressional intent. Before the change in the assessment base, banks with less than $10 billion in assets held approximately 20 percent of industry assets, yet paid approximately 30 percent of total assessments; after the change, small banks paid approximately 20 percent of total assessments, consistent with their share of industry assets.

Second, when Dodd-Frank raised the minimum reserve ratio from 1.15 percent to 1.35 percent and required that the reserve ratio reach this new minimum by September 30, 2020, it also directed the FDIC, when setting assessments, to offset the effect on small banks of the increase in the minimum reserve ratio. Therefore, to raise the reserve ratio to 1.35 percent by the statutory deadline and offset the effect of the increase on small banks, the FDIC approved a final rule in March 2016 imposing quarterly surcharges on large banks.[38] Surcharges began in the third quarter of 2016 (the quarter after the reserve ratio exceeded the previous minimum target of 1.15 percent) and will last until the quarter in which the reserve ratio reaches or exceeds 1.35 percent. The surcharges will not, however, extend past December 31, 2018. If the reserve ratio has not reached 1.35 percent by that date, banks with $10 billion or more in assets will be assessed a shortfall assessment on March 31, 2019. In addition, small banks will receive assessment credits for the portion of their regular assessments that contributed to growth in the reserve ratio between 1.15 percent and 1.35 percent. When the reserve ratio is 1.38 percent or higher, the FDIC will apply these credits to offset small banks' regular quarterly assessments.

Updating Risk-Based Pricing Using Data and Experience from the Crisis

Independent of Dodd-Frank, the FDIC has revised its pricing methodologies for both small and large banks, including highly complex banks.[39] Before the revisions, pricing methodologies had relied on data from the previous banking crisis (the bank and thrift crisis of the late 1980s and early 1990s). The large number of failures during the recent banking crisis gave the FDIC a wealth of new data on the characteristics of banks that failed. With the new data and fresh experience, the Corporation was able to update its pricing methodologies to better estimate the risks that banks pose to the DIF.

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liability adjustment (secured debt was included in the new assessment base and an adjustment was no longer necessary).

[38] 81 Fed. Reg. 32180 (May 20, 2016). The surcharges equal an annual rate of 4.5 basis points; they are applied to a large bank's assessment base that has certain adjustments made to it. The base for the surcharge is the bank's regular assessment base reduced by $10 billion, and adjusted for affiliated banks.

[39] 76 Fed. Reg. 10672 (Feb. 28, 2011). Generally, a highly complex bank is defined as (a) a large bank with at least $50 billion of total assets that is controlled by a U.S. parent with at least $500 billion in assets, or (b) a processing bank or a trust company with fiduciary assets of at least $500 billion. 12 CFR § 327.8(g).

Large Banks and Highly Complex Institutions

The final rule that revised the assessment base effective April 1, 2011, also revised the pricing methodology for large banks and highly complex institutions.[40] The changes made to the large-bank methodology were meant to do three things: (1) capture risk closer to the time a bank assumes the risk, (2) better differentiate risks posed by banks during good economic and banking conditions based on how the banks would fare during periods of stress or economic downturn, and (3) account more accurately for the losses the FDIC might incur if a large bank fails.

Under the revised large-bank pricing methodology, the FDIC uses two scorecards, one for the majority of large banks and a second for highly complex institutions. Both scorecards use banks' CAMELS component ratings and financial measures to determine a performance score and a loss severity score. Together, these scores predict the performance of banks during periods of stress and are used to determine a bank's assessment rate.[41] (See Tables 5.A.3 and 5.A.4.) The two scorecards are similar, but the scorecard for highly complex institutions uses some financial measures intended to reflect the more complex activities of these institutions. Risk categories were eliminated in the revised large-bank pricing methodology.[42] To compare the revised methodology with the one it replaced, the FDIC analyzed how well the new measures would have predicted a rank ordering of large banks based on the risk they posed as of the end of 2009. (The rank ordering was based on an expert valuation of relative risk by the FDIC.) The FDIC found that the measures in the revised methodology would have performed significantly better than the method it replaced.

Established Small Institutions

A revised pricing methodology for established small banks became effective in the third quarter of 2016, which was the same quarter that lower assessment rates adopted by the FDIC Board in 2011 went into effect and also the quarter after the reserve ratio first

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[40] In this rulemaking, the FDIC also created a depository institution debt adjustment (DIDA). The DIDA increases a bank's assessment rate when the bank holds long-term unsecured debt issued by another insured depository institution.

[41] Some of the definitions used in the large-bank and highly complex institution pricing methodologies were amended in 2012 and 2014. The 2014 revisions also contained other changes to assessment rules applicable to large and small banks; these changes were designed to conform to regulatory changes in capital rules adopted pursuant to Basel III (an international set of capital standards that are implemented by domestic banking regulators). See 77 Fed. Reg. 66000 (Oct. 31, 2012) and 79 Fed. Reg. 70427 (Nov. 26, 2014).

[42] In addition, long-term-debt-issuer ratings were no longer used. Dodd-Frank explicitly required all federal agencies to review and modify regulations in order to remove reliance on credit ratings and substitute an alternative standard of creditworthiness. Pub. L. 111-203, § 939A, 124 Stat. 1376, 1886 (codified at 15 U.S.C. 78o-7 note). Even before Dodd-Frank was enacted, however, the FDIC had proposed removing long-term-debt issuer ratings from its assessment calculations. 75 Fed. Reg. 23516, 23517 (May 3, 2010).

returned to 1.15 percent.[43] (See Table 5.A.4.) (An established small bank is generally defined as a bank that has been federally insured for at least five years and has less than $10 billion in total assets.)[44] The new methodology draws on data from the two most recent banking crises and the years between them. The underlying model uses financial ratios and CAMELS component ratings to estimate the probability of failure over three years. The new methodology uses the results of the underlying model to determine assessment rates, and uses CAMELS composite ratings (rather than risk categories, as in the methodology being replaced) to place limits on the assessment rates that banks can be charged. The FDIC's backtesting revealed that the new methodology would have differentiated between banks that later failed and those that did not better than the methodology being replaced, and would have differentiated significantly better both immediately before and at the beginning of the crisis.

The change in the pricing methodology for established small institutions was designed to be revenue neutral (that is, to raise approximately the same aggregate amount of revenue from small banks as would have been collected under the pricing methodology it replaced).

Conclusion

When the banking crisis began in 2008, the FDIC's deposit insurance fund lacked sufficient capital to withstand the losses that stemmed from that crisis. Although legislative reforms in 2006 had given the FDIC somewhat greater authority than it had had for the previous decade to manage the fund and to price for risk, the reforms came too late to allow the Corporation to build up the DIF before the crisis struck.

Dodd-Frank in 2010 gave the FDIC more authority to manage the DIF and to price deposit insurance for risk than the Corporation ever had, and the FDIC has used this authority to substantially revise its approach both to fund management and to risk-based pricing. The FDIC has developed a comprehensive, long-term DIF management plan designed to reduce procyclical volatility in the assessment system and keep assessment rates moderate and steady throughout economic and credit cycles, while also maintaining a positive fund balance even during a banking crisis. Based on a historical analysis of fund losses over a 60-year period, the FDIC has set a long-term fund reserve ratio target of 2.0 percent, since that level, combined with steady assessment rates, would have sufficed to prevent the fund from becoming negative during the last two banking crises. The FDIC also relied on this analysis to adopt moderate overall assessment rates that are intended to remain in place even during a downturn.

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[43] 81 Fed. Reg. 16059 (Mar. 25, 2016).

[44] 12 CFR § 327.8(e), (k).

Using statistical techniques, the FDIC has also incorporated large amounts of failure data from the recent banking crisis into its risk-based pricing methodologies for small banks and for large and highly complex banks. These new methodologies are able to better distinguish between banks that are likely to survive a downturn and those that are not, consistent with the goals of a risk-based pricing system.

Appendix

Evolution of the Assessment Rate Schedules, Q1 2009 to Present

To calculate a bank's quarterly deposit insurance assessment, the bank's assessment rate is multiplied by its assessment base. All rates below are annual and are in basis points, which are cents per $100 of the assessment base.

Table 5.A.1. Assessment Rate Schedule, Q1 2009

	Risk Category[a]			
	I	II	III	IV
Base Assessment Rate	12 to 14	17	35	50

Note: Assessment base is approximately equal to domestic deposits.

[a] Risk Category I comprises banks that pose the least risk, and each successively higher risk category comprises banks that pose increasingly higher risk.

Table 5.A.2. Assessment Rate Schedule, Q2 2009–Q1 2011

	Risk Category[a]			
	I	II	III	IV
Initial Base Assessment Rate	12 to 16	22	32	45
Unsecured Debt Adjustment	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Secured Debt Adjustment	0 to 8	0 to 11	0 to 16	0 to 22.5
Brokered Deposit Adjustment	N/A	0 to 10	0 to 10	0 to 10
Total Base Assessment Rate	7 to 24	17 to 43	27 to 58	40 to 77.5

Note: Assessment base is approximately equal to domestic deposits.

[a] Risk Category I comprises banks that pose the least risk, and each successively higher risk category comprises banks that pose increasingly higher risk.

Table 5.A.3. Assessment Rate Schedule, Q2 2011–Q2 2016

	Small-Bank Risk Category[a]				Large & Highly Complex Institutions
	I	II	III	IV	
Initial Base Assessment Rate	5 to 9	14	23	35	5 to 35
Unsecured Debt Adjustment[b]	–4.5 to 0	–5 to 0	–5 to 0	–5 to 0	–5 to 0
Brokered Deposit Adjustment	N/A	0 to 10	0 to 10	0 to 10	0 to 10
Total Base Assessment Rate[c]	2.5 to 9	9 to 24	18 to 33	30 to 45	2.5 to 45

Note: Assessment base equals average consolidated total assets minus average tangible equity, with additional reductions for custodial banks and banker's banks.

[a] Risk Category I comprises banks that pose the least risk, and each successively higher risk category comprises banks that pose increasingly higher risk.

[b] The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured institution's initial base assessment rate; thus, for example, an insured depository institution with an initial base assessment rate of 5 basis points will have a maximum unsecured debt adjustment of 2.5 basis points and cannot have a total base assessment rate lower than 2.5 basis points.

[c] Total base assessment rates do not include the depository institution debt adjustment.

Table 5.A.4. Assessment Rate Schedule, Q3 2016 to Present

(After the reserve ratio reaches 1.15 percent but is less than 2.0 percent)

	Established Small Banks			Large & Highly Complex Institutions
	CAMELS Composite			
	1 or 2	3	4 or 5	
Initial Base Assessment Rate	3 to 16	6 to 30	16 to 30	3 to 30
Unsecured Debt Adjustment[a]	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	N/A	N/A	N/A	0 to 10
Total Base Assessment Rate[b]	1.5 to 16	3 to 30	11 to 30	1.5 to 40

Note: Assessment base equals average consolidated total assets minus average tangible equity, with additional reductions for custodial banks and banker's banks.

[a] The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured institution's initial base assessment rate; thus, for example, an insured depository institution with an initial base assessment rate of 3 basis points will have a maximum unsecured debt adjustment of 1.5 basis points and cannot have a total base assessment rate lower than 1.5 basis points.

[b] Total base assessment rates do not include the depository institution debt adjustment.

Table 5.A.5. Assessment Rate Schedule

(After the reserve ratio reaches 2.0 percent but is less than 2.5 percent)

| | Established Small Banks | | | Large & Highly Complex Institutions |
| | CAMELS Composite | | | |
	1 or 2	3	4 or 5	
Initial Base Assessment Rate	2 to 14	5 to 28	14 to 28	2 to 28
Unsecured Debt Adjustment[a]	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	N/A	N/A	N/A	0 to 10
Total Base Assessment Rate[b]	1 to 14	2.5 to 28	9 to 28	1 to 38

Note: Assessment base equals average consolidated total assets minus average tangible equity, with additional reductions for custodial banks and banker's banks.

[a]   The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured institution's initial base assessment rate; thus, for example, an insured depository institution with an initial base assessment rate of 2 basis points will have a maximum unsecured debt adjustment of 1 basis point and cannot have a total base assessment rate lower than 1 basis point.

[b]   Total base assessment rates do not include the depository institution debt adjustment.

Table 5.A.6. Assessment Rate Schedule

(After the reserve ratio reaches 2.5 percent)

	Established Small Banks			Large & Highly Complex Institutions
	CAMELS Composite			
	1 or 2	**3**	**4 or 5**	
Initial Base Assessment Rate	1 to 13	4 to 25	13 to 25	1 to 25
Unsecured Debt Adjustment[a]	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	N/A	N/A	N/A	0 to 10
Total Base Assessment Rate[b]	0.5 to 13	2 to 25	8 to 25	0.5 to 35

Note: Assessment base equals average consolidated total assets minus average tangible equity, with additional reductions for custodial banks and banker's banks.

[a] The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured institution's initial base assessment rate; thus, for example, an insured depository institution with an initial base assessment rate of 1 basis point will have a maximum unsecured debt adjustment of 0.5 basis points and cannot have a total base assessment rate lower than 0.5 basis points.

[b] Total base assessment rates do not include the depository debt adjustment.

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