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Part IV

Federal Deposit Insurance Corporation

12 CFR Part 327
Assessments; Proposed Rule

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Part 327

RIN 3064–AE37

Assessments

AGENCY: Federal Deposit Insurance Corporation (FDIC).

ACTION: Notice of proposed rulemaking (NPR) and request for comment.

SUMMARY: The FDIC is proposing to amend 12 CFR part 327 to refine the deposit insurance assessment system for small insured depository institutions that have been federally insured for at least 5 years (established small banks) by: revising the financial ratios method so that it would be based on a statistical model estimating the probability of failure over three years; updating the financial measures used in the financial ratios method consistent with the statistical model; and eliminating risk categories for established small banks and using the financial ratios method to determine assessment rates for all such banks (subject to minimum or maximum initial assessment rates based upon a bank's CAMELS composite rating). The FDIC does not propose changing the range of assessment rates that will apply once the Deposit Insurance Fund (DIF or fund) reserve ratio reaches 1.15 percent; thus, under the proposal, as under current regulations, the range of initial deposit insurance assessment rates will fall once the reserve ratio reaches 1.15 percent. The FDIC proposes that a final rule would go into effect the quarter after a final rule is adopted; by their terms, however, the proposed amendments would not become operative until the quarter after the DIF reserve ratio reaches 1.15 percent.

DATES: Comments must be received by the FDIC no later than September 11, 2015.

ADDRESSES: You may submit comments on the notice of proposed rulemaking using any of the following methods:

- *Agency Web site: http://www.fdic.gov/regulations/laws/federal/.* Follow the instructions for submitting comments on the agency Web site.
- *Email: comments@fdic.gov.* Include RIN 3064–AE37 on the subject line of the message.
- *Mail:* Robert E. Feldman, Executive Secretary, Attention: Comments, Federal Deposit Insurance Corporation, 550 17th Street NW., Washington, DC 20429.
- *Hand Delivery:* Comments may be hand delivered to the guard station at the rear of the 550 17th Street Building (located on F Street) on business days between 7 a.m. and 5 p.m.
- *Public Inspection:* All comments received, including any personal information provided, will be posted generally without change to *http://www.fdic.gov/regulations/laws/federal.*

FOR FURTHER INFORMATION CONTACT: Munsell St.Clair, Chief, Banking and Regulatory Policy, Division of Insurance and Research, 202–898–8967; Nefretete Smith, Senior Attorney, Legal Division, 202–898–6851; Thomas Hearn, Counsel, Legal Division, 202–898–6967.

SUPPLEMENTARY INFORMATION:

I. Policy Objectives

The Federal Deposit Insurance Act (FDI Act) requires that the FDIC Board of Directors (Board) establish a risk-based deposit insurance assessment system.[1] Pursuant to this requirement, the FDIC adopted a risk-based deposit insurance assessment system effective in 1993 that applied to all banks.[2] A risk-based assessment system reduces the subsidy that lower-risk banks provide higher-risk banks and provides incentives for banks to monitor and reduce risks that could increase potential losses to the DIF. Since 1993, the FDIC has met its statutory mandate and has pursued these policy goals by periodically introducing improvements in the deposit insurance assessment system's ability to differentiate for risk. The primary purpose of the proposals in this NPR is to improve the risk-based deposit insurance assessment system applicable to small banks to more accurately reflect risk.[3]

[1] 12 U.S.C. 1817(b). A ''risk-based assessment system'' means a system for calculating an insured depository institution's assessment based on the institution's probability of causing a loss to the DIF due to the composition and concentration of the institution's assets and liabilities, the likely amount of any such loss, and the revenue needs of the DIF. See 12 U.S.C. 1817(b)(1)(C).

[2] As used in this NPR, the term ''bank'' is synonymous with the term ''insured depository institution'' as it is used in section 3(c)(2) of the FDI Act, 12 U.S.C 1813(c)(2).

On January 1, 2007, the FDIC instituted separate assessment systems for small and large banks. 71 FR 69282 (Nov. 30, 2006). See 12 U.S.C. 1817(b)(1)(D) (granting the Board the authority to establish separate risk-based assessment systems for large and small insured depository institutions).

[3] As used in this NPR, the term ''small bank'' is synonymous with the term ''small institution'' as it is used in 12 CFR 327.8. In general, a ''small bank'' is one with less than $10 billion in total assets.

II. Background

Risk-Based Deposit Insurance Assessments for Small Banks

Since 2007, assessment rates for small banks have been determined by placing each bank into one of four risk categories, Risk Categories I, II, III, and IV. These four risk categories are based on two criteria: capital levels and supervisory ratings. The three capital groups—well capitalized, adequately capitalized, and undercapitalized—are based on the leverage ratio and three risk-based capital ratios used for regulatory capital purposes.[4] The three supervisory groups, termed A, B, and C, are based upon supervisory evaluations by the small bank's primary federal regulator, state regulator or the FDIC.[5] Group A consists of financially sound institutions with only a few minor weaknesses (generally, banks with CAMELS[6] composite ratings of 1 or 2); Group B consists of institutions that demonstrate weaknesses that, if not corrected could result in significant deterioration of the institution and increased risk of loss to the DIF (generally, banks with CAMELS composite ratings of 3); and Group C consists of institutions that pose a substantial probability of loss to the DIF unless effective corrective action is taken (generally, banks with CAMELS composite ratings of 4 or 5). An institution's capital and supervisory group determine its risk category as set out in Table 1 below.

[4] The common equity tier 1 capital ratio, a new risk-based capital ratio, was incorporated into the deposit insurance assessment system effective January 1, 2015. 79 FR 70427 (November 26, 2014). Beginning January 1, 2018, a supplementary leverage ratio will also be used to determine whether an advanced approaches bank is: (a) well capitalized, if the bank is subject to the enhanced supplementary leverage ratio standards under 12 CFR 6.4(c)(1)(iv)(B), 12 CFR 208.43(c)(1)(iv)(B), or 12 CFR 324.403(b)(1)(vi), as each may be amended from time to time; and (b) adequately capitalized, if the bank is subject to the advanced approaches risk-based capital rules under 12 CFR 6.4(c)(2)(iv)(B), 12 CFR 208.43(c)(2)(iv)(B), or 12 CFR 324.403(b)(2)(vi), as each may be amended from time to time. 79 FR 70427, 70437 (November 26, 2014.) The supplementary leverage ratio is expected to affect the capital group assignment of few, if any, small banks.

[5] The term ''primary federal regulator'' is synonymous with the term ''appropriate federal banking agency'' as it is used in section 3(q) of the FDI Act, 12 U.S.C. 1813(q).

[6] A financial institution is assigned a composite rating based on an evaluation and rating of six essential components of an institution's financial condition and operations. These component factors address the adequacy of capital (C), the quality of assets (A), the capability of management (M), the quality and level of earnings (E), the adequacy of liquidity (L), and the sensitivity to market risk (S).

TABLE 1—DETERMINATION OF RISK CATEGORY

Capital group	Supervisory group		
	A CAMELS 1 or 2	B CAMELS 3	C CAMELS 4 or 5
Well Capitalized	Risk Category I.		
Adequately Capitalized	Risk Category II		Risk Category III.
Under Capitalized	Risk Category III		Risk Category IV

To further differentiate risk within Risk Category I (which includes most small banks), the FDIC uses the *financial ratios method,* which combines supervisory CAMELS component ratings with current financial ratios to determine a small Risk Category I bank's initial assessment rate.[7]

Within Risk Category I, those institutions that pose the least risk are charged a minimum initial assessment rate and those that pose the greatest risk are charged an initial assessment rate that is four basis points higher than the minimum. All other banks within Risk Category I are charged a rate that varies between these rates. In contrast, all banks in Risk Category II are charged the same initial assessment rate, which is higher than the maximum initial rate for Risk Category I. A single, higher, initial assessment rate applies to each bank in Risk Category III and another, higher, rate to each bank in Risk Category IV.[8]

The financial ratios method determines the assessment rates in Risk Category I using a combination of weighted CAMELS component ratings and the following financial ratios:

- Tier 1 Leverage Ratio;
- Net Income before Taxes/Risk-Weighted Assets;
- Nonperforming Assets/Gross Assets;
- Net Loan Charge-Offs/Gross Assets;
- Loans Past Due 30–89 days/Gross Assets;
- Adjusted Brokered Deposit Ratio; and
- Weighted Average CAMELS Composite Rating.[9]

To determine a Risk Category I bank's initial assessment rate, the weighted CAMELS components and financial ratios are multiplied by statistically derived pricing multipliers, the products are summed, and the sum is added to a uniform amount that applies to all Risk Category I banks. If, however, the rate is below the minimum initial assessment rate for Risk Category I, the bank will pay the minimum initial assessment rate; if the rate derived is above the maximum initial assessment rate for Risk Category I, then the bank will pay the maximum initial rate for the risk category.

The financial ratios used to determine rates come from a statistical model that predicts the probability that a Risk Category I institution will be downgraded from a composite CAMELS rating of 1 or 2 to a rating of 3 or worse within one year. The probability of a CAMELS downgrade is intended as a proxy for the bank's probability of failure. When the model was developed in 2006, the FDIC decided not to attempt to determine a bank's probability of failure because of the lack of bank failures in the years between the end of the bank and thrift crisis in the early 1990s and 2006.[10]

The financial ratios method does not apply to new small banks or to insured branches of foreign banks (insured branches).[11] The manner in which assessment rates for these institutions is determined is described further below.

Assessment Rates Under Current Rules

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), enacted in July 2010, revised the statutory authorities governing the FDIC's management of the DIF. The Dodd-Frank Act granted the FDIC authority to manage the fund in a manner that would help maintain a positive fund balance during a banking crisis and promote moderate, steady assessment rates throughout economic credit cycles.[12]

Among other things, the Dodd-Frank Act: (1) raised the minimum designated reserve ratio (DRR), which the FDIC must set each year, to 1.35 percent (from the former minimum of 1.15 percent) and removed the upper limit on the DRR (which was formerly capped at 1.5 percent);[13] (2) required that the fund reserve ratio reach 1.35 percent by September 30, 2020 (rather than 1.15 percent by the end of 2016, as formerly required);[14] and (3) required that, in setting assessments, the FDIC ''offset the effect of [requiring that the reserve ratio reach 1.35 percent by September 30, 2020 rather than 1.15 percent by the end of 2016] on insured depository institutions with total consolidated assets of less than $10,000,000,000.''[15]

In 2011, the FDIC adopted a schedule of assessment rates designed to ensure that the reserve ratio reaches 1.15 percent by September 30, 2020.[16] In the near future, the FDIC plans to propose a rule to implement the Dodd-Frank Act requirement that the cost of raising the reserve ratio from 1.15 percent to 1.35

[7] New small banks in Risk Category I, however, are charged the highest initial assessment rate in effect for that risk category. Subject to exceptions, a new bank is one that has been federally insured for less than five years as of the last day of any quarter for which it is being assessed. 12 CFR 327.8(j).

[8] In 2011, the Board revised and approved regular assessment rate schedules. See 76 FR 10672 (Feb. 25, 2011); 12 CFR 327.10.

[9] The weights applied to CAMELS components are as follows: 25 percent each for Capital and Management; 20 percent for Asset quality; and 10 percent each for Earnings, Liquidity, and Sensitivity to market risk. These weights reflect the view of the FDIC regarding the relative importance of each of the CAMELS components for differentiating risk among institutions for deposit insurance purposes. The FDIC and other bank supervisors do not use such a system to determine CAMELS composite ratings.

[10] See 71 FR 41910, 41913 (July 24, 2006).

[11] Insured branches of foreign banks are deemed small banks for purposes of the deposit insurance assessment system.

[12] 12 U.S.C. 1817(e) (granting the Board the discretion to suspend or limit dividends).

[13] 12 U.S.C. 1817(b)(3)(B).

[14] Public Law 111–203, 334(d), 124 Stat. 1376, 1539 (12 U.S.C. 1817(note)).

[15] Public Law 111–203, 334(e), 124 Stat. 1376, 1539 (12 U.S.C. 1817(note)). The Dodd-Frank Act also: (1) eliminated the requirement that the FDIC provide dividends from the fund when the reserve ratio is between 1.35 percent and 1.5 percent, 12 U.S.C. 1817(e), and (2) continued the FDIC's authority to declare dividends when the reserve ratio at the end of a calendar year is at least 1.5 percent, but granted the FDIC sole discretion in determining whether to suspend or limit the declaration of payment or dividends, 12 U.S.C. 1817(e)(2)(A)–(B).

[16] See 76 FR 10672.

percent be paid by banks with $10 billion or more in assets.

The current initial assessment rates for small and large banks are set forth in Table 2 below.

TABLE 2—INITIAL BASE ASSESSMENT RATES

[In basis points per annum]

	Risk category					
	I*		II	III	IV	Large & highly complex institutions**
	Minimum	Maximum				
Annual Rates (in basis points)	5	9	14	23	35	5–35

* Initial base rates that are not the minimum or maximum will vary between these rates.
** See § 327.8(f) and § 327.8(g) for the definition of large and highly complex institutions.

An institution's total assessment rate may vary from the initial assessment rate as the result of possible adjustments.[17] After applying all possible adjustments, minimum and maximum total assessment rates for each risk category are set forth in Table 3 below.

TABLE 3—TOTAL BASE ASSESSMENT RATES*

[In basis points per annum]

	Risk category I	Risk category II	Risk category III	Risk category IV	Large & highly complex institutions**
Initial Assessment Rate	5–9	14	23	35	5–35
Unsecured Debt Adjustment***	−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 Assessment Rate	2.5 to 9	9 to 24	18 to 33	30 to 45	2.5 to 45

* Total base assessment rates do not include the DIDA.
** See § 327.8(f) and (g) for the definition of large and highly complex institutions.
*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository institution's initial base assessment rate. The unsecured debt adjustment does not apply to new banks or insured branches.

Before adopting the current assessment rate schedules, the FDIC undertook a historical analysis to determine how high the reserve ratio would have to have been to have maintained both a positive balance and stable assessment rates from 1950 through 2010.[18] The analysis shows that the fund reserve ratio would have needed to be approximately 2 percent or more before the onset of the 1980s and 2008 crises to maintain both a positive fund balance and stable assessment rates, assuming, in lieu of dividends, that the long-term industry average nominal assessment rate would have been reduced by 25 percent when the reserve ratio reached 2 percent, and by 50 percent when the reserve ratio reached 2.5 percent.

In 2011, consistent with the FDIC's historical analysis and the FDIC's long-term fund management plan adopted as a result of the historical analysis, the Board adopted lower, moderate assessment rates that will go into effect when the DIF reserve ratio reaches 1.15 percent.[19] Pursuant to the FDIC's authority to set assessments, the initial base and total base assessment rates set forth in Table 4 below will take effect beginning the assessment period after the fund reserve ratio first meets or exceeds 1.15 percent, without the necessity of further action by the Board. The rates will remain in effect unless and until the reserve ratio meets or exceeds 2 percent.[20]

[17] A bank's total base assessment rate can vary from its initial base assessment rate as the result of three possible adjustments. Two of these adjustments—the unsecured debt adjustment and the depository institution debt adjustment (DIDA)—apply to all banks (except that the unsecured debt adjustment does not apply to new banks or insured branches). The unsecured debt adjustment lowers a bank's assessment rate based on the bank's ratio of long-term unsecured debt to the bank's assessment base. The DIDA increases a bank's assessment rate when it holds long-term, unsecured debt issued by another insured depository institution. The third possible adjustment—the brokered deposit adjustment—applies only to small banks in Risk Category II, III and IV (and to large and highly complex institutions that are not well capitalized or that are not CAMELS composite 1 or 2-rated). It does not apply to insured branches. The brokered deposit adjustment increases a bank's assessment when it holds significant amounts of brokered deposits. 12 CFR 327.9 (d).

[18] The historical analysis and long-term fund management plan are described at 76 FR at 10675 and 75 FR 66272, 66272–281 (Oct. 27, 2010).

[19] See 76 FR at 10717–720.

[20] For new banks, however, the rates will remain in effect even if the reserve ratio equals or exceeds 2 percent (or 2.5 percent).

[21] The reserve ratio for the immediately prior assessment period must also be less than 2 percent.

TABLE 4—INITIAL AND TOTAL BASE ASSESSMENT RATES *

[In basis points per annum]

[Once the reserve ratio reaches 1.15 percent] [21]

	Risk category I	Risk category II	Risk category III	Risk category IV	Large & highly complex institutions **
Initial Base Assessment Rate	3–7	12	19	30	3–30
Unsecured Debt Adjustment ***	−3.5 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	1.5 to 7	7 to 22	14 to 29	25 to 40	1.5 to 40

* Total base assessment rates do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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. The unsecured debt adjustment does not apply to new banks or insured branches.

In lieu of dividends, and pursuant to the FDIC's authority to set assessments and consistent with the FDIC's long-term fund management plan, the initial base and total base assessment rates set forth in Table 5 below will come into effect without further action by the Board when the fund reserve ratio at the end of the prior assessment period meets or exceeds 2 percent, but is less than 2.5 percent.[22]

TABLE 5—INITIAL AND TOTAL BASE ASSESSMENT RATES*

[In basis points per annum]

[If the reserve ratio for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent]

	Risk category I	Risk category II	Risk category III	Risk category IV	Large & highly complex institutions **
Initial Base Assessment Rate	2–6	10	17	28	2–28
Unsecured Debt Adjustment ***	−3 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	1 to 6	5 to 20	12 to 27	23 to 38	1 to 38

* Total base assessment rates do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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. The unsecured debt adjustment does not apply to insured branches.

The initial base and total base assessment rates set forth in Table 6 below will come into effect, again, without further action by the Board when the fund reserve ratio at the end of the prior assessment period meets or exceeds 2.5 percent.

TABLE 6—INITIAL AND TOTAL BASE ASSESSMENT RATES*

[In basis points per annum]

[If the reserve ratio for the prior assessment period is equal to or greater than 2.5 percent]

	Risk category I	Risk category II	Risk category III	Risk category IV	Large & highly complex institutions **
Initial Base Assessment Rate	1—5	9	15	25	1–25
Unsecured Debt Adjustment ***	−2.5 to 0	−4.5 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	0.5 to 5	4.5 to 19	10 to 25	20 to 35	0.5 to 35

* Total base assessment rates do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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. The unsecured debt adjustment does not apply to insured branches.

[22] New small banks will remain subject to the assessment schedule in Table 5 when the reserve ratio reaches 2 percent and 2.5 percent.

With respect to each of the four assessment rate schedules (Tables 3, 4, 5 and 6), the Board has the authority to adopt rates without further notice and comment rulemaking that are higher or lower than the total assessment rates (also known as the total base assessment rates) shown in the tables, provided that: (1) The Board cannot increase or decrease rates from one quarter to the next by more than two basis points; and (2) cumulative increases and decreases cannot be more than two basis points higher or lower than the total base assessment rates.[23]

III. Justification for Proposal

While the current deposit insurance assessment system effectively reflects the risk posed by small banks, it can be improved by incorporating newer data from the recent financial crisis and revising the methodology to directly estimate the probability of failure three years ahead. These improvements will allow the FDIC to more effectively price risk. The proposed improvements to the small bank risk-based assessment system will further the goals of reducing cross-subsidization of high-risk institutions by low risk institutions and help ensure that banks that take on greater risks will pay more for deposit insurance.

IV. Description of the Proposed Rule

Summary of the Proposed Rule

The FDIC proposes to improve the assessment system applicable to established small banks[24] (that is, small banks other than new small banks and insured branches of foreign banks) by: (1) Revising the financial ratios method so that it is based on a statistical model estimating the probability of failure over three years; (2) updating the financial measures used in the financial ratios method consistent with the statistical model; and (3) eliminating risk categories for all established small banks and using the financial ratios method to determine assessment rates for all such banks. CAMELS composite ratings, however, would be used to place a maximum on the assessment rates that CAMELS composite 1- and 2-rated banks could be charged and minimums on the assessment rates that CAMELS composite 3-, 4- and 5-rated banks could be charged.

Over 500 banks have failed since the end of 2007. These failures, together with the hundreds of failures during the banking crisis of the late 1980s and early 1990s, have generated a robust set of data on bank failures. The FDIC need no longer rely on a model that estimates a proxy for failure—the probability that a bank with a CAMELS composite rating of 1 or 2 will be downgraded to a CAMELS composite rating of 3, 4, or 5 within 12 months; rather, the FDIC can base small bank deposit insurance assessments on a statistical model that estimates a bank's probability of failure directly.

In addition to estimating probability of failure directly, the proposal improves the small bank deposit insurance assessment system in other ways. First, it allows the assessment system to better capture risk when the risk is assumed, rather than when the risk has already resulted in losses. The statistical model on which the proposed deposit insurance assessment system for small banks is based estimates the probability of failure within three years, balancing the need to capture risk when it is assumed with the need for accurate failure predictions. (The longer the prediction period, the less accurate a model's predictions will tend to be; so, for example, the FDIC cannot create a model that predicts failure ten years in the future with sufficient accuracy.) The risk-based assessment system established in 2011 for large banks is also designed to capture performance over a period longer than one year. The FDIC would update the financial measures used in the financial ratios method to be consistent with the proposed statistical model. All of the proposed measures were statistically significant in predicting a bank's probability of failure within a three-year period.

Second, because the model allows the FDIC to estimate the probability of failure directly, it allows the FDIC to apply the model to all established small banks, not just those in Risk Category I. In part because CAMELS ratings can incorporate information that the model cannot, the FDIC proposes to apply minimum or maximum initial base assessment rates that will depend on a bank's CAMELS composite rating. Thus, as it has with large banks, the FDIC would eliminate risk categories for small banks (other than new small banks and insured branches of foreign banks).

Third, because the model predicts the probability of failure three years ahead using data on hundreds of failures (including failures during the recent crisis), it better reflects banks' actual risks and provides incentives to banks to monitor and reduce risks that increase potential losses to the DIF. Because it measures risk more accurately, the model reduces the subsidization of riskier banks by less risky banks.

The FDIC intends to preserve the lower range of initial base assessment rates previously adopted by the Board. The FDIC is proposing that the new assessment system go into operation the quarter after the reserve ratio reaches 1.15 percent. At that time, under the initial base assessment rate schedules adopted by the Board in 2011, initial based assessment rates will fall automatically from the current 5 basis point to 35 basis point range to a 3 basis point to 30 basis point range, as reflected in Table 4.[25] The FDIC adopted this schedule of assessment rates pursuant to its long-term fund management plan as the FDIC's best estimate of the assessment rates that would have been needed from 1950 to 2010 to maintain a positive fund balance during the past two banking crises.

The FDIC proposes to convert the statistical model to assessment rates within this 3 basis point to 30 basis point assessment range in a revenue neutral way; that is, in a manner that does not change the aggregate assessment revenue collected from established small banks. Specifically, the conversion would be done to ensure that aggregate assessments for an assessment period shortly before adoption of a final rule would have been approximately the same under the final rule as they would have been under the assessment rate schedule set forth in Table 4 (the rates that, under current rules, will automatically go into effect when the reserve ratio reaches 1.15 percent).

To avoid unnecessary burden, the FDIC is proposing a revised small bank assessment system that does not require small banks to report any new data in their Reports of Condition and Income (Call Reports).

Implementation of the Proposed Rule

The FDIC proposes that a final rule go into effect the quarter after a final rule is adopted; by their terms, however, the proposed revisions would not become operative until the quarter after the DIF reserve ratio reaches 1.15 percent.

[23] See 12 CFR 327.10(f); 76 FR at 10684.

[24] Subject to exceptions, an established insured depository institution is one that has been federally insured for at least five years as of the last day of any quarter for which it is being assessed. 12 CFR 327.8(k).

[25] As under current rules, the brokered deposit adjustment would continue to apply only to established small banks that are less than well capitalized or that have a CAMELS composite rating of 3, 4 or 5.

Detailed Description of the Proposed Rule

Risk Differentiation

As mentioned above, the FDIC is proposing to update the financial measures used in the financial ratios method consistent with the statistical model, eliminate risk categories for all established small banks, and use the financial ratios method to determine assessment rates for all such banks. CAMELS composite ratings would be used to place a maximum on the assessment rates that CAMELS composite 1- and 2-rated banks could be charged, and minimums on the assessment rates that CAMELS composite 3-, 4- and 5-rated banks could be charged.

The financial ratios method as revised would use the measures described in the right-hand column of Table 7 below. For comparison's sake, the measures currently used in the financial ratios method are set out on the left-hand column of the table.

TABLE 7—COMPARISON OF CURRENT AND PROPOSED MEASURES IN THE FINANCIAL RATIOS METHOD

Current risk category I financial ratios method	Proposed financial ratios method
• Weighted Average CAMELS Component Rating	• Weighted Average CAMELS Component Rating.
• Tier 1 Leverage Ratio	• Tier 1 Leverage Ratio.
• Net Income before Taxes/Risk-Weighted Assets	• Net Income before Taxes/Total Assets.
• Nonperforming Assets/Gross Assets	• Nonperforming Loans and Leases/Gross Assets.
	• Other Real Estate Owned/Gross Assets.
• Adjusted Brokered Deposit Ratio	• Core Deposits/Total Assets.
	• One Year Asset Growth.
• Net Loan Charge-Offs/Gross Assets	
• Loans Past Due 30–89 Days/Gross Assets	
	• Loan Mix Index.

All of the proposed measures are derived from a statistical analysis that estimates a bank's probability of failure within three years. Each of the measures was statistically significant in predicting a bank's probability of failure over that period. The statistical analysis used bank financial data and CAMELS ratings from 1985 through 2011, failure data from 1986 through 2014, and loan charge-off data from 2001 through 2014.[26] Appendix 1 to the Supplementary Information section of this notice and the proposed Appendix E describe the statistical analysis and the derivation of these proposed measures in detail.

Two of the proposed measures—the weighted average CAMELS component rating and the tier 1 leverage ratio—are identical to the measures currently used in the financial ratios method.[27] The proposed net income before taxes/total assets measure is also identical to the current measure, except that the denominator is total assets rather than risk-weighted assets. The current measure nonperforming assets/gross assets includes other real estate owned. In the proposal, other real estate owned/gross assets is a separate measure from nonperforming loans and leases/gross assets.

The remaining three proposed measures—core deposits/total assets, one-year asset growth, and the loan mix index—are new.[28]

Under the proposal, the core deposits/total assets and the one-year asset growth measures would replace the adjusted brokered deposit ratio currently used in the financial ratios method. The adjusted brokered deposit ratio increases a Risk Category I small bank's assessment rate only if the bank has both large amounts of brokered deposits and high asset growth.[29] Few banks have both, so the ratio affects few banks.[30] One of the proposed replacement measures—core deposits/total assets—will tend to lower assessment rates for most small banks. The other proposed replacement measure—one-year asset growth—will tend to raise assessment rates for small banks that grow significantly over a year (other than through merger or by acquiring failed banks).

The loan mix index is a measure of the extent to which a bank's total assets include higher-risk categories of loans. Each category of loan in a bank's loan portfolio is divided by the bank's total assets to determine the percentage of the bank's assets represented by that category of loan. Each percentage is then multiplied by that category of loan's historical weighted average industry-wide charge-off rate. The products are then summed to determine the loan mix index value for that bank.

The loan categories in the loan mix index were selected based on the availability of category-specific charge-off rates over a sufficiently lengthy period (2001 through 2014) to be representative. The loan categories exclude credit card loans.[31] For each loan category, the weighted average charge-off rate weights each industry-wide charge-off rate for each year by the number of bank failures in that year. Thus, charge-off rates from 2009 through 2014, during the recent banking crisis, have a much greater influence on the weighted average charge-off rate than charge-off rates from the years before the crisis, when few failures occurred. The weighted averages assure that types of loans that have high

[26] For certain lagged variables, such as one-year asset growth rates, the statistical analysis also used bank financial data from 1984.

[27] Current rules provide that, if a Risk Category I small bank's CAMELS component ratings change during a quarter in a way that changes the bank's initial base assessment rate, the initial base assessment rate for the period before the change shall be determined under the financial ratios method using the CAMELS component ratings in effect before the change. Beginning on the date of the CAMELS component ratings change, the initial base assessment rate for the remainder of the quarter is determined using the CAMELS component ratings in effect after the change. 12 CFR 327.9(a)(4)(iv)(B). Under the proposal, this rule would remain essentially unchanged, but would apply to all established small banks rather than just banks within Risk Category I.

[28] Two measures in the current financial ratios method—net loan charge-offs/gross assets and loans past due 30–89 days/gross assets—are not used in the statistical analysis and are not among the proposed measures.

[29] The adjusted brokered deposit ratio can affect assessment rates only if a bank's brokered deposits (excluding reciprocal deposits) exceed 10 percent of its non-reciprocal brokered deposits and its assets have grown more than 40 percent in the previous 4 years. 12 CFR 327 Appendix A to Subpart A.

[30] As of December 31, 2014, the adjusted brokered deposit ratio affected the assessment rate of 81 banks.

[31] Credit card loans were excluded from the loan mix index because they produced anomalously high assessment rates for banks with significant credit card loans. Credit card loans have very high charge-off rates, which the loan mix index can capture, but they also tend to have very high interest rates to compensate. In addition, few small banks have significant concentrations of credit card loans. Consequently, credit card loans are omitted from the index.

charge-off rates during downturns have an appropriate influence on assessment rates.

Table 8 below illustrates how the loan mix index is calculated for a hypothetical bank.

TABLE 8—LOAN MIX INDEX FOR A HYPOTHETICAL BANK [32]

	Weighted charge-off rate percent	Loan category as a percent of hypothetical bank's total assets	Product of two columns to the left
Construction & Development	4.50	1.40	6.29
Commercial & Industrial	1.60	24.24	38.75
Leases	1.50	0.64	0.96
Other Consumer	1.46	14.93	21.74
Loans to Foreign Government	1.34	0.24	0.32
Real Estate Loans Residual	1.02	0.11	0.11
Multifamily Residential	0.88	2.42	2.14
Nonfarm Nonresidential	0.73	13.71	9.99
1–4 Family Residential	0.70	2.27	1.58
Loans to Depository banks	0.58	1.15	0.66
Agricultural Real Estate	0.24	3.43	0.82
Agriculture	0.24	5.91	1.44
SUM (Loan Mix Index)	.....	70.45	84.79

The weighted charge-off rates in the table are the same for all small banks. The remaining two columns vary from bank to bank, depending on the bank's loan portfolio. For each loan type, the value in the rightmost column is calculated by multiplying the weighted charge-off rate by the bank's loans of that type as a percent of its total assets. In this illustration, the sum of the right-hand column (84.79) is the loan mix index for this bank.

As in the current methodology for Risk Category I small banks, under the proposal the weighted CAMELS components and financial ratios would be multiplied by statistically derived pricing multipliers, the products would be summed, and the sum would be added to a uniform amount that would be: (a) Derived from the statistical analysis, (b) adjusted for assessment rates set by the FDIC, and (c) applied to all established small banks. The total would equal the bank's initial assessment rate. If, however, the resulting rate were below the minimum initial assessment rate for small banks, the bank's initial assessment rate would be the minimum initial assessment rate; if the rate were above the maximum, then the bank's initial assessment rate would be the maximum initial rate for small banks. In addition, if the resulting rate for a small bank were below the minimum or above the maximum initial assessment rate applicable to banks with the bank's CAMELS composite rating, the bank's initial assessment rate would be the respective minimum or maximum assessment rate for a small bank with its CAMELS composite rating. This approach would allow rates to vary incrementally across a wide range of rates for all small banks (other than new small banks and insured branches). The conversion of the statistical model to pricing multipliers and uniform amount are discussed further below and in detail in the proposed Appendix E. Appendix E also discusses the derivation of the pricing multipliers and the uniform amount.

Adjustments to Initial Base Assessment Rates

As under current rules: (1) The DIDA would continue to apply to all banks; (2) the unsecured debt adjustment would continue to apply to all banks except new banks and insured branches; and (3) the brokered deposit adjustment would continue to apply to all small banks except those that are well capitalized and have a CAMELS composite rating of 1 or 2.[33] As under current rules, if, during a quarter, a bank's supervisory rating changes from a CAMELS composite 1 or 2 rating to a CAMELS composite 3, 4 or 5 rating or vice versa, the bank would be subject to the brokered deposit adjustment for the portion of the quarter that it did not have a CAMELS composite 1 or 2 rating.[34]

Proposed Assessment Rates

As described above and as set out in the rate schedule in Table 9 below, for established small banks, the FDIC proposes to eliminate risk categories, but maintain the range of initial assessment rates (3 basis points to 30 basis points) that the Board has previously determined will go into effect starting the quarter after the reserve ratio reaches 1.15 percent and include a maximum assessment rate that would apply to CAMELS composite 1- and 2-rated banks and the minimum assessment rates that would apply to CAMELS composite 3-rated banks and CAMELS composite 4- and 5-rated banks.[35] Unless revised by the Board, these rates would remain in effect so long as the reserve ratio is less than 2 percent.

[32] As discussed above, the loan mix index uses loan charge-off data from 2001 through 2014. As discussed in greater detail below, if financial, failure and charge-off data from later years is available at the time the FDIC adopts a final rule pursuant to this proposal, the FDIC may update the statistical model, including the loan mix index, using the methodology described in Appendix E.

The table shows industry-wide weighted charge-off percentage rates, the loan category as a percentage of total assets and the products to two decimal places. In fact, the FDIC proposes to use seven decimal places for industry-wide weighted charge-off percentage rates, and as many decimal places as permitted by the FDIC's computer systems for the loan category as a percentage of total assets and the products. The total (the loan mix index itself) would use three decimal places.

[33] As under current rules, however, no adjustments would apply to bridge banks or conservatorships. These banks would continue to be charged the minimum assessment rate applicable to small banks. As under current rules, the brokered deposit adjustment would not apply to insured branches.

[34] If the bank were less than well capitalized, it would be subject to the brokered deposit adjustment for the whole quarter.

[35] See 12 CFR 327.10(b); 76 FR at 10718.

TABLE 9—INITIAL AND TOTAL BASE ASSESSMENT RATES *

[In basis points per annum]

[Once the reserve ratio reaches 1.15 percent] [36]

	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 ***	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	0 to10 ****	0 to10	0 to10	0 to 10
Total Base Assessment Rate	1.5 to 26	3 to 40	11 to 40	1.5 to 40

* Total base assessment rates in the table do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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.

**** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

As discussed above, the FDIC adopted the range of assessment rates in this rate schedule pursuant to its long-term fund management plan as the FDIC's best estimate of the assessment rates that would have been needed from 1950 to 2010 to maintain a positive fund balance during the past two banking crises. This assessment rate schedule remains the FDIC's best estimate of the long-term rates needed. Consequently, and as discussed in greater detail further below and in detail in Appendix E, the FDIC proposes to convert its statistical model to assessment rates within this 3 basis point to 30 basis point assessment range in a revenue neutral way.

The FDIC proposes to maintain the range of initial assessment rates, set out in the rate schedule in Table 10 below, that the Board has previously determined will go into effect starting the quarter after the reserve ratio reaches or exceeds 2 percent and is less than 2.5 percent. Unless revised by the Board, these rates would remain in effect so long as the reserve ratio is in this range. Table 10 also includes the maximum assessment rates that will apply to CAMELS composite 1- and 2-rated banks and the minimum assessment rates that will apply to CAMELS composite 3-rated banks and CAMELS composite 4- and 5-rated banks.

TABLE 10—INITIAL AND TOTAL BASE ASSESSMENT RATES *

[In basis points per annum]

[If the reserve ratio for the prior assessment period is equal to or greater than 2 percent and 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 ***	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	0 to 10 ****	0 to 10	0 to 10	0 to 10
Total Base Assessment Rate	1 to 24	2.5 to 38	9 to 38	1 to 38

* Total base assessment rates in the table do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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.

**** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

The FDIC proposes to maintain the range of initial assessment rates, set out in the rate schedule in Table 11 below, that the Board has previously determined will go into effect, again without further action by the Board, when the fund reserve ratio at the end of the prior assessment period meets or exceeds 2.5 percent. Unless changed by the Board, these rates would remain in effect so long as the reserve ratio is at or above this level. Table 11 also includes the maximum assessment rates that will apply to CAMELS composite 1- and 2-rated banks and the minimum assessment rates that will apply to CAMELS composite 3-rated banks and CAMELS composite 4- and 5-rated banks.

[36] The reserve ratio for the immediately prior assessment period must also be less than 2 percent.

TABLE 11—INITIAL AND TOTAL BASE ASSESSMENT RATES *

[In basis points per annum]

[If the reserve ratio for the prior assessment period is equal to or greater than 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 ***	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment	0 to 10 ****	0 to 10	0 to 10	0 to 10
Total Base Assessment Rate	0.5 to 23	2 to 35	8 to 35	0.5 to 35

* Total base assessment rates in the table do not include the DIDA.

** See § 327.8(f) and (g) for the definition of large and highly complex institutions.

*** The unsecured debt adjustment cannot exceed the lesser of 5 basis points or 50 percent of an insured depository 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.

**** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

With respect to each of the three assessment rate schedules (Tables 9, 10 and 11), the FDIC proposes that the Board would retain its authority to uniformly adjust assessment rates up or down from the total base assessment rate schedule without further rulemaking, as long as adjustment does not exceed 2 basis points. Also, with respect to each of the three schedules, the FDIC proposes that, if a bank's CAMELS composite or component ratings change during a quarter in a way that changes the institution's initial base assessment rate, then its assessment rate would be determined separately for each portion of the quarter in which it had different CAMELS composite or component ratings.

Conversion of Statistical Model to Pricing Multipliers and Uniform Amount

As discussed above, the FDIC proposes to convert its statistical model to assessment rates set out in Table 9 in a revenue neutral manner.[37] Specifically, and as described in detail in Appendix E, the FDIC proposes to convert the statistical model to assessment rates to ensure that aggregate assessments for an assessment period shortly before adoption of a final rule would have been approximately the same under the final rule as they would have been under the assessment rate schedule set forth in Table 4 (the rates that, under current rules, will automatically go into effect when the reserve ratio reaches 1.15 percent).

To illustrate the conversion, Table 12 below sets out the pricing multipliers and uniform amounts that would have resulted if the FDIC had converted the statistical model to the assessment rate schedule set out in Table 9 (with a range of assessment rates from 3 basis points to 30 basis points) so that, for the fourth quarter of 2014, aggregate assessments for all established small banks under the proposal would have equaled, as closely as reasonably possible, aggregate assessments for all established small banks had the assessment rate schedule in Table 4 been in effect for that assessment period.[38] Partly because the actual conversion will be based upon a later quarter (and partly for the reasons discussed directly below), the pricing multipliers and the uniform amount shown in Table 12 are likely to differ somewhat from those in the final rule.

TABLE 12—PRICING MULTIPLIERS AND THE UNIFORM AMOUNT UNDER A HYPOTHETICAL CONVERSION OF THE STATISTICAL MODEL TO ASSESSMENT RATES BASED ON THE FOURTH QUARTER OF 2014

Model measures	Pricing multiplier
Weighted Average CAMELS Component Rating	1.731
Tier 1 Leverage Ratio	−1.337
Net Income Before Taxes/ Total Assets	−0.652
Nonperforming Loans and Leases/Gross Assets	0.924
Other Real Estate Owned/ Gross Assets	0.620
Core Deposits/Total Assets	−0.139
One Year Asset Growth	0.043
Loan Mix Index	0.066
Uniform Amount	19.376

Updating the Statistical Model, Pricing Multipliers and Uniform Amount

The statistical analysis used bank financial data and CAMELS ratings from 1985 through 2011, failure data from 1986 through 2014 and loan charge-off data from 2001 through 2014. The FDIC proposes to retain the flexibility to update the statistical model from time to time using financial, failure and charge-off data from later years and publish a new loan mix index, uniform amount and pricing multipliers based on the updated model without further notice-and-comment rulemaking. Any update to the model would be done pursuant to the methodology described in Appendix E. No new financial ratios or other measures would be introduced into the model without notice-and-comment rulemaking. Because the analysis would continue to use earlier years' data as well, changes in estimations of failure probability should usually be relatively small. Similarly, if financial, failure and charge-off data from later years is available at the time the FDIC adopts a final rule pursuant to this proposal, the FDIC may update the statistical model,

[37] The FDIC proposes to convert a linear version of its model, which was estimated in a non-linear manner. (See Appendix E.) The conversion using a linear version of the model preserves the same rank ordering as the non-linear model, but using the linear version of the model allows initial assessment rates to be expressed as a linear function of the model variables. The FDIC also used a linear version of its original non-linear downgrade probability statistical model when it instituted variable rates within Risk Category 1 (effective January 1, 2007).

[38] Initial assessment rates under the rate schedule actually in effect for the fourth quarter of 2014 ranged from 5 basis points to 35 basis points, since the DIF reserve ratio was under 1.15 percent.

including the loan mix index, using the methodology described in Appendix E.

Insured Branches of Foreign Banks and New Small Banks

The FDIC proposes to make no changes to the rules governing the assessment rate schedules applicable to insured branches or to the assessment rate schedule applicable to new small banks. The FDIC also proposes to make no changes to the way in which assessment rates for insured branches and new small banks are determined.

Insured Branches

The current risk-based deposit insurance assessment system for small banks assigns insured branches an assessment risk classification that is based on the FDIC's consideration of supervisory evaluations provided by the institution's primary federal regulator.[39] Within Risk Category I, each insured branch's assessment rate is based on these supervisory evaluations.[40] Insured branches not in Risk Category I are charged the initial base assessment rate for the risk category to which they are assigned.[41] Once the DIF reserve ratio reaches 1.15 percent, 2 percent, and 2.5 percent, assessment rate schedules previously adopted by the Board will go into effect and remain in place for insured branches.

The FDIC does not propose changing the way assessment rates applicable to insured branches are determined.[42] Insured branches do not report the information that the FDIC would need to apply the financial ratios method to them.[43] Moreover, because insured branches operate as extensions of a foreign bank's global banking operations, they pose unique risks, which the financial ratios method may not be able to capture. An insured branch operates without capital of its own (capital is held by the foreign bank), its business strategies are typically directed by the foreign bank, it relies extensively on the foreign bank for liquidity and funding, and it often has considerable country and transfer risk exposures not typically found in other insured institutions of similar size. Insured branches also present potentially challenging concerns in the event of failure.

New Small Banks

New small banks are currently assigned to risk categories in the same manner as all other small banks. All new small banks in Risk Category I, however, are charged the maximum rate applicable to Risk Category I. New small banks not in Risk Category I are charged the initial base assessment rate for the risk category to which they are assigned.[44] Once the DIF reserve ratio reaches 1.15 percent, new small banks will be charged initial rates under the previously adopted rate schedule that automatically goes into effect then. This rate schedule will remain in place even if the reserve ratio equals or exceeds 2 percent or 2.5 percent.[45] After applying all possible adjustments, minimum and maximum total assessment rates for new small banks in each risk category are set forth in Table 13 below.

TABLE 13—TOTAL BASE ASSESSMENT RATES, NEW SMALL BANKS *

[In basis points per annum]

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial Assessment Rate	7	12	19	30
Brokered Deposit Adjustment (added)	N/A	0 to 10	0 to 10	0 to 10
Total Assessment Rate	7	12 to 22	19 to 29	30 to 40

* The unsecured debt adjustment does not apply to new banks. Total assessment rates do not include the DIDA.

The FDIC does not propose changing the way assessment rates applicable to new small banks are determined.[46] The financial data on which the financial ratios method is based tends to be harder to interpret and less meaningful for new small banks. A new bank undergoes rapid changes in the scale and scope of operations, often causing financial ratios to be fairly volatile. In addition, a new bank's loan portfolio is often unseasoned, and therefore it is difficult to assess credit risk based solely on current financial ratios.[47]

[39] These supervisory evaluations result in the assignment of supervisory ratings referred to as ROCA ratings. ROCA stands for Risk Management, Operational Controls, Compliance, and Asset Quality. Like CAMELS components, ROCA component ratings range from a ''1'' (best rating) to a ''5'' rating (worst rating). A Risk Category I insured branch generally has a ROCA composite rating of 1 or 2.

[40] Specifically, the assessment rate depends on the insured branch's weighted average ROCA component ratings. The weights applied to individual ROCA component ratings are 35 percent, 25 percent, 25 percent, and 15 percent, respectively.

[41] No insured branch in any risk category is subject to the unsecured debt adjustment or brokered deposit adjustment. Insured branches are subject to the DIDA.

[42] As of March 31, 2015, there were only 9 insured branches that file regulatory financial submissions (FFIEC Form 002). (One of these branches, however, files for itself and another branch of the same foreign bank that does not file separately.)

[43] For example, insured branches of foreign banks do not report earnings and report only limited balance sheet information in FFIEC Form 002.

[44] New small banks are subject to the DIDA. New small banks in Risk Categories II, III, and IV are subject to the brokered deposit adjustment. New small banks are not subject to the unsecured debt adjustment.

[45] As with other assessment rates, the Board has the ability to adopt actual rates that are higher or lower than these total assessment rates without the necessity of further notice and comment rulemaking, provided that: (1) The Board cannot increase or decrease rates from one quarter to the next by more than two basis points; and (2) cumulative increases and decreases cannot be more than two basis points higher or lower than the total base rates.

[46] Current rules provide that: (1) under specified conditions, certain subsidiary small banks will be considered established rather than new, 12 CFR 327.8(k)(4); and (2) the time that a bank has spent as a federally insured credit union is included in determining whether a bank is established, 12 CFR 327.8(k)(5). If a Risk Category I small bank is considered established under these rules, but has no CAMELS component ratings, its initial assessment rate is 2 basis points above the minimum initial assessment rate applicable to Risk Category I (which is equivalent to 2 basis points above the minimum initial assessment rate for established small banks) until it receives CAMELS component ratings. Thereafter, the assessment rate is determined by annualizing, where appropriate, financial ratios obtained from all quarterly Call Reports that have been filed, until the bank files four quarterly Call Reports. For small banks that are considered established under these rules, but do not have CAMELS component ratings, the FDIC proposes the following:

1. If the bank has no CAMELS composite rating, its initial assessment rate would be 2 basis points above the minimum initial assessment rate for established small banks until it receives a CAMELS composite rating; and

2. If the bank has a CAMELS composite rating but no CAMELS component ratings, its initial assessment rate would be determined using the financial ratios method by substituting its CAMELS composite rating for its weighted average CAMELS component rating and, if the bank has not yet filed four quarterly Call Reports, by annualizing, where appropriate, financial ratios obtained from all quarterly Call Reports that have been filed.

[47] Empirical studies show that new banks exhibit a ''life cycle'' pattern, and it takes close to a decade after its establishment for a new bank to mature.

Continued

Further, on average, new banks have a higher failure rate than established institutions.

V. Expected Effects of the Proposed Rule

Effect on Assessment Rates

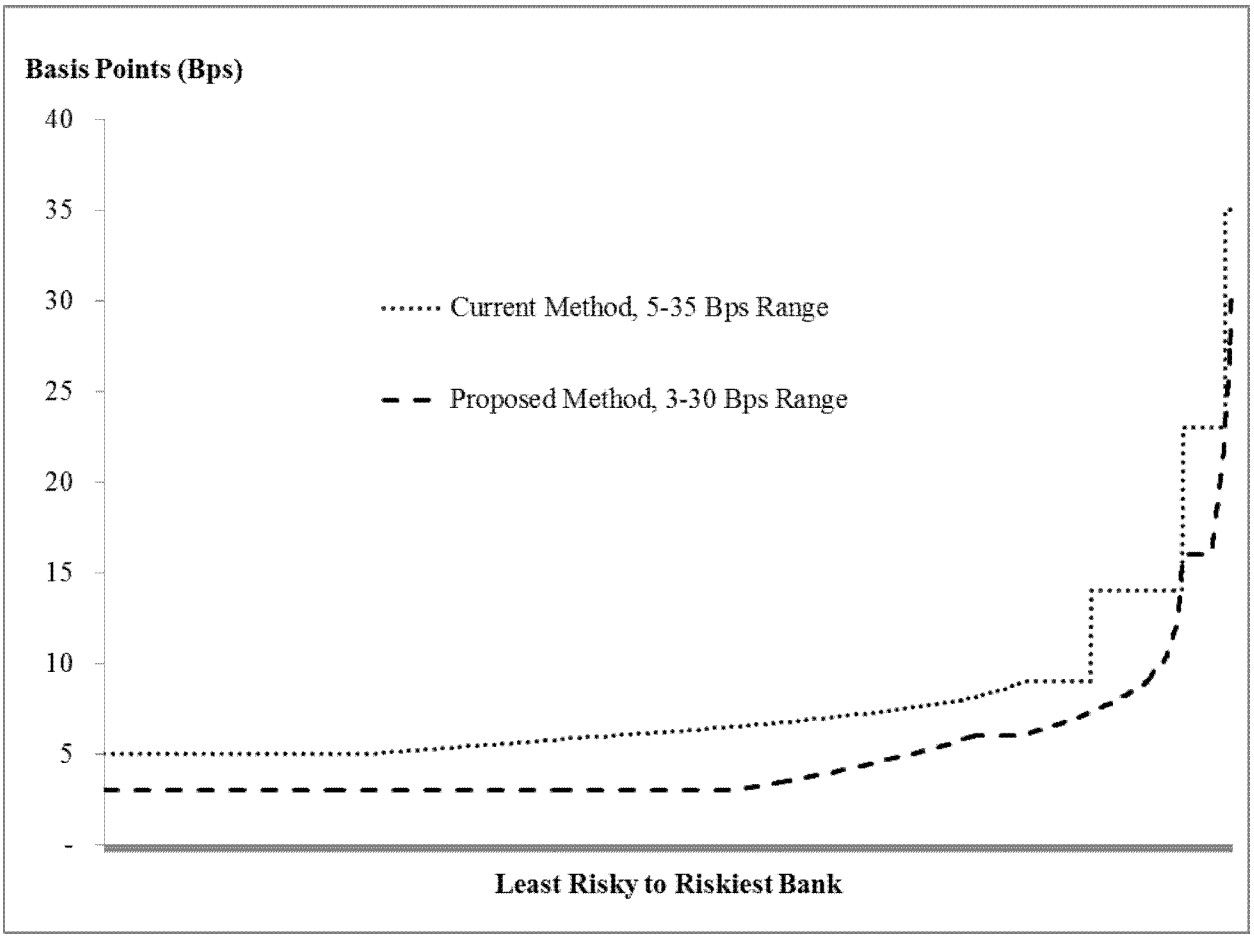
To illustrate the effects of the proposal on small bank assessment rates, the FDIC compared actual assessment rates of established small banks as of the end of 2014, using a range of initial assessment rates of 5 basis points to 35 basis points with hypothetical assessment rates under Table 9 of the proposal (which has an overall range of assessment rates of 3 basis points to 30 basis points).[48] The proportion (and number) of established small banks paying the minimum initial assessment rate would have increased significantly, from 23.3 percent in actuality (1,493 small banks) to 56.0 percent under the proposal (3,584 small banks). The proportion (and number) of established small banks paying the maximum assessment rate would have decreased from 0.7 percent of established small banks in actuality (43 small banks) to 0.1 percent of established small banks under the proposal (7 small banks). Most established small banks (5,922 or 92.5 percent) would have had rate decreases. On average, Risk Category I established small banks would have had a rate decrease of 2.4 basis points, and Risk Category II, III, and IV established small banks would have had a rate decrease of 6.5 basis points. Of the Risk Category II, III, and IV established small banks, 96.3 percent would have had rate decreases; the average decrease would have been 6.8 basis points. 481 established small banks (7.5 percent of established small banks) would have had rate increases. Of the Risk Category I established small banks, 8.0 percent would have had rate increases; the average increase would have been 1.6 basis points.

Chart 1 below graphically compares the distribution of established small bank initial assessment rates under this illustration. The horizontal axis in the chart represents established small banks ranked by risk, from the least risky on the left to the most risky on the right. Because actual risk rankings under the current small bank deposit insurance assessment system differ from risk rankings under the proposal, a particular point on the horizontal axis is not likely to represent the same bank for the current system and the proposal. Thus, the chart does not show how an individual bank's assessment would change under the proposal; it simply compares the distribution of assessment rates under the current system to the distribution under the proposal.

Despite low profitability and rapid growth, banks that are three years or newer have, on average, a probability of failure lower than established banks, perhaps owing to large capital cushions and close supervisory attention. However, after three years, new banks' failure probability, on average, surpasses that of established banks. New banks typically grow more rapidly than established banks and tend to engage in more high-risk lending activities funded by large deposits. Studies based on data from the 1980s showed that asset quality deteriorated rapidly for many new banks as a result, and failure probability (conditional upon survival in prior years) reached a peak by the ninth year. Many financial ratios of new banks generally begin to resemble those of established banks by about the seventh or eighth year of their operation. See Chiwon Yom, ''Recently Chartered Banks'' Vulnerability to Real Estate Crisis,'' FDIC Banking Review 17 (2005): 115 and Robert DeYoung, ''For How Long Are Newly Chartered Banks Financially Fragile?'' Federal Reserve Bank of Chicago Working Paper Series 2000–09.

[48] The proposal assumes a range of initial assessment rates from 3 basis points to 30 basis points. For purposes of determining assessment rates for the illustration, the FDIC converted the statistical model to a range of assessment rates from 3 basis points to 30 basis points so that, for the fourth quarter of 2014, aggregate assessments for all established small banks under the proposal would have equaled, as closely as reasonably possible, aggregate assessments for all established small banks under the rate schedule in Table 4 (the rates that, under current rules, will automatically go into effect when the reserve ratio reaches 1.15 percent). Initial assessment rates under the rate schedule actually in effect for the fourth quarter of 2014 ranged from 5 basis points to 35 basis points, since the DIF reserve ratio was under 1.15 percent.

Chart 1 – Illustrative, Hypothetical Comparison of Distribution of Assessment Rates For Established Small Banks (Comparing Actual Fourth Quarter of 2014 Initial Assessment Rates for the Current System to the Proposal)



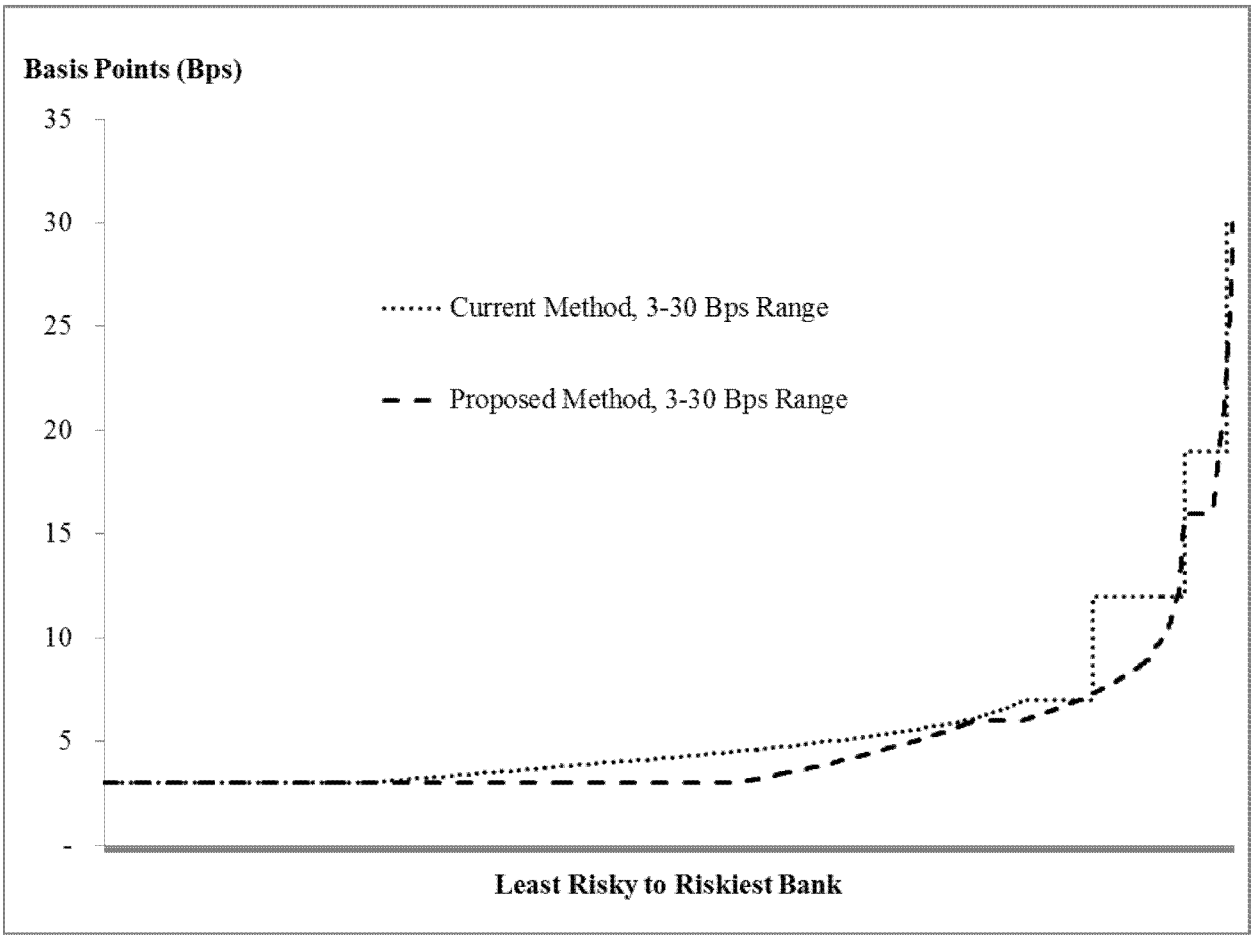
To further illustrate the effects of the proposal on small bank assessment rates, the FDIC compared hypothetical assessment rates under the proposal with the assessment rates established small banks would have been charged as of the end of 2014 if the assessment rate schedule that, under current rules, will go into effect when the reserve ratio reaches 1.15 percent had been in effect. The proportion of established small banks paying the minimum initial assessment rate would also have increased from 23.3 percent in actuality to 56.0 percent under the proposal and the proportion of established small banks paying the maximum assessment rate would also have decreased from 0.7 percent of established small banks in actuality to 0.1 percent of established small banks under the proposal. Most established small banks (3,814 or 59.5 percent) would have had rate decreases. On average, Risk Category I established small banks would have had a rate decrease of 0.4 basis points, and Risk Category II, III, and IV established small banks would have had a rate decrease of 3.7 basis points. Of the Risk Category II, III, and IV established small banks, 90.9 percent would have had rate decreases; the average decrease would have been 4.4 basis points. 1,268 established small banks (19.8 percent of established small banks) would have had rate increases. Of the Risk Category I established small banks, 21.4 percent would have had rate increases; the average increase would have been 1.9 basis points.

Chart 2 below graphically compares the distribution of established small bank initial assessment rates under this illustration.

Chart 2 – Illustrative, Hypothetical Comparison of Distribution of Assessment Rates

For Established Small Banks Based on the Fourth Quarter of 2014

(Comparing Table 4 Initial Assessment Rates for the Current System to the Proposal)



Effect on Capital and Earnings

Appendix 2 to the Supplementary Information section of this notice discusses the effect of the proposal on the capital and earnings of small established banks in detail. Annualizing fourth quarter 2014 balance sheet data, Appendix 2 analyzes the effects of the proposal on capital and income in two ways: (1) The effect of the proposal compared to the current small bank deposit insurance assessment system under the rate schedule in Table 3 (with an initial assessment rate range of 5 basis points to 35 basis points) (the first comparison); and (2) the effect of the proposal compared to the current small bank deposit insurance assessment system under the rate schedule in Table 4 (with an initial assessment rate range of 3 basis points to 30 basis points; this rate schedule is to go into effect the quarter after the DIF reserve ratio reaches 1.15 percent) (the second comparison).

Under either comparison, the proposal would cause no small banks to fall below a 4 percent or 2 percent leverage ratio that would otherwise be above these thresholds. Similarly, the proposal would cause no small banks to rise above a 2 percent leverage ratio that would otherwise be below this threshold. Two established small banks facing a decrease in assessments under the first comparison and one established small bank facing a decrease in assessments under the second comparison would, as a result of the proposal, have their leverage ratios rise above 4 percent, when they would have been below 4 percent otherwise.

In the first comparison, only approximately 7 percent of profitable established small banks and approximately 6 percent of unprofitable small banks would face a rate increase; all but a very few (26) banks would have resulting declines in income (or increases in losses, where the bank is unprofitable) of 5 percent or less. As discussed above, assessment rates for approximately 92 percent of established small banks would decline, resulting in increases in income (or decreases in losses), some of which would be substantial.

In the second comparison, approximately 20 percent of profitable established small banks and approximately 14 percent of unprofitable established small banks would face a rate increase; all but 111 established small banks would have resulting declines in income (or increases in losses, where the bank is unprofitable) of 5 percent or less. As discussed above, assessment rates for approximately 60 percent of established

small banks would decline, resulting in increases in income (or decreases in losses), some of which would be substantial.

In sum, because the proposed revisions are intended to generate the same total revenue from small banks as would have been generated absent the proposal, the revisions should, overall, have no effect on the capital and earnings of the banking industry, although the revisions will affect the earnings and capital of individual institutions.

VI. Backtesting

To evaluate the proposed revisions to the risk-based deposit insurance assessment system for small banks, the FDIC tested how well the revised system would have differentiated between banks that failed and those that did not during the recent crisis compared to the current small bank deposit insurance assessment system.

Table 14 compares accuracy ratios for the proposed system and the current small bank deposit insurance assessment system. An accuracy ratio compares how well each approach would have discriminated between banks that failed within the projection period and those that did not. The projection period in each case is the three years following the date of the projection (the first column), which is the last day of the year given. Thus, for example, the accuracy ratios for 2006 reflect how well each approach would have discriminated in its projection between banks that failed and those that did not from 2007 through 2009.[49] A ''perfect'' projection would receive an accuracy ratio of 1; a random projection would receive an accuracy ratio of 0.[50]

TABLE 14—ACCURACY RATIO COMPARISON BETWEEN THE PROPOSAL AND THE CURRENT SMALL BANK DEPOSIT INSURANCE ASSESSMENT SYSTEM

Year of projection	Accuracy ratio for the proposal * (A)	Accuracy ratio for the current small bank assessment system (B)	Accuracy ratio for the proposal—accuracy ratio for the current system (A–B)
2006	0.7029	0.3491	0.3539
2007	0.7779	0.5616	0.2163
2008	0.8930	0.7825	0.1105
2009	0.9398	0.9015	0.0383
2010	0.9657	0.9394	0.0262
2011	0.9485	0.9323	0.0161

* The accuracy ratio for the proposal is based on the conversion of the statistical model as estimated through 2014.

The table reveals that, while the current system did relatively well at capturing risk and predicting failures in more recent years, the proposed system would have not only done significantly better immediately before the recent crisis and at the beginning of the crisis, but also better overall.[51] In the early part of the crisis, when CAMELS ratings had not fully reflected the worsening condition of many banks, the proposed system would have recognized risk far better than the current system, primarily because the rates under the proposed system are not constrained by risk categories. As the crisis progressed and CAMELS ratings more fully reflected crisis conditions, the superiority of the proposed system decreased, but it still performed better than the current system.

Appendix 1 to the Supplementary Information section of this notice contains a more detailed description of the FDIC's backtests of the proposal.

VII. Alternatives Considered

Alternative Minimum and Maximum Assessment Rates Based on CAMELS Composite Ratings

The FDIC considered imposing no minimum or maximum initial assessment rates based on a bank's CAMELS composite rating, which would have allowed initial assessment rates to vary between the minimum and maximum initial assessment rates of the entire rate schedule without regard to a bank's CAMELS composite rating (the unbounded variation). Thus, for example, under the 3 basis point to 30 basis point initial assessment range, a CAMELS composite 5 rated bank could, in principle, have paid a 3 basis point initial rate and a CAMELS composite 1 rated bank could, in principle, have paid a 30 basis point initial rate. As Table 15 shows, the accuracy ratios for this unbounded variation would have been similar to the accuracy ratios for the proposal.

[49] The current small bank deposit insurance assessment system did not exist at the end of 2006 and existed in somewhat different forms in years before 2011. The comparison assumes that the small bank deposit insurance assessment system in its current form existed in each year of the comparison.

[50] A ''perfect'' projection is defined as one where the projection rates every bank that fails over the projection period as more risky than every bank that does not fail. A random projection is one where the projection does no better than chance; that is, any given percentage of banks with projected higher risk will include the same percentage of banks that fail over the projection period. Thus, for example, in a random projection, the 10 percent of banks that receive the highest risk projections will include 10 percent of the banks that fail over the projection period; the 20 percent of banks that receive the highest risk projections will include 20 percent of the banks that fail over the projection period, and so on.

[51] As implied in the footnote to Table 14, the accuracy ratios in the table for the proposed system are based on in-sample backtesting. In-sample backtesting compares model forecasts to actual outcomes where those outcomes are included in the data used in model development. Out-of-sample backtesting is the comparison of model predictions against outcomes where those outcomes are not used as part of the model development used to generate predictions. Out-of-sample backtesting, discussed in Appendix 1 of the Supplementary Information section of this notice, also shows that, while the current assessment system for small banks did relatively well at predicting failures in more recent years, the proposed system would have done significantly better immediately before the recent crisis and at the beginning of the crisis, but also better overall.

TABLE 15—ACCURACY RATIO COMPARISON BETWEEN THE PROPOSAL AND THE UNBOUNDED VARIATION

Year of projection	Accuracy ratio for the unbounded variation (A)	Accuracy ratio for the proposal * (B)	Accuracy ratio for the unbounded variation—accuracy ratio for the proposal (A–B)
2006	0.6959	0.7029	−0.0070
2007	0.7779	0.7779	0.0001
2008	0.9121	0.8930	0.0191
2009	0.9407	0.9398	0.0010
2010	0.9670	0.9657	0.0013
2011	0.9514	0.9485	0.0029

* The accuracy ratios for the variation and for the proposal are based on the conversion of the statistical model as estimated through 2014.

The FDIC decided not to propose the unbounded variation, however. Other than taking into account weighted average CAMELS component ratings, the statistical model uses historical financial data to estimate average relationships between financial measures and the risk of failure. The statistical model does not take into account idiosyncratic or unquantifiable risk or risk mitigators (*e.g.,* entering or exiting a risky line of lending; having inexperienced or experienced management, reducing or tightening underwriting requirements), again except through weighted average CAMELS component ratings. The model does take into account weighted average CAMELS component ratings, but it assigns the same weight to them for each bank. Thus, for banks that have significant idiosyncratic or unquantifiable risk or risk mitigators, the model may not assign an assessment rate that reflects their actual risk. The proposal, however, ensures that the assessment system takes idiosyncratic and unquantifiable risks and risk mitigators into account to the extent that they are reflected in CAMELS composite ratings, and prevents the assessment system from assigning a rate that reflects either too little risk (for a bank with a CAMELS composite 3, 4 or 5 rating) or too much risk (for a bank with a CAMELS composite 1 or 2 rating). As a result, under the proposal, initial assessment rates for small banks that are well rated (those with CAMELS composite ratings of 1 or 2) would not overlap with initial assessment rates for troubled small banks (those with CAMELS composite ratings of 4 or 5), except at the maximum initial rate for CAMELS composite 1- and 2-rated banks and the minimum initial rate for CAMELS composite 4- and 5-rated banks.

In seeking the proper balance between maintaining the accuracy of the assessment system overall and reducing the risk that a particular bank's assessment rate might be inappropriate, the FDIC considered many other variations of minimum and maximum initial assessment rates based on a bank's CAMELS composite rating. Some variations with lower (or no) minimums for CAMELS 3- and/or CAMELS 4- and 5-rated banks and/or higher (or no) maximums for CAMELS 1- and/or CAMELS 2-rated banks had slightly higher accuracy ratios, but would have increased the risk of inappropriate assessment rates for some banks. Some variations with higher minimums for CAMELS 3- and/or CAMELS 4- and 5-rated banks and/or lower maximums for CAMELS 1- and/or CAMELS 2-rated banks had somewhat lower (or significantly lower) accuracy ratios. The maximums and minimums in the proposal represent the FDIC's best judgment on the proper balance. The FDIC is requesting comment on whether the proposal achieves the proper balance and whether the final rule should, instead, use alternative (or no) maximums and minimums based on CAMELS composite ratings. Because the FDIC intends that the effect of the proposal be revenue neutral, any reduction in the maximum initial assessment rate applicable to CAMELS composite 1- or CAMELS 2-rated banks that lowers some banks' assessment rates will increase the assessment rates of other banks.[52]

The FDIC is particularly interested in comment on two alternatives to the proposal, both of which would distinguish between CAMELS composite 1- and 2-rated small banks. The first alternative would maintain the assessment rate schedule that would go into effect starting the quarter after the reserve ratio reaches 1.15 percent (with a range of initial assessment rates of 3 basis points to 30 basis points) and include the same maximum and minimum assessment rates based upon banks' CAMELS composite ratings (see Table 9), except that it would lower the maximum initial assessment rate for a CAMELS composite 1-rated bank from 16 basis points to 12 basis points.[53] As reflected in Table 16 below, compared to the proposal, this alternative would have virtually no effect on accuracy (that is, on how well the assessment system would have differentiated between banks that failed and those that did not during the recent crisis); the alternative, like the proposal, is also significantly more accurate than the current small bank deposit insurance assessment system. On the other hand, the FDIC has never before distinguished between CAMELS composite 1-rated banks and CAMELS composite 2-rated banks for deposit insurance assessment purposes.

[52] To be revenue neutral, using different maximums or minimums will lead to different uniform amounts and pricing multipliers from the proposal when the new statistical model is converted to assessment rates.

[53] Similarly, the first alternative would maintain the proposed assessment rate schedule that would go into effect the quarter after the reserve ratio reaches or exceeds 2 percent, but is less than 2.5 percent, and include the same maximum and minimum assessment rates determined by CAMELS composite ratings (see Table 10), except that it would lower the maximum initial assessment rate for a CAMELS composite 1 rated bank from 14 basis points to 10 basis points. Also, the first alternative would maintain the proposed assessment rate schedule that would go into effect the quarter after the reserve ratio reaches or exceeds 2.5 percent, and include the same maximum and minimum assessment rates determined by CAMELS composite ratings (see Table 11), except that it would lower the maximum initial assessment rate for a CAMELS composite 1 rated bank from 13 basis points to 9 basis points.

TABLE 16—ACCURACY RATIO COMPARISON BETWEEN THE FIRST ALTERNATIVE, THE PROPOSAL AND THE CURRENT SMALL BANK DEPOSIT INSURANCE ASSESSMENT SYSTEM

Year of projection	Accuracy ratio for the alternative * (A)	Accuracy ratio for the proposal * (B)	Accuracy ratio for the alternative—accuracy ratio for the proposal (A–B)	Accuracy ratio for the current small bank assessment system (C)	Accuracy ratio for the alternative—accuracy ratio for the current system (A–C)
2006	0.7045	0.7029	0.0016	0.3491	0.3555
2007	0.7770	0.7779	−0.0009	0.5616	0.2154
2008	0.8895	0.8930	−0.0035	0.7825	0.1070
2009	0.9398	0.9398	0.0000	0.9015	0.0383
2010	0.9657	0.9657	0.0000	0.9394	0.0262
2011	0.9485	0.9485	0.0000	0.9323	0.0161

* The accuracy ratios for the alternative and for the proposal are based on the conversion of the statistical model as estimated through 2014.

The second alternative is the same as the first, except that, for the rate schedule that would go into effect the quarter after the reserve ratio reaches 1.15 percent, the minimum initial assessment rate applicable to CAMELS composite 4- and 5-rated banks would be lowered from 16 basis points to 12 basis points.[54] [55] As reflected in Table 17 below, compared to the proposal, this alternative would also have little effect on accuracy and, like the proposal, is significantly more accurate than the current small bank deposit insurance assessment system.

TABLE 17—ACCURACY RATIO COMPARISON BETWEEN THE SECOND ALTERNATIVE, THE PROPOSAL AND THE CURRENT SMALL BANK DEPOSIT INSURANCE ASSESSMENT SYSTEM

Year of projection	Accuracy ratio for the alternative *	Accuracy ratio for the proposal *	Accuracy ratio for the alternative-accuracy ratio for the proposal (A–B)	Accuracy ratio for the current small bank assessment system	Accuracy ratio for the alternative-accuracy ratio for the current system (A–C)
2006	0.7061	0.7029	0.0032	0.3491	0.3570
2007	0.7779	0.7779	0.0000	0.5616	0.2163
2008	0.8903	0.8930	−0.0027	0.7825	0.1078
2009	0.9407	0.9398	0.0009	0.9015	0.0392
2010	0.9671	0.9657	0.0014	0.9394	0.0276
2011	0.9504	0.9485	0.0019	0.9323	0.0180

* The accuracy ratios for the alternative and for the proposal are based on the conversion of the statistical model as estimated through 2014.

In addition to the numerous variations on minimum and maximum initial assessment rates based on CAMELS composite ratings, the FDIC also considered other alternatives when developing this proposal.

Loss Given Default

Though expected losses to the DIF are a function of both the probability of a failure (or probability of default (PD)) and the loss given failure (or loss given default (LGD)), the new statistical model estimates only the PD. As discussed in Appendix 1 to the Supplementary Information section of this notice, the FDIC did not model LGD. Actual losses for many failed banks during the recent crisis are still estimated, primarily because of the use of loss-sharing agreements that have not yet terminated. Until the losses are actually realized, estimating an LGD model using current data would be circular, as other FDIC models are used to estimate expected losses where losses have not yet been realized. Relying solely on realized losses would exclude much of the failure data from the recent crisis, leaving mainly failure data from the banking crisis of the late 1980s and early 1990s. However, the vast majority of the bank failures in that crisis occurred in a different regulatory regime (prior to the Federal Deposit Insurance Corporation Improvement Act of 1991) and may, therefore, not reflect expected LGD in the current environment as well. For these reasons, the FDIC considered but rejected including LGD in the new statistical model. Nevertheless, after losses from failures during the recent crisis are more fully realized, it may be appropriate to consider whether LGD should be included in a small bank pricing model.

No Change

The FDIC also considered leaving the current small bank deposit insurance assessment system in place unchanged. While the backtesting discussed in Appendix 1 revealed that the new statistical model generally performed

[54] The second alternative would have the same assessment rate schedule go into effect the quarter after the reserve ratio reaches or exceeds 2 percent, but is less than 2.5 percent, as the first alternative and include the same maximum and minimum assessment rates determined by CAMELS composite ratings, except that it would lower the minimum initial assessment rate for a CAMELS composite 4 and 5 rated banks from 14 basis points to 10 basis points. Also, the second alternative would have the same assessment rate schedule go into effect the quarter after the reserve ratio reaches or exceeds 2.5 percent as the first alternative, and include the same maximum and minimum assessment rates determined by CAMELS composite ratings (see Table 11), except that it would lower the minimum initial assessment rate for a CAMELS composite 4- and 5-rated banks from 13 basis points to 9 basis points.

[55] Under either alternative, if a bank's CAMELS composite or component ratings changed during a quarter (other than a change in CAMELS composite rating from a 4 to a 5 or a 5 to a 4 with no change in component ratings), including a change in CAMELS composite rating from a 1 to a 2 or a 2 to a 1, its assessment rate would be determined separately for each portion of the quarter in which it had different CAMELS composite or component ratings.

better than the current small bank deposit insurance assessment system, the current system performed relatively well. Nevertheless, the FDIC is proposing to change the small bank deposit insurance assessment system and base it on the new statistical model because the new model is superior to the current small bank deposit insurance assessment system. Under the proposed system, fewer riskier small banks would pay lower assessments and fewer safer banks would pay higher assessments than their conditions warrant.

VIII. Request for Comments

The FDIC seeks comment on every aspect of this proposed rulemaking, including the alternatives considered. In addition, the FDIC seeks comment on the following:

- Are there other variables, besides the eight included in the statistical model and proposal, that both predict the likelihood of bank failure with statistical significance and do not have perverse incentive effects?
- Are there variables that can be shown to predict likely losses given failure with statistical significance?
- Should the upper end of the assessment rate range decline from 35 basis points to 30 basis points as proposed or should higher assessment rates continue to apply to the riskiest banks?

IX. Regulatory Analysis

A. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) requires that each federal agency either certify that a proposed rule would not, if adopted in final form, have a significant economic impact on a substantial number of small entities or prepare an initial regulatory flexibility analysis of the proposal and publish the analysis for comment.[56] Certain types of rules, such as rules of particular applicability relating to rates or corporate or financial structures, or practices relating to such rates or structures, are expressly excluded from the definition of ''rule'' for purposes of the RFA.[57] The proposed rule relates directly to the rates imposed on insured depository institutions for deposit insurance and to the deposit insurance assessment system that measures risk and determines each established small bank's assessment rate. Nonetheless, the FDIC is voluntarily undertaking an initial regulatory flexibility analysis of the proposal and seeking comment on it.

As of December 31, 2014, of the 6,509 insured commercial banks and savings institutions, there were 5,257 small insured depository institutions as that term is defined for purposes of the RFA (*i.e.,* those with $550 million or less in assets).[58]

For purposes of this analysis, whether the FDIC were to collect needed assessments under the existing rule or under the proposed rule, the total amount of assessments collected would be the same. The FDIC's total assessment needs are driven by the FDIC's aggregate projected and actual insurance losses, expenses, investment income, and insured deposit growth, among other factors, and assessment rates are set pursuant to the FDIC's long-term fund management plan. This analysis demonstrates how the new pricing system under the proposed range of assessment rates of 3 basis points to 30 basis points (P330) could affect small entities relative to the current assessment rate schedule (C535) and relative to the rate schedule that under current regulations will be in effect when the reserve ratio exceeds 1.15 percent (C330). Using data as of December 31, 2014, the FDIC calculated the total assessments that would be collected under both rate schedules and under the proposed rule.

The economic impact of the proposal on each small institution for RFA purposes (*i.e.,* institutions with assets of $550 million or less) was then calculated as the difference in annual assessments under the proposed rule compared to the existing rule as a percentage of the institution's annual revenue and annual profits, assuming the same total assessments collected by the FDIC from the banking industry.[59]

Projected Effects on Small Entities Assuming a Range of Assessment Rates Under Both the Current Established Small Bank Deposit Insurance Assessment System and the Proposed System of 3 Basis Points to 30 Basis Points (P330–C330)

Based on the December 31, 2014 data, of the total of 5,257 small institutions, one institution would have experienced an increase in assessments equal to five percent or more of its total revenue. These figures do not reflect a significant economic impact on revenues for a substantial number of small insured institutions. Table 18 below sets forth the results of the analysis in more detail.

TABLE 18—PERCENT CHANGE IN ASSESSMENTS RESULTING FROM THE PROPOSAL

[Assuming No Change in the Assessment Rate Range]

Change in assessments	Number of institutions	Percent of Institutions
More than 10 percent lower	0	0
5 to 10 percent lower	3	0
0 to 5 percent lower	3,296	63
0 to 5 percent higher	1,957	37
5 to 10 percent higher	1	0
More than 10 percent higher	0	0
Total	5,257	100

The FDIC performed a similar analysis to determine the impact on profits for small institutions. Based on December 31, 2014 data, of those small institutions with reported profits, 21 institutions would have an increase in assessments equal to 10 percent or more of their profits. Again, these figures do not reflect a significant economic impact on profits for a substantial number of small insured institutions.

[56] See 5 U.S.C. 603, 604 and 605.

[57] 5 U.S.C. 601.

[58] Throughout this RFA analysis (unlike the rest of this NPR), a ''small institution'' refers to an institution with assets of $550 million or less; a ''small bank,'' however, continues to refer to a small insured depository institution for purposes of deposit insurance assessments (generally, a bank with less than $10 billion in assets).

[59] For purposes of the analysis, an institution's total revenue is defined as the sum of its interest income and noninterest income and an institution's profit is defined as income before taxes and extraordinary items.

Table 19 sets forth the results of the analysis in more detail.

TABLE 19*—ASSESSMENT CHANGES RELATIVE TO PROFITS FOR PROFITABLE SMALL INSTITUTIONS UNDER THE PROPOSAL

[Assuming No Change in the Assessment Rate Range]

Change in assessments relative to profits	Number of institutions	Percent of institutions
Decrease in assessments equal to more than 40 percent of profits	65	1
Decrease in assessments equal to 20 to 40 percent of profits	64	1
Decrease in assessments equal to 10 to 20 percent of profits	131	3
Decrease in assessments equal to 5 to 10 percent of profits	306	6
Decrease in assessments equal to 0 to 5 percent of profits	3,541	73
Increase in assessments equal to 0 to 5 percent of profits	706	14
Increase in assessments equal to 5 to 10 percent of profits	40	1
Increase in assessments equal to 10 to 20 percent of profits	8	0
Increase in assessments equal to 20 to 40 percent of profits	5	0
Increase in assessments equal to more than 40 percent of profits	8	0
Total	4,874	100

*Institutions with negative or no profit were excluded. These institutions are shown in Table 20.

Table 19 excludes small institutions that either show no profit or show a loss, because a percentage cannot be calculated. The FDIC analyzed the effect of the proposal on these institutions by determining the annual assessment change (either an increase or a decrease) that would result. Table 20 below shows that 27 (seven percent) of the 383 small insured institutions with negative or no reported profits would have an increase of $20,000 or more in their annual assessments.

TABLE 20—CHANGE IN ASSESSMENTS FOR UNPROFITABLE SMALL INSTITUTIONS RESULTING FROM THE PROPOSAL

[Assuming No Change in the Assessment Rate Range]

Change in assessments	Number of Institutions	Percent of Institutions
$20,000 or more decrease	170	44
$10,000–$20,000 decrease	74	19
$5,000–$10,000 decrease	43	11
$1,000–$5,000 decrease	28	7
$0–$1,000 decrease	11	3
$0–$1,000 increase	3	1
$1,000–$5,000 increase	16	4
$5,000–$10,000 increase	6	2
$10,000–$20,000 increase	5	1
$20,000 increase or more	27	7
Total	383	100

Projected Effects on Small Entities Assuming a Range of Assessment Rates Under the Current Established Small Bank Deposit Insurance Assessment System of 5 Basis Points to 35 Basis Points and Under the Proposed System of 3 Basis Points to 30 Basis Points (Assessment Change P330–C535)

Based on the December 31, 2014 data, of the total of 5,257 small institutions, no institution would have experienced an increase in assessments equal to five percent or more of its total revenue. These figures do not reflect a significant economic impact on revenues for a substantial number of small insured institutions. Table 21 below sets forth the results of the analysis in more detail.

TABLE 21—PERCENT CHANGE IN ASSESSMENTS RESULTING FROM THE PROPOSAL

[Assuming Assessment Rate Range Change From 5–35 Bps to 3–30 Bps]

Change in assessments	Number of institutions	Percent of institutions
More than 10 percent or lower	4	0
5 to 10 percent lower	4	0
0 to 5 percent lower	4,969	95
0 to 5 percent higher	280	5
More than 5 percent higher	0	0
Total	5,257	100

The FDIC performed a similar analysis to determine the impact on profits for small institutions. Based on December 31, 2014 data, of those small institutions with reported profits, eight institutions would have an increase in assessments equal to 10 percent or more of their profits. Again, these figures do not reflect a significant economic impact on profits for a substantial number of small insured institutions. Table 22 sets forth the results of the analysis in more detail.

TABLE 22*—ASSESSMENT CHANGES RELATIVE TO PROFITS FOR PROFITABLE SMALL INSTITUTIONS UNDER THE PROPOSAL

[Assuming Assessment Rate Range Change From 5–35 Bps to 3–30 Bps]

Change in assessments relative to profits	Number of institutions	Percent of institutions
Decrease in assessments equal to more than 40 percent of profits	119	2
Decrease in assessments equal to 20 to 40 percent of profits	99	2
Decrease in assessments equal to 10 to 20 percent of profits	285	6
Decrease in assessments equal to 5 to 10 percent of profits	603	12
Decrease in assessments equal to 0 to 5 percent of profits	3,513	72
Increase in assessments equal to 0 to 5 percent of profits	239	5
Increase in assessments equal to 5 to 10 percent of profits	8	0
Increase in assessments equal to 10 to 20 percent of profits	4	0
Increase in assessments equal to 20 to 40 percent of profits	3	0
Increase in assessments equal to more than 40 percent of profits	1	0
Total	4,874	100

* Institutions with negative or no profit were excluded. These institutions are shown in Table 23.

Table 22 excludes small institutions that either show no profit or show a loss, because a percentage cannot be calculated. The FDIC analyzed the effect of the proposal on these institutions by determining the annual assessment change (either an increase or a decrease) that would result. Table 23 below shows that just 11 (three percent) of the 383 small insured institutions with negative or no reported profits would have an increase of $20,000 or more in their annual assessments. Again, these figures do not reflect a significant economic impact on profits for a substantial number of small insured institutions.

TABLE 23—CHANGE IN ASSESSMENTS FOR UNPROFITABLE SMALL INSTITUTIONS RESULTING FROM THE PROPOSAL

[Assuming No Change in the Assessment Rate Range]

Change in assessments	Number of institutions	Percent of institutions
$20,000 or more decrease	262	68
$10,000–$20,000 decrease	57	15
$5,000–$10,000 decrease	23	6
$1,000–$5,000 decrease	14	4
$0–$1,000 decrease	3	1
$0–$1,000 increase	1	0
$1,000–$5,000 increase	6	2
$5,000–$10,000 increase	1	0
$10,000–$20,000 increase	5	1
$20,000 increase or more	11	3
Total	383	100

The proposed rule does not directly impose any ''reporting'' or ''recordkeeping'' requirements within the meaning of the Paperwork Reduction Act. The compliance requirements for the proposed rule would not exceed (and, in fact, would be the same as) existing compliance requirements for the current risk-based deposit insurance assessment system for small banks. The FDIC is unaware of any duplicative, overlapping or conflicting federal rules.

The initial RFA analysis set forth above demonstrates that, if adopted in final form, the proposed rule would not have a significant economic impact on a substantial number of small institutions within the meaning of those terms as used in the RFA.[60]

Commenters are invited to provide the FDIC with any information they may have about the likely quantitative effects of the proposal on small insured depository institutions (those with $550 million or less in assets).

B. Riegle Community Development and Regulatory Improvement Act:

The Riegle Community Development and Regulatory Improvement Act (RCDRIA) requires that the FDIC, in determining the effective date and administrative compliance requirements of new regulations that impose additional reporting, disclosure, or other requirements on insured depository institutions, consider, consistent with principles of safety and soundness and the public interest, any administrative burdens that such regulations would place on depository institutions, including small depository institutions, and customers of depository institutions, as well as the benefits of such regulations.[61]

This NPR proposes no additional reporting or disclosure requirements on insured depository institutions, including small depository institutions, nor on the customers of depository institutions.

[60] 5 U.S.C. 605.

[61] 12 U.S.C. 4802.

C. Paperwork Reduction Act:

No collections of information pursuant to the Paperwork Reductions Act (44 U.S.C. 3501 *et seq.*) are contained in the proposed rule.

D. The Treasury and General Government Appropriations Act, 1999—Assessment of Federal Regulations and Policies on Families

The FDIC has determined that the proposed rule will not affect family well-being within the meaning of section 654 of the Treasury and General Government Appropriations Act, enacted as part of the Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1999 (Pub. L. 105–277, 112 Stat. 2681).

E. Solicitation of Comments on Use of Plain Language

Section 722 of the Gramm-Leach-Bliley Act, Public Law 106–102, 113 Stat. 1338, 1471 (Nov. 12, 1999), requires the Federal banking agencies to use plain language in all proposed and final rules published after January 1, 2000. The FDIC invites your comments on how to make this proposal easier to understand. For example:

- Has the FDIC organized the material to suit your needs? If not, how could the material be better organized?
- Are the requirements in the proposed regulation clearly stated? If not, how could the regulation be stated more clearly?
- Does the proposed regulation contain language or jargon that is unclear? If so, which language requires clarification?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the regulation easier to understand?

Appendix 1—Description of Statistical Model Underlying Proposed Method for Determining Deposit Insurance Assessments For Established Small Insured Depository Institutions

This appendix provides a technical description of the statistical model (the ''new model'')[62] underlying the proposed method for determining deposit insurance assessments for established small banks. The appendix provides background information, reviews the data and methodology used to estimate the new model underlying the proposed method, discusses estimation results and alternative specifications considered, and evaluates the results.

I. Background

A. RRPS

The current small bank deposit insurance assessment system has been in effect, with some modifications, since January 1, 2007. The current small bank deposit insurance system assigns assessment rates in several steps. The first step assigns small banks to risk categories. The categories are jointly determined by bank capital and supervisory ratings. Well-capitalized small banks rated CAMELS 1 or 2 are placed in Risk Category I.[63] Small banks with lower capital or weaker CAMELS ratings are placed in either Risk Category II, Risk Category III or Risk Category IV.

The second step differentiates risk further among Risk Category I small banks using the *financial ratios method,* which combines supervisory CAMELS component ratings with current financial ratios to determine a Risk Category I small bank's initial assessment rate. The contribution of these variables (the CAMELS component ratings and the financial ratios) to assessment rates is determined using a linear model (the downgrade probability model or existing model) estimating the probability that a CAMELS 1- or 2-rated bank will be downgraded to a CAMELS rating of 3 or worse within 12 months.

In November 2006, when the final rule establishing the current small bank deposit insurance system was adopted, it had been more than a decade since the United States experienced a significant number of bank failures. Consequently, historical downgrades were used as a proxy for the risk to the DIF of a bank's failure.

The data generated by the rash of bank failures since the financial crisis of 2008 suggests that the model underlying the small bank deposit insurance assessment system can be improved and updated.

B. Probability of Default

The data generated from the approximately 500 bank failures since 2008 suggests that the probability of downgrade probability model can be replaced by a probability of default (that is, a probability of failure) model. Failures are nearly always costly to the FDIC, whereas downgrades lead to DIF losses relatively infrequently, since many downgraded banks do not fail.

C. Loss Given Default

Though expected losses to the DIF are a function of both the probability of a default (PD) and the loss given default (LGD), the new model estimates only the PD. LGD was not modeled. Actual losses for many of the failed banks during the crisis are still estimated, primarily because of the use of loss-sharing agreements that have not yet terminated. Until the losses are actually realized, estimating a loss given default model using current data would be circular, as FDIC models are used to estimate expected losses where losses have not yet been realized. Relying solely on realized losses would exclude much of the failure data from the recent crisis, leaving mainly failure data from the banking crisis of the late 1980s and early 1990s. However, the vast majority of the bank failures in that crisis occurred in a different regulatory regime (prior to the Federal Deposit Insurance Corporation Improvement Act of 1991[64]) and may, therefore, not reflect expected LGD in the current environment as well. See Bennett and Unal (2014).

Notwithstanding these concerns, a careful consideration of whether future rulemaking should include LGD in a small bank deposit insurance assessment model may be appropriate after most losses are realized from failures during the recent crisis.

II. Methodology

A. Variable Selection

In addition to the existing model, the FDIC relied on other existing models of bank risk, both regulatory and academic, to select candidate variables for inclusion in the new model.

1. SCOR

The Statistical CAMELS Offsite Rating (SCOR) system is one of FDIC's offsite monitoring models and is used to identify banks whose financial condition has deteriorated since their last on-site examination. SCOR is designed as a short-term model with a one-year forecast horizon, to identify institutions that are currently CAMELS 1 or 2 rated that might receive a rating of CAMELS 3, 4 or 5 at the next examination.

The SCOR model uses an ordered logistic regression to predict the composite CAMELS rating and the six CAMELS component ratings. A logistic regression allows for nonlinear relationships between each explanatory

[62] The preamble to the NPR refers to the new model as the ''statistical model.''

[63] Unless explicitly stated otherwise, references to CAMELS ratings are references to CAMELS composite ratings.

[64] FDIC (1998), Legislation Governing the FDIC's Roles as Insurer and Receiver,'' from *Managing the Crisis, https://www.fdic.gov/bank/historical/managing/history3-A.pdf,* p. 774–747.

variable and the dependent variable (the variable that depends upon the explanatory variable). In an ordered logistic regression, the dependent variable (CAMELS) can only have discrete values that are ordered. (In the case of CAMELS, the ordered values are 1 through 5.) The other variables (the explanatory variables) are then used to predict the likelihood of observing each of the possible outcomes.

SCOR uses twelve variables to measure banks' financial condition. These financial measures are (as a ratio to total assets): equity, loan loss reserves, loans past due 30–89 days, loans past due 90+ days, nonaccrual loans, other real estate owned, charge-offs, provisions for loan losses and transfer risk, income before taxes and extraordinary charges, volatile liabilities, liquid assets, and loans and long term securities.[65]

2. GMS

The Growth Monitoring System (GMS) is one of FDIC's offsite monitoring models designed to monitor banks' risk taking associated with rapid growth and heavy reliance on non-traditional sources of funds. GMS is designed to identify distress and failure before bank conditions actually weaken, thereby allowing supervisors to take preventive action.

GMS estimates the likelihood that a bank will be downgraded from a CAMELS 1 or 2 rating to a CAMELS 3, 4 or 5 rating within three years as a function of the bank's current risk characteristics. The explanatory variables include a bank's asset growth, equity ratio, loan to asset ratio, noncore funds to asset ratio, change in loan mix index, reserve coverage ratio and a binary variable indicating whether a bank is currently CAMELS 1 rated.[66]

3. Academic

There exist numerous papers discussing models that predict bank failures. In these papers, the explanatory variables predicting bank failures are largely divided into measures of (1) capital; (2) asset quality; (3) earnings; (4) liquidity; (5) sensitivity to market risk; and (6) other risk measures.

A bank's capital adequacy is an important predictor of its survival because it provides a cushion to withstand unanticipated losses. Studies have used a total equity to total assets ratio (Santoni, Ricci, and Kelshiker (2010), Betz, Oprica, Peltonen, Sarlin (2012)) or the leverage ratio (Santoni, Ricci, and Kelshiker (2010)) to measure a bank's equity position. These studies find that higher capital ratios are correlated with lower failure probability.

To measure a bank's asset quality, nonperforming loans (Wheelock and Wilson (2000), Santoni, Ricci, and Kelshiker (2010), Gilbert, Meyer, and Vaughan (1999)) and other real estate owned to total assets ratios have been used. A large volume of nonperforming loans and other real estate owned relative to total loans (or total assets) signal low credit quality in a bank's loan portfolio.

Higher bank earnings also provide a cushion to withstand adverse economic shocks and lower failure probability. To measure bank earnings, measures such as net income before taxes, interest expense (Betz, Oprica, Peltonen, Sarlin (2012)), and total operating income (Lane, Looney, and Wansley (1986)) have been used.

Loan portfolio ratios, such as commercial and industrial (C&I) loans, commercial real estate loans, construction and development (C&D) loans, and consumer loans (Cole and Gunther (1995), Whalen (1991), Lane, Looney, and Wansley (1986)), have been used to measure a bank's concentration in different loan types.

Rapid loan growth or asset growth can be indicators of a bank's aggressive risk-taking and of underwriting loans or acquiring assets with lower creditworthiness. A correlation between rapid credit growth and bank distress has been well documented in academic research (Solttila and Vihriala (1994), Clair (1992), Salas and Saurina (2002), Keeton (1999), Foos, Norden, and Weber (2009), and Logan (2001)).

Liquidity measures include a core deposits to total assets ratio (Gilbert, Meyer, Vaughan (1999)) and a liquid assets to total assets ratio (Gilbert, Meyer, Vaughan (1999), Lane, Looney, and Wansley (1986)). These measures can indicate a bank's ability to meet unexpected liquidity needs. A high loans to total deposits ratio (Gilbert, Meyer, Vaughan (1999)) or loans to total assets ratio can indicate a bank's illiquidity, since loans are typically less liquid than other assets on a bank's balance sheet.

Bank size (Gilbert, Meyer, Vaughan (1999), Wheelock and Wilson (2000)) can predict failure likelihood, since large banks can benefit from diversification across product lines and geographic regions.

Whether a bank is a part of a holding company is another measure used by some studies (Gilbert, Meyer, Vaughan (1999), Wheelock and Wilson (2000)). An indicator of holding company affiliation can predict failure probability, since a holding company can serve as a source of strength to banks.

Onali (2012) finds a positive relation between bank default risk and dividend payout ratios. This finding is consistent with the theory that dividend payouts exacerbate moral hazard. He finds, however, that the relationship is insignificant for banks that are very close to failure.

B. Variables

Table 1.1 lists and describes the variables that are included in the new model as the result of reviewing academic studies on bank risk and testing candidate variables.

TABLE 1.1—NEW MODEL VARIABLE DESCRIPTION

Variables	Description
Tier 1 Leverage Ratio (%)	Tier 1 capital divided by adjusted average assets. (Numerator and denominator are both based on the definition for prompt corrective action.)
Net Income before Taxes/Total Assets (%)	Income (before income taxes and extraordinary items and other adjustments) for the most recent twelve months divided by total assets.
Nonperforming Loans and Leases/Gross Assets[67] (%)	Sum of total loans and lease financing receivables past due 90 or more days and still accruing interest and total nonaccrual loans and lease financing receivables (excluding, in both cases, the maximum amount recoverable from the U.S. Government, its agencies or government-sponsored enterprises, under guarantee or insurance provisions) divided by gross assets.*

[65] Detailed description of the model and the variables used in SCOR can be found in ''The SCOR System of Off-Site Monitoring: Its Objectives, Functioning, and Performance,'' Collier, Forbush, Nuxoll, and O'Keefe (2003).

[66] Detailed description of the GMS model can be found in ''Bank Growth and Long Term Risk,'' Hwa, Jacewitz, and Yom (May 2011).

TABLE 1.1—NEW MODEL VARIABLE DESCRIPTION—Continued

Variables	Description
Other Real Estate Owned/Gross Assets (%)	Other real estate owned divided by gross assets.
Core Deposits/Total Assets (%)	Domestic office deposits (excluding time deposits over the deposit insurance limit and the amount of brokered deposits below the standard maximum deposit insurance amount) divided by total assets.
Weighted Average of C, A, M, E, L, and S Component Ratings.	The weighted sum of the "C," "A," "M," "E", "L", and "S" CAMELS components, with weights of 25 percent each for the "C" and "M" components, 20 percent for the "A" component, and 10 percent each for the "E", "L", and "S" components. In instances where the "S" component is missing, the remaining components are scaled by a factor of 10/9.**
Loan Mix Index	A measure of credit risk described below.
Asset Growth (%)	Growth in assets (merger adjusted) over the previous year. If growth is negative, then the value is set to zero.

[67] "Gross assets" are total assets plus the allowance for loan and lease financing receivable losses (ALLL); for purposes of estimating the statistical model, for years before 2001, when allocated transfer risk was not included in ALLL in Call Reports, allocated transfer risk was included in gross assets separately.

* Delinquency and non-accrual data on government guaranteed loans are not available for the entire estimation period. As a result, the model is estimated without deducting delinquent or past-due government guaranteed loans from the nonperforming loans and leases to gross assets ratio.

** The component rating for sensitivity to market risk (the "S" rating) is not available for years before 1997. As a result, and as described in the table, the model is estimated using a weighted average of five component ratings excluding the "S" component where the component is not available.

1. Equity

The new model includes the leverage ratio (as defined in the FDIC's capital regulations[68]). This variable was statistically significant across specifications (that is, it was statistically significant regardless of the other variables included in the model).

2. Loan Mix Index

Consistent with the GMS model, the FDIC included a loan mix index (''LMI'') variable that aggregates a bank's loan portfolio and historical loan category charge-offs into a single variable. Statistically, combining the loan categories into a single index increases the explanatory power of the model.

For each loan category, the LMI assigns an industry-wide charge-off rate based on historical data. A bank's LMI value is then the sum of the products of each of that bank's loan category exposures as a percentage of total assets and the associated charge-off rate. Appendix 1.1 to the Supplementary Information section of this notice shows how the LMI is constructed for a hypothetical bank.

In constructing the LMI, many alternatives were considered, including: using the change in a bank's amount of loans in a loan category rather than simply the amount of loans in a loan category, weighting charge-offs more heavily during crises and evaluating loans in a loan category as a proportion of total loans rather than as a proportion of assets.

Both in in-sample and out-of-sample backtesting, the LMI using a bank's amount of loans in a loan category had higher forecast accuracy than using the change in a bank's amount of loans in a loan category from a previous period. In-sample backtesting compares model forecasts to actual outcomes where those outcomes are included in the data used in model development. Out-of-sample backtesting is the comparison of model predictions against outcomes where those outcomes are not used as part of the model development used to generate predictions.

In-sample, all of the explanatory power came from using the amount of loans in a loan category. Out-of-sample, including the change in a bank's amount of loans in a loan category in addition to the amount of loans in a loan category did not improve performance.

Three alternative methods of averaging yearly historical industry-wide charge-off rates were considered: an unweighted average of each year's industry-wide charge-off rate, an unweighted average of each of the recent crisis years' industry-wide charge-off rates, and an average of each year's industry-wide charge-off rate weighted by the number of bank failures in the year. Out-of-sample performance for the LMI variable using an average weighted by the number of bank failures in the year slightly outperformed the LMI variable using an unweighted average over recent crisis years and more significantly outperformed the LMI variable using an unweighted average. The LMI variable using an average weighted by the number of bank failures in a year was selected over the LMI variable using an unweighted average over recent crisis years because the latter variable requires a determination of what constitutes a crisis. No such determination is necessary using the variable selected.

The FDIC also considered using total loans as the denominator of the LMI along with a liquidity variable, but elected to use total assets as the denominator to avoid imposing excessive penalties on banks that hold few loans relative to assets. (The liquidity variable was not statistically significant when total assets were used as the denominator.) Using loans as a proportion of total assets has the advantage of not extrapolating risk exposures in loans to a bank's entire asset portfolio, although it effectively assigns zero risk to all non-loan assets, implicitly treating loans as riskier than investments in other assets. Many of these other assets, however, are liquid assets. Out-of-sample performance of the models using total assets as the denominator did not differ much from the performance using total loans as the denominator along with a liquidity variable.

3. Asset Growth

Among the variables included in the specifications was a one-year asset growth rate. The FDIC also considered a two-year growth rate and lagged one- and two-year growth rates. The one-year growth rates generally had the most explanatory power and additional growth rates did not tend to improve the model's fit.

Mergers of troubled banks into healthier banks and purchases of failed banks help limit losses to the DIF. Penalizing banks for growth that occurs through the acquisition of troubled or failed banks would create a disincentive for such mergers. Consequently, bank

[68] 12 CFR 3.10; 12 CFR 217.10; 12 CFR 324.10.

asset growth was adjusted to remove growth resulting from mergers and failed bank acquisitions.

4. Income

Consistent with previous findings, net income before taxes was found to be a significant explanatory variable.

5. Core Deposits

Early test versions of the new model used noncore liabilities as a variable predictive of failure. This variable was statistically significant in-sample across all specifications with a positive correlation with failure. Subsequent versions used core deposits as the alternative variable. It provides similar predictive power, and is the variable maintained for the proposed version of the new model.

6. Nonperforming Loans and Leases

Nonperforming loans and leases are defined as the sum of total loans and leases past due 90 or more days and total nonaccrual loans and leases. This variable, which measures bank asset quality, was found to be a statistically significant predictor of failure.

7. Other Real Estate Owned

The ratio of other real estate owned to gross assets is another measure of a bank's asset quality and was a significant predictor of failure across specifications.

8. CAMELS

A weighted CAMELS component variable was included in the new model to capture examination ratings. The weighted CAMELS component variable is calculated with the following weights on the component ratings: Capital (25%), Asset quality (20%), Management (25%), Earnings (10%), Liquidity (10%), Sensitivity to market risk (10%). For model estimation, in instances where the ''S'' component is missing, the remaining components are scaled by a factor of 10/9.

Other specifications tested separate dummy variables for CAMELS composite ratings of 3, 4, and 5. (A dummy variable for CAMELS 2 composite ratings was not statistically significant.) However, the single weighted CAMELS component measure performed comparably in out-of-sample tests and was chosen over the dummy variable specification for both the reduction in the number of variables, for its more continuous treatment of examination ratings and for its consistency with the current financial ratios method.

C. Considered Variables

1. Loan Loss Reserves

Loan loss reserves were tested in the development of the new model and were a positive predictor of failure across all specifications. Including reserves in the new model, however, would lead to higher deposit insurance assessments for banks with higher loan loss reserves, creating a disincentive for banks to build these reserves. Because loan loss reserves protect the FDIC in the event of failure, they were ultimately excluded from the new model. (Loan loss reserves were excluded from the downgrade probability model for the same reason.) The losses to forecasting accuracy were small.

2. Lagged moving averages

To capture the possibility that changes in variables (as opposed to point-in-time values of variables) are correlated with failure, the FDIC tested the model using lagged moving averages. In theory, these lagged moving averages could also capture the effect of variables that do not change frequently. However, lagged moving averages were not consistently significant across specifications.

3. Insignificant Variables

A number of variables were also tested but ultimately not included in the model because they did not remain statistically significant across specifications. These variables are listed in Appendix 1.2 to the Supplementary Information section of this notice.

D. Excluded Variables

1. Distance to Default

Distance to default measures, which compare the amount of loss absorbing capital against the volatility of the return on underlying assets, are commonly used in failure prediction models. These variables are generally constructed with market data. However, such measures are not available for most small banks.

2. Macroeconomic Variables

Macroeconomic variables were excluded for three primary reasons. First, the assessment rates proposed are (and the rates previously adopted by the FDIC's Board were) explicitly intended to reduce procyclicality; that is, to maintain a positive reserve ratio while keeping relatively constant assessment rates.[69] Second, macroeconomic factors would add considerable complexity to the model. Finally, macroeconomic factors are imprecise measures of economic conditions for small banks that often operate only locally.

3. Holding Company Affiliation

The FDIC does not believe it is appropriate to charge a small bank a higher assessment rate because it is not part of a multi-bank holding company; consequently, the new model does not include a measure indicating whether a bank is a part of a holding company.

4. Brokered Deposits

The FDIC ultimately chose the related measure of core deposits (see above).

5. Bank Size

The FDIC is disinclined to discriminate for deposit insurance assessment purposes based on the size of an established small bank. Assessing the smallest banks at higher rates because of their size would raise the costs of many banks that are the only bank in their community. Assessing the largest of the small banks at higher rates because of their size would impair their ability to compete with large banks, which are not charged higher rates based on their size.

III. Estimation Model

A. Shumway (2001)

The FDIC chose to estimate failure using a discrete-time hazard model with a constant hazard rate. Hazard models are designed to capture the duration of time until a particular event occurs (in this case, bank failure). The defining feature of a hazard model is that at every interval of time, a bank is exposed to some risk of failure that depends on certain observed measures. If the bank fails during a period, then it is not in the sample for later periods. If the bank survives, then it remains in the sample the following period and is exposed to a new risk of failure that depends on any changes in the bank risk variables. The FDIC used a discrete time assumption because of the regular reporting schedule for Call Report data, and the simplicity and transparency of estimation. A discrete time assumption implies that only the failure or survival of the bank is modeled for a given time period. This is in contrast to a continuous time model that also considers the exact failure time within that time period.

Shumway (2001) demonstrates that if each period's probability of failure (or default probability) follows a logistic function, then the discrete-time hazard model is equivalent to a multi-period logistic model. The logistic function relates a set of variables (in this case,

[69] *See* 75 FR 66272, 66273–66281, 66292 (Oct. 27, 2010).

measures of bank risk) to a number between 0 and 1 (in this case, the probability of bank failure). It is nonlinear, so that the effect of a change in the values of bank risk variables on the probability of bank failure depends on the level of bank risk. A multi-period logistic model estimates the probability of failure for all observations across banks and time. However, relative to a pooled logistic model in which each bank-year observation is treated as an independent event, the standard errors of the coefficients of a discrete-time hazard model require an adjustment. The adjustment is required because of the serial dependence of the failure variable; a bank that is observed in any period necessarily has not failed in any previous period and any bank that fails necessarily drops out of the sample after failing.

A multi-period model was chosen over a single time period model. A single time period failure model requires the choice of the appropriate estimation time period. Therefore, it is unable to exploit data outside of the chosen time horizon and cannot be readily adapted to include new data. For example, a single time period model could not be used to capture bank failures in the 1990s, stability in the early 2000s, and the bank failures following the 2008 financial crisis. Furthermore, there is no systematic way to choose the right sample period for a static model.

The FDIC imposed a constant hazard rate on the model. A constant hazard rate implies that the age of the bank does not affect its likelihood of future failure. This is in contrast to a non-constant hazard rate that may be more appropriate for newer banks that do not yet have an established business model or management. However, new banks are excluded from the model. Because there is no relationship between the age of an established bank (one at least five years old) and failure, a constant hazard rate is more appropriate.

C. Time Horizon

Because deposit insurance assessments should ideally reflect risks posed by banking activity as they are assumed rather than when they are realized, a three year time horizon was chosen for both the estimation and forecasting periods. To obtain predictions for the three-year forecast, the FDIC considered one-year, two-year, and three-year time horizons in estimating the new model. In each case, the FDIC used only contemporaneous data to calculate three-year forecasts. That is, the FDIC alternatively used one-year, two-year, and three-year intervals in the estimation period (1984—2010) to forecast failures out-of-sample from January 1, 2011 through December 31, 2013 based on yearend 2010 data. The three-year interval tended to outperform the one- and two-year intervals for three-year out-of-sample forecasting.

D. In-Sample Estimation

The in-sample estimation time period was chosen to be 1985 through 2011, incorporating Call Report data through the end of 2011 and failures through the end of 2014.

To avoid having overlapping three-year look-ahead periods for a given regression, each regression uses data in which only every third year is included. One regression uses insured depository institutions' Call Report and TFR data for the end of 1985 and failures from 1986 through 1988; Call Report and TFR data for the end of 1988 and failures from 1989 through 1991; and so on, ending with Call Report data for the end of 2009 and failures from 2010 through 2012. (See Table 1.2A below.) The second regression uses insured depository institutions' Call Report and TFR data for the end of 1986 and failures from 1987 through 1989, and so on, ending with Call Report data for the end of 2010 and failures from 2011 through 2013. (See Table 1.2B below.) The third regression uses insured depository institutions' Call Report and TFR data for the end of 1987 and failures from 1988 through 1990, and so on, ending with Call Report data for the end of 2011 and failures from 2012 through 2014. (See Table 1.2C below.) Since there is no particular reason for favoring any one of these three regressions over another, the actual model estimates are constructed as an average of each of the three regression estimates for each parameter.

The regressions only include observations for institutions that are at least five years of age, since younger institutions will be subject to a different assessment methodology. Also, since the model will be applied to banks with under $10 billion in assets, larger banks are not included in the regressions.

The data used for estimation is winsorized (that is, extreme values in the data are reset to reduce the effect of outliers) at the 1st percentile and 99th percentile levels for each year. For example, if a variable for a bank has a value greater than the 99th percentile value for that year, then the value for that bank is set to the 99th percentile value before estimation is made.

The test statistics applied follow the analysis of Shumway (2001). In Shumway's formulation, the standard test statistics from a logistic regression used to assess statistical significance are divided by the average number of bank-years per bank; this adjustment corrects for the lack of independence between bank-year observations. That is, an adjustment is made to account for a bank no longer being observed after failure. In tables 1.2A, 1.2B, and 1.2C below, ''WaldChiSq2'' shows the adjusted χ-square statistic, and ''ProbChiSq2'' the associated probability value. (The lower the value of ProbChisSq2, the more statistically significant is the parameter estimate. Parameter estimates with a ProbChiSq2 below .05 are considered to be statistically significant at the .05 level.)

As reported in Tables 1.2A, 1.2B, and 1.2C, banks with a higher leverage ratio are less likely to fail within the next three years. Similarly, banks' earnings before taxes and their core deposits to assets ratios are negatively correlated with failure probability. In contrast, nonperforming loans and the other real estate owned to assets ratios are positively correlated with failure probability. Moreover, banks with a higher LMI, faster asset growth, and worse weighted CAMELS component ratings are more likely to fail within the next three years.

The estimated coefficients of the variables are statistically significant at the 5% level for all three regression sets except for the asset growth rate variable. The asset growth rate is statistically significant for two out of the three regressions.

TABLE 1.2A.—REGRESSION WITH DECEMBER 2009 AS LAST DATA POINT FOR INDEPENDENT VARIABLES

Variable description	Estimate	WaldChiSq2	ProbChiSq2
Intercept	−2.8919	17.3025	0.000032
Tier 1 Leverage Ratio (%)	−0.3522	82.6065	0.000000
Net Income before Taxes/Total Assets (%)	−0.1197	8.0705	0.004499
Loan Mix Index	0.0152	41.9399	0.000000
Core Deposits/Total Assets (%)	−0.0265	23.7705	0.000001

TABLE 1.2A.—REGRESSION WITH DECEMBER 2009 AS LAST DATA POINT FOR INDEPENDENT VARIABLES—Continued

Variable description	Estimate	WaldChiSq2	ProbChiSq2
Nonperforming Loans and Leases/Gross Assets (%)	0.2597	53.1450	0.000000
Other Real Estate Owned/Gross Assets (%)	0.1498	10.8676	0.000979
Asset Growth	0.0161	8.1715	0.004255
Weighted Average of C, A, M, E, L and S Component Ratings	0.4888	20.4650	0.000006

TABLE 1.2B—REGRESSION WITH DECEMBER 2010 AS LAST DATA POINT FOR INDEPENDENT VARIABLES

Variable description	Estimate	WaldChiSq2	ProbChiSq2
Intercept	−1.8213	7.9746	0.004744
Tier 1 Leverage Ratio (%)	−0.3603	82.0847	0.000000
Net Income before Taxes/Total Assets (%)	−0.1585	12.7807	0.000350
Loan Mix Index	0.0210	106.2229	0.000000
Core Deposits/Total Assets (%)	−0.0398	54.8076	0.000000
Nonperforming Loans and Leases/Gross Assets (%)	0.2358	39.1907	0.000000
Other Real Estate Owned/Gross Assets (%)	0.1801	17.7846	0.000025
Asset Growth	0.0046	0.5448	0.460463
Weighted Average of C, A, M, E, L and S Component Ratings	0.3432	9.9098	0.001644

TABLE 1.2C—REGRESSION WITH DECEMBER 2011 AS LAST DATA POINT FOR INDEPENDENT VARIABLES

Variable Description	Estimate	WaldChiSq2	ProbChiSq2
Intercept	−2.1862	10.9481	0.000937
Tier 1 Leverage Ratio (%)	−0.3410	75.4433	0.000000
Net Income before Taxes/Total Assets (%)	−0.2354	31.0665	0.000000
Loan Mix Index	0.0157	43.3664	0.000000
Core Deposits/Total Assets (%)	−0.0429	59.4956	0.000000
Nonperforming Loans and Leases/Gross Assets (%)	0.2325	37.6910	0.000000
Other Real Estate Owned/Gross Assets (%)	0.1584	12.0705	0.000512
Asset Growth	0.0133	5.5076	0.018934
Weighted Average of C, A, M, E, L and S Component Ratings	0.5318	22.3623	0.000002

The parameter estimates applied for the assessments are the average of the estimates from the three regressions above. These average values are show in table 1.2D.

TABLE 1.2D—AVERAGE OF THE PARAMETER ESTIMATES OVER THREE REGRESSIONS

Variable description	Estimate
Intercept	−2.2998
Tier 1 Leverage Ratio (%)	−0.3512
Net Income before Taxes/ Total Assets (%)	−0.1712
Loan Mix Index	0.0173
Core Deposits/Total Assets (%)	−0.0364
Nonperforming Loans and Leases/Gross Assets (%)	0.2427
Other Real Estate Owned/ Gross Assets (%)	0.1628
Asset Growth	0.0113
Weighted Average of C, A, M, E, L and S Component Ratings	0.4546

When the new model is used to determine assessment rates, the variables Asset Growth and Net Income before Taxes/Total Assets are each bounded as follows:

$$\text{Asset Growth} \leq 190\text{-}25 \leq \text{Net Income before Taxes/Total Assets} \leq 3.$$

For example, if Asset Growth is greater than 190 (percent) then it is reset to 190 to determine assessment rates. After the parameters shown in table 1.2D were obtained, the values of these bounds were determined by performing an iterative series of backtests covering data from 1985 to 2011, with each iteration testing a different combination of bounds; the combination of bounds that resulted in the best rank correlation (Kendall's tau) between probability of failure and actual failure is the combination of bounds selected.

IV. Validation

A. Backtest Comparison of the Proposal to the Current RRPS System

Using initial base assessment rates,[70] the FDIC also compared the out-of-sample forecast accuracy of the proposal in this NPR, which is based on the new model, to the current small bank deposit insurance system's financial ratios method's assessment rankings.[71] Comparisons were made for projections as of the end of six different years, 2006 through 2011, and are shown graphically using cumulative accuracy profile (CAP) curves. A CAP curve is illustrated in Figure 1.1. Suppose that banks are ranked on a percentile basis according to a model's predicted probability of failure, with the ranking in descending order. Thus the banks with the highest predicted probability of failure would have a percentile rank near zero, while the banks with the

[70] The current small bank deposit insurance assessment system did not exist at the end of 2006 and existed in somewhat different forms in years before 2011. The comparison assumes that the small bank deposit insurance assessment system in its current form and the proposal in this NPR (assuming a revenue neutral conversion to assessment rates as of the end of 2014) had been in effect in each year of the comparison.

[71] For the out-of-sample backtests, the parameters applied are the average of the parameters from three separate regressions, as in the new model, except with more recent three-year periods omitted. Using Table 1.3 as an example, one regression uses data from the end of 1985 and failures from 1986 through 1988; data for the end of 1988 and failures from 1989 through 1991; and so on, ending with data for the end of 2003 and failures from 2004 through 2006. The second regression uses data from the end of 1987 and failures from 1988 through 1990, and so on, ending with data for the end of 2002 and failures from 2003 through 2005. The third regression uses data from the end of 1986 and failures from 1987 through 1989, and so on, ending with data for the end of 2001 and failures from 2002 through 2004.

lowest predicted probability of failure would have a percentile rank near 100. In Figure 1.1, the horizontal axis represents this bank percentile rank. The vertical axis represents the cumulative percentage of actual failures. For example, the point marked by ''X'' indicates that the 30 percent of banks with the highest projected probability of failure included 50 percent of the banks that actually failed. In general, when comparing a CAP curve for alternative models, a model with a higher CAP curve (one with more area underneath it) would be the superior model.

Figure 1.1. Cumulative Accuracy Profile (CAP) Illustration

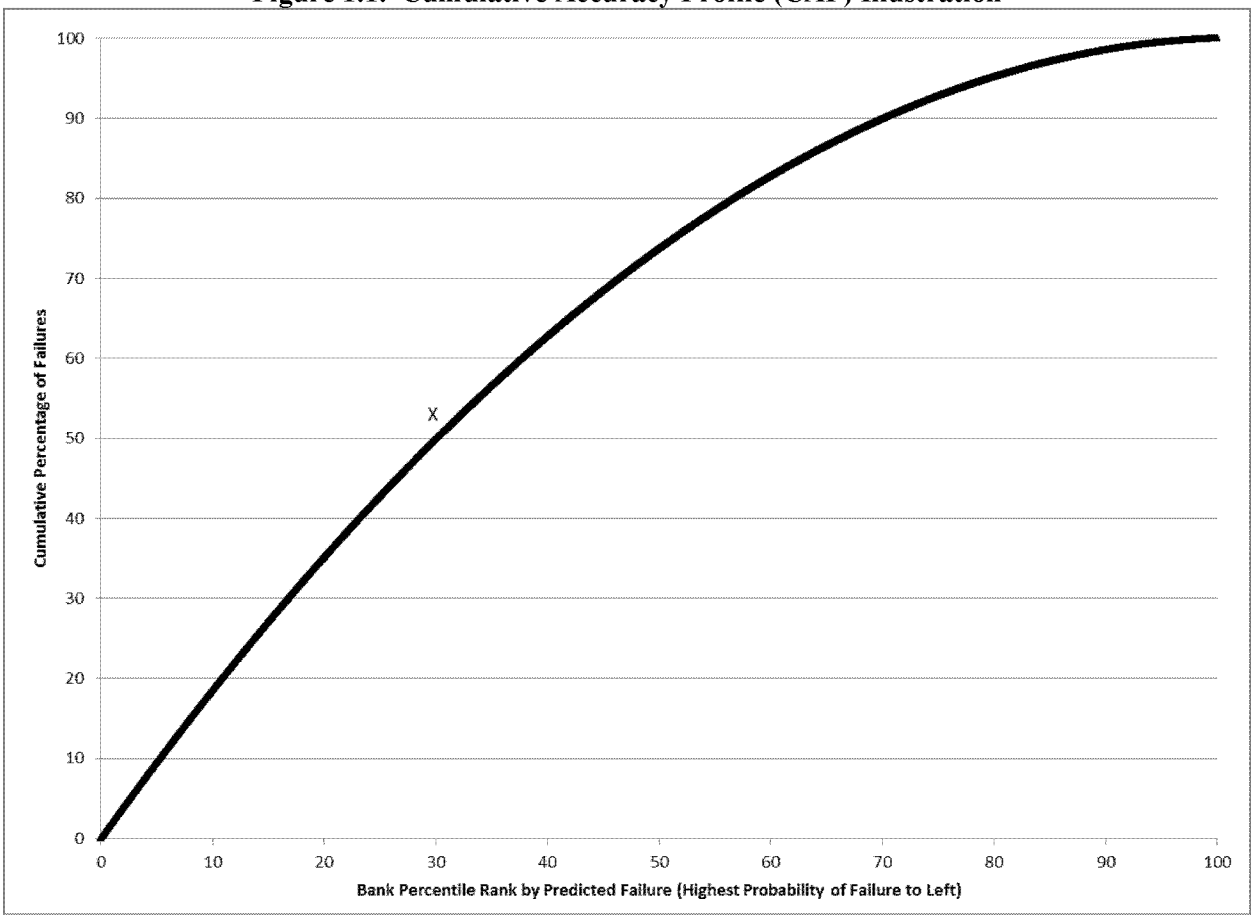
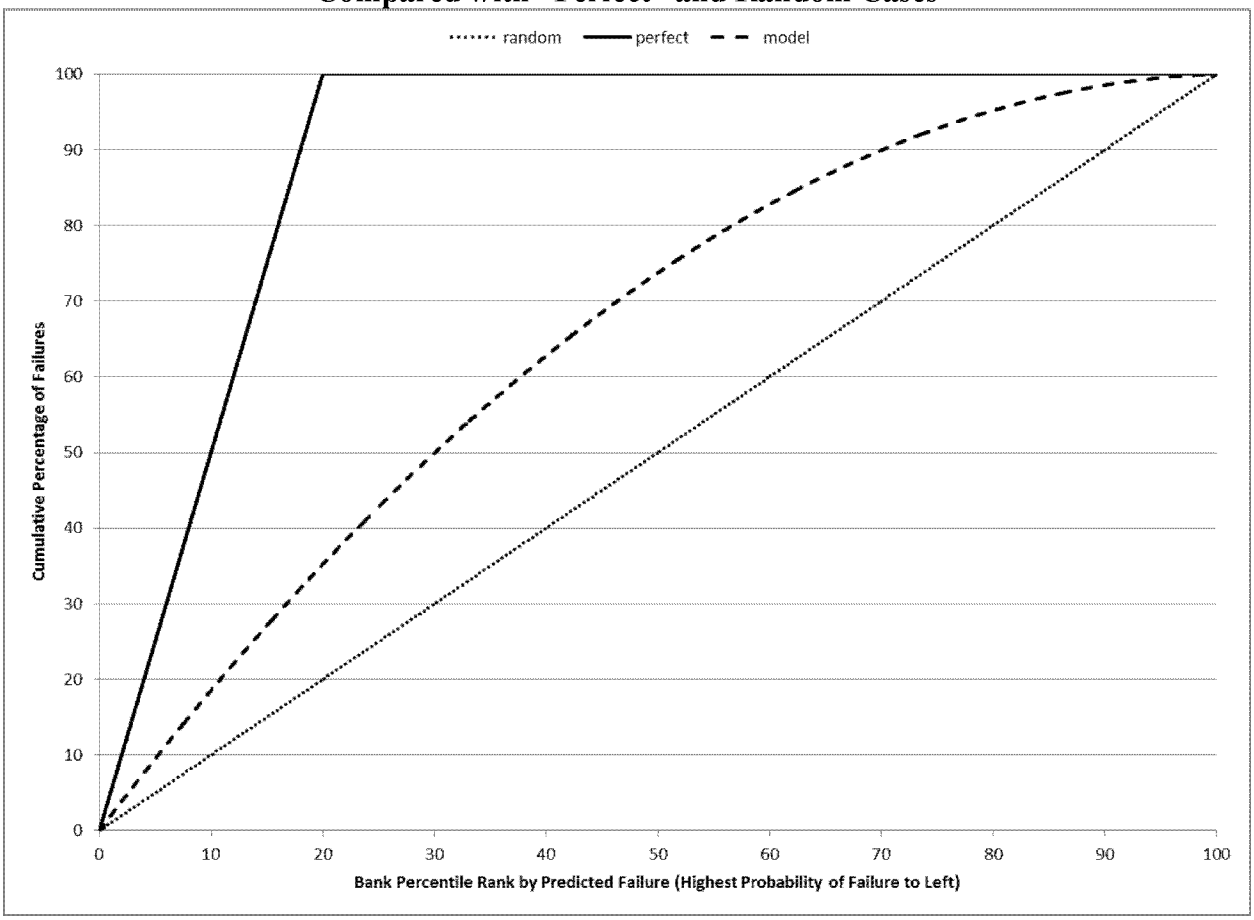


Figure 1.2 shows the CAP curve for a model (dotted line) compared with two limiting CAP curves. The ''random'' curve (single straight line) shows what the CAP would look like if the model prediction were purely random; for example, the 30 percent of banks with the highest failure projections would include 30 percent of actual failures. At the other extreme, the two solid straight lines show a CAP curve for a model that perfectly differentiates banks that fail from banks that do not in its projections; thus, for example, assuming that 20 percent of all banks actually failed, for the ''perfect'' model, the 20 percent of banks with the highest projected failure probability would identify 100 percent of failures.[72]

[72] The accuracy ratio can be derived from the CAP curve. For the model depicted by the curved line in Figure 1.2, the area between the curved line and the dotted straight line is a measure of the superiority of the model over the random benchmark. The area between the solid line and the dotted straight line is a measure of the superiority of a ''perfect'' model over the random benchmark. The ratio of these two areas is the accuracy ratio for the model depicted by the curved line. The value is normalized so that it is always less than or equal to 1. An accuracy ratio of 1 occurs in the case of a perfect model, and is 0 in the case of a model that does no better than random guessing. (For the illustrative example in Figure 1.2, the accuracy ratio of the model depicted by the curved line is .396.)

Figure 1.2. Cumulative Accuracy Profile (CAP) Illustration Compared with "Perfect" and Random Cases



To illustrate the application of CAP curves to the assessment system, Figure 1.3 shows a CAP curve for the current small bank deposit insurance system based on its risk ranking (as reflected in assessment rates) as of 2006 and on failures over the next three years (2007 through 2009). The horizontal axis coordinates for four points on this curve, ''IV'', ''III'', ''II'', and ''I Max'', corresponding to the percentage of small banks reported in Column (A) in Table 1.3 below, and the vertical axis coordinates for the points correspond to the percentage of failures contained within these percentages of small banks, as shown in column (B) in Table 1.3. For example, the point in Figure 1.3 marked ''IV'' is 0.06 (percentage of small banks in Risk Category IV) on the horizontal axis and 0.65 (percentage of actual failures among small banks in Risk Category IV) on the vertical axis. Similarly, all points to the left of the point marked ''III'' in Figure 1.3 are Risk Category III and IV rated small banks.

The banks along the horizontal axis corresponding to the horizontal axis coordinates between the points ''II'' and ''I Max'' represent Risk Category I small banks that are assessed at the maximum assessment rate for that category. The banks corresponding to the horizontal axis coordinates between the points ''I Max'' and ''I Var'' represent Risk Category I small banks that are differentially assessed between the maximum and minimum assessment rates for Risk Category I. (Point ''I Var'' is not included in Table 1.3.) Banks to the right of the horizontal axis coordinate for the point ''I Var'' represent Risk Category I small banks that were assessed at the minimum assessment rate.

TABLE 1.3—COMPARISONS OF OUT-OF-SAMPLE PROJECTION OF NEW MODEL TO THE SMALL BANK DEPOSIT INSURANCE ASSESSMENT SYSTEM'S RANKINGS FOR 2006 *

	(A)	(B)	(C)
	Percentage of Small Banks in Risk Categories (X Percent)	Percentage of actual failures among the X Percent	Percentage of actual failures among riskiest X Percent of banks under the proposal
Risk Category IV	0.06	0.65	1.29
Risk Categories IV and III	0.66	3.23	6.61
Risk Categories IV, III, and II	5.35	14.19	40.00

TABLE 1.3—COMPARISONS OF OUT-OF-SAMPLE PROJECTION OF NEW MODEL TO THE SMALL BANK DEPOSIT INSURANCE ASSESSMENT SYSTEM'S RANKINGS FOR 2006 *—Continued

	(A)	(B)	(C)
	Percentage of Small Banks in Risk Categories (X Percent)	Percentage of actual failures among the X Percent	Percentage of actual failures among riskiest X Percent of banks under the proposal
Risk Categories IV, III, II, and Max. Rate RC I	12.79	34.19	57.42

* New Model Projections use 2003 as Last Year of Estimation Data.

Where a group of banks along the horizontal axis all have the same risk ranking (that is, where they would all pay the same assessment rate), the CAP curve is constructed as if the failures that occur within this group are uniformly distributed, resulting in a straight line (shown as two parallel lines in CAP curve). Thus, for example, the 26 failures that occurred among the banks on the horizontal axis to the right of ''I Var'', which represent the 3,011 Risk Category I small banks that were assessed at the minimum assessment rate as of the end of 2006, are shown as uniformly distributed among this group (that is, as if each successive bank represented 26/3,011 of a failure). This representation results in the straight line between point ''I Var'' and the point to the extreme upper right of the curve.

Figure 1.3 – Cumulative Accuracy Profile for the Small Bank Deposit Insurance Assessment System Based on Its Risk Rankings for 2006

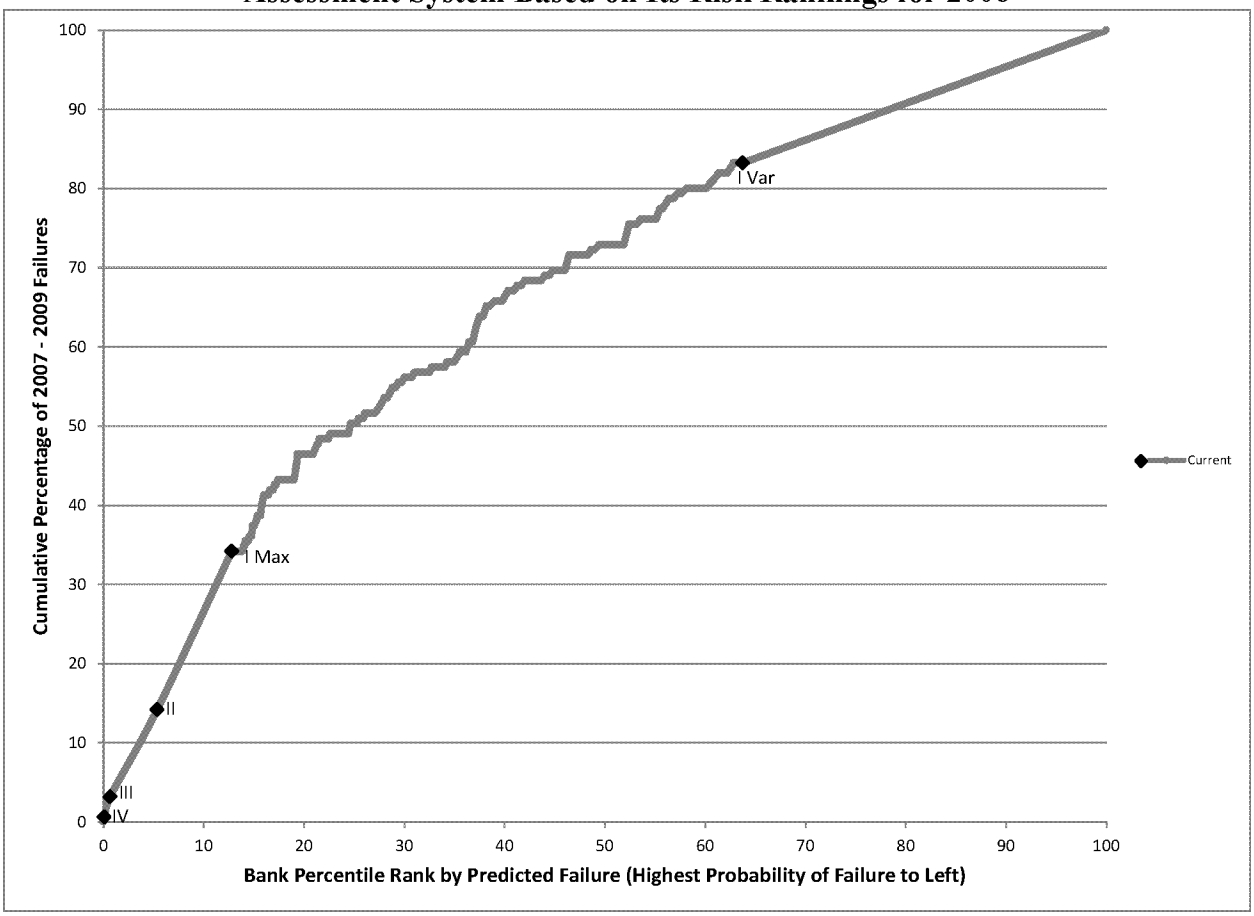


Figure 1.4 shows the same CAP curve as Figure 1.3, but adds a CAP curve based on the proposal's risk ranking (as reflected in assessment rates) as of 2006 and on failures over the next three years (2007 through 2009).[73] Just as Table 1.3 implies, the proposal is superior to the current system at all points. The proposal is obviously superior at the

[73] The horizontal axis shows the risk rank order percentile for each model (the current small bank deposit insurance assessment system and the proposal), but, because the rankings are different under the two models, as a general rule, the bank that corresponds to any given point along the horizontal axis is likely to be different from one model to the other.

points marked by ''III'', ''II'', and ''I Max''. The distinction between the point marked by ''IV'' (for the current small bank deposit insurance system) and the graph for the proposal is difficult to see in the graph, but Table 1.3 shows that the proposal has a vertical value of 1.29 at that point, which is superior to the value of 0.65 for the current small bank deposit insurance system.

As discussed earlier, for the current small bank deposit insurance assessment system, banks along the horizontal axis corresponding to the horizontal axis coordinates between the points ''I Max'' and ''I Var'' represent Risk Category I small banks that are assessed between the maximum and minimum assessment rates for Risk Category I. The proposal is superior in this entire range for 2006.

Figure 1.4 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2006

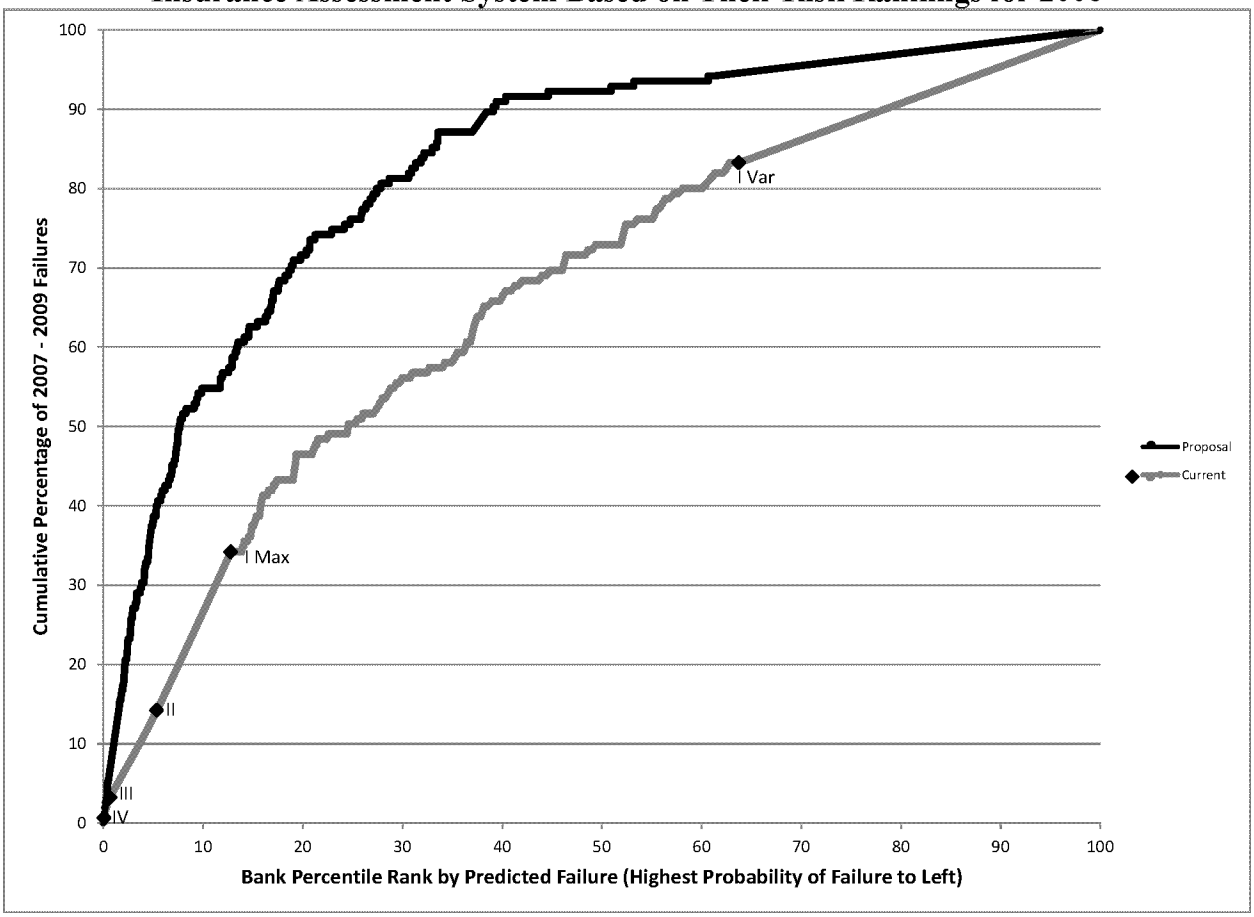


Figure 1.5 shows the same CAP curve based on the proposal's projections as of 2007 and on failures over the next three years (2008 through 2010). The proposal is superior at all points except ''IV'' and the points to the left of that point, where the two models yield identical results.

Figure 1.5 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2007

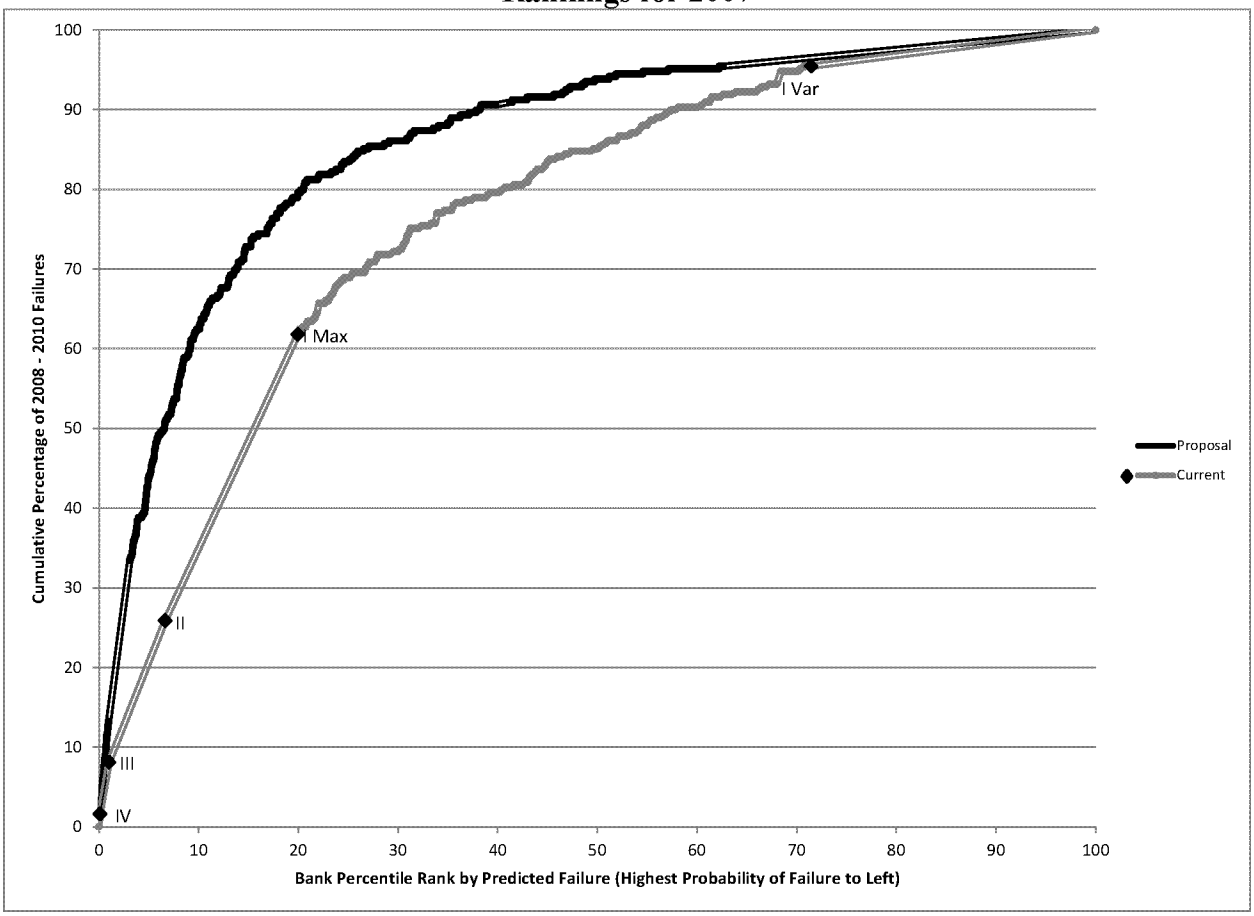


Figure 1.6 shows the same CAP curve based on the proposal's projections as of 2008 and on failures over the next three years (2009 through 2011). The proposal is superior at most points (especially between ''III'' and the horizontal-axis 57-percentile level) and is nearly identical to the current model at remaining points.

Figure 1.6 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2008

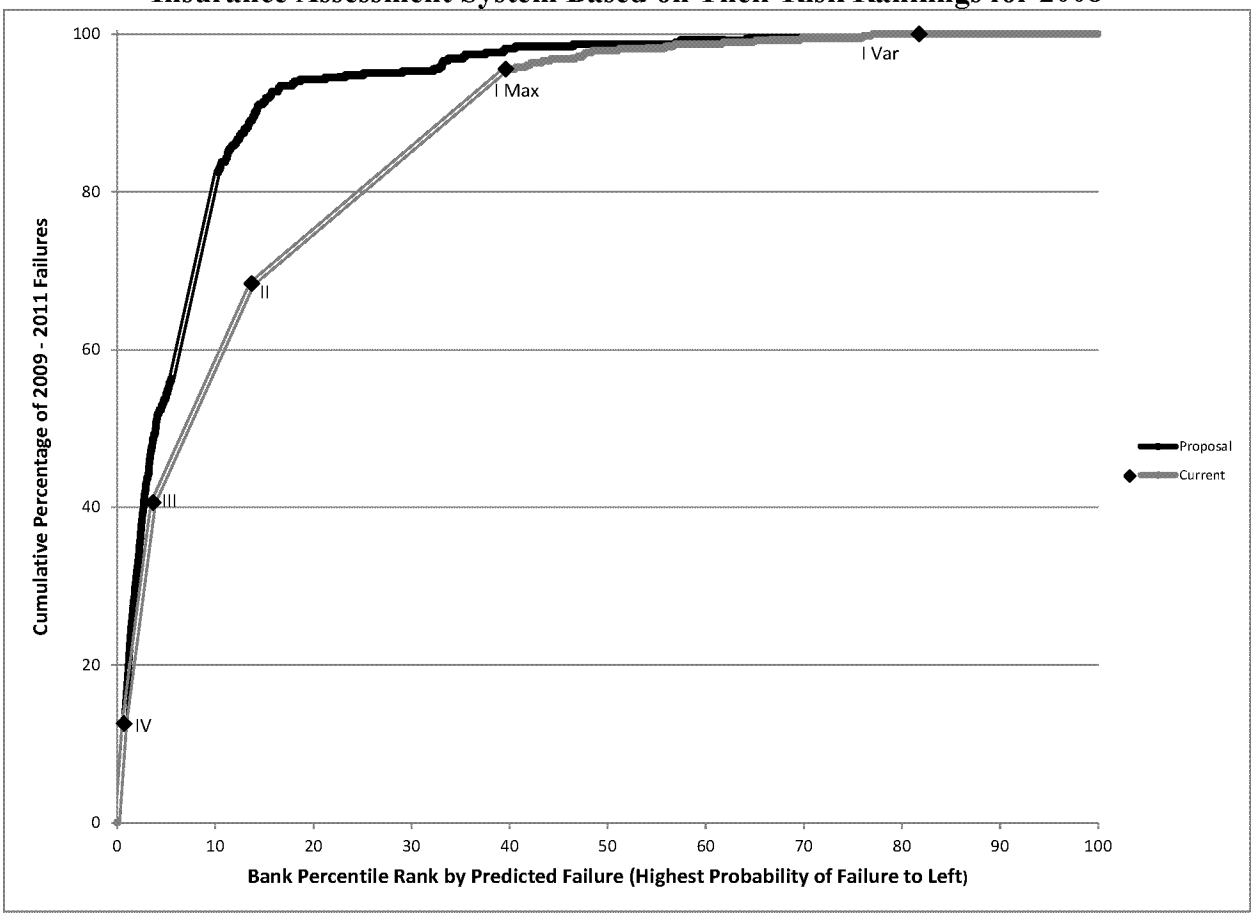


Figure 1.7 shows CAP curves for 2009. (Note that the vertical axis is not zero based.) The proposal is superior at most points and approximately equal to the current model at some points (near IV, and at points to the right of the ''X'').

Figure 1.7 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2009

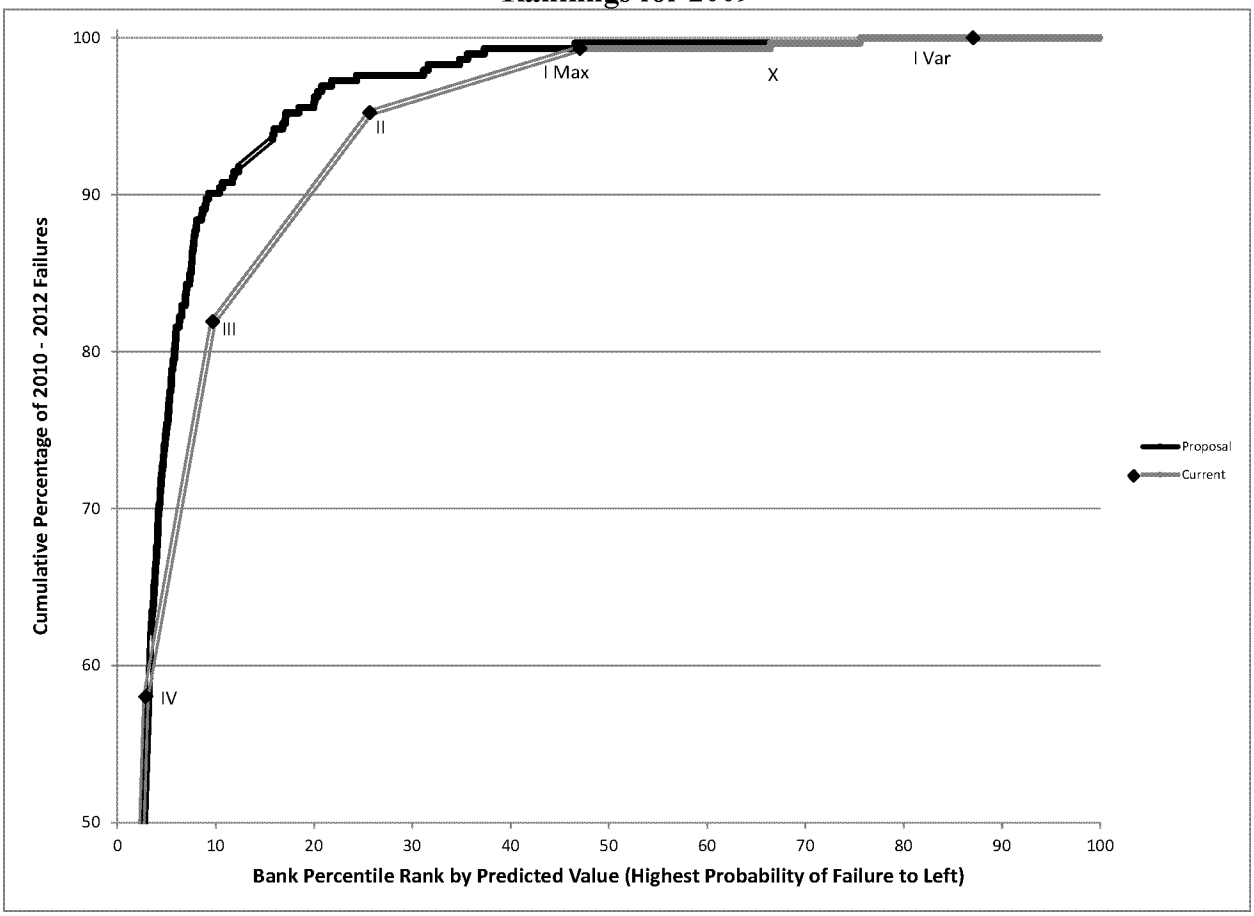
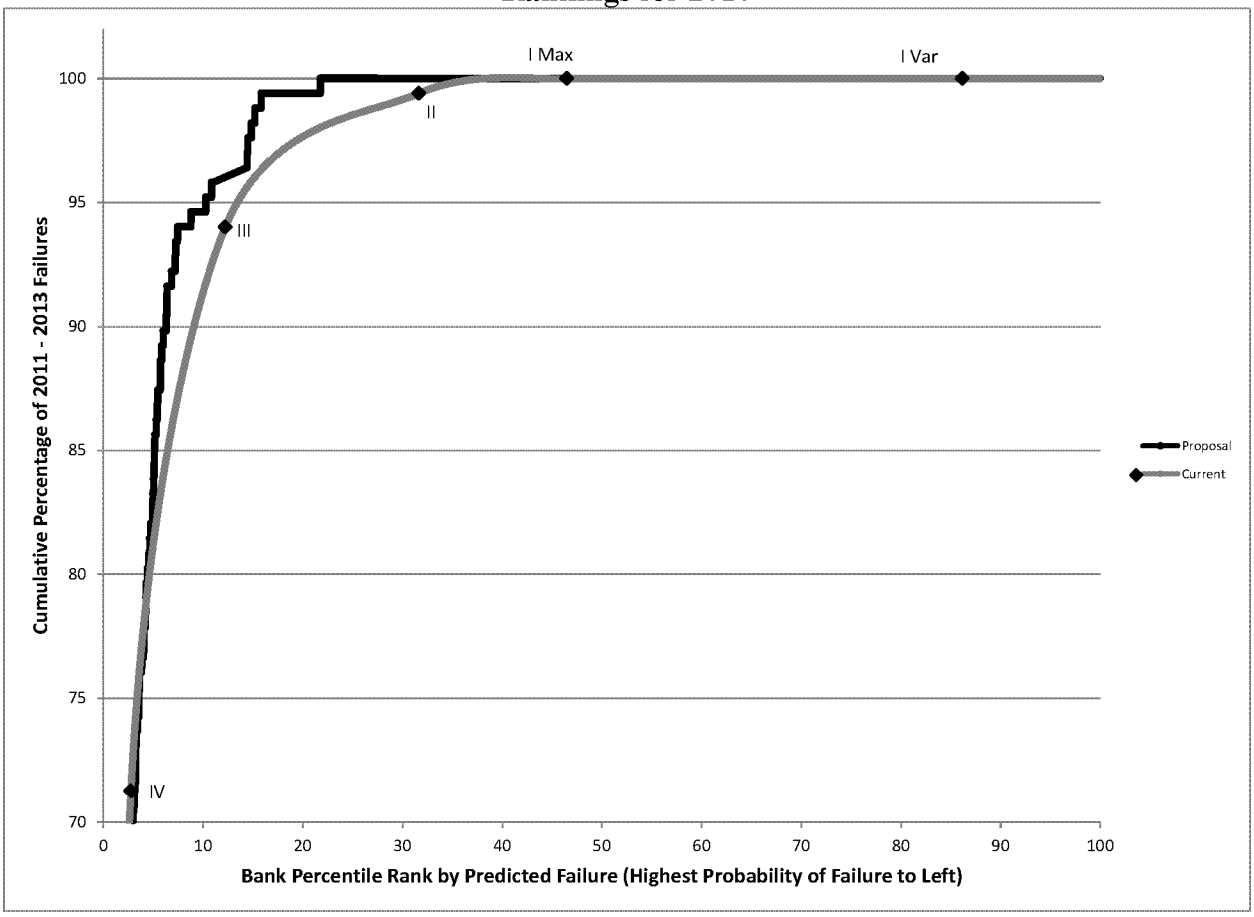


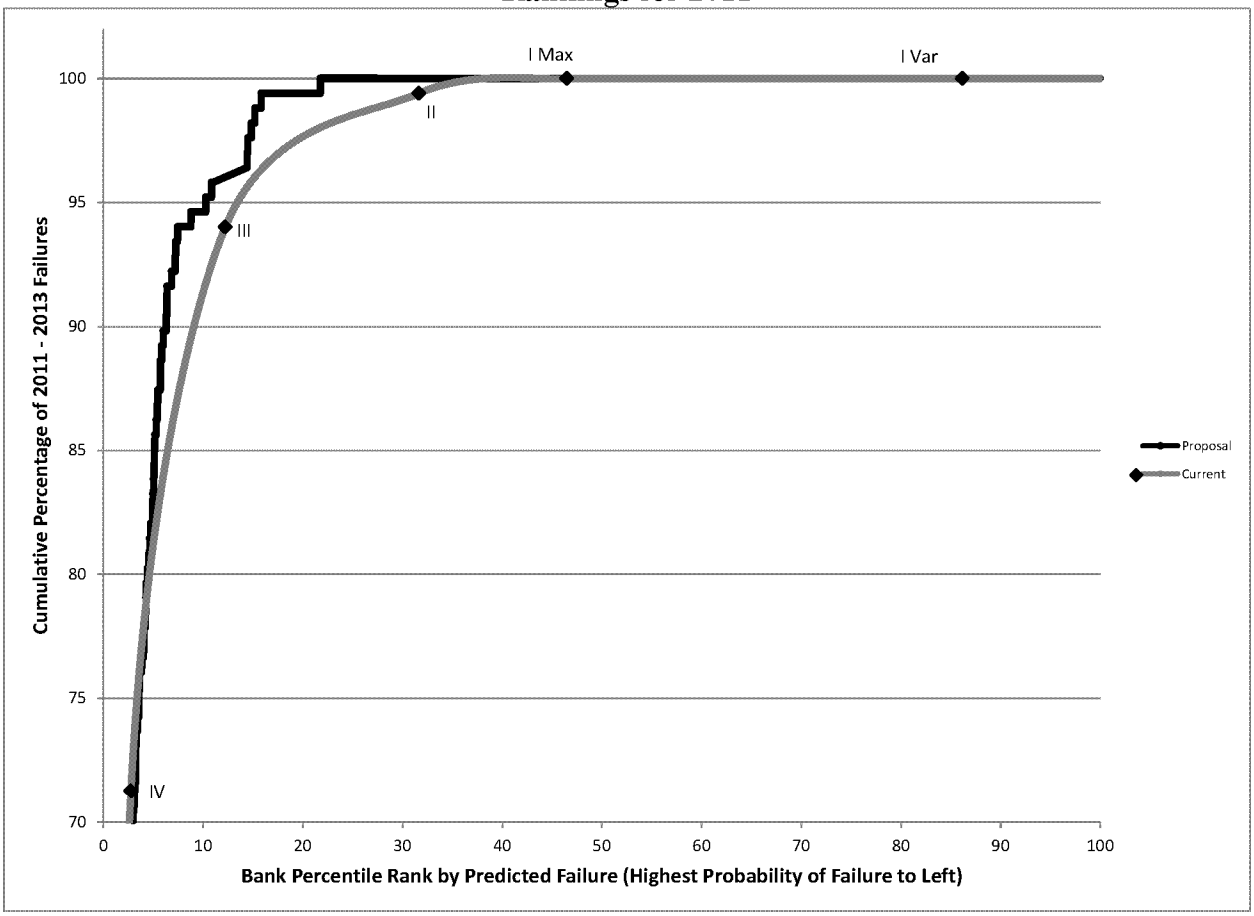
Figure 1.8 shows CAP curves for 2010. When using 2010 data to rank-order small banks based on failure likelihood, the proposal performs worse than the current small bank deposit insurance system for the 2.76 percent of worst-rated small banks (the percentage of banks in Risk Category IV). Bank failures after 2010 occurred in the earlier part of the three-year horizon (more failures in 2011 than in 2013). In such instances, the current small bank deposit insurance system, which has a one-year forecast horizon, can perform better than the proposal with a longer forecast horizon. However, the proposal performs better than or as well as the current model for all points to the right of the intersection of the two curves (near the point marked ''IV'').

Figure 1.8 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2010



A similar pattern is observed for projections from 2011, in Figure 1.9. The current small bank deposit insurance system is superior at point IV, as well as a few points from the 51st to 60th percentiles on the horizontal axis. At all other points, the proposal is superior or equal to the current model.

Figure 1.9 – Cumulative Accuracy Profiles of Proposal vs. the Small Bank Deposit Insurance Assessment System Based on Their Risk Rankings for 2011



Overall, the proposal is superior to the current small bank deposit insurance system for all years. The superiority of the new model is much stronger for projections from the years 2006, 2007, and 2008 than in the years 2010 and 2011. By 2010, CAMELS ratings largely reflected the weakened condition of many banks. Furthermore, for projections from 2010 and 2011, a large portion of the failures of the subsequent three-year horizon were near term—that is, in the earlier part of the three-year horizon. For projections done from 2006, 2007 and 2008, a larger portion of the actual failures were further out in the three-year horizon. Thus, while CAMELS 4 and 5 ratings can be good predictors of near-term failures, the additional indicators from the new model contribute more to forecasting accuracy when the failures are further out in time.

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Appendix 1.1—Loan Mix Index

The ''Loan Mix Index'' provides a measure of the extent to which banks hold higher risk types of assets. This index uses historical charge-off rates to identify loans types with higher risk. For each loan type, a ''weighted charge-off rate'' (shown in the table below) is calculated, which is the average charge-off rate for that loan type for each year since 2001 weighted by the number of bank failures in the year. (Thus charge-off rates during crisis years have more weight.) Table 1.1.1 below illustrates how the LMI is calculated for a hypothetical bank. The ''weighted charge-off rate'' values shown in the table are the same for all banks because they are industry-wide weighted averages. The remaining two columns will vary across banks, depending on the banks' portfolios. For each loan type, the value in the rightmost column is calculated by multiplying the ''weighted charge-off rate'' by the bank's loans (for that type) as a percent of its total assets. In this illustration, the sum of the right-hand column (84.79) is the LMI for this bank.

TABLE 1.1.1—LOAN MIX INDEX FOR A HYPOTHETICAL BANK [1]

	Weighted charge-off rate percent	Loan category as a percent of hypothetical bank's total assets	Product of two columns to the left
Construction & Development	4.50	1.40	6.29
Commercial & Industrial	1.60	24.24	38.75
Leases	1.50	0.64	0.96
Other Consumer	1.46	14.93	21.74
Loans to Foreign Government	1.34	0.24	0.32
Real Estate Loans Residual	1.02	0.11	0.11
Multifamily Residential	0.88	2.42	2.14
Nonfarm Nonresidential	0.73	13.71	9.99
1–4 Family Residential	0.70	2.27	1.58
Loans to Depository banks	0.58	1.15	0.66
Agricultural Real Estate	0.24	3.43	0.82
Agriculture	0.24	5.91	1.44
SUM (Loan Mix Index)	.....	70.45	84.79

Credit card loans are excluded from the list of ''loan types. Although credit card loans have high charge-off rates, they tend to also have high interest rates. The LMI also excludes obligations of states and other political subdivisions in the U.S., loans to nondepository financial institutions, and loans classified as ''other loans.'' There is no reported charge-off data for these types of loans.

[1] The table shows industry-wide weighted charge-off percentage rates, the loan category as a percentage of total assets, the products and the sum (the loan mix index) to two decimal places. The final rule will use seven decimal places for industry-wide weighted charge-off percentage rates, and as many decimal places as permitted by the FDIC's computer systems for the loan category as a percentage of total assets and the products. The total (the loan mix index itself) will use three decimal places.

Appendix 1.2—Variables Tested

Capital

Total equity/Total assets
Reserves/Total assets
Reserve coverage ratio = (allowance for loan & lease losses + allocated transfer risk reserve)/(past-due 90 days and non-accrual loans)

Asset Quality

Loans past due 30–89/Assets
Loans past due 90+ days/Assets
Nonaccrual loans and leases/Assets
Other real estate owned/Assets
Nonperforming Loans/Assets = SUM(past dues 90+, nonaccrual loans)/Assets
Gross loan charge-offs/Assets
Net loan charge-offs/Assets
Loan loss provision/Assets
Loan loss provision/Gross charge-offs
Change in loan loss provision
Gross loan charge-offs/(Net income + Provisions of loan losses)

Earnings

Income before taxes/Assets
Interest income
Interest expense
Net operating income/Assets
Net interest income/Assets
Deposit interest expense/Total deposits
Earnings volatility: 4-quarter standard deviation of income before taxes, 8-quarter standard deviation of income before taxes

Liquidity

Noncore liabilities/Assets
Loans and Leases/Total deposits
Liquid assets/Assets

Other measures

Loan concentration index
One-year asset growth rate
Quartile ranking of one-year asset growth rate
Retained earnings/Assets
Cash dividends on capital stock/Net income

Efficiency Ratio = Non-interest expenses/(Interest income + Non-interest income)

Supervisory Rating

Weighted average CAMELS component rating

CAMELS composite rating

Appendix 2—Analysis of the Projected Effects of the Payment of Assessments on the Capital and Earnings of Insured Depository Institutions

I. Introduction

This analysis estimates the effect of the changes in the deposit insurance assessment system and assessment rates in the proposed rule on the equity capital and profitability of banks.[1] The changes considered in the proposed rule affect only established small banks; they do not affect new banks, large banks or insured branches of foreign banks.

This appendix analyzes how the new assessment system under the proposed range of initial base assessment rates of 3 basis points to 30 basis points (P330) could increase or decrease earnings and capital relative to the current initial base assessment rate schedule of 5 basis points to 35 basis points (C535) and relative to the initial base assessment rate schedule of 3 basis points to 30 basis points (C330) that will take effect when the reserve ratio exceeds 1.15 percent under current regulations (*i.e.,* absent adoption of the proposed rule as a final rule). The proposed rule (P330) is intended to maintain approximate revenue neutrality compared to C330. Therefore, for insured established small banks in aggregate, the proposed rule will not affect aggregate earnings and capital compared to C330. Compared to the current system under current assessment rates, however, banks in the aggregate will have higher earnings and capital under the proposal. This analysis focuses on the magnitude of increases or decreases to individual established small banks' earnings and capital resulting from the proposed rule.

II. Assumptions and Data

The analysis assumes that pre-tax income for the next four quarters for each established small bank is equal to income in the fourth quarter of 2014. The analysis also assumes that the effects of changes in assessments are not transferred to customers in the form of changes in borrowing rates, deposit rates, or service fees. Since deposit insurance assessments are a tax-deductible operating expense, increases in the assessment expense can lower taxable income and decreases in the assessment expense can increase taxable income. Therefore, the analysis considers the effective after-tax cost of assessments in calculating the effect on capital.

The effect of the change in assessments on an established small bank's income is measured by the change in deposit insurance assessments as a percent of income before assessments, taxes, and extraordinary items (hereafter referred to as ''income''). This income measure is used in order to eliminate the potentially transitory effects of extraordinary items and taxes on profitability. In order to facilitate a comparison of the impact of assessment changes, established small banks were assigned to one of two groups: those that were profitable and those that were unprofitable for the year ending December 31, 2014. For this analysis, data as of December 31, 2014 are used to calculate each bank's assessment base and risk-based assessment rate. The base and rate are assumed to remain constant throughout the one year projection period. An established small bank's earnings retention and dividend policies also influence the extent to which assessments affect equity levels. If an established small bank maintains the same *dollar* amount of dividends when it pays a higher deposit insurance assessment under the proposed rule, equity (retained earnings) will be less by the full amount of the after-tax cost of the increase in the assessment. This analysis instead assumes that an established small bank will maintain its dividend *rate* (that is, dividends as a fraction of net income) unchanged from the weighted average rate reported over the four quarters ending December 31, 2014.

III. Projected Effects on Capital and Earnings Assuming a Range of Assessment Rates under the Current Established Small Bank Deposit Insurance Assessment System of 5 Basis Points to 35 Basis Points and under the Proposed System of 3 Basis Points to 30 Basis Points (Assessment Change P330–C535)

Under this scenario, no established small banks facing an increase in assessments would, as a result of the assessment increase, fall below a 4 percent or 2 percent leverage ratio. Two established small banks facing a decrease in assessments would, as a result of the decrease, have their leverage ratio rise above the 4 percent threshold. No established small banks facing a decrease in assessments would, as a result of the assessment decrease, have their leverage ratio rise above the 2 percent threshold.

[1] As it is elsewhere in this NPR, in this appendix, the term ''bank'' is synonymous with the term ''insured depository institution'' and the term ''established small bank'' is synonymous with the term ''established small depository institution'' as it is used in 12 CFR part 327. In general, an ''established small bank'' is one that has less than $10 billion in assets and that has been federally insured for at least five years as of the last day of any quarter for which it is being assessed.

Table 2.1 shows that approximately 83 percent of profitable established small banks are projected to have a decrease in assessments in an amount between 0 and 10 percent of income. Another 9 percent of profitable established small banks would have a reduction in assessments exceeding 10 percent of their income. 453 profitable established small banks would have an increase in assessments, with all but 7 of them facing assessment increases between 0 and10 percent of their income.

Table 2.1 – Effect of the Proposal on Income for Profitable Established Small Banks

(P330 compared to C535)

Change in Assessments Relative to Income	INSTITUTIONS		ASSETS	
	Number	Percent of Total Profitable Established Small Banks	Assets ($ billions)	Percent of Total Assets of Profitable Established Small Banks
Decrease over 40%	125	2	21	1
Decrease 20% to 40%	108	2	25	1
Decrease 10% to 20%	312	5	75	3
Decrease 5% to 10%	663	11	179	6
Decrease 0% to 5%	4,317	72	2,101	74
No Change	2	0	1	0
Increase 0% to 5%	432	7	430	15
Increase 5% to 10%	14	0	16	1
Increase 10% to 20%	3	0	1	0
Increase 20% to 40%	2	0	1	0
Increase over 40%	2	0	1	0
All	5,982	100	2,849	100

Table 2.2 provides the same analysis for established small banks that were unprofitable during the year ending December 31, 2014. Table 2.2 shows that about 51 percent of unprofitable established small banks are projected to have a decrease in assessments in an amount between 0 and 10 percent of their losses. Another 43 percent will have lower assessments in amounts exceeding 10 percent income. Only 25 unprofitable banks will face assessment increases, all but 2 of them in amounts between 0 and 10 percent of losses.

Table 2.2 – Effect of the Proposal on Income for Unprofitable Established Small Banks

(P330 compared to C535)

Change in Assessment Relative to Losses	INSTITUTIONS		ASSETS	
	Number	Percent of Total Unprofitable Established Small Banks	Assets ($ billions)	Percent of Total Assets of Unprofitable Established Small Banks
Decrease over 40%	55	13	8	8
Decrease 20% to 40%	49	12	7	7
Decrease 10% to 20%	74	18	14	14
Decrease 5% to 10%	80	20	27	28
Decrease 0% to 5%	126	31	32	33
No Change	1	0	0	0
Increase 0% to 5%	20	5	8	8
Increase 5% to 10%	3	1	0	0
Increase 10% to 20%	1	0	0	0
Increase 20% to 40%	0	0	0	0
Increase over 40%	1	0	0	0
All	410	100	96	100

IV. Projected Effects on Capital and Earnings Assuming a Range of Initial Base Assessment Rates Under Both the Current Established Small Bank Deposit Insurance Assessment System and the Proposed System of 3 Basis Points to 30 Basis Points (P330–C330)

Under this scenario, no established small banks facing an increase in assessments would, as a result of the assessment increase, fall below a 4 percent or 2 percent leverage ratio. One established small bank facing a decrease in assessments would, as a result of the assessment decrease, have its leverage ratio rise above the 4 percent threshold.

Table 2.3 shows that approximately 54 percent of profitable established small banks are projected to have a decrease in assessments in an amount between 0 and 10 percent of income. Another 4 percent of profitable established small banks would have a reduction in assessments exceeding 10 percent of their income. 1,211 profitable established small banks would have an increase in assessments, with all but 27 facing assessment increases between 0 and10 percent of their income.

Table 2.3 – Effect of the Proposal on Income for Profitable Established Small Banks

(P330 compared to C330)

Change in Assessments Relative to Income	INSTITUTIONS		ASSETS	
	Number	Percent of Total Profitable Established Small Banks	Assets ($ billions)	Percent of Total Assets of Profitable Established Small Banks
Decrease over 40%	69	1	11	0
Decrease 20% to 40%	69	1	18	1
Decrease 10% to 20%	145	2	29	1
Decrease 5% to 10%	333	6	85	3
Decrease 0% to 5%	2,849	48	1,097	38
No Change	1,306	22	459	16
Increase 0% to 5%	1,115	19	1,070	38
Increase 5% to 10%	69	1	61	2
Increase 10% to 20%	11	0	15	1
Increase 20% to 40%	7	0	2	0
Increase over 40%	9	0	2	0
All	5,982	100	2,849	100

Table 2.4 provides the same analysis for established small banks that were unprofitable during the year ending December 31, 2014. Table 2.4 shows that about 57 percent of unprofitable established small banks are projected to have a decrease in assessments in an amount between 0 and 10 percent of their losses. Another 27 percent will have lower assessments in amounts exceeding 10 percent of their losses. Only 59 unprofitable banks will face assessment increases, all but 6 of them in amounts between 0 and 10 percent of losses.

Table 2.4 – Effect of the Proposal on Income for Unprofitable Established Small Banks

(P330 compared to C330)

Change in Assessments Relative to Losses	INSTITUTIONS		ASSETS	
	Number	Percent of Total Unprofitable Established Small Banks	Assets ($ billions)	Percent of Total Assets of Unprofitable Established Small Banks
Decrease over 40%	34	8	5	5
Decrease 20% to 40%	30	7	5	5
Decrease 10% to 20%	48	12	6	7
Decrease 5% to 10%	62	15	13	13
Decrease 0% to 5%	172	42	47	49
No Change	5	1	7	7
Increase 0% to 5%	44	11	6	6
Increase 5% to 10%	9	2	7	7
Increase 10% to 20%	2	0	0	0
Increase 20% to 40%	1	0	0	0
Increase over 40%	3	1	0	0
All	410	100	96	100

X. Revisions to Code of Federal Regulations

List of subjects in 12 CFR Part 327.

Bank deposit insurance, Banks, Savings Associations.

For the reasons set forth above, the FDIC proposes to amend part 327 as follows:

PART 327—ASSESSMENTS

■ 1. The authority for 12 CFR part 327 continues to read as follows:

Authority: 12 U.S.C. 1441, 1813, 1815, 1817–19, 1821.

§ 327.3 [Amended]

■ 2. Amend § 327.3, in paragraph (b), by removing ''§§ 327.4(a) and 327.9'' and adding its place ''§ 327.4(a) and § 327.9 or § 327.16''.

§ 327.4 [Amended]

■ 3. Amend § 327.4:

■ a. In paragraph (a), by removing ''§ 327.9'' and adding in its place ''§ 327.9 or § 327.16''.

■ b. In paragraph (c), by removing ''§ 327.9(e)(3)'' and adding in its place ''§§ 327.9(f)(3) and 327.16 (f)(3)''.

■ 4. Amend § 327.8:

■ a. In paragraph (e) and (f), by removing ''§ 327.9(e)'' and adding in its place ''§§ 327.9(f) and 327.16 (f)''.

■ b. In paragraph (k)(1), by removing ''§ 327.9(f)(3) and (4)'' and adding in its place ''§§ 327.9(g)(3) and (4) and 327.16 (f)(3) and (4)''.

■ c. By revising paragraph (l).

■ d. In paragraphs (m), (n), (o), and (p), by removing ''§ 327.9(d)(1)'' and adding in its place ''§§ 327.9(e)(1) and 327.16(e)(1)'' and removing ''§ 327.9(d)(2)'' and adding in its place ''§§ 327.9(e)(2) and 327.16(e)(2).''

■ e. By adding paragraphs (v) through (z).

The revision and additions read as follows:

§ 327.8 Definitions.

* * * * *

(l) *Risk assignment.* Under § 327.9, for all small institutions and insured branches of foreign banks, risk assignment include assignment to Risk Category I, II, III, or IV and, within Risk Category I, assignment to an assessment rate. Under § 327.16, for all new small institutions and insured branches of foreign banks, risk assignment includes assignment to Risk Category I, II, III, or IV, and for insured branches of foreign banks within Risk Category I, assignment to an assessment rate or rates. For all established small institutions, large institutions and highly complex institutions, risk assignment includes assignment to an assessment rate.

* * * * *

(v) *Established small institution*—An established small institution is a ''small institution'' as defined under paragraph (e) of this section that meets the definition of ''established depository

institution'' under paragraph (k) of this section.

(w) *New small institution*—A new small institution is a ''small institution'' as defined under paragraph (e) of this section that meets the definition of ''new depository institution'' under paragraph (j) of this section.

(y) *Deposit Insurance Fund and DIF*—the Deposit Insurance Fund established pursuant to 12 U.S.C. 1813(y)(1).

(z) *Reserve ratio of the DIF*—the reserve ratio as defined in 12 U.S.C. 1813(y)(3).

■ 5. Amend § 327.9 by adding introductory text to read as follows:

§ 327.9 Assessment pricing methods.

The following pricing methods shall apply through the calendar quarter in which the reserve ratio of the DIF reaches 1.15 percent for the first time after June 30, 2015.

* * * * *

■ 6. Add § 327.16 to read as follows:

§ 327.16 Assessment pricing methods—beginning the first calendar quarter after the calendar quarter in which the reserve ratio of the DIF reaches 1.15 percent.

(a) *Established small institutions.* Beginning the first calendar quarter after June 30, 2015 in which the reserve ratio of the DIF reached or exceeded 1.15 percent in the previous calendar quarter, an established small institution shall have its initial base assessment rate determined by using the financial ratios methods set forth in paragraph (a)(1) of this section.

(1) Under the financial ratios method, each of seven financial ratios and a weighted average of CAMELS component ratings will be multiplied by a corresponding pricing multiplier. The sum of these products will be added to a uniform amount. The resulting sum shall equal the institution's initial base assessment rate; provided, however, that no institution's initial base assessment rate shall be less than the minimum initial base assessment rate in effect for established small institutions with a particular CAMELS component rating for that quarter nor greater than the maximum initial base assessment rate in effect for established small institutions with a particular CAMELS component rating for that quarter. An institution's initial base assessment rate, subject to adjustment pursuant to paragraphs (e)(1), (2), and (3) of this section, as appropriate (resulting in the institution's total base assessment rate, which in no case can be lower than 50 percent of the institution's initial base assessment rate), and adjusted for the actual assessment rates set by the Board under § 327.10(g), will equal an institution's assessment rate. The seven financial ratios are: Tier 1 Leverage Ratio (%); Net Income before Taxes/Total Assets (%); Nonperforming Loans and Leases/Gross Assets (%); Other Real Estate Owned/Gross Assets (%); Core Deposits/Total Assets (%); One Year Asset Growth (%); and Loan Mix Index. The ratios are defined in Table A.1 of Appendix A to this subpart. The ratios will be determined for an assessment period based upon information contained in an institution's report of condition filed as of the last day of the assessment period as set out in paragraph (a)(2) of this section. The weighted average of CAMELS component ratings is created by multiplying each component by the following percentages and adding the products: Capital adequacy—25%, Asset quality—20%, Management—25%, Earnings—10%, Liquidity—10%, and Sensitivity to market risk—10%. The following table sets forth the initial values of the pricing multipliers:

Risk measures *	Pricing multipliers **
Tier 1 Leverage ratio	[____]
Net Income before Taxes/Total Assets	[____]
Nonperforming Loans and Leases/Gross Assets	[____]
Other Real Estate Owned/Gross Assets	[____]
Core Deposits/Total Assets	[____]
One Year Asset Growth	[____]
Loan Mix Index	[____]
Weighted Average CAMELS Component Rating	[____]

* Ratios are expressed as percentages.
** Multipliers are rounded to three decimal places.

(i) The seven financial ratios and the weighted average CAMELS component rating will be multiplied by the respective pricing multiplier, and the products will be summed. To this result will be added the uniform amount. The resulting sum shall equal the institution's initial base assessment rate; provided, however, that no institution's initial base assessment rate shall be less than the minimum initial base assessment rate in effect for the applicable CAMELS composite grouping set out in § 327.10 for that quarter nor greater than the maximum initial base assessment rate in effect for the applicable CAMELS composite grouping set out in § 327.10 for that quarter.

(ii) Uniform amount and pricing multipliers. Except as adjusted for the actual assessment rates set by the Board under § 327.10(f), the uniform amount shall be:

(A) ____ whenever the assessment rate schedule set forth in § 327.10(b) is in effect;

(C) ____ whenever the assessment rate schedule set forth in § 327.10(c) is in effect; or

(D) ____ whenever the assessment rate schedule set forth in § 327.10(d) is in effect.

(iii) *Implementation of CAMELS rating changes*—(A) *Composite rating change.* If, during a quarter, a CAMELS composite rating change occurs in a way that changes the institution's initial base assessment rate, then the institution's initial base assessment rate for the portion of the quarter prior to the change shall be determined using the assessment schedule for the appropriate CAMELS composite rating in effect before the change, including any minimum or maximum initial base assessment rates, and subject to adjustment pursuant to paragraphs (e)(1) through (3) of this section, as appropriate, and adjusted for actual assessment rates set by the Board under § 327.10(f). For the portion of the quarter after the CAMELS composite rating change, the institution's initial base assessment rate shall be determined using the assessment schedule for the applicable CAMELS composite rating in effect, including any minimum or maximum initial base assessment rates, and subject to adjustment pursuant to paragraphs (e)(1) through (3) of this section, as appropriate, and adjusted for actual assessment rates set by the Board under § 327.10(f).

(B) *Component ratings changes.* If, during a quarter, a CAMELS component rating change occurs in a way that changes the institution's initial base assessment rate, the initial base assessment rate for the period before the change shall be determined under the financial ratios method using the CAMELS component ratings in effect before the change, subject to adjustment under paragraphs (e)(1) through (3) of this section, as appropriate. Beginning on the date of the CAMELS component rating change, the initial base assessment rate for the remainder of the quarter shall be determined under the financial ratios method using the CAMELS component ratings in effect after the change, again subject to adjustment under paragraphs (e)(1) through (3), as appropriate.

(2) *Applicable reports of condition.* The financial ratios used to determine the assessment rate for an established small institution shall be based upon information contained in an institution's Consolidated Reports of Condition and Income or Thrift Financial Report (or successor report, as appropriate) dated as of March 31 for the assessment period beginning the preceding January 1; dated as of June 30 for the assessment period beginning the preceding April 1; dated as of September 30 for the assessment period beginning the preceding July 1; and dated as of December 31 for the assessment period beginning the preceding October 1.

(b) *Large and Highly Complex institutions*—(1) *Assessment scorecard for large institutions (other than highly complex institutions).* (i) A large institution other than a highly complex institution shall have its initial base assessment rate determined using the scorecard for large institutions.

SCORECARD FOR LARGE INSTITUTIONS

	Scorecard measures and components	Measure weights (percent)	Component weights (percent)
P	Performance Score	.....	.....
P.1 ..	Weighted Average CAMELS Rating	100	30
P.2 ..	Ability to Withstand Asset-Related Stress	.....	50
	Leverage ratio	10	.....
	Concentration Measure	35	.....
	Core Earnings/Average Quarter-End Total Assets*	20	.....
	Credit Quality Measure	35	.....
P.3 ..	Ability to Withstand Funding-Related Stress	.....	20
	Core Deposits/Total Liabilities	60	.....
	Balance Sheet Liquidity Ratio	40	.....
L	Loss Severity Score	.....	.....
L.1 ...	Loss Severity Measure	.....	100

* Average of five quarter-end total assets (most recent and four prior quarters).

(ii) The scorecard for large institutions produces two scores: performance score and loss severity score.

(A) Performance score for large institutions. The performance score for large institutions is a weighted average of the scores for three measures: the weighted average CAMELS rating score, weighted at 30 percent; the ability to withstand asset-related stress score, weighted at 50 percent; and the ability to withstand funding-related stress score, weighted at 20 percent.

(*1*) *Weighted average CAMELS rating score.* (*i*) To compute the weighted average CAMELS rating score, a weighted average of an institution's CAMELS component ratings is calculated using the following weights:

CAMELS component	Weight (percent)
C	25
A	20
M	25
E	10
L	10
S	10

(*ii*) A weighted average CAMELS rating converts to a score that ranges from 25 to 100. A weighted average rating of 1 equals a score of 25 and a weighted average of 3.5 or greater equals a score of 100. Weighted average CAMELS ratings between 1 and 3.5 are assigned a score between 25 and 100. The score increases at an increasing rate as the weighted average CAMELS rating increases. Appendix B of this subpart describes the conversion of a weighted average CAMELS rating to a score.

(*2*) *Ability to withstand asset-related stress score.* (*i*) The ability to withstand asset-related stress score is a weighted average of the scores for four measures: Leverage ratio; concentration measure; the ratio of core earnings to average quarter-end total assets; and the credit quality measure. Appendices A and C of this subpart define these measures.

(*ii*) The Leverage ratio and the ratio of core earnings to average quarter-end total assets are described in appendix A and the method of calculating the scores is described in appendix C of this subpart.

(*iii*) The score for the concentration measure is the greater of the higher-risk assets to Tier 1 capital and reserves score or the growth-adjusted portfolio concentrations score. Both ratios are described in appendix C.

(*iv*) The score for the credit quality measure is the greater of the criticized and classified items to Tier 1 capital and reserves score or the underperforming assets to Tier 1 capital and reserves score.

(*v*) The following table shows the cutoff values and weights for the measures used to calculate the ability to withstand asset-related stress score. Appendix B of this subpart describes how each measure is converted to a score between 0 and 100 based upon the minimum and maximum cutoff values, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk.

CUTOFF VALUES AND WEIGHTS FOR MEASURES TO CALCULATE ABILITY TO WITHSTAND ASSET-RELATED STRESS SCORE

Measures of the ability to withstand asset-related stress	Cutoff values		Weights (percent)
	Minimum (percent)	Maximum (percent)	
Leverage ratio	6	13	10
Concentration Measure			35
Higher-Risk Assets to Tier 1 Capital and Reserves; or	0	135	
Growth-Adjusted Portfolio Concentrations	4	56	
Core Earnings/Average Quarter-End Total Assets*	0	2	20
Credit Quality Measure			35
Criticized and Classified Items/Tier 1 Capital and Reserves; or	7	100	
Underperforming Assets/Tier 1 Capital and Reserves	2	35	

* Average of five quarter-end total assets (most recent and four prior quarters).

(*vi*) The score for each measure in the table in paragraph (b)(1)(ii)(A)(*2*)(*v*) is multiplied by its respective weight and the resulting weighted score is summed to arrive at the score for an ability to withstand asset-related stress, which can range from 0 to 100, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk.

(*3*) Ability to withstand funding-related stress score. Two measures are used to compute the ability to withstand funding-related stress score: a core deposits to total liabilities ratio, and a balance sheet liquidity ratio. Appendix A of this subpart describes these measures. Appendix B of this subpart describes how these measures are converted to a score between 0 and 100, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk. The ability to withstand funding-related stress score is the weighted average of the scores for the two measures. In the following table, cutoff values and weights are used to derive an institution's ability to withstand funding-related stress score:

CUTOFF VALUES AND WEIGHTS TO CALCULATE ABILITY TO WITHSTAND FUNDING-RELATED STRESS SCORE

Measures of the ability to withstand funding-related stress	Cutoff values		Weights (percent)
	Minimum (percent)	Maximum (percent)	
Core Deposits/Total Liabilities	5	87	60
Balance Sheet Liquidity Ratio	7	243	40

(*4*) Calculation of Performance Score. In paragraph (b)(1)(ii)(A)(*3*), the scores for the weighted average CAMELS rating, the ability to withstand asset-related stress, and the ability to withstand funding-related stress are multiplied by their respective weights (30 percent, 50 percent and 20 percent, respectively) and the results are summed to arrive at the performance score. The performance score cannot be less than 0 or more than 100, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk.

(B) *Loss severity score.* The loss severity score is based on a loss severity measure that is described in appendix D of this subpart. Appendix B also describes how the loss severity measure is converted to a score between 0 and 100. The loss severity score cannot be less than 0 or more than 100, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk. Cutoff values for the loss severity measure are:

CUTOFF VALUES TO CALCULATE LOSS SEVERITY SCORE

Measure of loss severity	Cutoff values	
	Minimum (percent)	Maximum (percent)
Loss Severity	0	28

(C) *Total score.* (*1*) The performance and loss severity scores are combined to produce a total score. The loss severity score is converted into a loss severity factor that ranges from 0.8 (score of 5 or lower) to 1.2 (score of 85 or higher). Scores at or below the minimum cutoff of 5 receive a loss severity factor of 0.8, and scores at or above the maximum cutoff of 85 receive a loss severity factor of 1.2. The following linear interpolation converts loss severity scores between the cutoffs into a loss severity factor:

(Loss Severity Factor = 0.8 + [0.005 * (Loss Severity Score − 5)].

(*2*) The performance score is multiplied by the loss severity factor to produce a total score (total score = performance score * loss severity factor). The total score can be up to 20 percent higher or lower than the performance score but cannot be less than 30 or more than 90. The total score is subject to adjustment, up or down, by a maximum of 15 points, as set forth in paragraph (b)(3) of this section. The resulting total score after adjustment cannot be less than 30 or more than 90.

(D) *Initial base assessment rate.* A large institution with a total score of 30 pays the minimum initial base assessment rate and an institution with

a total score of 90 pays the maximum initial base assessment rate. For total scores between 30 and 90, initial base assessment rates rise at an increasing rate as the total score increases, calculated according to the following formula:

$$Rate = Minimum\ Rate + \left[\left(\left(1.4245 \times \left(\frac{Score}{100}\right)^2\right) - 0.0385\right) \times (Maximum\ Rate - Minimum\ Rate)\right]$$

where Rate is the initial base assessment rate (expressed in basis points), Maximum Rate is the maximum initial base assessment rate then in effect (expressed in basis points), and Minimum Rate is the minimum initial base assessment rate then in effect (expressed in basis points). Initial base assessment rates are subject to adjustment pursuant to paragraphs (b)(3), (e)(1), (e)(2), of this section; large institutions that are not well capitalized or have a CAMELS composite rating of 3, 4 or 5 shall be subject to the adjustment at paragraph (e)(3) of this section; these adjustments shall result in the institution's total base assessment rate, which in no case can be lower than 50 percent of the institution's initial base assessment rate.

(2) *Assessment scorecard for highly complex institutions.* (i) A highly complex institution shall have its initial base assessment rate determined using the scorecard for highly complex institutions.

SCORECARD FOR HIGHLY COMPLEX INSTITUTIONS

	Measures and components	Measure weights (percent)	Component weights (percent)
P	Performance Score	.....	.....
P.1 ..	Weighted Average CAMELS Rating	100	30
P.2 ..	Ability To Withstand Asset-Related Stress	.....	50
	Leverage ratio	10	.....
	Concentration Measure	35	.....
	Core Earnings/Average Quarter-End Total Assets	20	.....
	Credit Quality Measure and Market Risk Measure	35	.....
P.3 ..	Ability To Withstand Funding-Related Stress	.....	20
	Core Deposits/Total Liabilities	50	.....
	Balance Sheet Liquidity Ratio	30	.....
	Average Short-Term Funding/Average Total Assets	20	.....
L	Loss Severity Score	.....	.....
L.1 ...	Loss Severity	.....	100

(ii) The scorecard for highly complex institutions produces two scores: performance and loss severity.

(A) Performance score for highly complex institutions. The performance score for highly complex institutions is the weighted average of the scores for three components: weighted average CAMELS rating, weighted at 30 percent; ability to withstand asset-related stress score, weighted at 50 percent; and ability to withstand funding-related stress score, weighted at 20 percent.

(*1*) *Weighted average CAMELS rating score.* (*i*) To compute the score for the weighted average CAMELS rating, a weighted average of an institution's CAMELS component ratings is calculated using the following weights:

CAMELS component	Weight (percent)
C	25
A	20
M	25
E	10
L	10
S	10

(*ii*) A weighted average CAMELS rating converts to a score that ranges from 25 to 100. A weighted average rating of 1 equals a score of 25 and a weighted average of 3.5 or greater equals a score of 100. Weighted average CAMELS ratings between 1 and 3.5 are assigned a score between 25 and 100. The score increases at an increasing rate as the weighted average CAMELS rating increases. Appendix B of this subpart describes the conversion of a weighted average CAMELS rating to a score.

(*2*) *Ability to withstand asset-related stress score.* (*i*) The ability to withstand asset-related stress score is a weighted average of the scores for four measures: Leverage ratio; concentration measure; ratio of core earnings to average quarter-end total assets; credit quality measure and market risk measure. Appendix A of this subpart describes these measures.

(*ii*) The Leverage ratio and the ratio of core earnings to average quarter-end total assets are described in appendix A and the method of calculating the scores is described in appendix B of this subpart.

(*iii*) The score for the concentration measure for highly complex institutions is the greatest of the higher-risk assets to the sum of Tier 1 capital and reserves score, the top 20 counterparty exposure to the sum of Tier 1 capital and reserves score, or the largest counterparty exposure to the sum of Tier 1 capital and reserves score. Each ratio is described in appendix A of this subpart. The method used to convert the concentration measure into a score is described in appendix C of this subpart.

(*iv*) The credit quality score is the greater of the criticized and classified items to Tier 1 capital and reserves score or the underperforming assets to Tier 1 capital and reserves score. The market risk score is the weighted average of three scores—the trading revenue volatility to Tier 1 capital score, the market risk capital to Tier 1 capital score, and the level 3 trading assets to Tier 1 capital score. All of these ratios are described in appendix A of this subpart and the method of calculating the scores is described in appendix B. Each score is multiplied by its respective weight, and the resulting

weighted score is summed to compute the score for the market risk measure. An overall weight of 35 percent is allocated between the scores for the credit quality measure and market risk measure. The allocation depends on the ratio of average trading assets to the sum of average securities, loans and trading assets (trading asset ratio) as follows:

(*v*) Weight for credit quality score = 35 percent * (1—trading asset ratio); and,

(*vi*) Weight for market risk score = 35 percent * trading asset ratio.

(*vii*) Each of the measures used to calculate the ability to withstand asset-related stress score is assigned the following cutoff values and weights:

CUTOFF VALUES AND WEIGHTS FOR MEASURES TO CALCULATE THE ABILITY TO WITHSTAND ASSET-RELATED STRESS SCORE

Measures of the ability to withstand asset-related stress	Cutoff values		Market risk measure (percent)	Weights (percent)
	Minimum (percent)	Maximum (percent)		
Leverage ratio	6	13		10.
Concentration Measure				35.
Higher Risk Assets/Tier 1 Capital and Reserves;	0	135		
Top 20 Counterparty Exposure/Tier 1 Capital and Reserves; or	0	125		
Largest Counterparty Exposure/Tier 1 Capital and Reserves	0	20		
Core Earnings/Average Quarter-end Total Assets	0	2		20.
Credit Quality Measure*				35* (1 − Trading Asset Ratio).
Criticized and Classified Items to Tier 1 Capital and Reserves; or	7	100		
Underperforming Assets/Tier 1 Capital and Reserves	2	35		
Market Risk Measure*				35* Trading Asset Ratio.
Trading Revenue Volatility/Tier 1 Capital	0	2	60	
Market Risk Capital/Tier 1 Capital	0	10	20	
Level 3 Trading Assets/Tier 1 Capital	0	35	20	

* Combined, the credit quality measure and the market risk measure are assigned a 35 percent weight. The relative weight of each of the two scores depends on the ratio of average trading assets to the sum of average securities, loans and trading assets (trading asset ratio).

(*viii*) [Reserved]

(*ix*) The score of each measure is multiplied by its respective weight and the resulting weighted score is summed to compute the ability to withstand asset-related stress score, which can range from 0 to 100, where a score of 0 reflects the lowest risk and a score of 100 reflects the highest risk.

(*3*) Ability to withstand funding related stress score. Three measures are used to calculate the score for the ability to withstand funding-related stress: a core deposits to total liabilities ratio, a balance sheet liquidity ratio, and average short-term funding to average total assets ratio. Appendix A of this subpart describes these ratios. Appendix B of this subpart describes how each measure is converted to a score. The ability to withstand funding-related stress score is the weighted average of the scores for the three measures. In the following table, cutoff values and weights are used to derive an institution's ability to withstand funding-related stress score:

CUTOFF VALUES AND WEIGHTS TO CALCULATE ABILITY TO WITHSTAND FUNDING-RELATED STRESS MEASURES

Measures of the ability to withstand funding-related stress	Cutoff values		Weights (percent)
	Minimum (percent)	Maximum (percent)	
Core Deposits/Total Liabilities	5	87	50
Balance Sheet Liquidity Ratio	7	243	30
Average Short-term Funding/Average Total Assets	2	19	20

(*4*) Calculation of Performance Score. The weighted average CAMELS score, the ability to withstand asset-related stress score, and the ability to withstand funding-related stress score are multiplied by their respective weights (30 percent, 50 percent and 20 percent, respectively) and the results are summed to arrive at the performance score, which cannot be less than 0 or more than 100.

(B) *Loss severity score.* The loss severity score is based on a loss severity measure described in appendix D of this subpart. Appendix B of this subpart also describes how the loss severity measure is converted to a score between 0 and 100. Cutoff values for the loss severity measure are:

CUTOFF VALUES FOR LOSS SEVERITY MEASURE

Measure of loss severity	Cutoff values	
	Minimum (percent)	Maximum (percent)
Loss Severity	0	28

(C) *Total score.* The performance and loss severity scores are combined to produce a total score. The loss severity score is converted into a loss severity factor that ranges from 0.8 (score of 5 or lower) to 1.2 (score of 85 or higher). Scores at or below the minimum cutoff of 5 receive a loss severity factor of 0.8, and scores at or above the maximum cutoff of 85 receive a loss severity factor of 1.2. The following linear interpolation converts loss severity scores between the cutoffs into a loss severity factor: (Loss Severity Factor = 0.8 + [0.005 * (Loss Severity Score − 5)]. The performance score is multiplied by the loss severity factor to produce a total score (total score = performance score * loss severity factor). The total score can be up to 20 percent higher or lower than the performance score but cannot be less than 30 or more than 90. The total score is subject to adjustment, up or down, by a maximum of 15 points, as set forth in paragraph (b)(3) of this section. The resulting total score after adjustment cannot be less than 30 or more than 90.

(D) *Initial base assessment rate.* A highly complex institution with a total score of 30 pays the minimum initial base assessment rate and an institution with a total score of 90 pays the maximum initial base assessment rate. For total scores between 30 and 90, initial base assessment rates rise at an increasing rate as the total score increases, calculated according to the following formula:

$$Rate = Minimum\ Rate + \left[\left(\left(1.4245 \times \left(\frac{Score}{100}\right)^2\right) - 0.0385\right) \times (Maximum\ Rate - Minimum\ Rate)\right]$$

where Rate is the initial base assessment rate (expressed in basis points), Maximum Rate is the maximum initial base assessment rate then in effect (expressed in basis points), and Minimum Rate is the minimum initial base assessment rate then in effect (expressed in basis points). Initial base assessment rates are subject to adjustment pursuant to paragraphs (b)(3), (e)(1), and (e)(2) of this section; highly complex institutions that are not well capitalized or have a CAMELS composite rating of 3, 4 or 5 shall be subject to the adjustment at paragraph (e)(3) of this section; these adjustments shall result in the institution's total base assessment rate, which in no case can be lower than 50 percent of the institution's initial base assessment rate.

(3) Adjustment to total score for large institutions and highly complex institutions. The total score for large institutions and highly complex institutions is subject to adjustment, up or down, by a maximum of 15 points, based upon significant risk factors that are not adequately captured in the appropriate scorecard. In making such adjustments, the FDIC may consider such information as financial performance and condition information and other market or supervisory information. The FDIC will also consult with an institution's primary federal regulator and, for state chartered institutions, state banking supervisor.

(i) *Prior notice of adjustments*—(A) *Prior notice of upward adjustment.* Prior to making any upward adjustment to an institution's total score because of considerations of additional risk information, the FDIC will formally notify the institution and its primary federal regulator and provide an opportunity to respond. This notification will include the reasons for the adjustment and when the adjustment will take effect.

(B) *Prior notice of downward adjustment.* Prior to making any downward adjustment to an institution's total score because of considerations of additional risk information, the FDIC will formally notify the institution's primary federal regulator and provide an opportunity to respond.

(ii) *Determination whether to adjust upward; effective period of adjustment.* After considering an institution's and the primary federal regulator's responses to the notice, the FDIC will determine whether the adjustment to an institution's total score is warranted, taking into account any revisions to scorecard measures, as well as any actions taken by the institution to address the FDIC's concerns described in the notice. The FDIC will evaluate the need for the adjustment each subsequent assessment period. Except as provided in paragraph (b)(3)(iv) of this section, the amount of adjustment cannot exceed the proposed adjustment amount contained in the initial notice unless additional notice is provided so that the primary federal regulator and the institution may respond.

(iii) *Determination whether to adjust downward; effective period of adjustment.* After considering the primary federal regulator's responses to the notice, the FDIC will determine whether the adjustment to total score is warranted, taking into account any revisions to scorecard measures. Any downward adjustment in an institution's total score will remain in effect for subsequent assessment periods until the FDIC determines that an adjustment is no longer warranted. Downward adjustments will be made without notification to the institution. However, the FDIC will provide advance notice to an institution and its primary federal regulator and give them an opportunity to respond before removing a downward adjustment.

(iv) *Adjustment without notice.* Notwithstanding the notice provisions set forth above, the FDIC may change an institution's total score without advance notice under this paragraph, if the institution's supervisory ratings or the scorecard measures deteriorate.

(c) *New small institutions*—(1) *Risk Categories.* Each new small institution shall be assigned to one of the following four Risk Categories based upon the institution's capital evaluation and supervisory evaluation as defined in this section.

(i) *Risk Category I.* New small institutions in Supervisory Group A that are Well Capitalized will be assigned to Risk Category I.

(ii) *Risk Category II.* New small institutions in Supervisory Group A that are Adequately Capitalized, and new small institutions in Supervisory Group B that are either Well Capitalized or Adequately Capitalized will be assigned to Risk Category II.

(iii) *Risk Category III.* New small institutions in Supervisory Groups A and B that are Undercapitalized, and new small institutions in Supervisory Group C that are Well Capitalized or Adequately Capitalized will be assigned to Risk Category III.

(iv) *Risk Category IV.* New small institutions in Supervisory Group C that are Undercapitalized will be assigned to Risk Category IV.

(2) *Capital evaluations.* Each new small institution will receive one of the following three capital evaluations on the basis of data reported in the institution's Consolidated Reports of Condition and Income or Thrift Financial Report (or successor report, as appropriate) dated as of March 31 for the assessment period beginning the preceding January 1; dated as of June 30 for the assessment period beginning the

preceding April 1; dated as of September 30 for the assessment period beginning the preceding July 1; and dated as of December 31 for the assessment period beginning the preceding October 1.

(i) *Well Capitalized.* A Well Capitalized institution is one that satisfies each of the following capital ratio standards: Total risk-based capital ratio, 10.0 percent or greater; tier 1 risk-based capital ratio, 8.0 percent or greater; leverage ratio, 5.0 percent or greater; and common equity tier 1 capital ratio, 6.5 percent or greater, and after January 1, 2018, if the institution is an insured depository institution subject to the enhanced supplementary leverage ratio standards under 12 CFR 6.4(c)(1)(iv)(B), 12 CFR 208.43(c)(1)(iv)(B), or 12 CFR 324.403(b)(1)(vi), as each may be amended from time to time, a supplementary leverage ratio of 6.0 percent or greater.

(ii) *Adequately Capitalized.* An Adequately Capitalized institution is one that does not satisfy the standards of Well Capitalized in paragraph (c)(2)(i) of this section but satisfies each of the following capital ratio standards: Total risk-based capital ratio, 8.0 percent or greater; tier 1 risk-based capital ratio, 6.0 percent or greater; leverage ratio, 4.0 percent or greater; and common equity tier 1 capital ratio, 4.5 percent or greater, and after January 1, 2018, if the institution is an insured depository institution subject to the advanced approaches risk-based capital rules under 12 CFR 6.4(c)(2)(iv)(B), 12 CFR 208.43(c)(2)(iv)(B), or 12 CFR 324.403(b)(2)(vi), as each may be amended from time to time, a supplementary leverage ratio of 3.0 percent or greater.

(iii) *Undercapitalized.* An undercapitalized institution is one that does not qualify as either Well Capitalized or Adequately Capitalized under paragraphs (c)(2)(i) and (ii) of this section.

(3) *Supervisory evaluations.* Each new small institution will be assigned to one of three Supervisory Groups based on the Corporation's consideration of supervisory evaluations provided by the institution's primary federal regulator. The supervisory evaluations include the results of examination findings by the primary federal regulator, as well as other information that the primary federal regulator determines to be relevant. In addition, the Corporation will take into consideration such other information (such as state examination findings, as appropriate) as it determines to be relevant to the institution's financial condition and the risk posed to the Deposit Insurance Fund. The three Supervisory Groups are:

(i) *Supervisory Group ''A.''* This Supervisory Group consists of financially sound institutions with only a few minor weaknesses;

(ii) *Supervisory Group ''B.''* This Supervisory Group consists of institutions that demonstrate weaknesses which, if not corrected, could result in significant deterioration of the institution and increased risk of loss to the Deposit Insurance Fund; and

(iii) *Supervisory Group ''C.''* This Supervisory Group consists of institutions that pose a substantial probability of loss to the Deposit Insurance Fund unless effective corrective action is taken.

(4) *Assessment method for new small institutions in Risk Category I*—(i) *Maximum Initial Base Assessment Rate for Risk Category I New Small Institutions.* A new small institution in Risk Category I shall be assessed the maximum initial base assessment rate for Risk Category I small institutions in the relevant assessment period.

(ii) *New small institutions not subject to certain adjustments.* No new small institution in any risk category shall be subject to the adjustment in (e)(1) of this section.

(iii) *Implementation of CAMELS rating changes*—(A) *Changes between risk categories.* If, during a quarter, a CAMELS composite rating change occurs that results in a Risk Category I institution moving from Risk Category I to Risk Category II, III or IV, the institution's initial base assessment rate for the portion of the quarter that it was in Risk Category I shall be the maximum initial base assessment rate for the relevant assessment period, subject to adjustment pursuant to paragraph (e)(2) of this section, as appropriate, and adjusted for the actual assessment rates set by the Board under § 327.10(g). For the portion of the quarter that the institution was not in Risk Category I, the institution's initial base assessment rate, which shall be subject to adjustment pursuant to paragraphs (e)(2) and (3) of this section, as appropriate, shall be determined under the assessment schedule for the appropriate Risk Category. If, during a quarter, a CAMELS composite rating change occurs that results in an institution moving from Risk Category II, III or IV to Risk Category I, then the maximum initial base assessment rate for new small institutions in Risk Category I shall apply for the portion of the quarter that it was in Risk Category I, subject to adjustment pursuant to paragraph (e)(2) of this section, as appropriate, and adjusted for the actual assessment rates set by the Board under § 327.10(g). For the portion of the quarter that the institution was not in Risk Category I, the institution's initial base assessment rate, which shall be subject to adjustment pursuant to paragraphs (e)(2) and (3) of this section shall be determined under the assessment schedule for the appropriate Risk Category.

(d) *Insured branches of foreign banks*—(1) *Risk categories for insured branches of foreign banks.* Insured branches of foreign banks shall be assigned to risk categories as set forth in paragraph (c)(1) of this section.

(2) *Capital evaluations for insured branches of foreign banks.* Each insured branch of a foreign bank will receive one of the following three capital evaluations on the basis of data reported in the institution's Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks dated as of March 31 for the assessment period beginning the preceding January 1; dated as of June 30 for the assessment period beginning the preceding April 1; dated as of September 30 for the assessment period beginning the preceding July 1; and dated as of December 31 for the assessment period beginning the preceding October 1.

(i) *Well Capitalized.* An insured branch of a foreign bank is Well Capitalized if the insured branch:

(A) Maintains the pledge of assets required under § 347.209 of this chapter; and

(B) Maintains the eligible assets prescribed under § 347.210 of this chapter at 108 percent or more of the average book value of the insured branch's third-party liabilities for the quarter ending on the report date specified in paragraph (d)(2) of this section.

(ii) *Adequately Capitalized.* An insured branch of a foreign bank is Adequately Capitalized if the insured branch:

(A) Maintains the pledge of assets required under § 347.209 of this chapter; and

(B) Maintains the eligible assets prescribed under § 347.210 of this chapter at 106 percent or more of the average book value of the insured branch's third-party liabilities for the quarter ending on the report date specified in paragraph (d)(2) of this section; and

(C) Does not meet the definition of a Well Capitalized insured branch of a foreign bank.

(iii) *Undercapitalized.* An insured branch of a foreign bank is undercapitalized institution if it does

not qualify as either Well Capitalized or Adequately Capitalized under paragraphs (d)(2)(i) and (ii) of this section.

(3) *Supervisory evaluations for insured branches of foreign banks.* Each insured branch of a foreign bank will be assigned to one of three supervisory groups as set forth in paragraph (c)(3) of this section.

(4) *Assessment method for insured branches of foreign banks in Risk Category I.* Insured branches of foreign banks in Risk Category I shall be assessed using the weighted average ROCA component rating.

(i) *Weighted average ROCA component rating.* The weighted average ROCA component rating shall equal the sum of the products that result from multiplying ROCA component ratings by the following percentages: Risk Management—35%, Operational Controls—25%, Compliance—25%, and Asset Quality—15%. The weighted average ROCA rating will be multiplied by 5.076 (which shall be the pricing multiplier). To this result will be added a uniform amount. The resulting sum—the initial base assessment rate—will equal an institution's total base assessment rate; provided, however, that no institution's total base assessment rate will be less than the minimum total base assessment rate in effect for Risk Category I institutions for that quarter nor greater than the maximum total base assessment rate in effect for Risk Category I institutions for that quarter.

(ii) *Uniform amount.* Except as adjusted for the actual assessment rates set by the Board under § 327.10(g), the uniform amount for all insured branches of foreign banks shall be:

(A) −3.127 whenever the assessment rate schedule set forth in § 327.10(a) is in effect;

(B) −5.127 whenever the assessment rate schedule set forth in § 327.10(b) is in effect;

(C) −6.127 whenever the assessment rate schedule set forth in § 327.10(c) is in effect; or

(D) −7.127 whenever the assessment rate schedule set forth in § 327.10(d) is in effect.

(iii) *Insured branches of foreign banks not subject to certain adjustments.* No insured branch of a foreign bank in any risk category shall be subject to the adjustments in paragraphs (b)(3) or (e)(1) or (3) of this section.

(iv) *Implementation of changes between Risk Categories for insured branches of foreign banks.* If, during a quarter, a ROCA rating change occurs that results in an insured branch of a foreign bank moving from Risk Category I to Risk Category II, III or IV, the institution's initial base assessment rate for the portion of the quarter that it was in Risk Category I shall be determined using the weighted average ROCA component rating. For the portion of the quarter that the institution was not in Risk Category I, the institution's initial base assessment rate shall be determined under the assessment schedule for the appropriate Risk Category. If, during a quarter, a ROCA rating change occurs that results in an insured branch of a foreign bank moving from Risk Category II, III or IV to Risk Category I, the institution's assessment rate for the portion of the quarter that it was in Risk Category I shall equal the rate determined as provided using the weighted average ROCA component rating. For the portion of the quarter that the institution was not in Risk Category I, the institution's initial base assessment rate shall be determined under the assessment schedule for the appropriate Risk Category.

(v) *Implementation of changes within Risk Category I for insured branches of foreign banks.* If, during a quarter, an insured branch of a foreign bank remains in Risk Category I, but a ROCA component rating changes that will affect the institution's initial base assessment rate, separate assessment rates for the portion(s) of the quarter before and after the change(s) shall be determined under this paragraph (d)(4) of this section.

(e) *Adjustments*—(1) *Unsecured debt adjustment to initial base assessment rate for all institutions.* All institutions, except new institutions as provided under paragraphs (g)(1) and (2) of this section and insured branches of foreign banks as provided under paragraph (d)(4)(iii) of this section, shall be subject to an adjustment of assessment rates for unsecured debt. Any unsecured debt adjustment shall be made after any adjustment under paragraph (b)(3) of this section.

(i) *Application of unsecured debt adjustment.* The unsecured debt adjustment shall be determined as the sum of the initial base assessment rate plus 40 basis points; that sum shall be multiplied by the ratio of an insured depository institution's long-term unsecured debt to its assessment base. The amount of the reduction in the assessment rate due to the adjustment is equal to the dollar amount of the adjustment divided by the amount of the assessment base.

(ii) *Limitation.* No unsecured debt adjustment for any institution shall exceed the lesser of 5 basis points or 50 percent of the institution's initial base assessment rate.

(iii) *Applicable quarterly reports of condition.* Unsecured debt adjustment ratios for any given quarter shall be calculated from quarterly reports of condition (Consolidated Reports of Condition and Income and Thrift Financial Reports, or any successor reports to either, as appropriate) filed by each institution as of the last day of the quarter.

(2) *Depository institution debt adjustment to initial base assessment rate for all institutions.* All institutions shall be subject to an adjustment of assessment rates for unsecured debt held that is issued by another depository institution. Any such depository institution debt adjustment shall be made after any adjustment under paragraphs (b)(3) and (e)(1) of this section.

(i) *Application of depository institution debt adjustment.* An insured depository institution shall pay a 50 basis point adjustment on the amount of unsecured debt it holds that was issued by another insured depository institution to the extent that such debt exceeds 3 percent of the institution's Tier 1 capital. The amount of long-term unsecured debt issued by another insured depository institution shall be calculated using the same valuation methodology used to calculate the amount of such debt for reporting on the asset side of the balance sheets.

(ii) *Applicable quarterly reports of condition.* Depository institution debt adjustment ratios for any given quarter shall be calculated from quarterly reports of condition (Consolidated Reports of Condition and Income and Thrift Financial Reports, or any successor reports to either, as appropriate) filed by each institution as of the last day of the quarter.

(3) *Brokered Deposit Adjustment.* All new small institutions in Risk Categories II, III, and IV, all established small institutions, all large institutions and all highly complex institutions, except established small institutions and large and highly complex institutions (including new large and new highly complex institutions) that are well capitalized and have a CAMELS composite rating of 1 or 2, shall be subject to an assessment rate adjustment for brokered deposits. Any such brokered deposit adjustment shall be made after any adjustment under paragraphs (b)(3) and (e)(1) and (2) of this section. The brokered deposit adjustment includes all brokered deposits as defined in Section 29 of the Federal Deposit Insurance Act (12 U.S.C. 1831f), and 12 CFR 337.6, including reciprocal deposits as defined in § 327.8(p), and brokered deposits that

consist of balances swept into an insured institution from another institution. The adjustment under this paragraph is limited to those institutions whose ratio of brokered deposits to domestic deposits is greater than 10 percent; asset growth rates do not affect the adjustment. Insured branches of foreign banks are not subject to the brokered deposit adjustment as provided in paragraph (d)(4)(iii) of this section.

(i) *Application of brokered deposit adjustment.* The brokered deposit adjustment shall be determined by multiplying 25 basis points by the ratio of the difference between an insured depository institution's brokered deposits and 10 percent of its domestic deposits to its assessment base.

(ii) *Limitation.* The maximum brokered deposit adjustment will be 10 basis points; the minimum brokered deposit adjustment will be 0.

(iii) *Applicable quarterly reports of condition.* Brokered deposit ratios for any given quarter shall be calculated from the quarterly reports of condition (Call Reports and Thrift Financial Reports, or any successor reports to either, as appropriate) filed by each institution as of the last day of the quarter.

(f) *Request to be treated as a large institution*—(1) *Procedure.* Any institution with assets of between $5 billion and $10 billion may request that the FDIC determine its assessment rate as a large institution. The FDIC will consider such a request provided that it has sufficient information to do so. Any such request must be made to the FDIC's Division of Insurance and Research. Any approved change will become effective within one year from the date of the request. If an institution whose request has been granted subsequently reports assets of less than $5 billion in its report of condition for four consecutive quarters, the institution shall be deemed a small institution for assessment purposes.

(2) *Time limit on subsequent request for alternate method.* An institution whose request to be assessed as a large institution is granted by the FDIC shall not be eligible to request that it be assessed as a small institution for a period of three years from the first quarter in which its approved request to be assessed as a large institution became effective. Any request to be assessed as a small institution must be made to the FDIC's Division of Insurance and Research.

(3) *Request for review.* An institution that disagrees with the FDIC's determination that it is a large, highly complex, or small institution may request review of that determination pursuant to § 327.4(c).

(g) *New and established institutions and exceptions*—(1) *New small institutions.* A new small Risk Category I institution shall be assessed the Risk Category I maximum initial base assessment rate for the relevant assessment period. No new small institution in any risk category shall be subject to the unsecured debt adjustment as determined under paragraph (e)(1) of this section. All new small institutions in any Risk Category shall be subject to the depository institution debt adjustment as determined under paragraph (e)(2) of this section. All new small institutions in Risk Categories II, III, and IV shall be subject to the brokered deposit adjustment as determined under paragraph (e)(3) of this section.

(2) *New large institutions and new highly complex institutions.* All new large institutions and all new highly complex institutions shall be assessed under the appropriate method provided at paragraph (b)(1) or (2) of this section and subject to the adjustments provided at paragraphs (b)(3) and (e)(2) and (3) of this section. No new highly complex or large institutions are entitled to adjustment under paragraph (e)(1) of this section. If a large or highly complex institution has not yet received CAMELS ratings, it will be given a weighted CAMELS rating of 2 for assessment purposes until actual CAMELS ratings are assigned.

(3) *CAMELS ratings for the surviving institution in a merger or consolidation.* When an established institution merges with or consolidates into a new institution, if the FDIC determines the resulting institution to be an established institution under § 327.8(k)(1), its CAMELS ratings for assessment purposes will be based upon the established institution's ratings prior to the merger or consolidation until new ratings become available.

(4) *Rate applicable to institutions subject to subsidiary or credit union exception*—(i) *Established small institutions.* A small institution that is established under § 327.8(k)(4) or (5) shall be assessed as follows:

(A) If the institution does not have a CAMELS composite rating, its initial base assessment rate shall be 2 basis points above the minimum initial base assessment rate applicable to established small institutions until it receives a CAMELS composite rating.

(B) If the institution has a CAMELS composite rating but no CAMELS component ratings, its initial assessment rate shall be determined using the financial ratios method, as set forth in (a)(1) of this section, but its CAMELS composite rating will be substituted for its weighted average CAMELS component rating and, if the institution has not filed four quarterly reports of condition, then the assessment rate will be determined by annualizing, where appropriate, financial ratios from all quarterly reports of condition that have been filed.

(ii) *Large or highly complex institutions.* If a large or highly complex institution is considered established under § 327.8(k)(4) or (5), but does not have CAMELS component ratings, it will be given a weighted CAMELS rating of 2 for assessment purposes until actual CAMELS ratings are assigned.

(5) *Request for review.* An institution that disagrees with the FDIC's determination that it is a new institution may request review of that determination pursuant to § 327.4(c).

(h) *Assessment rates for bridge depository institutions and conservatorships.* Institutions that are bridge depository institutions under 12 U.S.C. 1821(n) and institutions for which the Corporation has been appointed or serves as conservator shall, in all cases, be assessed at the Risk Category I minimum initial base assessment rate, which shall not be subject to adjustment under paragraphs (b)(3), (e)(1), (2), or (3) of this section.

■ 7. In § 327.10, revise paragraphs (b) through (f) to read as follows:

(b) Assessment rate schedules for established small institutions and large and highly complex institutions applicable in the first calendar quarter after June 30, 2015, that the reserve ratio of the DIF reaches or exceeds 1.15 percent for the previous calendar quarter and in all subsequent quarters that the reserve ratio is less than 2 percent.

(1) *Initial base assessment rate schedule for established small institutions and large and highly complex institutions.* In the first calendar quarter after June 30, 2015, that the reserve ratio of the DIF reaches or exceeds 1.15 percent for the previous calendar quarter and in all subsequent quarters that the reserve ratio is less than 2 percent, the initial base assessment rate for established small institutions and large and highly complex institutions, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule:

INITIAL BASE ASSESSMENT RATE SCHEDULE ONCE THE RESERVE RATIO OF THE DIF REACHES 1.15 PERCENT AND THE RESERVE RATIO FOR THE IMMEDIATELY PRIOR ASSESSMENT PERIOD IS LESS THAN 2 PERCENT *

	Established small institutions			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

* All amounts for all risk categories are in basis points annually. Initial base rates that are not the minimum or maximum rate will vary between these rates.

(i) CAMELS Composite 1- and 2-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 3 to 16 basis points.

(ii) CAMELS Composite 3-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 6 to 30 basis points.

(iii) CAMELS Composite 4- and 5-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 16 to 30 basis points.

(iv) Large and Highly Complex Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all large and highly complex institutions shall range from 3 to 30 basis points.

(2) *Total base assessment rate schedule after adjustments.* Once the reserve ratio of the DIF first reaches 1.15 percent, and the reserve ratio for the immediately prior assessment period is less than 2 percent, the total base assessment rates after adjustments for established small institutions and large and highly complex institutions shall be as prescribed in the following schedule.

TOTAL BASE ASSESSMENT RATE SCHEDULE (AFTER ADJUSTMENTS) * IF RESERVE RATIO OF THE DIF REACHES 1.15 PERCENT AND THE RESERVE RATIO FOR THE IMMEDIATELY PRIOR ASSESSMENT PERIOD IS LESS THAN 2 PERCENT **

	Established small institutions			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.	−5 to 0	−5 to 0	−5 to 0	−5 to 0
Brokered Deposit Adjustment.	0 to 10 ***	0 to 10	0 to 10	0 to 10
Total Base Assessment Rate.	1.5 to 26	3 to 40	11 to 40	1.5 to 40

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Total base rates that are not the minimum or maximum rate will vary between these rates.

*** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

(i) *CAMELS Composite 1- and 2-rated Established Small Institutions Total Base Assessment Rate Schedule.* The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 1.5 to 26 basis points.

(ii) CAMELS Composite 3-rated Established Small Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 3 to 40 basis points.

(iii) CAMELS Composite 4- and 5-rated Established Small Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 11 to 40 basis points.

(iv) Large and Highly Complex Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all large and highly complex institutions shall range from 1.5 to 40 basis points.

(c) *Assessment rate schedules if the reserve ratio of the DIF for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent*—(1) *Initial base assessment rate schedule for established small institutions and large and highly complex institutions.* If the reserve ratio of the DIF for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent, the initial base assessment rate for established small institutions and large and highly complex institutions, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule:

INITIAL BASE ASSESSMENT RATE SCHEDULE IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS EQUAL TO OR GREATER THAN 2 PERCENT BUT 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

* All amounts for all risk categories are in basis points annually. Initial base rates that are not the minimum or maximum rate will vary between these rates.

(i) *CAMELS Composite 1- and 2-rated Established Small Institutions Initial Base Assessment Rate Schedule.* The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 2 to 14 basis points.

(ii) *CAMELS Composite 3-rated Established Small Institutions Initial Base Assessment Rate Schedule.* The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 5 to 28 basis points.

(iii) *CAMELS Composite 4- and 5-rated Established Small Institutions Initial Base Assessment Rate Schedule.* The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 14 to 28 basis points.

(iv) *Large and Highly Complex Institutions Initial Base Assessment Rate Schedule.* The annual initial base assessment rates for all large and highly complex institutions shall range from 2 to 28 basis points.

(2) *Total Base Assessment Rate Schedule after Adjustments for Established Small Institutions and Large and Highly Complex Institutions.* If the reserve ratio of the DIF for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent, the total base assessment rates after adjustments for established small institutions and large and highly complex institutions, except as provided in paragraph (f) of this section, shall be as prescribed in the following schedule.

TOTAL BASE ASSESSMENT RATE SCHEDULE (AFTER ADJUSTMENTS) * IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS EQUAL TO OR GREATER THAN 2 PERCENT BUT 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 **	−5 to 0	−5 to 0	−5 to 0	−5 to 0.
Brokered Deposit Adjustment	0 to 10 ***	0 to 10	0 to 10	0 to 10.
Total Base Assessment Rate	1 to 24	2.5 to 38	9 to 38	1 to 38.

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Total base rates that are not the minimum or maximum rate will vary between these rates.

*** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

(i) *CAMELS Composite 1- and 2-rated Established Small Institutions Total Base Assessment Rate Schedule.* The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 1 to 24 basis points.

(ii) *CAMELS Composite 3-rated Established Small Institutions Total Base Assessment Rate Schedule.* The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 2.5 to 38 basis points.

(iii) *CAMELS Composite 4- and 5-rated Established Small Institutions Total Base Assessment Rate Schedule.* The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 9 to 38 basis points.

(iv) *Large and Highly Complex Institutions Total Base Assessment Rate Schedule.* The annual total base assessment rates for all large and highly complex institutions shall range from 1 to 38 basis points.

(d) *Assessment rate schedules if the reserve ratio of the DIF for the prior assessment period is greater than 2.5 percent*—(1) *Initial Base Assessment Rate Schedule.* If the reserve ratio of the DIF for the prior assessment period is greater than 2.5 percent, the initial base assessment rate for established small institutions and a large and highly complex institutions, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule:

INITIAL BASE ASSESSMENT RATE SCHEDULE IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS GREATER THAN OR EQUAL TO 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

* All amounts for all risk categories are in basis points annually. Initial base rates that are not the minimum or maximum rate will vary between these rates.

(i) CAMELS Composite 1- and 2-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 1 to 13 basis points.

(ii) CAMELS Composite 3-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 4 to 25 basis points.

(iii) CAMELS Composite 4- and 5-rated Established Small Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 13 to 25 basis points.

(iv) Large and Highly Complex Institutions Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all large and highly complex institutions shall range from 1 to 25 basis points.

(2) Total Base Assessment Rate Schedule after Adjustments. If the reserve ratio of the DIF for the prior assessment period is greater than 2.5 percent, the total base assessment rates after adjustments for established small institutions and large and highly complex institutions, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule.

TOTAL BASE ASSESSMENT RATE SCHEDULE (AFTER ADJUSTMENTS) * IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS GREATER THAN OR EQUAL TO 2.5 PERCENT **

	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 **	−5 to 0	−5 to 0	−5 to 0	−5 to 0.
Brokered Deposit Adjustment	0 to 10 ***	0 to 10	0 to 10	0 to 10.
Total Base Assessment Rate	.5 to 23	2 to 35	8 to 35	.5 to 35.

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Total base rates that are not the minimum or maximum rate will vary between these rates.

*** The brokered deposit adjustment applies to established small banks with CAMELS composite ratings of 1 or 2 only if they are less than well capitalized.

(i) CAMELS Composite 1- and 2-rated Established Small Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 1 or 2 shall range from 0.5 to 23 basis points.

(ii) CAMELS Composite 3-rated Established Small Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 3 shall range from 2 to 35 basis points.

(iii) CAMELS Composite 4- and 5-rated Established Small Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all established small institutions with a CAMELS composite rating of 4 or 5 shall range from 8 to 35 basis points.

(iv) Large and Highly Complex Institutions Total Base Assessment Rate Schedule. The annual total base assessment rates for all large and highly complex institutions shall range from 0.5 to 35 basis points.

(e) Assessment Rate Schedules for New Institutions and Insured Branches of Foreign Banks.

(1) New depository institutions, as defined in 327.8(j), shall be subject to the assessment rate schedules as follows:

(i) *Prior to the reserve ratio of the DIF first reaching 1.15 percent after June 30, 2015.* Prior to the reserve ratio of the DIF reaching 1.15 percent for the first time after June 30, 2015, all new institutions shall be subject to the initial and total base assessment rate schedules provided for in paragraph (a) of this section.

(ii) *Assessment rate schedules for new large and highly complex institutions once the DIF reserve ratio first reaches 1.15 percent after June 30, 2015.* Beginning the first calendar quarter after June 30, 2015 in which the reserve ratio of the DIF reaches or exceeds 1.15 percent in the previous calendar quarter, new large and highly complex institutions shall be subject to the initial and total base assessment rate schedules provided for in paragraph (b) of this section, even if the reserve ratio equals or exceeds 2 percent or 2.5 percent.

(iii) *Assessment rate schedules for new small institutions once the DIF reserve ratio first reaches 1.15 percent after June 30, 2015.*

(A) Initial Base Assessment Rate Schedule for New Small Institutions. Beginning the first calendar quarter after June 30, 2015 in which the reserve ratio

of the DIF reaches or exceeds 1.15 percent in the previous calendar quarter, the initial base assessment rate for a new small institution shall be the rate prescribed in the following schedule, even if the reserve ratio equals or exceeds 2 percent or 2.5 percent.

INITIAL BASE ASSESSMENT RATE SCHEDULE IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS EQUAL TO OR GREATER THAN 1.15 PERCENT

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial Assessment Rate	7	12	19	30

* All amounts for all risk categories are in basis points annually.

(*1*) Risk Category I Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all new small institutions in Risk Category I shall be 7 basis points.

(*2*) Risk Category II, III, and IV Initial Base Assessment Rate Schedule. The annual initial base assessment rates for all new small institutions in Risk Categories II, III, and IV shall be 12, 19, and 30 basis points, respectively.

(*3*) All new small institutions in any one risk category, other than Risk Category I, will be charged the same initial base assessment rate, subject to adjustment as appropriate.

(B) Total Base Assessment Rate Schedule for New Small Institutions. Beginning the first calendar quarter after June 30, 2015 in which the reserve ratio of the DIF reaches or exceeds 1.15 percent in the previous calendar quarter, the total base assessment rates after adjustments for a new small institution shall be the rate prescribed in the following schedule, even if the reserve ratio equals or exceeds 2 percent or 2.5 percent.

TOTAL BASE ASSESSMENT RATE SCHEDULE (AFTER ADJUSTMENTS) * IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS EQUAL TO OR GREATER THAN 1.15 PERCENT **

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial Assessment Rate	7	12	19	30.
Brokered Deposit Adjustment (added)	N/A	0 to 10	0 to 10	0 to 10.
Total Assessment Rate	7	12 to 22	19 to 29	30 to 40.

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Total base rates that are not the minimum or maximum rate will vary between these rates.

(*1*) Risk Category I Total Assessment Rate Schedule. The annual total base assessment rates for all new small institutions in Risk Category I shall be 7 basis points.

(*2*) Risk Category II Total Assessment Rate Schedule. The annual total base assessment rates for all new small institutions in Risk Category II shall range from 12 to 22 basis points.

(*3*) Risk Category III Total Assessment Rate Schedule. The annual total base assessment rates for all new small institutions in Risk Category III shall range from 19 to 29 basis points.

(*4*) Risk Category IV Total Assessment Rate Schedule. The annual total base assessment rates for all new small institutions in Risk Category IV shall range from 30 to 40 basis points.

(2) *Insured branches of foreign banks*—(i) *Assessment rate schedule for insured branches of foreign banks once the reserve ratio of the DIF first reaches 1.15 percent, and the reserve ratio for the immediately prior assessment period is less than 2 percent.* Once the reserve ratio of the DIF first reaches 1.15 percent, and the reserve ratio for the immediately prior assessment period is less than 2 percent, the initial and total base assessment rates for an insured branch of a foreign bank, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule.

INITIAL AND TOTAL BASE ASSESSMENT RATE SCHEDULE * ONCE THE RESERVE RATIO OF THE DIF REACHES 1.15 PERCENT AND THE RESERVE RATIO FOR THE IMMEDIATELY PRIOR ASSESSMENT PERIOD IS LESS THAN 2 PERCENT **

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial and Total Assessment Rate	3 to 7	12	19	30

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Initial and total base rates that are not the minimum or maximum rate will vary between these rates.

(A) Risk Category I Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for an insured branch of a foreign bank in Risk Category I shall range from 3 to 7 basis points.

(B) Risk Category II, III, and IV Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for Risk Categories II, III, and IV shall be 12, 19, and 30 basis points, respectively.

(C) All insured branches of foreign banks in any one risk category, other than Risk Category I, will be charged the same initial base assessment rate, subject to adjustment as appropriate.

(ii) *Assessment rate schedule for insured branches of foreign banks if the reserve ratio of the DIF for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent.* If the reserve ratio of the DIF for the prior assessment period is equal to or greater than 2 percent and less than 2.5 percent, the initial and total base assessment rates for an insured branch of a foreign bank, except as provided in paragraph (f), shall be the rate prescribed in the following schedule.

INITIAL AND TOTAL BASE ASSESSMENT RATE SCHEDULE * IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS EQUAL TO OR GREATER THAN 2 PERCENT BUT LESS THAN 2.5 PERCENT **

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial and Total Assessment Rate	2 to 6	10	17	28

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Initial and total base rates that are not the minimum or maximum rate will vary between these rates.

(A) Risk Category I Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for an insured branch of a foreign bank in Risk Category I shall range from 2 to 6 basis points.

(B) Risk Category II, III, and IV Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for Risk Categories II, III, and IV shall be 10, 17, and 28 basis points, respectively.

(C) All insured branches of foreign banks in any one risk category, other than Risk Category I, will be charged the same initial base assessment rate, subject to adjustment as appropriate.

(iii) *Assessment rate schedule for insured branches of foreign banks if the reserve ratio of the DIF for the prior assessment period is greater than 2.5 percent.* If the reserve ratio of the DIF for the prior assessment period is greater than 2.5 percent, the initial and total base assessment rate for an insured branch of foreign bank, except as provided in paragraph (f) of this section, shall be the rate prescribed in the following schedule:

INITIAL AND TOTAL BASE ASSESSMENT RATE SCHEDULE * IF RESERVE RATIO FOR PRIOR ASSESSMENT PERIOD IS GREATER THAN OR EQUAL TO 2.5 PERCENT **

	Risk category I	Risk category II	Risk category III	Risk category IV
Initial Assessment Rate	1 to 5	9	15	25

* The depository institution debt adjustment, which is not included in the table, can increase total base assessment rates above the maximum assessment rates shown in the table.

** All amounts for all risk categories are in basis points annually. Initial and total base rates that are not the minimum or maximum rate will vary between these rates.

(A) Risk Category I Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for an insured branch of a foreign bank in Risk Category I shall range from 1 to 5 basis points.

(B) Risk Category II, III, and IV Initial and Total Base Assessment Rate Schedule. The annual initial and total base assessment rates for Risk Categories II, III, and IV shall be 9, 15, and 25 basis points, respectively.

(C) All insured branches of foreign banks in any one risk category, other than Risk Category I, will be charged the same initial base assessment rate, subject to adjustment as appropriate.

(f) Total Base Assessment Rate Schedule adjustments and procedures—(1) Board Rate Adjustments. The Board may increase or decrease the total base assessment rate schedule in paragraphs (a) through (e) of this section up to a maximum increase of 2 basis points or a fraction thereof or a maximum decrease of 2 basis points or a fraction thereof (after aggregating increases and decreases), as the Board deems necessary. Any such adjustment shall apply uniformly to each rate in the total base assessment rate schedule. In no case may such rate adjustments result in a total base assessment rate that is mathematically less than zero or in a total base assessment rate schedule that, at any time, is more than 2 basis points above or below the total base assessment schedule for the Deposit Insurance Fund in effect pursuant to paragraph (b) of this section, nor may any one such adjustment constitute an increase or decrease of more than 2 basis points.

(2) Amount of revenue. In setting assessment rates, the Board shall take into consideration the following:

(i) Estimated operating expenses of the Deposit Insurance Fund;

(ii) Case resolution expenditures and income of the Deposit Insurance Fund;

(iii) The projected effects of assessments on the capital and earnings of the institutions paying assessments to the Deposit Insurance Fund;

(iv) The risk factors and other factors taken into account pursuant to 12 U.S.C. 1817(b)(1); and

(v) Any other factors the Board may deem appropriate.

(3) Adjustment procedure. Any adjustment adopted by the Board pursuant to this paragraph will be adopted by rulemaking, except that the Corporation may set assessment rates as necessary to manage the reserve ratio,

within set parameters not exceeding cumulatively 2 basis points, pursuant to paragraph (f)(1) of this section, without further rulemaking.

(4) Announcement. The Board shall announce the assessment schedules and the amount and basis for any adjustment thereto not later than 30 days before the quarterly certified statement invoice date specified in § 327.3(b) of this part for the first assessment period for which the adjustment shall be effective. Once set, rates will remain in effect until changed by the Board.

■ 8. Add Appendix E to part 327 to read as follows:

Appendix E—Method To Derive Pricing Multipliers and Uniform Amount

I. Introduction

The uniform amount and pricing multipliers are derived from:

- A model (the Statistical Model) that estimates the probability of failure of an institution over a three-year horizon;
- The minimum initial base assessment rate;
- The maximum initial base assessment rate;
- Thresholds marking the points at which the maximum and minimum assessment rates become effective.

II. The Statistical Model

The Statistical Model estimates the probability of an insured depository institution failing within three years using a logistic regression and pooled time-series cross-sectional data;[1] that is, the dependent variable in the estimation is whether an insured depository institution failed during the following three-year period. Actual model parameters for the Statistical Model are an average of each of three regression estimates for each parameter. Each of the three regressions uses end-of-year data from insured depository institutions' quarterly reports of condition and income (Call Reports and Thrift Financial Reports or TFRs[2]) for every third year to estimate probability of failure within the ensuing three years. One regression (Regression 1) uses insured depository institutions' Call Report and TFR data for the end of 1985 and failures from 1986 through 1988; Call Report and TFR data for the end of 1988 and failures from 1989 through 1991; and so on, ending with Call Report data for the end of 2009 and failures from 2010 through 2012. The second regression (Regression 2) uses insured depository institutions' Call Report and TFR data for the end of 1986 and failures from 1987 through 1989, and so on, ending with Call Report data for the end of 2010 and failures from 2011 through 2013. The third regression (Regression 3) uses insured depository institutions' Call Report and TFR data for the end of 1987 and failures from 1988 through 1990, and so on, ending with Call Report data for the end of 2011 and failures from 2012 through 2014. The regressions include only Call Report data and failures for established small institutions.

Table E.1 lists and defines the explanatory variables (regressors) in the Statistical Model and the measures used in Sec. 327.16(a)(1).

TABLE E.1—DEFINITIONS OF REGRESSORS

Variables	Description
Tier 1 Leverage Ratio (%)	Tier 1 capital divided by adjusted average assets. (Numerator and denominator are both based on the definition for prompt corrective action.)
Net Income before Taxes/Total Assets (%)	Income (before income taxes and extraordinary items and other adjustments) for the most recent twelve months divided by total assets.[1]
Nonperforming Loans and Leases/Gross Assets (%)	Sum of total loans and lease financing receivables past due 90 or more days and still accruing interest and total nonaccrual loans and lease financing receivables (excluding, in both cases, the maximum amount recoverable from the U.S. Government, its agencies or government-sponsored enterprises, under guarantee or insurance provisions) divided by gross assets.[2] [3]
Other Real Estate Owned/Gross Assets (%)	Other real estate owned divided by gross assets.[2]
Core Deposits/Total Assets (%)	Domestic office deposits (excluding time deposits over the deposit insurance limit and the amount of brokered deposits below the standard maximum deposit insurance amount) divided by total assets.
Weighted Average of C, A, M, E, L, and S Component Ratings	The weighted sum of the ''C,'' ''A,'' ''M,'' ''E'', ''L'', and ''S'' CAMELS components, with weights of 25 percent each for the ''C'' and ''M'' components, 20 percent for the ''A'' component, and 10 percent each for the ''E'', ''L'', and ''S'' components. In instances where the ''S'' component is missing, the remaining components are scaled by a factor of 10/9.[4]
Loan Mix Index	A measure of credit risk described below.
Asset Growth (%)	Growth in assets (adjusted for mergers[5]) over the previous year. If growth is negative, then the value is set to zero.[6]

[1] For purposes of calculating actual assessment rates (as opposed to model estimation), the ratio of Net Income Before Taxes to Total Assets is bounded below by (and cannot be less than) −25 percent and is bounded above by (and cannot exceed) 3 percent.

[2] For purposes of calculating actual assessment rates (as opposed to model estimation), ''Gross assets'' are total assets plus the allowance for loan and lease financing receivable losses (ALLL); for purposes of estimating the Statistical Model, for years before 2001, when allocated transfer risk was not included in ALLL in Call Reports, allocated transfer risk is included in gross assets separately.

[3] Delinquency and non-accrual data on government guaranteed loans are not available for the entire estimation period. As a result, the Statistical Model is estimated without deducting delinquent or past-due government guaranteed loans from the nonperforming loans and leases to gross assets ratio.

[4] The component rating for sensitivity to market risk (the ''S'' rating) is not available for years before 1997. As a result, and as described in the table, the Statistical Model is estimated using a weighted average of five component ratings excluding the ''S'' component where the component is not available.

[5] Growth in assets is also adjusted for acquisitions of failed banks.

[6] For purposes of calculating actual assessment rates (as opposed to model estimation), Asset Growth is bounded above by (and cannot exceed) 190 percent.

[1] Tests for the statistical significance of parameters use adjustments discussed by Tyler Shumway (2001) ''Forecasting Bankruptcy More Accurately: A Simple Hazard Model,'' Journal of Business 74:1, 101–124.

[2] Beginning in 2012, all insured depository institutions began filing quarterly Call Reports and the TFR was no longer filed.

The financial variable regressors used to estimate the failure probabilities are obtained from Call Reports and TFRs. The weighted average of the ''C,'' ''A,'' ''M,'' ''E'', ''L'', and ''S'' component ratings regressor is based on component ratings obtained from the most recent bank examination conducted within 24 months before the date of the Call Report or TFR.

The Loan Mix Index assigns loans to the categories of loans described in Table E.2. For each loan category, a charge-off rate is calculated for each year from 2001 through 2014. The charge-off rate for each year is the aggregate charge-off rate on all such loans held by small institutions in that year. A weighted average charge-off rate is then calculated for each loan category, where the weight for each year is based on the number of small-bank failures during that year.[3] A Loan Mix Index for each established small institution is calculated by: (1) Multiplying the ratio of the institution's amount of loans in a particular loan category to its total assets by the associated weighted average charge-off rate for that loan category; and (2) summing the products for all loan categories. Table E.2 gives the weighted average charge-off rate for each category of loan, as calculated through the end of 2014. The Loan Mix Index excludes credit card loans.

TABLE E.2—LOAN MIX INDEX CATEGORIES

	Weighted charge-off rate percent
Construction & Development	4.4965840
Commercial & Industrial	1.5984506
Leases	1.4974551
Other Consumer	1.4559717
Loans to Foreign Government	1.3384093
Real Estate Loans Residual	1.0169338
Multifamily Residential	0.8847597
Nonfarm Nonresidential	0.7286274
1–4 Family Residential	0.6973778
Loans to Depository banks	0.5760532
Agricultural Real Estate	0.2376712
Agricultural	0.2432737

For each of the three regression estimates (Regression 1, Regression 2 and Regression 3), the estimated probability of failure (over a three-year horizon) of institution *i* at time *T* is

Equation 1

$$P_{iT} = 1/((1+\exp(-Z_{iT}))$$

where

Equation 2

$$Z_{iT} = \beta_0 + \beta_1 (\text{Tier 1 Leverage Ratio}_{iT}) + \beta_2 (\text{Nonperforming loans and leases ratio}_{iT}) + \beta_3 (\text{Other real estate owned ratio}_{iT}) + \beta_4 (\text{Net income before taxes ratio}_{iT}) + \beta_5 (\text{Core deposits ratio}_{iT}) + \beta_6 (\text{Weighted average CAMELS component rating}_{iT}) + \beta_7 (\text{Loan mix index}_{iT}) + \beta_8 (\text{Asset growth}_{iT})$$

where the β variables are parameter estimates. As stated earlier, for actual assessments, the β values that are applied are averages of each of the individual parameters over three separate regressions. Pricing multipliers (discussed in the next section) are based on Z_{iT}.[4]

III. Derivation of Uniform Amount and Pricing Multipliers

The uniform amount and pricing multipliers used to compute the annual initial base assessment rate in basis points, R_{iT}, for any such institution *i* at a given time *T* will be determined from the Statistical [5] Model as follows:

Equation 3

$$R_{iT} = \alpha_0 + \alpha_1 * Z_{iT} \text{ subject to } Min \leq R_{iT} \leq Max$$

where α_0 and α_1 are a constant term and a scale factor used to convert Z_{iT} to an assessment rate, *Max* is the maximum initial base assessment rate in effect and *Min* is the minimum initial base assessment rate in effect. (R_{iT} is expressed as an annual rate, but the actual rate applied in any quarter will be $R_{iT}/4$.)

Solving equation 3 for minimum and maximum initial base assessment rates simultaneously,

$Min = \alpha_0 + \alpha_1 * Z_N$ and $Max = \alpha_0 + \alpha_1 * Z_X$

where Z_X is the value of Z_{iT} above which the maximum initial assessment rate (*Max*) applies and Z_N is the value of Z_{iT} below which the minimum initial assessment rate (*Min*) applies,

results in values for the constant amount, α_0, and the scale factor, α_1:

[3] An exception is ''Real Estate Loans Residual,'' which consists of real estate loans held in foreign offices. Few small insured depository institutions report this item and a statistically reliable estimate of the weighted average charge-off rate could not be obtained. Instead, a weighted average of the weighted average charge-off rates of the other real estate loan categories is used. (The other categories are construction & development, multifamily residential, nonfarm nonresidential, 1–4 family residential, and agricultural real estate.) The weight for each of the other real estate loan categories is based on the aggregate amount of the loans held by small insured depository institutions as of December 31, 2014.

[4] The Z_{iT} values have the same rank ordering as the probability measures P_{iT}.

[5] R_{iT} is also subject to the minimum and maximum assessment rates applicable to established small institutions based upon their CAMELS composite ratings.

Equation 4

$$\alpha_0 = Min - \frac{Z_N * (Max - Min)}{Z_X - Z_N}$$

and *Equation 5*

$$\alpha_1 = \frac{Max - Min}{Z_X - Z_N}$$

The values for Z_X and Z_N will be selected to ensure that, for an assessment period shortly before adoption of a final rule, aggregate assessments for all established small institutions would have been approximately the same under the final rule as they would have been under the assessment rate schedule that, under rules in effect before adoption of the final rule, would have automatically gone into effect when the reserve ratio reached 1.15 percent. As an example, using aggregate assessments for all established small institutions for the fourth quarter of 2014 to determine Z_X and Z_N, and assuming that *Min* had equaled 3 basis points and *Max* had equaled 30 basis points, the value of Z_X would have been 0.49 and Z_N −6.60. Hence based on equations 4 and 5, $\alpha_0 = 28.134$ and $\alpha_1 = 3.808$.

Therefore from equation 3, it follows that

Equation 6

$$R_{iT} = 28.134 + 3.808 * Z_{iT} \text{ subject to } 3 \leq R_{iT} \leq 30$$

Substituting equation 2 produces an annual initial base assessment rate for institution *i* at time *T*, R_{iT}, in terms of the uniform amount, the pricing multipliers and model variables:

Equation 7

$$R_{iT} = [28.134 + 3.808 * \beta_0] + 3.808 * [\beta_1 (\text{Tier 1 leverage ratio}_{iT})] + 3.808 * \beta_2 (\text{Nonperforming loans and leases ratio}_{iT}) + 3.808 * \beta_3 (\text{Other real estate owned ratio}_{iT}) + 3.808 * \beta_4 (\text{Net income before taxes ratio}_{iT}) + 3.808 * \beta_5 (\text{Core deposits ratio}_{iT}) + 3.808 * \beta_6 (\text{Weighted average CAMELS component rating}_{iT}) + 3.808 * \beta_7 (\text{Loan mix index}_{iT}) + 3.808 * \beta_8 (\text{Asset growth}_{iT})$$

again subject to $3 \leq R_{iT} \leq 30$ [6]

where $28.134 + 3.808 * \beta_0$ equals the uniform amount, $3.808 * \beta_j$ is a pricing multiplier for the associated risk measure *j*, and *T* is the date of the report of condition corresponding to the end of the quarter for which the assessment rate is computed.

Once the minimum and maximum cutoff values, Z_X and Z_N, are established as described in Section III of this Appendix, they will not change without additional notice-and-comment rulemaking. If *Max* (the maximum initial assessment rate) in effect or *Min* (the minimum initial assessment rate) in effect change, the uniform amount and pricing multipliers will be recalculated as described in equations 3 through 7 without additional notice-and-comment rulemaking.

IV. Updating the Statistical Model, Uniform Amount, and Pricing Multipliers

The Statistical Model is estimated using year-end financial ratios and the weighted average of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' component ratings (and the ''S'' component where it was available) from the end of 1984 through the end of 2011, failure data from the 1985 through 2014 and data for the weighted average charge-off rates for the Loan Mix Index from 2001 through 2014. The FDIC may, from time to time, but no more frequently than annually, re-estimate the Statistical Model with financial, failure and charge-off data from later years and publish a new Loan Mix Index, uniform amount and pricing multipliers based upon the methodology described in Sections I through III of this Appendix without further notice-and-comment rulemaking.

By order of the Board of Directors.

Dated at Washington, DC, this 16th day of June, 2015.

Federal Deposit Insurance Corporation.

Robert Feldman,

Executive Secretary.

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[6] As stated above, R_{iT} is also subject to the minimum and maximum assessment rates applicable to established small institutions based upon their CAMELS composite ratings.