SHARE INSURANCE FUND ANALYSIS & FORECAST

NAFCU RESEARCH DIVISION – January 2019

During NCUA's November 2018 Board meeting, agency staff presented third-quarter figures for the Share Insurance Fund (SIF). Those figures reflect the impact of a number of notable recent events, including: the merger of the Temporary Corporate Credit Union Stabilization Fund (TCCUSF, or Stabilization Fund) with the SIF in October 2017; an increase in loss reserves from $286 million to over $925 million in the fourth quarter of 2017; the announcement of a $736 million distribution to insured credit unions in February 2018; and the failures of several credit unions with concentrated holdings of taxi medallion loans in 2018. At the following month's Board meeting, the normal operating level (NOL) for 2018 was set at 1.38 percent. While the SIF provided a distribution to insured credit unions earlier in 2018 as a result of the merger with the Stabilization Fund, the prospect for future payouts is uncertain. Much will depend on whether, and how quickly, the NOL returns to its traditional level of 1.30 percent. Based on our forecast through the end of 2018, NAFCU estimates that the SIF will finish the year with enough equity to provide a distribution to credit unions in the range of $100 million to $150 million.

BACKGROUND ON TCCUSF CLOSURE

The TCCUSF was formed in 2009 to deal with the failure of five corporate credit unions. Had those costs been paid through the SIF, it would have resulted in sizable premiums to credit unions at a time when many were struggling through the financial crisis. The formation of the TCCUSF, along with the securitization of the legacy assets of the failed corporates, allowed NCUA to spread these costs over time. The fund ended 2009 with a net position of negative $7.4 billion. Through a combination of assessments, legal recoveries, and stronger-than-anticipated performance of the legacy assets, the net position of the TCCUSF improved by roughly $10 billion over the next eight years.

On October 1, 2017, NCUA closed the TCCUSF and merged its balance sheet with that of the SIF. At the time of the merger, the TCCUSF had a net equity position of positive $2.6 billion. When added to the equity of the SIF, it resulted in an increase to the SIF's equity ratio above the normal operating level (NOL). That surplus equity totaled $736 million, which was returned to federally-insured credit unions in 2018 as a distribution in accordance with the *Federal Credit Union Act*.

In addition to merging the two funds, NCUA also raised the NOL from 1.3 percent, where it had historically been, to 1.39 percent.[1] The NOL functions as a ceiling for the amount of equity held in the SIF. If the equity ratio[2] ends the year above the NOL, NCUA must provide a distribution to credit unions in the amount of the surplus equity. On the other hand, NCUA <u>may</u> charge a premium if the equity ratio drops below 1.3 percent and <u>must</u> charge a premium or establish a restoration plan if the equity ratio drops below 1.2 percent. If a premium is charged, the amount of the premium is at NCUA's discretion, but it must return the equity ratio to at least 1.2 percent and no more than 1.3 percent.

The increase in the NOL effectively reduced the amount of the 2018 SIF distribution to credit unions by roughly $1 billion. NCUA justified the increase on the grounds that a higher NOL was needed to absorb the projected loss of equity that would accompany a moderate recession over a five-year period. As compared to prior years, an additional three basis points was deemed necessary to provide an adequate cushion for the SIF under recessionary conditions, four basis

[1] Since 1984 when Congress mandated that NCUA establish the normal operating level for the fund annually, the NCUA Board has always maintained it at 1.30 percent, except for the years 1988 through 1999, when the NOL was set at a range of 1.25 percent to 1.30 percent.

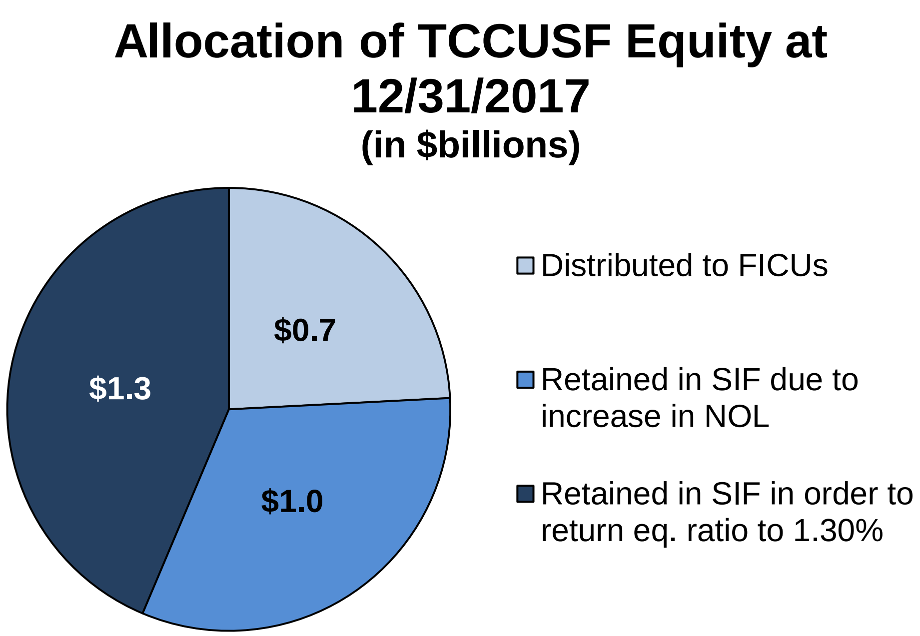
[2] The equity ratio of the SIF is calculated as retained earnings (excluding unrealized gains and losses on investments) plus contributed capital, divided by insured shares.

points were allocated to absorb the forecasted drop in value of the merged-in TCCUSF assets during such a recession, and a final two basis points were included to carry the projections forward two years under base-case loss assumptions.[3]

The latter two items are each related to the corporate resolution process, which now potentially impacts the SIF due to the TCCUSF merger. Following the failure of the five corporate credit unions, NCUA securitized their assets and issued NCUA Guaranteed Notes (NGNs). The notes were guaranteed by the agency and backed by cash flows from the legacy assets. Based on third quarter figures, it is expected that the legacy assets will produce enough cash to repay investors, with nearly $300 million in excess flowing back to the SIF. But if repayment on those assets declines, due to a recession for example, the amount repaid to the SIF could decline. This would require NCUA to write down the value of the receivable and reduce the fund's equity. The final payments to the NGN investors will be made in 2020 and 2021. NCUA has not determined its ultimate disposition strategy for those legacy assets with lives that extend beyond the NGN obligations.

Based on NCUA's forecasts and using the NOL as a starting point, a moderate recession would lead to a loss of equity that would drop the equity ratio to 1.2 percent over five years. NCUA's selection of an NOL is intended to prevent the need to charge a premium in the event that their scenario plays out. Using the 2017 NOL of 1.39 percent as an example, NCUA forecasted losses equal to 19 basis points of insured shares over the following five years assuming recessionary conditions.

This increase in the NOL was a key concern for NAFCU at the time that NCUA's merger plan was proposed and was a major reason why NAFCU ultimately opposed the merger. A 1.30 percent NOL has proven to be adequate for the SIF to absorb the stress of a recession. Since Congress established the NOL as the de facto cap on the SIF in 1984, the NCUA Board maintained it at no more than 1.30 percent until 2018. In raising the NOL to an unprecedented level, NCUA provided no assurances or timeline for unwinding it. NAFCU remains opposed to the increase in the NOL, and strongly believes that the nearly $1 billion of additional equity that currently resides in the SIF due to the elevated NOL could be put to better use by credit unions in the service of their members.



[3] Between year-end 2017 and 2019, NCUA's base projection forecasts a two basis point decline in SIF equity. Therefore, NCUA considered that additional equity was necessary in order that the four-basis point cushion for the TCCUSF legacy assets would not deteriorate before the majority of the outstanding corporate stabilization liabilities come due in 2020.

2018 Normal Operating Level

Whether, and how quickly, credit unions receive the equity due to them from the corporate credit union resolution hinges on NCUA's annual determination of the normal operating level. Assuming the equity ratio exceeds the NOL at the end of the year, a one-basis point reduction frees up roughly $100 million to be returned to credit unions.

At its December Board meeting, NCUA announced a reduction in the NOL for 2018 to 1.38 percent. NAFCU is pleased that this policy change could potentially mean more funds returned to credit unions in 2019. However, there is still no compelling reason why the NOL should be above 1.30 percent. Moreover, a reduction of just one basis point inspires little confidence that the agency views 1.30 percent as a "normal" NOL to be targeted under typical conditions. Rather, it appears likely that the NOL is permanently unmoored from its traditional level.

A comparison of NCUA's 2017 and 2018 calculations is below:

Component	Sep-17	Sep-18
Statutory Minimum	1.20%	1.20%
Plus: Potential Decline in Insurance Fund Performance	0.13%	0.13%
Plus: Potential Decline in Value in Claims on Corporate Estates	0.04%	0.02%
Plus: Projected Equity Ratio Decline in 2018 and 2019	0.02%	0.03%
Equals: Normal Operating Level	**1.39%**	**1.38%**

A year ago, NCUA withheld a total of 6 basis points of SIF equity related to corporate resolution (the items in red). Despite the fact that another year has elapsed, and we are drawing nearer to the repayment of the majority of the NGN obligations in 2020, NCUA only reduced the NOL by one basis point for the combination of these items in 2018.

SIF TRENDS

Outside of changes to the NOL, future SIF distributions and premiums will be determined by changes in the equity ratio. The primary drivers of the equity ratio are: (1) insurance loss expenses; (2) investment yield; (3) operating expenses; and (4) share growth.

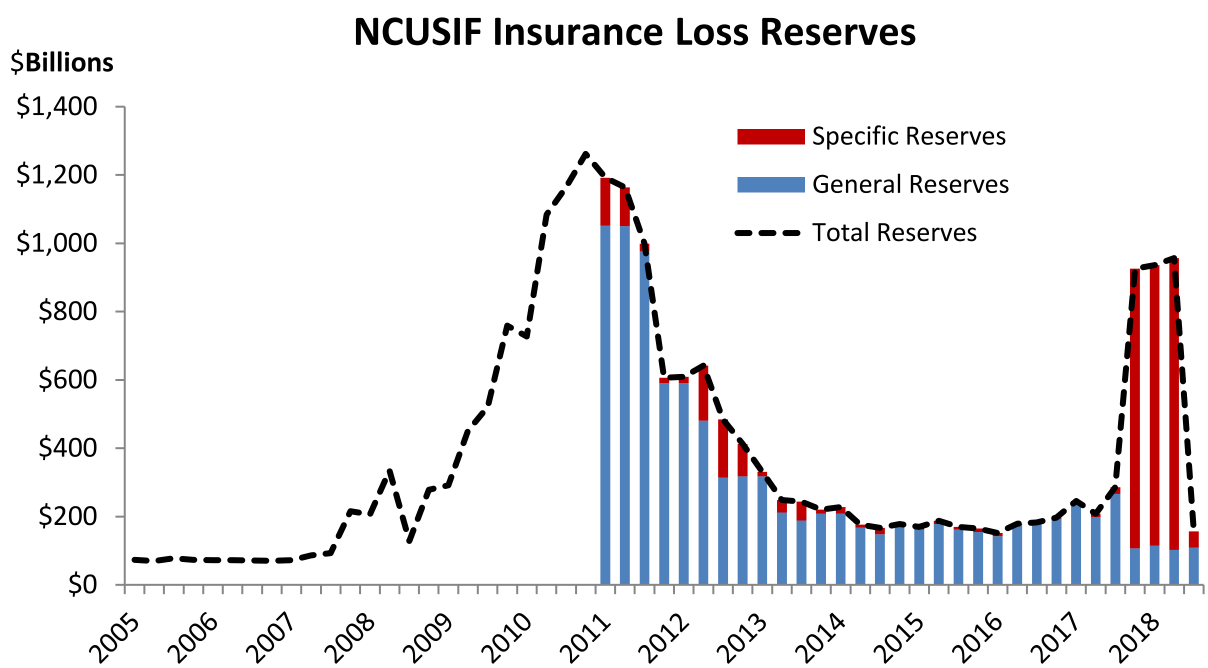
Reserves & Insurance Loss Expenses

Insurance loss expenses are the most volatile and unpredictable input for the equity ratio. The expense is usually driven by changes in reserves established to absorb losses related to credit union failures. During the financial crisis, insurance loss expenses soared, peaking in 2010 at $736 million (reserves that year were over $1.2 billion). In the following year, NCUA recognized an insurance loss expense of negative $532 million as the agency began a process of unwinding the buildup in reserves. As a result, credit unions were charged premiums in 2009 and 2010, then received distributions in 2011 through 2013[4].

The amount expensed, therefore, is heavily dependent on NCUA's reserving methodology. NCUA uses a two-step process to calculate the SIF's reserve requirements. First, NCUA establishes specific reserves for those credit unions which have recently failed or are on the verge of failure. Importantly, before NCUA can establish a specific reserve for a credit union, the failure must be deemed "probable" and the agency must have enough information to make a reasonable estimate of the losses. Then, NCUA establishes general reserves for the remaining population of credit

[4] By statute, the distributions in those years were made to the TCCUSF since there was an outstanding borrowing from the U.S. Treasury at the time.

unions for which specific reserves have not already been established. NCUA's general reserve calculation utilizes an econometric model which factors in measures of industry health and financial performance, historical loss data, and other economic measures.



Note: NCUA began breaking out general & specific reserves in 2011
Source: NCUSIF Financial Highlights (NCUA)

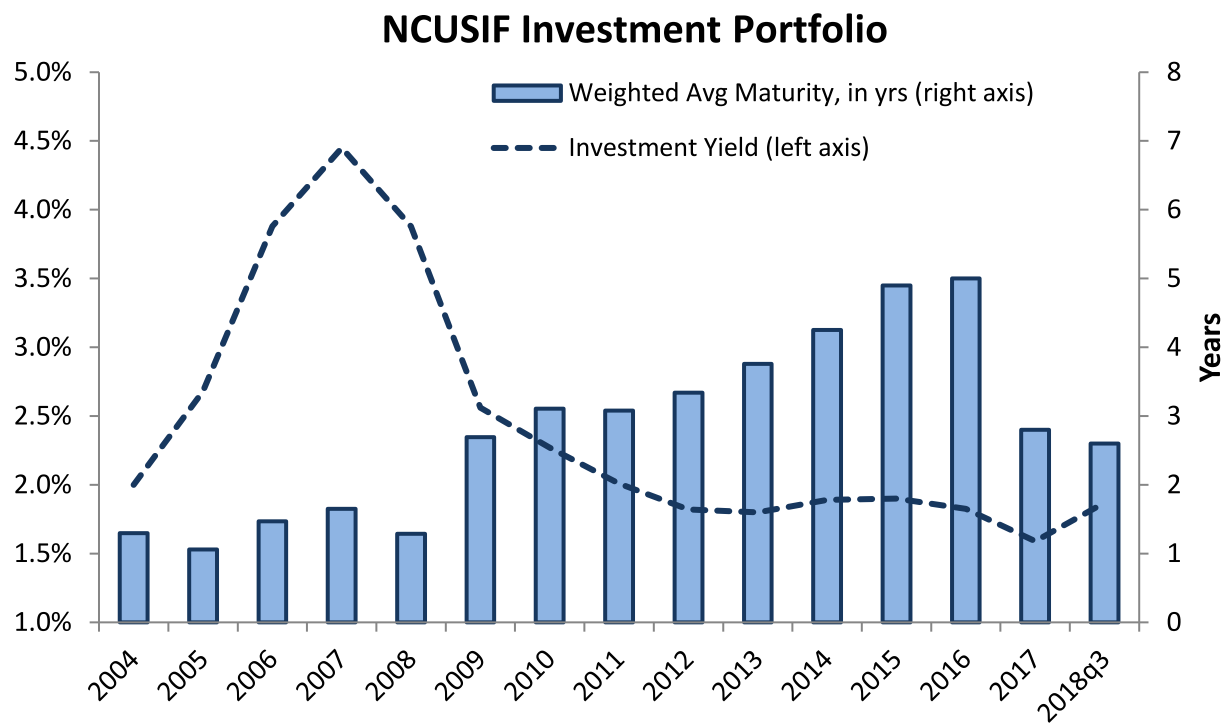
The chart above shows the trend in total insurance loss reserves for the NCUSIF, along with general and specific reserves. (The agency began reporting the latter two items in its monthly NCUSIF financial statements in 2011.) The large spike in specific reserves starting in the fourth quarter of 2017 is likely related to several large New York City-area credit unions that originated taxi medallion loans, and which were liquidated in 2018. The ultimate cost of these failures is yet to be determined, but they are likely to be significant, particularly as one of the liquidated credit unions had over $1 billion in total assets. Following those liquidations, reserves dropped to a level near its post-recession low.

While further costs related to taxi medallion loans are possible, all four of the primary medallion loan originators in the New York City area have either been liquidated or merged with other credit unions. Still, other credit unions have exposures through loan participations, and it is possible that similar problems could emerge in other markets. Thus far SIF losses related to taxi medallion loans have been concentrated in New York City.

Investment Yield

Cash and investments constitute over 90 percent of total SIF assets. While the investment portfolio is limited to U.S. Treasury Notes up to 10 years in maturity, plus some amount held in an overnight account, the portfolio has nevertheless undergone significant changes in recent years. The duration of the portfolio at the end of 2008 was approximately 1.3 years. Half the portfolio was held in the overnight account and just two percent of investments had a maturity of five years or greater. In the following years, the agency gradually increased the weighted average life of the portfolio by investing roughly equal amounts across the 10-year maturity spectrum. As a result, the portfolio duration increased substantially, finally peaking at 5 years in 2016. However, in 2017 NCUA reallocated more of its portfolio to short-term investments, which reduced the duration to 2.8 years. This change is likely due to the need for increased liquidity in light of the large credit union liquidations referenced previously.

The chart below shows the trend in duration and yield for the NCUSIF investment portfolio. By lengthening the duration after 2008, the agency was able to support the yield during an era of historically-low interest rates. The decline in yield during and following the crisis would have been more pronounced had the agency maintained its pre-crisis portfolio duration. However, the recent improvement in market interest rates has not produced a significant change in yield for the NCUSIF since the agency reduced the duration last year.



Source: NCUSIF Financial Highlights (NCUA)

Operating Expenses

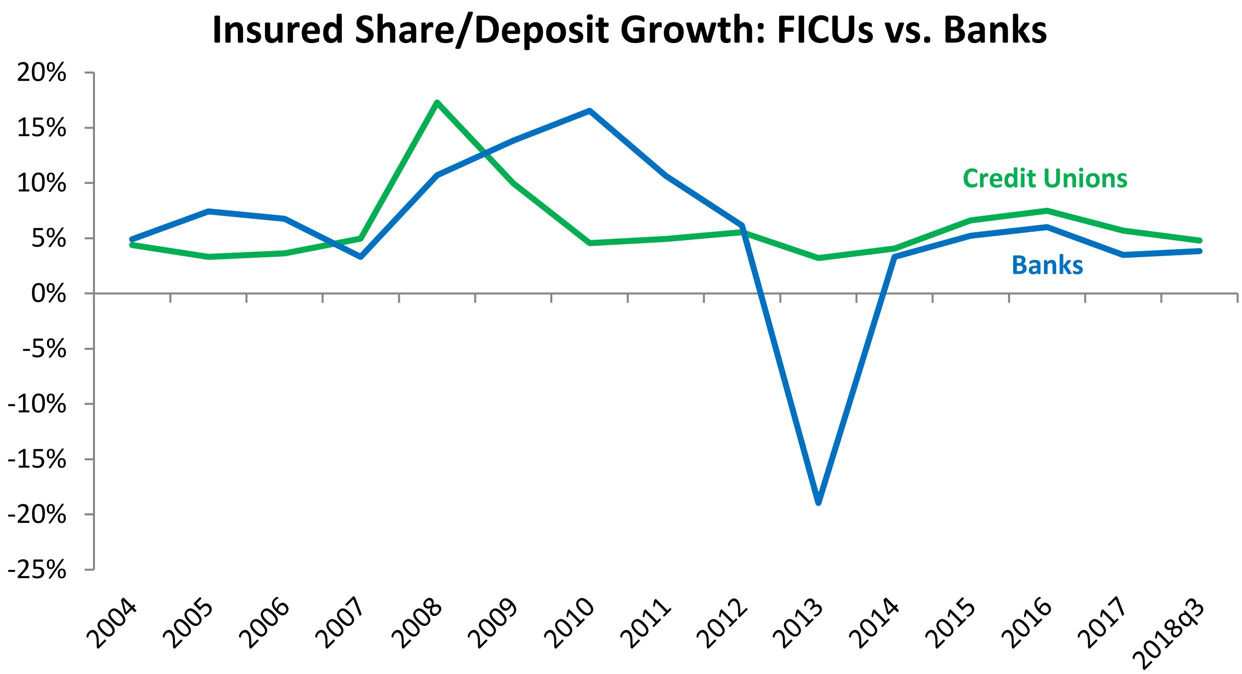
Each year NCUA books operating expenses to the SIF based on a fixed percentage of NCUA's overall operating budget. The methodology for determining this percentage – referred to as the overhead transfer rate (OTR) – was the subject of a rule finalized in November 2017. The new methodology produced an OTR of 60.5 percent for 2019, which continues a decline since 2016 when the OTR was 73.1 percent. The decline in the OTR over that period means that a smaller portion of NCUA's operating budget is being allocated to the SIF, with the remaining portion funded by federal credit unions through their operating fee assessment. NCUA will revisit the methodology every three years.

From 2008 through 2016, operating expenses increased by over 150 percent. NCUA's overall operating budget swelled during the financial crisis, and this explains most of the increase during that time. In addition, the OTR increased over that time from 52 percent to 73 percent over that span, which contributed to the rise in expenses for the SIF.

NCUA’s operating budget growth has slowed, but it is still positive. NCUA budgeted a 2.1 percent increase in costs for 2019, and a 3.9 percent increase for 2020.

Share Growth

Insured shares forms the denominator in the calculation of the equity ratio for the SIF. Growth in insured shares leads to a decline in the equity ratio.[5] Through the third quarter of 2018, year-over-year insured share growth for the industry was 4.8 percent, which was down from 2017 (5.7 percent) and below the long-run average (6.5 percent over the past 30 years).



Note: In 2008 Congress increased insurance coverage limits to $250k for banks and credit unions; from from 2010-2012, FDIC insured entire balance of noninterest-bearing transaction accounts

NAFCU FORECAST

There is substantial uncertainty regarding the future path of the equity ratio. Primarily, this is due to the range of potential outcomes related to insurance losses. NAFCU's equity ratio forecast reflects this uncertainty with wide ranges among three scenarios: optimistic, base, and pessimistic.

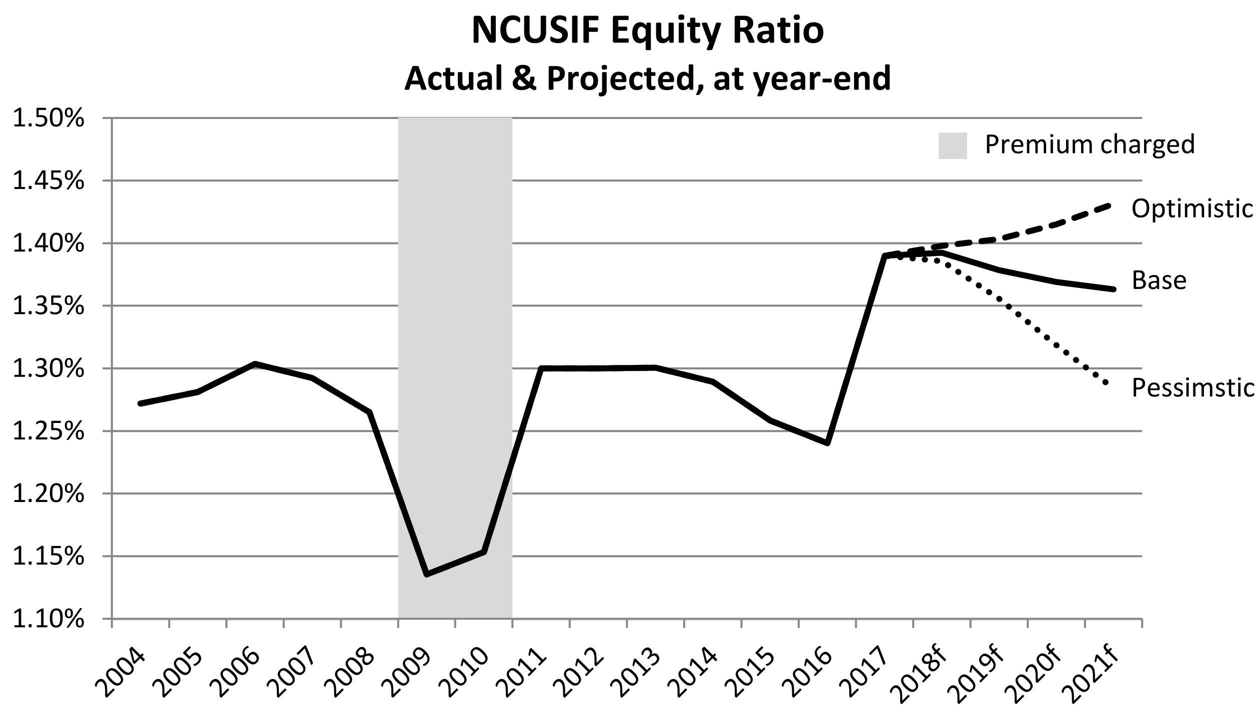
The **optimistic** scenario is one with moderate share growth, reductions to insurance loss reserves, and further improvements in the value of the corporate legacy assets. At year-end 2018, the optimistic scenario would yield a distribution of roughly two basis points to insured credit unions (for payment in 2019), or $200 million for the industry. There would also likely be distributions from the SIF of one to two basis points per year in subsequent years even if the NOL remains at its current level of 1.38 percent. (Note that the trend in the chart assumes no distributions after 2018 since the NOL for those years is not yet known.)

The **base** scenario forecast predicts a decline of roughly one basis point per year in the equity ratio through 2021. This is a milder decline than was seen prior to the merger of the TCCUSF in the 2013-16 years. That is due mostly to an improved outlook for investment yield due to higher interest rates. Under the base scenario, there would be a

[5] Federally-insured credit unions contribute 1 percent of their insured shares as a capital deposit to the SIF. However, so long as the equity ratio is above this level, each additional share has the effect of diluting the ratio.

distribution of $100 to $150 million, or roughly one basis point of insured shares, in 2019. However, distributions in following years would only be made if the NOL were to decline by a larger amount than the equity ratio.

Finally, the **pessimistic** scenario would involve more insurance losses related to taxi medallion lenders, combined with the impact of an economic downturn. Even under such a scenario, there may be a small distribution to credit unions (less than $50 million) in 2019. Distributions in following years under this scenario are not likely. However, premiums are also unlikely unless the equity ratio falls to near or below 1.2 percent.



Notes: Estimates do not assume full funding of the one percent capitalization deposit at year end.