The FDIC's Proposed Increase in Deposit Insurance Assessments May Be Based On Incorrect Projections

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On June 21, 2022, the FDIC published a proposal to increase sharply the assessments banks pay for deposit insurance. The assessments are used to build up a reserve that is in turn used to cover losses from insured bank failures. The proposal was prompted by the fact that the ratio of reserves to insured deposits (the "reserve ratio") had fallen to 1.23 percent, and the FDIC is required by law to maintain a minimum ratio of 1.35 percent or, if short of that target for any reason, adopt a plan to return to the minimum within eight years of the plan's adoption. Because the FDIC had adopted a plan in September 2020, shortly after the ratio first fell below 1.35 percent, it needs to return the ratio to 1.35 percent by September 2028. The proposal was premised on FDIC analysis indicating that the reserve ratio would not return to 1.35 percent until between the second quarter of 2027 and the third quarter of 2034, depending on the assumptions made, and that the FDIC was therefore at risk of failing to meet its statutory deadline.

In this note, we replicate the FDIC's projections and then change two assumptions. First, whereas the FDIC assumes that interest earnings and capital gains will be zero over the forecast horizon, we assume that starting in 2022Q3, they will sum to 2½ percent, which is roughly where rates are now and the Federal Open Market Committee's outlook for the overnight rate over the longer term. Second, whereas the FDIC assumes that deposits will grow at 3½ or 4 percent, we assume that the level of deposits will remain unchanged in the medium term, in line with the fact that deposits are currently contracting and that the factors that have boosted deposits over the past few years have all reversed.

Each of these changes shifts significantly the projected date earlier that the DIF reserve ratio will reach 1.35 percent, and together they move the projected date to the third quarter of next year. For example, using the FDIC's most pessimistic assumptions and simply assuming that interest earnings and capital gains will be 2½ percent of reserves instead of zero moves the projected date for reaching 1.35 rate nearly nine years earlier than the FDIC's projection, from 2034Q3 to 2025Q4. If, in addition, deposits are assumed to hold steady at their 2022Q1 level (and they are probably already below that level), the reserve ratio reaches 1.35 percent in the third quarter of next year rather than the third quarter of 2034.

In short, the FDIC appears not to have taken into account the significant changes that have taken place this year with respect to interest rates and deposits and the outlook for those variables. If the FDIC's projections are adjusted for those changes, the reason it proffers for such a sharp increase in assessments evaporates. Rather than doing poorly, the FDIC's reserve-ratio restoration plan is performing well. The FDIC reassesses the performance of its plan every six months. The Corporation should table its proposed increase and reconsider the situation six months down the road.

Background

The FDIC charges insured depository institutions (henceforth “banks”) assessments that it uses to meet its operating expenses, pay bank failure costs, and maintain a reserve, the Deposit Insurance Fund (DIF). The assessments are calculated as a fraction of each bank’s total liabilities, its “assessment base.” The total fee for each bank is calculated by multiplying its assessment base times an assessment rate. The assessment rate equals a base rate of 2 basis points plus adjustments for financial condition, size, and complexity. For the assessment period ending March 31, 2022, the weighted-average assessment rate was 3.7 basis points. The DIF is invested in Treasury securities, roughly equally divided between bills and notes with maturities of up to five years.

The DIF reserve ratio is the ratio of the DIF to insured deposits. The Federal Deposit Insurance Act requires the FDIC to maintain the reserve ratio at or above 1.35 percent or to implement a restoration plan that will restore the ratio to 1.35 percent within 8 years. This 8-year restoration period is designed to avoid potentially procyclical assessment increases during periods of economic stress in which bank funds would be better spent supporting economic recovery.[1] In the first and second quarters of 2020, deposits increased sharply as businesses and households sought the safety and liquidity of bank deposits; businesses drew down their lines of credit at banks and deposited the line draws; the Federal Reserve bought trillions of dollars of securities from nonbanks; and households and businesses deposited government support checks. That growth drove the reserve ratio below its required level as of June 30, 2020. The FDIC adopted a restoration plan on September 15, 2020; so the ratio must be restored by September 15, 2028.

At the end of March 2022, the reserve ratio equaled 1.23 percent. The ratio is low for two reasons. First, as interest rates have risen, the FDIC has made capital losses on the Treasury securities in which the reserve is invested– unrealized losses rose over $1 billion in the first quarter alone. Second, deposit growth continued longer than the FDIC expected, and deposits remain elevated.

INTEREST RATES

After remaining near zero since the beginning of the pandemic, interest rates have risen sharply in recent quarters. For example, the 3-year Treasury rate remained below ¼ percentage point through the beginning of 2021, rose to 1 percentage point by the end of 2021, and then jumped to 3½ percent by June 2022. (The duration of the FDIC’s portfolio is probably about 3 years.) The movement in the 3-year rate reflects the abrupt change in the level and expected path for the federal funds rate, the FOMC’s monetary policy target. In June 2021 the median FOMC participant expected the federal funds rate to still be zero at the end of 2022 and about ½ percent at the end of 2023. In June 2022 the outlook was for the rate to rise to 2 percent by the end of 2022 and 2¾ percent by the end of 2023.

[1] *C.f.* Statement of Donald E. Powell, Chairman of the Federal Deposit Insurance Corporation, on Deposit Insurance Reform before the Committee on Financial Services of the U.S. House of Representatives, Subcommittee on Financial Institutions and Consumer Credit (Mar. 17, 2005) *available at* https://archives-financialservices.house.gov/media/pdf/031705dp.pdf (noting that the then-existing statutory requirement to raise assessments to return the DIF to the statutory minimum within one year of a shortfall “could impose a significant drain on the net income of depository institutions when they can least afford it, thereby impeding credit availability and economic recovery” and describing the then-existing system as “pro-cyclical”).

For two reasons, the interest rates relevant for projecting FDIC interest income are current and expected market rates, not the yields of the securities when they were purchased. First, and most importantly, the FDIC maintains the securities as "available for sale" and therefore marks them to market. When interest rates change, the securities take a capital gain or loss, and then going forward the expected interest yield and capital or loss sum to the new market rates. Second, as discussed above, the maturities of the securities the FDIC holds are fairly short, so the portfolio will relatively quickly be reinvested into higher yielding securities.

Consequently, the FDIC's assumption that the interest yield and capital gains on the portfolio of securities making up the reserve fund will be zero is incorrect. Moreover, as discussed below, that assumption makes a large difference in the projected date that the reserve ratio reaches 1.35 percent. A comprehensive projection would include an interest rate assumption that blended current and expected rates across the maturities of the securities in and expected to be in FDIC's portfolio. Market quotes suggest that overnight rates are going to continue to rise in the coming months to 2½ percent this fall and 3½ percent by the first quarter of next year, and 3- and 5-year rates currently are both about 3 percent.

Why the yield on FDIC's portfolio of securities will be higher now that interest rates are higher

Now that interest rates are higher, as the FDIC's portfolio of investments matures, the proceeds will be reinvested into higher-yielding securities; indeed, half of the portfolio rolls over every business day. But even if none of the securities in the portfolio mature, the FDIC investment income would still rise along with market rates because the portfolio is marked to market, as illustrated in the following example.

Consider a 5-year note with a $100 par value that was issued when interest rates were 4 percent and expected to remain at 4 percent forever. Its quarterly coupon is $1 and its market value is equal to its par value of $100. But then interest rates rise to 8 percent and now everyone that rates will be 8 percent forever. The security experiences a -15.9 percent capital loss — the market value drops from $100 to $84.1.

If nothing changes, over time the market value of the security rises gradually back to $100 because just before it matures and pays $100 principal it has to be worth $100. This is called "pull to par." Over the next quarter, an investor earns 2 percent on the security (one-fourth of the prevailing annual rate of 8 percent), consisting of interest earnings and a capital gain. The coupon of $1 divided by the market price at the beginning of the quarter ($84.1) provides a 1.2 percent interest yield. In addition, the market prices rise to $84.8 because of pull to par, a capital gain of 0.8 percent. Combined, the investor earns 2 percent, or 8 percent at an annual rate, the new prevailing rate of interest.

For conservatism and simplicity, we assume that, starting in the current quarter (2022Q3) the sum of the interest yield and capital gains on the FDIC's portfolio will be 2½ percent starting although an assumption of 3 percent is probably closer to the correct level implied by market prices over the medium term. An assumption of 2½ percent is in line with the expected overnight interest rate in the long run of the median FOMC participant in the projections provided at the June 2022 FOMC meeting.[2] By way of reference, in 2019Q2 when the federal funds rate was 2½ percent, the sum of the FDIC's interest earnings and capital gains was 3 percent at an annual rate.

The FDIC has not published data on its portfolio's performance for the second quarter, but the change in interest rates that occurred over the quarter suggests interest earnings rose and the market value of its portfolio fell slightly, so for Q2 we maintain the FDIC's assumption that interest earnings and capital gains were zero.

[2] https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20220615.pdf

DEPOSITS

Deposits remain elevated but have begun to decline and are likely to continue to decline. The ratio of deposits to loans at commercial banks at the end of 2022Q1 was 166 percent compared with a 10-year pre-Covid average of 133 percent.[3] Median household savings and checking account balances at Bank of America remain 60 to 80 percent above their 2019 average.[4] The ratio of deposits to bank assets is 82 percent versus a 74 percent pre-Covid average. And deposits currently make up 14 percent of household financial assets versus a pre-Covid average of 12 percent. Especially germane for the FDIC, as of 2022Q1, the ratio of total insured deposits to the total assessment base was 48 percent compared with 43 percent in 2019Q4.

Deposit levels have remained elevated for three reasons.[5] First, households remain flush with savings because of the inflow of government relief funds and a decline in spending: Cumulative excess household savings equals $990 billion relative to an amount that keeps the savings rate constant at the pre-Covid level.[6] Second, with deposit rates and money market rates all essentially equal to zero up until March 2022, deposits have been an attractive place to keep excess liquidity (returns are essentially equal, but deposits offer superior payment services and money market investments are not insured). Third, when the Federal Reserve purchases a security from a nonbank, the purchase price is credited to the seller's bank account and bank deposits are boosted temporarily. Between mid-February 2020 and the end of April 2022, the Fed purchased $4.6 trillion in Treasury securities and Agency MBS.[7]

All three of these developments are reversing. Starting in March, the Federal Reserve has raised its target range for the federal funds rate 150 basis points with substantial further tightening expected, and a more normal spread between money market rates and deposit rates has opened up. In response, depositors are shifting into money market mutual funds.[8] Covid-related fiscal support programs have ended and the household saving rate has been below average in recent months.[9] Lastly, QE has turned to QT. Rather than purchasing securities, the Federal Reserve is allowing its holdings to mature without replacement, up to pre-specified limits. When the Fed does not roll over a maturing security, someone else buys the new security that the Treasury issues. If that someone else is not a bank, bank deposits temporarily go down.

For all these reasons, as shown in the exhibit, deposit growth has decelerated and deposits are now contracting. Indeed, last month the OCC cautioned national banks that "…a reversal of fiscal stimulus, an increase in deposit substitutes, and increased economic development and business investment may drive a decline in deposits."[10]

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[3] Federal Reserve Statistical Release Z.1.

[4] Bank of America Institute, Consumer Checkpoint, 7 July 2022. https://business.bofa.com/content/dam/flagship/bank-of-america-institute/economic-insights/consumer-checkpoint-july-2022.pdf

[5] See Federal Reserve Board blog post "Understanding Bank Deposit Growth Under Covid," June 3, 2022, and BPI blog post "QE May Raise Deposits at Banks Immediately, but Not Permanently," April 6, 2021.

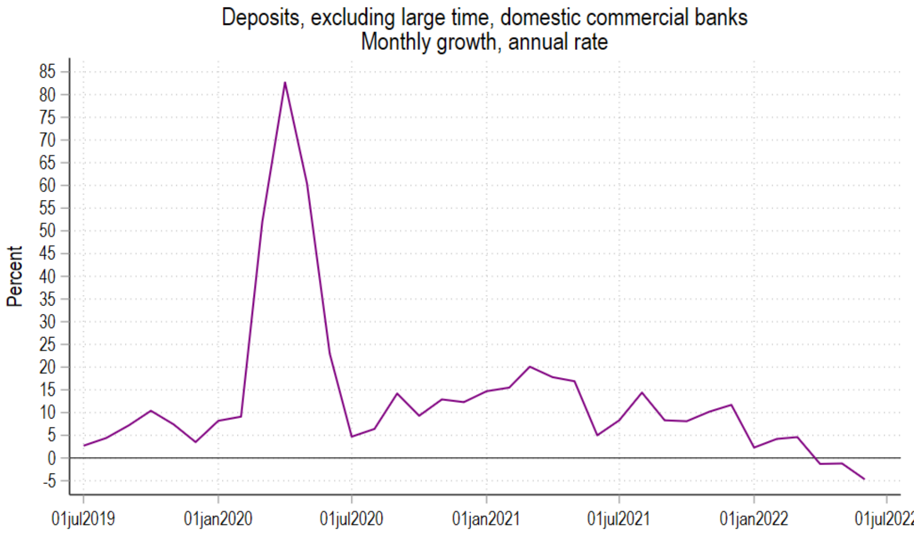
[6] Bureau of Economic Analysis, Personal Income and Outlays, May 2022, and author's calculations.

[7] Federal Reserve Statistical Release H.4.1.

[8] Retail money funds grew $73.4 billion between December 2021 and May 2022, an 18 percent annual rate. Federal Reserve Statistical Release H.6.

[9] Bureau of Economic Analysis, Personal Income and Outlays, May 2022.

[10] Office of the Comptroller of the Currency, Semiannual Risk Perspective, June 23, 2022, p. 24.



Note: Data are from the Federal Reserve Statistical H.8. Final observation for June 2022 uses the average of the weekly observations.

Projections

Each quarter, the DIF evolves. Assessments, interest earnings, and capital gains add to the fund. Operating expenses, bank failure costs, and capital losses drain the fund. To project the ratio of the DIF to insured deposits, it is necessary to project those inflows and outflows as well as the growth of deposits.

Projections						
Investment yield (interest plus net capital gain)	Deposit growth rate, percent	Assessment rate, basis points	Assessment base growth rate, percent	Insurance losses 2022-2026 $billions 5-year total	Operating expense growth rate, percent	Date reserve ratio reaches 1.35 percent
FDIC Projections						
0	4	3.5	4.5	1.8	1	**2034Q3**
0	3.5	4	4.5	1.8	1	**2027Q2**
Most Pessimistic FDIC Assumptions and Investment Yield Equal to 2½ percent						
2.5*	4	3.5	4.5	1.8	1	**2025Q4**
BPI Projection: Investment Yield 2½ percent, Deposit Growth equal to 0, and Assessment Rate Equal to FDIC Average						
2.5*	0**	3.75	4.5	1.8	1	**2023Q3**
*Equals zero in 2022Q2. **In 2024Q4, when deposits/assessment base equal pre-covid level, deposit growth rate equals the assessment base growth rate.						

MATCHING THE FDIC PROJECTIONS

As a first step, we replicate the FDIC's projections.[11] We take as a jumping off point at the end of 2022Q1 that insured deposits are $9,975 billion, the assessment base is $20,831 billion, and quarterly operating expenses are $453 million.[12] Following the FDIC, we assume that interest earnings and capital gains are zero, the assessment base grows at a 4.5 percent annual rate, operating expenses grow at a 1 percent annual rate, and failure costs will sum to $1.8 billion over 2022 to 2026. [13] [14]

When we combine those assumptions with the FDIC's two cases for deposit growth and the assessment rate, we get identical results. When deposit growth is 4 percent and the assessment rate is 3.5 basis points, the reserve ratio reaches 1.35 percent 2034Q3. When deposit growth is 3.5 percent and the assessment rate is 4 basis points, the reserve ratio reaches 1.35 percent in 2027Q2.

CORRECTED PROJECTIONS

Next, we correct the FDIC assumptions to reflect the current and expected future state of interest rates and deposit levels. Correcting the investment yield assumption alone has a significant effect. Using the FDIC's most pessimistic assumptions for deposit growth and the assessment rate (4 percent and 3.5 percent, respectively), when starting in the current quarter, the investment portfolio earns 2.5 percent rather than 0, the reserve ratio rises to 1.35 percent in 2025Q4.[15] That is, the reserve ratio reaches the statutory requirement nearly 9 years sooner than the FDIC projects and 3 years before the deadline.

Lastly, we also assume that deposits hold steady at their 2022Q1 level until the ratio of deposits to the assessment base equals its pre-Covid level, at that point, deposits grow at the same rate as the assessment base (4½ percent annual rate).[16] In addition, we set the assessment rate to 3.75 basis points, halfway between the FDIC's two alternative assumptions of 3.5 and 4 basis points and essentially equal to the weighted-average assessment rate in the most recent assessment period for which data is available, ending March 31, 2022.[17] Using these assumptions, the reserve ratio reaches 1.35 percent in the third quarter of next year.

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[11] BPI analysis is available upon request.

[12] 2022Q1 Quarterly Banking Profile p. 24.

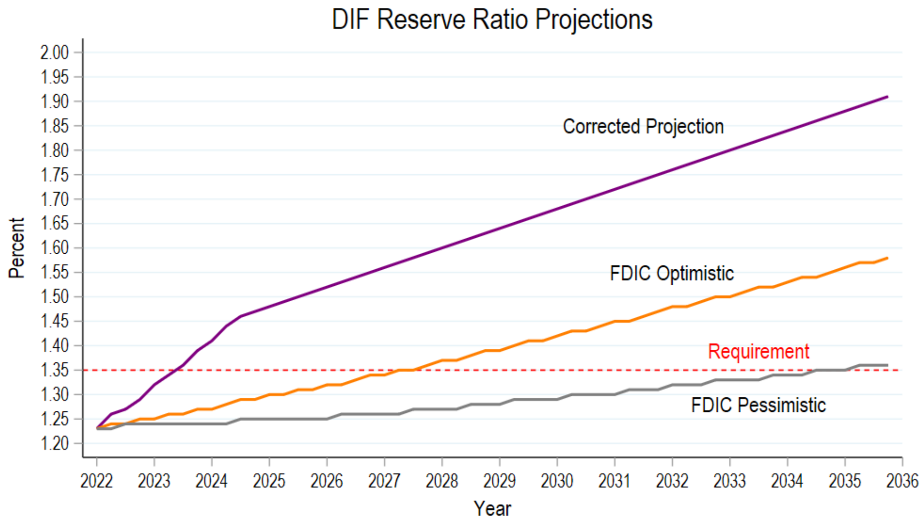
[13] "Restoration Plan Semiannual Update and Amended Restoration Plan," memo to the FDIC Board of Directors from Patrick Mitchell, June 21, 2022, pp. 8-9.

[14] In order to match the FDIC's projected date that the reserve ratio equals 1.35 percent in the more pessimistic scenario, we need to assume that failure costs drop to zero after 2026. The drop in the failure cost is irrelevant for BPI projections because the reserve ratio is normalized before 2027. For those seeking to replicate these results, we also infer that the FDIC converted annual growth rates into quarterly growth rates using compounding rather than by dividing by four (which is fine).

[15] We maintain the FDIC's assumption that interest earnings and net capital gains were zero in 2022Q2.

[16] The increase in the assumed deposit growth rate from 0 to 4½ percent when the deposit – assessment base ratio is normalized causes the kink in the "corrected projection" line in 2024Q4.

[17] "Restoration Plan Semiannual Update and Amended Restoration Plan," memo to the FDIC Board of Directors from Patrick Mitchell, June 21, 2022, pp. 8-9.



Note: Data are from the FDIC's March 2022 Quarterly Banking Profile; 'Restoration Plan Semiannual Update and Amended Restoration Plan,' memo to the FDIC Board of Directors from Patrick Mitchell, June 21, 2022, pp. 8-9; and the author's calculations.

Conclusion

After the FDIC's projections are adjusted to reflect recent developments, the projections indicate that the DIF reserve ratio is on track to reach 1.35 percent by the middle of next year, more than 5 years before the statutory deadline and between 4 and 9 years earlier than the FDIC projected. As a result, the FDIC proposal to double the base assessment rate from 2 basis points to 4 basis points is not supported by the rationale the FDIC provides.

The revised projections are based on the FDIC's model with two adjustments. First, rather than assume that interest rates will be zero, the new projections assume that interest rates will be 2½ percent, in line with the FOMC's outlook. Second, rather than assume that deposits will grow at 3½ or 4 percent, the projections assume that deposits will be unchanged in the medium term. That assumption is conservative given the recent declines in deposits and the economic and financial forces that will be acting to hold deposits down for several quarters – higher interest rates, reduced saving rates, and QE turning to QT.

Given that the reason the FDIC gave for doubling the base assessment rate is incorrect, it would be imprudent for the FDIC to make such a large increase to the deposit assessment rate at this time. It would be more appropriate for the FDIC to reconsider the change after it has re-run its analysis in six months, at the time of its next required semiannual restoration plan update. At that point, the trajectory of deposit levels could be clearer, and the FDIC will have been able to observe its investment income at the higher level of prevailing interest rates.