Credit Policy Research

Shock Scenarios: U.S. Bank Deposits

Rise in Retail Bank Deposit Rates Would Dampen Bank Profitability

FitchRatings

High Online Bank Rates Could Pressure Traditional Banks

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Related Research

Shock Scenario: U.S. Retail (Significant Credit Implications for Retailers, REITs and CMBS) (September 2017)

U.S. Banks: A Normalization of Interest Rates (April 2017)

Deposit Rates Remain Low: The interest on deposits offered by commercial banks in the U.S. remains at historically low levels, despite recent Fed Funds rate increases. In 3Q17, U.S. depository institutions offered 7bps in interest on retail savings deposits and money market deposit accounts (MMDAs) of less than $100,000 on average compared to 118bps on savings accounts and MMDAs at U.S. online banks, according to Federal Deposit Insurance Corporation (FDIC) disclosures. Fitch has conducted two hypothetical scenarios on depository institutions that envision immediate increases in rates paid on retail savings deposits and MMDAs solely as a result of pressure from online bank competition. These scenarios assume no change in the general level of market rates and, therefore, do not affect asset yields. **The shock scenarios considered in the report differ greatly from Fitch Ratings' current base and stress case expectations and are not intended to question the assumptions underpinning Fitch's existing credit ratings or outlooks.**

Scope of Scenarios: This report seeks to quantify the potential impact that increases in retail deposit rates at large U.S. commercial banks (banks with $50 billion or more in assets) would have on profitability. The scenarios illustrate the magnitude of the difference between these banks' deposit rates and online bank deposit rates for FDIC-insured accounts. Fitch assumes large U.S. commercial banks respond to the threat of deposit migration to online banks by raising deposit rates in this study. For the purposes of the scenarios, Fitch does not assume any changes in market interest rates or asset yields. The scenarios modify reported costs associated with retail savings deposits and MMDAs while leaving all other income statement and balance sheet items unchanged *(see Methodology, page 9, for details)*.

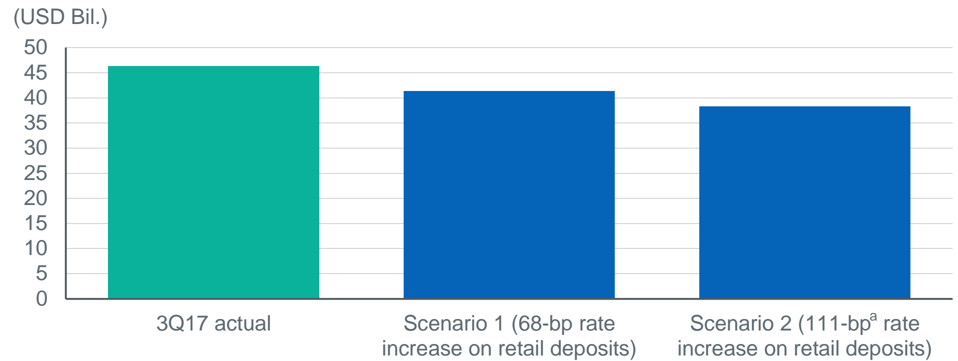
Mounting Pressures for Banks: The gap between the simple average retail savings deposit rate offered by U.S. commercial banks and the weighted average rate offered by online banks has widened since the Federal Reserve began raising the Fed Funds rate in December 2015. The difference was 111bps as of 3Q17, up from 77bps at the time of the first Fed Funds rate increase in 4Q15 *(see chart on page 3)*. Fitch does not currently expect large commercial banks in the U.S. to be pressured to match the retail deposit rate offered by online banks. However, Fitch anticipates some increase in deposit costs in the near- to intermediate term for these banks independent of the scenarios outlined below.

Retail Deposits Important for Banks: Retail deposits are an important source of funding for banks, given their favorable regulatory treatment, historically low cost relative to other funding sources and stability under most situations. Post-crisis regulations from Basel III, such as the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR), provide additional incentives for banks to finance their operations through these deposits by treating them as the most stable source of funding. Should online banks pose a threat to either the cost or stability of these deposit balances, large commercial banks may be pressured to raise their retail deposit rates to retain savings deposits and MMDAs.

Shock Scenarios Reduce Banks' Profitability by up to 17%: Fitch analyzed the impact that two hypothetical retail savings deposit and MMDA rate increase scenarios would have on large U.S. commercial bank profitability. Scenario 1 assumes that the rate paid on retail deposits at large U.S. commercial banks would immediately rise to 75bps on an annualized basis, representing a 68-bp increase from the current average rate on retail savings deposits and MMDAs. Scenario 2 assumes these rates would rise 111bps to a new rate of 118bps, matching the rate paid on savings deposits and MMDAs at online banks. As illustrated in the chart on the following page, Scenario 1 would have reduced large U.S. commercial bank quarterly pre-tax income by $4.9 billion (11%) in aggregate compared to the reported $46.3 billion in 3Q17. Scenario 2 would have trimmed pre-tax income by $8.0 billion, or 17%. Fitch does not anticipate that the changes in profitability from these two hypothetical shocks would have an impact on current bank ratings absent additional market stresses unrelated to deposit rates.

High Online Bank Rates Could Pressure Traditional Banks (continued)

Large U.S. Commercial Bank Quarterly Pre-Tax Income



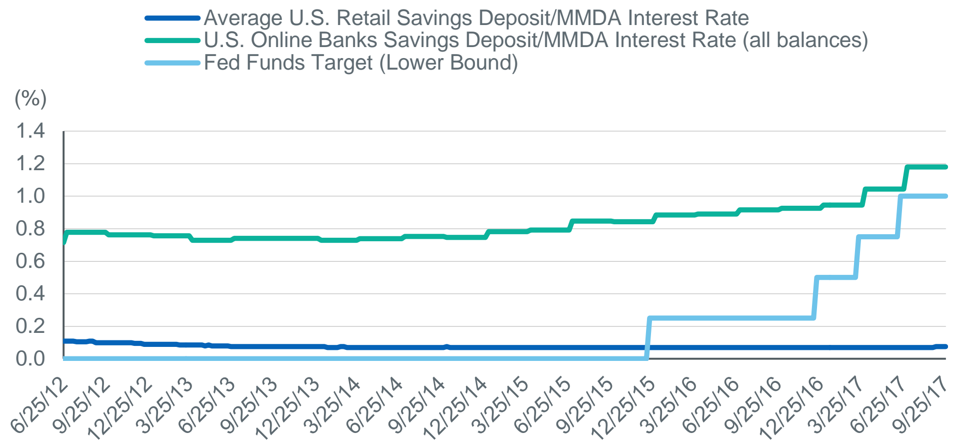
[a]Difference between weighted average deposit rate for online banks cohort and U.S. average depository institution rate in 3Q17.
Source: Fitch, FDIC.

Scenario Background

The study is intended to illustrate the degree to which hypothetical increases in retail savings deposit costs affect bank funding costs and ultimately profitability. To test the importance of the low cost of these deposits to bank profitability, Fitch held constant all other income statement and balance sheet items and applied Fitch's retail deposit rate scenarios to retail deposit balances. The scenarios envision an immediate shock to large commercial bank savings deposit rates due to strong competition from online banks and do not account for changes in monetary policy.

Large U.S. commercial banks currently offer historically low rates to retail depositors. Online banks offered 118bps on all savings deposit and MMDA accounts in 3Q17, of which 89% are retail balances. Fitch used this rate as a proxy for the retail rate paid by online banks, since the vast majority of these banks' deposits are classified as personal and household accounts by the FDIC.

U.S. Savings Deposit Rates Unchanged Amid Rate Hikes

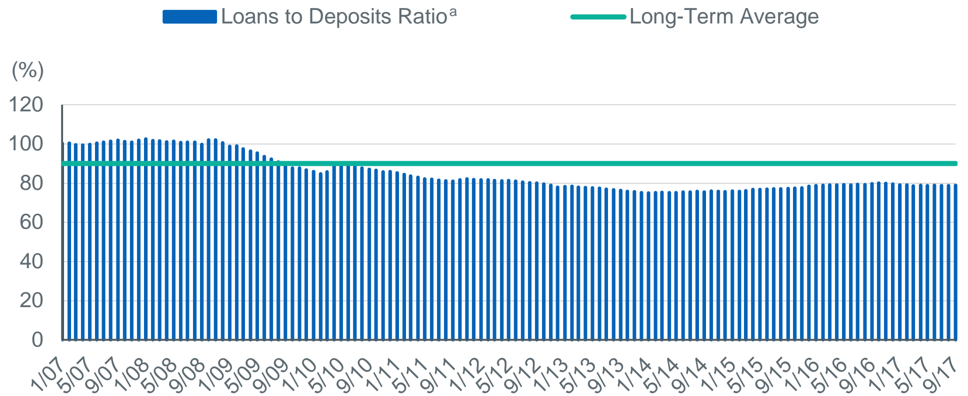


Source: Fitch, FDIC, Board of Governors of the Federal Reserve System/FRED.

Fitch does not anticipate a material rise in savings deposit rates at large U.S. commercial banks in the near-term. Deposit growth is strong at U.S. commercial banks relative to loan growth due to the size of the Federal Reserve's balance sheet and money market fund (MMF) reform, sending deposit dollars to banks. Loan to deposit ratios for all U.S. commercial banks in aggregate are about 79%, much below the long-term average of 90% *(see chart below)*. A return to the long-term average would imply excess deposits of over $1 trillion. This reduces the need for banks to offer competitive deposit rates *(see chart on the following page)*.

Scenario Background (Continued)

U.S. Loans to Deposits Ratio Remains Below Average



[a]All U.S. commercial banks.
Source: Fitch, Board of Governors of the Federal Reserve System/FRED.

Fitch shocked the interest rate offered on retail savings deposits and MMDAs in the U.S., a subset of all interest bearing deposits that does not include time deposits and CDs. Fitch views savings deposits and MMDAs as the least sticky among interest bearing deposits to individuals and households since the accounts offer instant access to funds and no withdrawal penalties. Therefore, these deposits are most vulnerable to competitive rate pressures.

The total savings deposit and MMDA balance at large U.S. commercial banks stood at $5.5 trillion in aggregate in 3Q17, of which $2.9 trillion comprises retail, and the remaining $2.6 trillion consists of corporate/ other depositors, according to FDIC disclosures.

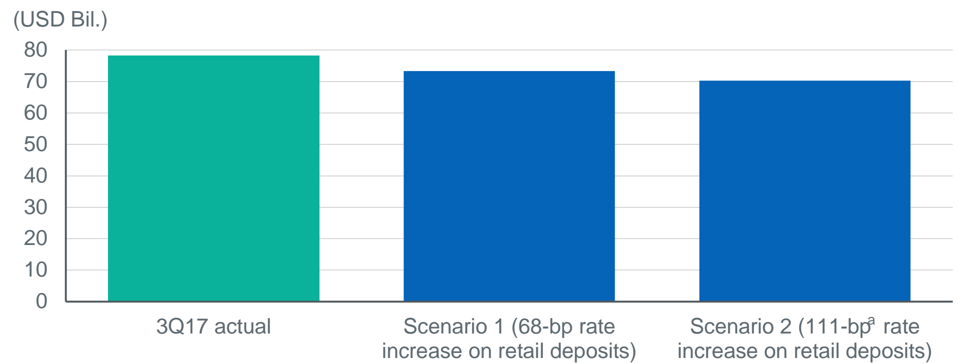
Fitch assumes that deposit rates for retail deposits at large U.S. commercial banks will rise from 7bps on average to 75bps (68-bp rise) in Scenario 1 and 118bps (111-bp rise) in Scenario 2 while the rate paid to non-retail depositors remains the same. The difference between the current average interest rate and the interest rate in each scenario is applied to the $2.9 trillion retail deposit balance and added to total interest expense.

Scenario Results and Findings

Both scenarios outlined above would significantly raise total interest expenses for large U.S. commercial banks, reducing bank profitability and net interest margin (NIM). Interest expenses on all savings accounts and MMDAs would have been $7.6 billion in Scenario 1 and $10.7 billion in Scenario 2 in 3Q17, compared to the reported $2.6 billion.

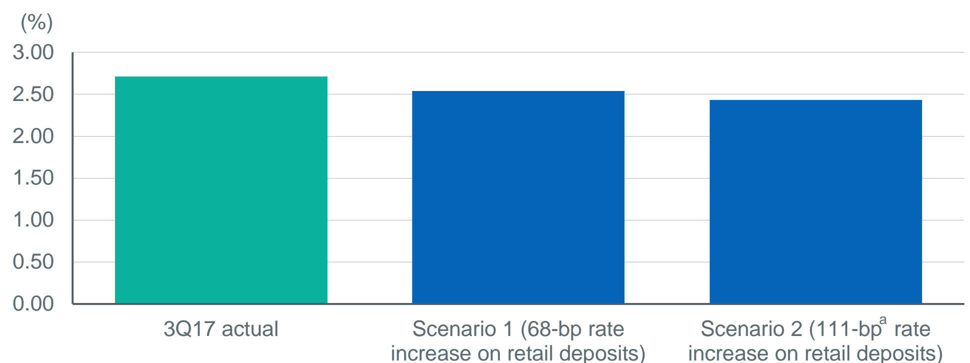
These increases in interest expenses would have driven pre-tax income down $4.9 billion (11%) and $8.0 billion (17%) in Scenarios 1 and 2, respectively, in 3Q17, compared to the reported pre-tax income of $46.3 billion *(see chart on page 2)*. Net interest income would have been 6% and 10% lower in Scenarios 1 and 2, respectively, translating to NIM declines of 17bps and 28bps *(see chart below)*.

Large U.S. Commercial Bank Quarterly Net Interest Income



[a]Difference between weighted average deposit rate for online banks cohort and U.S .average depository institution rate in 3Q17.
Source: Fitch, FDIC.

Large U.S. Commercial Banks Annualized Net Interest Margin



[a]Difference between weighted average deposit rate for online banks cohort and U.S. average depository institution rate in 3Q17.
Source: Fitch, FDIC.

Key Takeaways and Other Considerations

Possible Mitigants

Large commercial banks hold some competitive advantages over online banks in attracting customers absent interest rate considerations, such as having physical branch locations, good brand recognition, diversified businesses and a wide array of products and services. Large banks could leverage these advantages to retain retail customers by offering enhanced services, such as new loan offerings for existing customers. This could limit pressure to raise deposit rates drastically if these banks experienced competitive pressure from their online-only counterparts. However, these defensive moves would have associated costs.

Online banks have been able to offer materially higher rates on retail savings deposits and MMDAs due to their lack of costs associated with operating physical branches. These institutions also tend to invest in higher yielding assets such as credit cards and auto loans, allowing them to pay over 100bps for retail deposits and still maintain solid NIMs.

Rising Rate Environment

Fitch believes that a rise in deposit betas — the share of Fed rate hikes passed on to depositors — and absolute retail deposit costs are likely in the near- to intermediate term at large U.S. commercial banks. We maintain our view that U.S. interest rates will normalize faster than current market expectations and the latest rate hike on June 14 underscores that the Fed is on track for an additional 25-bp hike by end-2017 with continued steady increases in 2018 and 2019.

The pricing sensitivity of online deposits still remains relatively untested during periods of rising rates. Although deposit rate increases have been modest to date, Fitch expects additional U.S. rate hikes to result in more increases in deposit costs at online banks. As shown in the chart on page 3, rates on all savings deposits and MMDAs, 89% of which are retail accounts, have risen slightly during the rate hike cycle at online banks. Since December 2015, deposit betas on all savings deposits and MMDAs at U.S. online banks have been 34% in aggregate, compared to 8% at large U.S. commercial bank savings deposits and MMDAs, which include corporate deposits. If U.S. online banks continue to exhibit higher betas, the gap between offered deposit rates of the two cohorts would widen further with future Fed Funds rate increases.

In Fitch's view, rated U.S. banks are mainly asset sensitive. Therefore, in a rising rate environment, asset repricing would offset increases in deposit pricing and still positively impact net interest income.

The combination of further Fed rate hikes, the beginning of the unwind of the Fed's balance sheet and the growing presence of high-yield online savings banks could pressure large U.S. commercial banks to increase deposit rates faster than historical experience. Retail deposit balances at online banks have grown 36% since year-end 2015, compared to 10% for large U.S. commercial banks over the same period. However, online banks still only have a 6% market share of U.S. retail deposits. Technology increasingly makes the identification and execution of a strategy that optimizes deposit income available to retail customers, potentially assisting in further growth of online retail deposit balances. The financial incentives for customers to switch deposits are limited in a low rate environment, but faced with rising rates, the rewards for switching may increase.

All banks could potentially experience less stickiness from retail deposits in the future due to disruptive technology. Services and resources that can help easily identify the highest savings deposit rates for consumers could aid in pressuring banks to offer more competitive rates to avoid losing this source of funding.

Appendix

Regulatory Treatment

Banks currently have high deposit balances relative to loans outstanding, mitigating some pressure to retain retail deposit balances. Despite banks having excess liquidity, post-crisis regulations from Basel III incentivize banks to fund more of their operations through retail deposits, creating a need to retain these deposits even amid slow loan growth.

The LCR, designed to test banks' resilience to a 30-day liquidity stress, treats retail deposits as highly stable funding. The ratio aims to ensure banks have adequate high quality liquid assets to survive a significant funding stress. In this test, retail deposits are only assumed to run off 3% of the balance in the U.S., compared to 10% for corporate deposits and 100% for short-term wholesale funding. Similar treatment is given to retail deposits under the NSFR, which intends to ensure banks have minimal funding risk over a one-year time horizon.

The FRB also implements a capital surcharge for Global Systemically Important Banks (G-SIBs), requiring them to hold additional capital above regulatory minimums. Banks that have heavier reliance on short-term wholesale funding could be subjected to a relatively higher surcharge, further incentivizing banks to fund themselves through retail depositors.

Methodology

This report seeks to quantify the hypothetical impact that increases in retail deposit rates in isolation at commercial banks in the U.S. would have on profitability metrics for these banks. The scenarios conducted hold all balance sheet and income statement items constant with the exception of the interest rate paid on Fitch's definition of retail savings deposits, which excludes time deposits.

Fitch used FDIC call reports from 3Q17 for depository institutions as the primary data source in the U.S. analysis. Retail savings deposits and MMDAs are defined as those accounts intended primarily for individuals, households or family use from these statements.

Fitch's calculation of the average retail savings deposit and MMDA rate of 7bps in 3Q17 is derived from FDIC weekly national rate and rate cap disclosures. All other data points provided in the U.S. portion of the report are weighted average or cumulative figures from either Fitch's cohort of U.S. banks with $50 billion or more in assets (large U.S. commercial banks) or Fitch's cohort of online-only banks from their respective FDIC call reports.

FDIC disclosures provide details on interest expenses on all savings deposits and MMDAs but not expenses associated with retail specific accounts. Therefore, Fitch used the simple average of weekly average non-jumbo savings deposit and money market deposit products according to FDIC weekly national rates and rate caps as a proxy for the current rate paid on retail savings deposits and MMDAs by Fitch's cohort of large U.S. commercial banks. In the scenarios, the new total interest expense was calculated by multiplying the difference between this simple average rate (7bps) and the rate applied in each scenario (75bps and 118bps) by the retail savings deposits and MMDA balances and adding this figure to total interest expense. Fitch acknowledges that the current simple average rate of 7bps is derived from a separate source from the FDIC call reports. Therefore, this figure may deviate slightly from the undisclosed weighted average rate that Fitch's cohort of large commercial banks is paying on these retail accounts.

Fitch calculated the weighted average rate paid by online banks (118bps) by dividing interest expense attributed to all savings accounts and MMDAs by the total balance of these accounts. This may include non-retail accounts since disclosure by account type is not made available by FDIC call reports. However, 89% of savings deposits and MMDAs are categorized as accounts intended primarily for individual, household or family use at online banks. Fitch excludes Goldman Sachs from its online banks cohort since the majority of Goldman Sachs savings deposit and MMDA balances are from non-retail depositors.

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