

Banks

# What's behind the slowdown in bank deposits?

Filip Blazheski

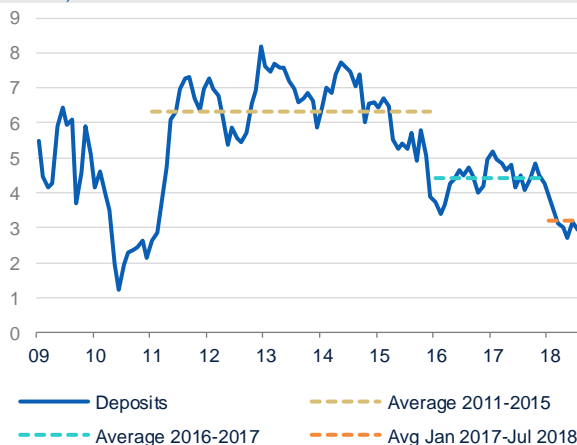
- **Bank deposits have slowed since the end of 2015 and further more since the beginning of 2018**
- **The slowdown matches historical patterns during late-stage economic expansions**
- **The likely cause is the higher attractiveness of deposit alternatives as deposit interest rates have not increased commensurately with other short-term interest rates**
- **Rebalancing of assets has helped banks grow loans at a faster pace than deposits**
- **Deposit growth will increase either when banks start competing for deposits more intensively or as a result of flight to safety**

Commercial bank deposit growth has slowed down significantly since the beginning of the year. In July 2018, deposits grew at a rate of 2.9 % YoY, compared to an average of 4.4% during 2016-2017 and 6.3% during 2011-2015 (Figure 1). The decline in deposit growth has not had a detrimental effect on lending so far, which has continued at solid rates; total loans in June and July 2018 increased by 4.3 and 4.2% YoY, respectively. While deposits might emerge as a limiting factor to lending going forward if the economy continues expanding, the banks will be able to work around it by tapping wholesale funding as much as possible under current regulations. This brief examines the cyclical historical patterns in deposit growth and takes a deeper look into the specific causes behind the most recent slowdown.

## Cyclical patterns

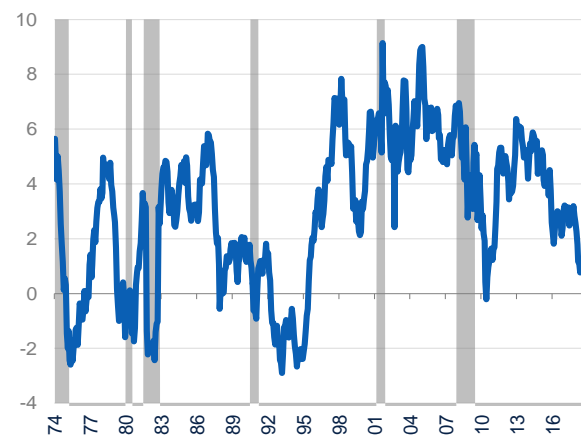
Real deposit growth tends to peak around the middle stage of every expansion cycle (Figure 2), slow down afterwards, and pick up just before the downturn, as funds fly to safety, to then reach a local maximum during or slightly after the recession. This is then followed by a slight slowdown as depositors draw down funds to cover expenses in the initial recovery stage, after which deposits start to grow again strongly due to stronger nominal GDP growth amid low interest rates. This pattern is easily observable when the cyclical component of the series is filtered out (Figure 3) or using cross-correlations (Figure 4). Based on these results, the current slowdown in deposit growth is consistent with historical patterns.

Figure 1. Deposits, all commercial banks (% YoY)



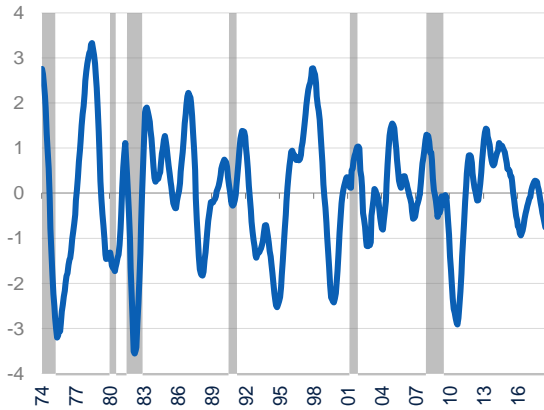
Source: BBVA Research and Federal Reserve

Figure 2. Real deposits, all commercial banks (% YoY)



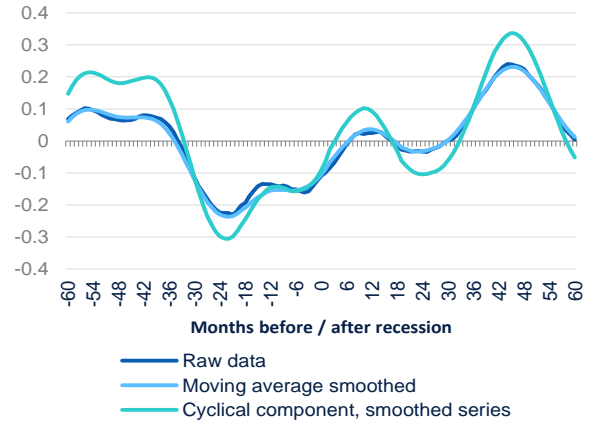
Source: BBVA Research and Federal Reserve

Figure 3. Real deposits, all commercial banks, cyclical component, smoothed series (% YoY)



Source: BBVA Research and Federal Reserve

Figure 4. Cross-correlograms, real deposit growth and recession dummies (Correlation coefficients)

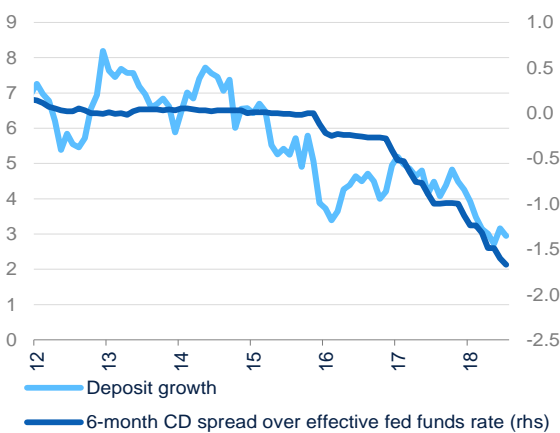


Source: BBVA Research

## Interest rate spreads and deposit betas

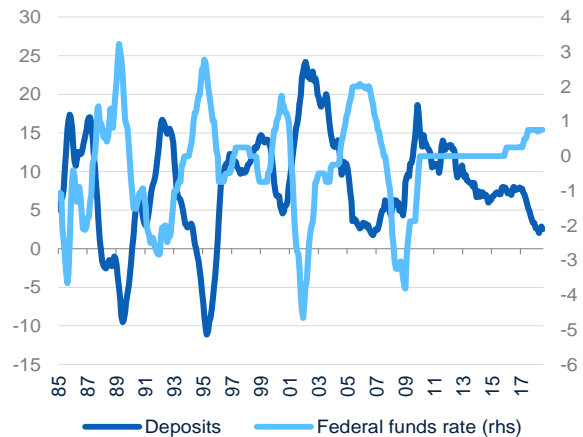
The most recent slowdown in deposit growth coincides with the latest cycle of short-term interest rate increases, which was initiated by the Federal Reserve in December 2015. The Fed rate hikes have not been coupled with commensurate increases in interest rates on deposits at commercial banks so far, resulting in wider interest rate spreads (Figure 5). This phenomenon is not unique for the current stage of the cycle, and is richly documented by Drechsler et al. (2017). Part of their conclusion is: *“When the Fed funds rate rises, the spread between the Fed funds rate and deposit rates also rises, triggering large deposit outflows... When rates are low, banks face competition from cash in supplying liquidity to households, which forces them to charge a low spread on deposits. When rates are high, banks’ competition is mainly from other banks, which allows them to increase spreads.... Households respond by decreasing their deposit holdings...”*<sup>1</sup> The effects of higher interest rate spreads are especially strong on savings deposits (Figure 6), which represent close to 80% of total deposits in the economy.

Figure 5. Commercial bank deposit growth and deposit interest rate spread (% YoY and percentage points)



Source: BBVA Research, Federal Reserve and RateWatch

Figure 6. Savings deposits and the Federal Funds Rate (% YoY and percentage points difference YoY)



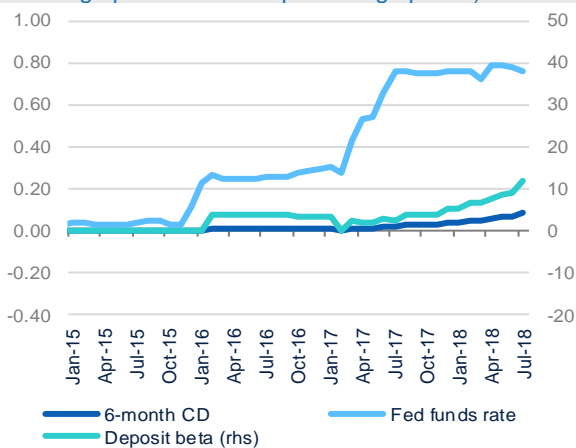
Source: BBVA Research and Federal Reserve

1: Drechsler, I., Savov, A., Schnabl, P. (2017). *The Deposits Channel of Monetary Policy*. The Quarterly Journal of Economics, Volume 132, Issue 4, Pages 1819–1876. <https://qoq.ql/1VEFqN>

A key concept in this discussion is deposit beta. Deposit beta measures the percentage of short-term interest rate changes that banks pass onto their depositors. Despite showing an upward trend, the deposit beta has remained very low (Figure 7), suppressing the attractiveness of consumer bank deposits as savings vehicles. At little over 10% currently, the deposit beta would have a long way to go before it reaches 100% – a state in which banks pass all short-term interest rate increases onto their consumers. Assuming an exponential trend fitted to the data for the last 20 months, this would occur in around two and a half years, and even then deposit interest rates might not match the federal funds rate due to cumulative effects.

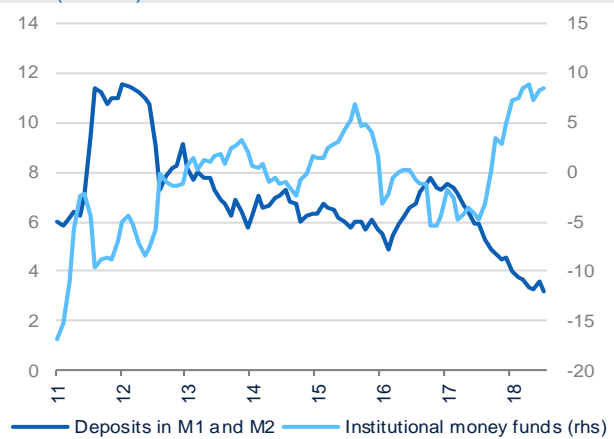
The low deposit betas and the increase in deposit spreads have contributed to a stronger growth in institutional money funds, which are a vehicle where large depositors are able to invest short-term funds and are thus an alternative to commercial banks in periods of low economic and financial stress (Figure 8). If the current trends in deposit spreads do not reverse, the flow of funds into institutional money funds will continue. That said, one way that this scenario might not materialize fully would be if the Fed lowers interest rates in the intervening period due to an economic slowdown, in which case this, coupled with a flight to safety, would induce deposit growth to increase sharply, as it happens before every recession.

Figure 7. Interest rate changes and deposit beta (Percentage points YoY and percentage points)



Source: BBVA Research and Federal Reserve

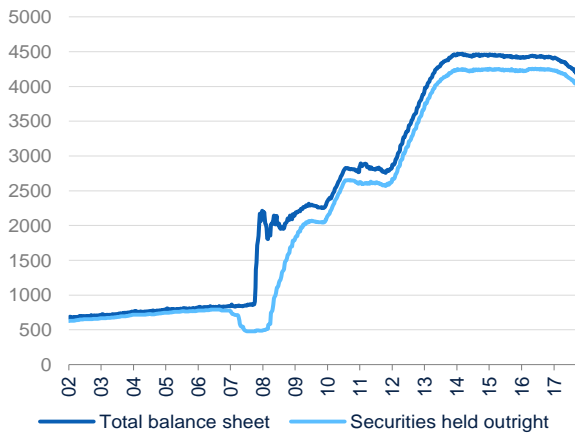
Figure 8. Growth in deposits versus institutional money funds (% YoY)



Source: BBVA Research and Federal Reserve

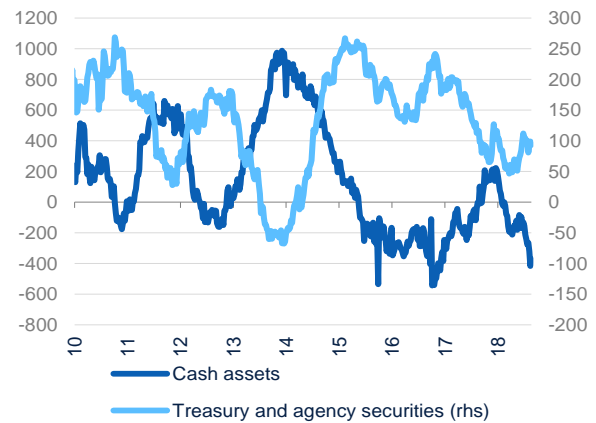
An additional trend that could be adversely affecting deposits that has emerged in the meantime is the Federal Reserve balance sheet normalization process, which was kicked off in the second half of last year. This process is designed to gradually drive down the amount of securities held outright by the Federal Reserve (Figure 9) and help move long-term interest rates higher. Since the end of October 2017, the amount of securities held outright by the Fed has decreased by \$218bn. This has been offset by a decrease in reserves and deposits at Federal Reserve Banks in the amount of \$237bn, which in essence represent cash assets for commercial banks. While the decrease in reserves could be related to the deposit growth slowdown, the effect cannot be confirmed at this stage due to lack of enough historical data. Moreover, even if there is some negative effect, it would likely be significantly smaller than the effects brought about by the increase in short-term interest rates. In either case, what banks have done to manage the decrease in cash assets has been to increase the holdings of risk-free securities (Figures 10 and 11), which has allowed them to maintain stable liquidity ratios (Figure 12).

Figure 9. Federal Reserve balance sheet and securities held outright (\$bn)



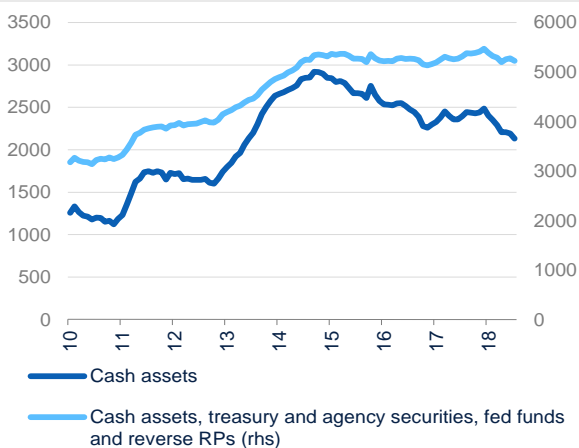
Source: BBVA Research and Federal Reserve

Figure 10. Cash assets and treasury and agency securities (\$bn YoY)



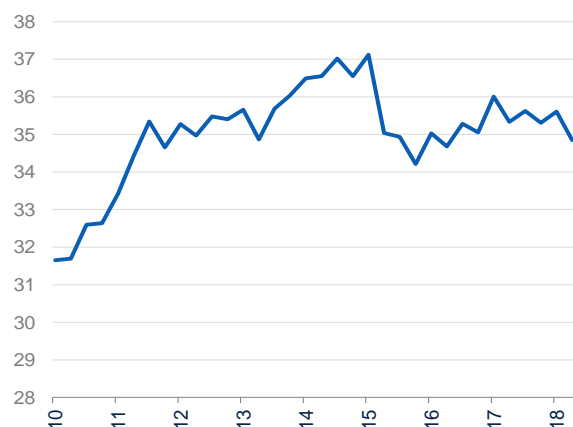
Source: BBVA Research and Federal Reserve

Figure 11. Cash assets versus total liquid assets (\$bn)



Source: BBVA Research and Federal Reserve

Figure 12. Weighted average liquidity ratio<sup>2</sup>, commercial and savings banks (Percentage points)



Source: BBVA Research calculations based on SNL data

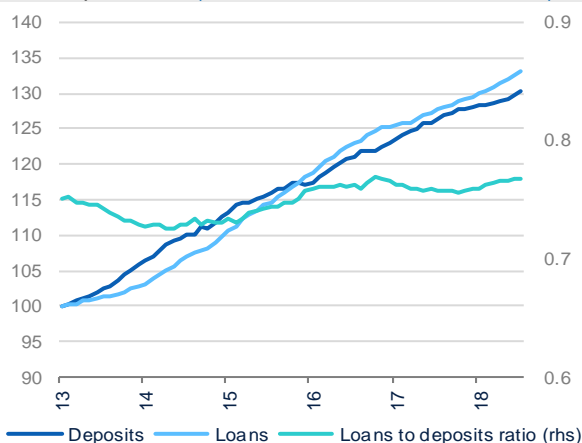
## Loan funding requirements

Transforming deposits into loans is one of the key functions of banking. The current slowdown in deposit growth has so far not exerted significant pressures on banks' ability to lend. While the loan-to-deposit ratio has increased somewhat as would be expected, it is still close to its average for the period since 2013 (Figure 13). The key reason why banks have been able to meet the loan demand over the last period is the accumulated excess deposit base from the crisis and post-crisis period (2009-2014), when deposit growth surpassed lending growth by a significant degree. This excess deposit base reflected new regulatory guidelines and a weak demand for loans as households were deleveraging. Part of these excess deposits have been invested in non-treasury securities and non-agency MBS, which the banks have used to increase income, as well as for asset-liability management purposes.

<sup>2</sup>: Liquidity Ratio is calculated as: (Cash and Balances Due + Securities + Fed Funds Sold and Repos + Trading Account Assets - Pledged Securities) / Total Liabilities. The weights used are total asset for each institution.

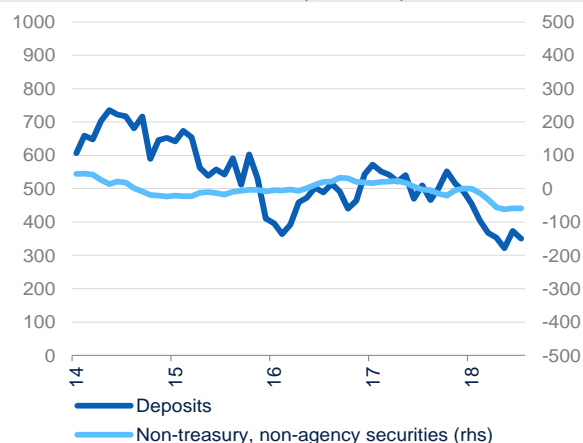
When deposit growth slowed significantly at the beginning of this year, banks started drawing down on some of these securities (Figure 14), in addition to marking down part of the fixed income portion that is classified as available for sale due to the accounting requirement that this part of the portfolio is recorded at fair value. The replacement of these securities with new bank loans results in a transfer of assets from lower to higher yielding activities, which some loans have now become as interest rates have increased. The move is also motivated by a desire to limit losses on the fixed-income segment of these securities as interest rates continue rising. Since non-treasury securities and non-agency MBS are not critical from a regulatory perspective in a way that treasuries and agency MBS are, banks have been able to implement this strategy with no significant obstacles. That said, the changes in asset distribution are also resulting in a higher loan-to-deposit ratio, and have the potential to strain banks' liquidity and impact their capital requirements. The changes in asset distribution thus have the potential to increase banks' risk exposure and negatively impact liquidity, so they cannot continue for an indefinite period of time.

Figure 13. Loans and deposits at commercial banks and loan-to-deposit ratio (Index = 100, Jan 2013; and ratio)



Source: BBVA Research and Federal Reserve

Figure 14. Deposits and non-treasury, non-agency securities, commercial banks (\$bn YoY)



Source: BBVA Research and Federal Reserve

Because of this, while rebalancing assets can help sustain loan growth amid lower deposit growth for some time, the reach of the strategy is limited. As a result, banks are likely to start competing more aggressively for deposits if they want to sustain their operations and maintain market shares. The data shows that this process has already begun, and anecdotal evidence shows that this time the pressure to increase deposit interest rates will be higher due to the emergence of online banks or branch-light banks<sup>3</sup>. These new competitors have lower operating costs, and thus can afford to compete more aggressively on price. Moreover, the competition from entities such as credit unions remains strong, as some of them can also afford to increase interest rates at a higher rate due to lack of need for profit distribution like the one that banks face.

Aside from online players, the banks that are likely to start increasing deposit rates first are the ones with the highest loan-to-deposit ratios. On the flip side, banks with relatively low loan-to-deposit ratios that also provide high non-monetary benefits to their depositors through augmented service and/or strong brand recognition are likely to be the last ones to start meaningfully increasing interest rates. In either case, assuming regulation does not change materially in the next two years and the economy continues expanding, banks will be facing increased competition for deposits, higher funding rates and thus a limit on net interest margin (NIM) growth. A positive aspect of this scenario is that while NIM may not increase, the solid lending growth would lead to higher revenue and possibly net income.

3: See Stoval, N. & Vanderpool C. (2018). *Higher funding costs loom as deposit betas jump at some large US banks*. S&P Global. <https://goo.gl/d8n4D4>. Gray A. (April 8, 2018). *Bank competition heats up for US customer deposits*. *Financial Times*. <https://goo.gl/JPQafE>. and Back, A. (August 18, 2018). *Banks Finally Start to Pay Their Depositors*. *Wall Street Journal*. <https://goo.gl/BchZfr>.

In an alternative scenario, the slowdown in deposit growth at commercial banks could have a cooling effect on growth if it results in lower availability of longer term loans, as maturity transformation remains one of the key roles that banks play. While this development is likely going to be mitigated by banks accessing wholesale funding, it would also lead to a reliance of higher risk and potentially higher cost funding. The implication from all this on Fed policy is an ongoing vigilance when hiking short-term interest rates further. Luckily, while the Fed might not be able to slow down the process of short-term interest rate increases if inflation accelerates sharply, this is not likely to be the case in the short-term.

## Effects on bank strategy

The evolving economic landscape presents some challenges as well as opportunities for commercial banks. The first challenge comes from the need to carefully manage the risks that come with the process of asset reallocation that is needed to meet loan demand before increasing deposit rates. The second challenge comes from the need to secure sustainable and profitable growth when funding costs increase through advantageous risk-reward profiles, lower operating expenditures, and higher non-interest income streams. The challenges present opportunities for some banks to gain ground from competitors that have a more difficult time adapting. The banks that perform best will be the ones that are able to provide excellent and ever improving customer experience, can utilize new technologies to increase efficiency, and are best able to manage risks. The banks that struggle to respond to these challenges will find it difficult to grow substantially in the short to mid-term.

## Bottom line

The slowdown in bank deposit growth that has started at the end of 2015 and intensified this year is consistent with historical patterns that emerge in late stage expansions. The slowdown is driven by the increase in short-term interest rates and the limited benefit of higher interest rates that banks pass onto their depositors. Banks are able to do this because they can meet new loan demand with existing assets that have been accumulated in the earlier stages of the business cycle, thus optimizing business performance. Due to the relatively lower attractiveness of bank deposits, some depositors are availing themselves of other options, and will keep on doing so until banks increase deposit interest rates or the cycle turns and deposit growth jumps due to flight to safety. While there is also a possibility that balance sheet normalization could have an added effect to the current slowdown, it is not clear that this is the case and if it is whether it is material.

In this cycle, an added pressure on banks to increase deposit interest rates comes from online or branch-lite banks, which have lower operating costs and thus can compete for deposits more aggressively. If banks do not meet this challenge, they might have a problem meeting loan demand, which would have to be mitigated with higher reliance on wholesale funding. This could hurt banks' profitability and risk profiles, which in turn could have an adverse effect on the economy. This could emerge as a source of concern for the Fed as it proceeds to increase short-term interest rates. The banks that perform best in this new environment are the ones that are able to provide best customer service, while maximizing interest and non-interest income, while ensuring a favorable risk-reward balance.

## DISCLAIMER

This document was prepared by Banco Bilbao Vizcaya Argentaria's (BBVA) BBVA Research U.S. on behalf of itself and its affiliated companies (each BBVA Group Company) for distribution in the United States and the rest of the world and is provided for information purposes only. Within the US, BBVA operates primarily through its subsidiary Compass Bank. The information, opinions, estimates and forecasts contained herein refer to the specific date and are subject to changes without notice due to market fluctuations. The information, opinions, estimates and forecasts contained in this document have been gathered or obtained from public sources, believed to be correct by the Company concerning their accuracy, completeness, and/or correctness. This document is not an offer to sell or a solicitation to acquire or dispose of an interest in securities.