If the yield curve stays flat for the foreseeable future, what sensible action can you take to offset some of the net interest margin pressure?

As we discuss below, PNC FIG Advisors continue to recommend prudent approaches regarding the role of investment securities to enhance profitability while effectively managing interest rate risk and liquidity considerations. These tailored strategies have historically satisfied both investors and regulators, but tactics should be modified given the characteristics of today’s interest rate environment.

- The environment remains conducive to issuing both senior debt and subordinated debt, depending on your institution’s needs. Debt may be preferable to equity given that common shareholders will not be diluted and there are no voting rights attached to these instruments. Due in part to its tax-deductibility, the cost of capital on debt is often lower than that of equity capital for community banks.

- Most banks have a securities portfolio with a duration of 3–5 years. Depending upon an individual bank’s financial condition and risk tolerance, today’s interest rate conditions may merit consideration of a slightly more aggressive strategy that selectively layers in some assets with durations of 5–7 plus years. We believe this approach comfortably fits within acceptable risk/reward ratios of both investors and regulators.

- The start of a new year typically presents opportunities to selectively sell municipal bonds at attractive prices. This seasonal strategy arises because the new issue, tax-exempt municipal bond supply is typically light from New Year’s Day through mid-February. Demand, however, is generally quite strong as buyers (high-net-worth individuals, mutual funds, hedge funds, etc.) need to buy bonds. Consequently, secondary muni prices tend to move higher on this seasonal supply/demand dynamic that is unique early in the year.

Banks that seek steady returns should consider senior or sub debt as an alternative form of capital. As a supplement to equity, debt (arguably under-utilized) can help banks achieve a higher earnings per share and return on equity. The marketing and pricing of senior and sub debt issuances by community banks are not “cookie cutter” and therefore, should be carefully planned on an individualized basis. Please contact a member of the PNC FIG Advisory team or provide your contact information at pnc.com/fig to discuss whether issuing now makes sense for your institution.
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Community banking institutions may elect to comply with one new regulatory capital requirement instead of four due to final rule changes adopted by federal banking agencies on October 29, 2019.

New rules are intended to simplify capital requirements and should help ease the burdens of calculating and reporting regulatory capital. In order to qualify for the new Community Bank Leverage Ratio ("CBLR"), a bank or bank holding company ("BHC"), must have average total consolidated assets below $10 billion and a leverage ratio above 9.0%. Among other things, the CBLR (the "Final Rule") eliminates the need to calculate risk-weighted capital/assets. The CBLR uses the existing definition of Tier 1 capital as the numerator and average total consolidated assets as the denominator. BHCs are also subject to all bank capital requirements and can qualify for the CBLR option.

Final Rule Unlikely to Significantly Affect the Community Bank Debt Market

The regulatory treatment of subordinated debt ("sub debt") as Tier 2 capital is eliminated when the CBLR option is used, but there are other important reasons why community banks issue debt. Debt issuances are used to fund acquisitions, refinance higher-cost debt, and repurchase stock. It seems likely, however, that institutions that elect the CBLR option will tend to issue senior debt vs. sub debt. In theory, senior debt should price more favorably given the higher ranking in the capital structure.
On October 29, the Federal Reserve, Office of Comptroller of the Currency (OCC), and Federal Deposit Insurance Corporation (FDIC) finalized new rules to simplify the standard needed for banks and bank holding companies to qualify as “well capitalized.”

Many banks will probably adopt a “wait and see” approach to the new rule. Anecdotal evidence suggests that the time and effort needed to calculate and report the existing capital ratios varies significantly among community banks.

The new issuance debt market is near-ideal due to a supply/investor demand imbalance, low Treasury yields, and relatively tight credit spreads.

Senior and subordinated debt are effective forms of financing on a risk/reward basis for banks that seek capital to support growth.

The ability to issue debt facilitates the use of cash to fund acquisitions, which is significant as common equity raises can be more difficult for smaller institutions. Non-stock deals appeal to sellers seeking to “cash out.”

Regulators and bank investors appreciate proactive asset/liability management, which uses funding that more or less matches the expected duration or maturities of assets.

Although important to regulators, banks, and debt markets, it appears that equity analysts and investors are not focused on the Final Rule, which became effective January 1, 2020.

**New Capital Rule — Game Changer or Nothingburger?**

On October 29, 2019, the Federal Reserve Board (“Fed”), the OCC, and the FDIC finalized new rules needed for commercial banks and bank holding companies to qualify as “well capitalized.” In order to qualify for the CBLR, a bank or bank holding company must have average total consolidated assets below $10 billion and a leverage ratio above 9.0%. (There are a few other conditions that we won’t detail here as they do not apply to most community banking institutions.)

The simplified regulatory capital requirement should reduce the complexity and costs associated with calculating current capital ratios and risk-weighting assets. While simplicity is usually better, banking organizations should consider current and anticipated capital levels before electing to use the CBLR.

A qualifying banking organization may elect to use the CBLR option at any time. The same institution is permitted to opt out of the CBLR option between reporting periods by providing its Basel III capital ratios to the appropriate regulators at the time of opting out. There apparently is no regulatory limit regarding how many times an institution can switch between the current capital requirements and the CBLR standard. The Final Rule provides for a two-quarter grace period for a CBLR banking institution to be considered “well-capitalized” if its CBLR ratio is between 8–9%. There is no grace period if the ratio falls below 8%.

Smaller institutions, in particular, should consider key asset thresholds, such as the $3 billion threshold that exempts small bank and savings and loan holding companies from the Federal Reserve’s regulatory capital requirements under the Federal Reserve’s Small Bank Holding Company Policy Statement and the $10 billion threshold.

Many banks will probably adopt a “wait and see” approach to the new rule. In addition to the normal uncertainties created by adoption of a new regulatory rule, the timing of the CBLR rule is peculiar given that capital ratios at some community banks could be skewed in the near-term due to the implementation of the Current Expected Credit Losses (CECL) model in 2020. (Small companies are not compelled to comply with CECL until 2023.) In any event, we don’t believe that it makes much sense for banks that are nearing the $10 billion asset threshold to adopt the CBLR.

**The Effect of Basel III Regulations**

Under Basel III regulations, sub debt is included as Tier 2 capital for BHCs. These regulations permit BHCs to “push down” proceeds to the subsidiary bank where they are included as Tier 1 capital. This often helps banking organizations meet or exceed total risk-based capital requirements, which are 10.5% under Basel III regulations.

A sub debt issuance qualifies as capital as long as the maturity date is 5 years or more. At the 5-year point, the percentage that is includable as capital at the holding company declines by 20% each year. Therefore, companies that issued sub debt in 2014 should be incentivized to issue new debt and use the proceeds to repay the earlier debt issuance.

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*The word “nothingburger,” which is usually associated with Twitter users, was coined in the 1950s by Hollywood gossip columnist Louella Parsons.*
Due in part to Basel III regulations, senior debt is not as prevalent as sub debt among community banks but occasionally there are new issue deals. Senior debt does not get the Tier 2 treatment at the holding company which isn’t necessarily a problem for banks below $3 billion. In theory, senior debt should price more favorably given the higher ranking in the capital structure, but the limitations around capital treatment at the holding company potentially have made this a less common source of capital.

Today’s historically low interest rate environment has been a key factor for the pick-up in sub debt issuance from 2014–2017. Other reasons for the more widespread use of sub debt financing was the prevalence of Troubled Asset Relief Program (“TARP”) and Small Business Lending Fund (“SBLF”) financing that needed to be redeemed before these instruments reset to 9.0% coupon rates.

Other factors that contributed to more sub debt issuances included the realization that investors and regulators demanded higher total capital ratios; the Federal Reserve change to the Small Bank Holding Company Policy Statement that allowed for significantly higher leverage for BHCS under $1 billion in assets (subsequently amended to $3 billion); and last, but not least, a more receptive market for debt issuances.
In 2016, we reported on a research article that all community bankers should have found interesting, titled “Is Bigger Necessarily Better in Community Banking?”1 According to the three researchers who wrote the paper, the answer to this question is a resounding “Yes!” The authors didn’t say how to grow, but their analysis showed the bigger the better. Of course, we know that growth can come from one of two ways — organically or from merger and acquisition (M&A) activity.

In 2018, the same esteemed team of researchers — plus one more contributor — wrote a follow-up article titled “Does Scale Matter in Community Bank Performance? Evidence Obtained by Applying Several New Measures of Performance.”2 Again they came to the same conclusion, saying, “Overall, our results suggest that, on average, large community banks outperform small community banks.”

Who are these researchers and why should we listen to them? The lead author is Joseph P. Hughes, a professor at Rutgers University. If you search his name on the internet, you’ll find that he has a remarkable record of research into banks and publishes in highly regarded, peer-reviewed journals. His coauthors are Julapa Jagtiani, from the Federal Reserve Bank of Philadelphia, Loretta J. Mester, from the Federal Reserve Bank of Cleveland and The Wharton School, and Choon-Geol Moon, a professor at Hanyang University in Seoul, South Korea. Quite a team! Bank research conducted by a team of this caliber is certainly worth reading, and these two papers can be accessed through the Philadelphia Federal Reserve website.
Yes, the Bigger the Better!
The authors break the community bank segment of their dataset into “small community banks,” defined as banks with less than $1 billion in assets, and “large community banks,” defined as banks with assets between $1 billion and $10 billion. The third segment of banks that the researchers include in their study is termed “midsize banks,” which are banks with assets between $10 billion and $50 billion.** In their 2016 study, the reason they excluded banks with more than $50 billion in assets from their study was to “focus on firms that are not considered systemically important financial institutions by the definition given in the Dodd-Frank Act.”

The overarching conclusion of their 2016 paper was that “larger community banks outperform smaller community banks.” Their follow-up paper in 2018 reinforces their earlier conclusion. The link between size and performance is clear. They also found that banks with assets between $10 billion and $50 billion — institutions they feel are too large to be considered “community banks” — outperform large community banks with assets between $1 billion and $10 billion. (Obviously, the asset size when a bank is no longer considered a community bank is debatable, as some of our clients exceed $10 billion and consider themselves community banks.)

All board members and executives who are debating strategic goals and specifically the importance of growth should read their papers related to size, as they provide metrics and an analytical paradigm that can be used at the board level for evaluating performance.

What is driving these differences in relative performance? The authors point to the regulatory reforms mandated by the Dodd-Frank Act and the ongoing need to increase investment in technology. The expanded regulatory and technology costs at community banks have a substantial fixed-cost component to them. Once you start to layer fixed costs onto a business model, this becomes an immediate impetus to grow in order to spread those costs. The authors observe that in the past, community banks benefited from potential advantages in relationship lending, but research “suggests these advantages may be shrinking.” If this is correct, it means that community banks are feeling pressure on the revenue and cost sides at the same time, which can squeeze profit margins.

In addition to the factors discussed above that are pressuring community banks to grow, the authors discuss two more factors that are at work. They report that medium size banks (larger than $10 billion) are more efficient at credit-risk assessment and monitoring. Related to credit-risk management, there is an ongoing incentive for small banks to grow larger to “exploit scale economies.” While they don’t mention economies of scope specifically, often as organizations expand their business model, this can also lead to economies of scope. Thus, the pressure to grow is coming from many directions.

Recent Trends in Profitability and Efficiency
While Hughes and his team decided to analyze publicly traded, top-tier holding companies, we wanted to look more broadly at bank performance for commercial banks with assets of $50 billion and less. Thus, we filtered using the same break in asset size, but included all commercial banks in the United States and not simply at the bank holding company level. We also included banks that have been acquired and are defunct, because we wanted to compare performance across time.

The number of banks found in each asset range is shown in Table 1. Note that the number of banks in each category changed a lot in the last 5 years. The changes can be explained by banks graduating to the next asset category, M&A activity, and closures. Between 2015 and 2019, the total number of banks decreased by 15%. The most notable change is in the less-than-$1-billion asset category, where the consolidation of the industry and lack of de novo banks are most evident. This category is down 924 banks or 19%. This reduction was partially offset by a 10% increase in banks (up 56) between $1 billion and $10 billion and a 37% increase in banks (up 31) between $10 billion and $50 billion.

**In their 2016 article, they termed this group “large banks.”
Let’s revisit what we reported in our 2016 article, shown in Figure 1. The return on equity (ROE) trends showed that the larger community banks were outperforming the smaller community banks, but the midsize banks actually lost their edge to the large community banks in terms of ROE. In 2013, the average ROE for the large community banks crossed over the trend line for the $10 billion to $50 billion banks. We were curious to see if this trend continued.

In Figure 2, we report the median ROE for 2015 to 2019. (Note that we changed from reporting averages to medians to avoid skew in the dataset.) Yes, the trend continues, in that the large community banks are beating the midsize banks in terms of the ROEs that they’re generating. Furthermore, while larger community banks are beating smaller community banks — which is no surprise — the smaller banks are hanging close to the midsize banks. Hughes and his team are viewing banks above $10 billion to not be community banks. (Repeating what we said earlier, the asset size when a bank is no longer considered a community bank is debatable.) The ROE data suggest that large community banks are sufficiently large to go toe to toe with midsize banks.

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Table 1: Number of Banks by Total Assets³

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $1B</td>
<td>4,977</td>
<td>4,702</td>
<td>4,473</td>
<td>4,214</td>
<td>4,053</td>
</tr>
<tr>
<td>$1B to $10B</td>
<td>568</td>
<td>590</td>
<td>593</td>
<td>602</td>
<td>624</td>
</tr>
<tr>
<td>$10B to $50B</td>
<td>84</td>
<td>90</td>
<td>101</td>
<td>112</td>
<td>115</td>
</tr>
<tr>
<td>Total Banks</td>
<td>5,629</td>
<td>5,382</td>
<td>5,167</td>
<td>4,928</td>
<td>4,792</td>
</tr>
</tbody>
</table>

Figure 1: Average Return on Equity (ROE)%

Figure 2: Median Return on Equity (%)

11 10 9 8 7 6 5 4 3 2011 2012 2013 2014 2015

Less than $1B
$1B to $10B
$10B to $50B

2015 2016 2017 2018 2019

Less than $1B
$1B to $10B
$10B to $50B
On the other hand, the data also underscore the importance of smaller community banks growing organically and/or by M&A to move up the food chain, so to speak. Plus, capital management — namely, dividend policy and managing to the bank’s sustainable growth rate — continues to be quite important.

An importance difference in the Hughes et al. study versus ours is that they use several market value metrics, such as Tobin’s q ratio, to measure performance, while we are only using an accounting-based measure (ROE). (There are pluses and minuses to all performance metrics.) The conclusion we draw is that, yes, larger community banks outperform smaller community banks, but the large community banks — at least in terms of ROE — are remaining competitive relative to midsize banks. Favorably, community banks have been able to sustain an upward trend in ROE since the financial crisis, which is partly explained by industry consolidation and the elimination of many poor-performing banks.

The Tobin’s q ratio measures a bank’s market value of assets (MVA) to their replacement cost, where MVA is measured as the sum of the market value of equity and the book value of liabilities, and replacement cost is measured by the book value of assets. Economists like examining the Tobin q ratio because it shows the market’s assessment of the value relative to book value. A ratio above one indicates that the firm is creating value, and the greater the ratio the better. Back in 2016, using this metric, Hughes et al. found that large community banks were performing better than small community banks and midsize banks were performing better than large community banks. Interestingly, in their latest study they again show that large beats small in the community bank arena, but now they report no statistical difference between large community bank and midsize banks.

As for the trends in efficiency for the last 5 years shown in Figure 3, we see a similar story to what we reported in 2016. The larger community banks are more efficient than the smaller community banks, and the midsize banks are more efficient than the large community banks, in terms of efficiency ratio (defined as noninterest expense less amortization of intangible assets, divided by net interest income on a fully taxable equivalent basis and noninterest income). Our finding that larger banks are more efficient than smaller banks, using an accounting-based metric, is consistent with the Hughes et al. study, which finds that larger community banks have an edge over smaller banks, using their market-based metrics. What’s interesting now to see is that even though the midsize banks are more efficient than large community banks, the Tobin’s q and the ROE for the large community banks are keeping pace with the midsize banks. This suggests that the large community banks are leaner with their capital structure and/or are doing a better job minimizing nonearning assets in order to close the gap.

This suggests that the large community banks are leaner with their capital structure and/or are doing a better job minimizing nonearning assets in order to close the gap.
**Branch Efficiency in the Headlines**

A headline in December from the American Banker reads, “Banks under Mounting Pressure to Increase Deposits-Per-Branch.” The article goes on to say, “One way many banks are looking to improve overall efficiency is by focusing on a metric that doesn’t show up in call reports: deposits-per-branch.” To get a snapshot of where community banks stand with their branches, we narrowed our dataset to banks with assets less than $10 billion. We found their median deposits per branch to be $46 million.

It is interesting to see how the ROEs compare as banks increase their deposits-per-branch. You would think the more productive a bank’s branch network is the higher the ROE. Indeed, this is what the data shows. Table 2 provides the median deposits per branch and ROE by quartile.

The way to think of quartiles is in percentage terms. So the top 25% of banks is quartile four, the second 25% is quartile three and so forth. We see that the least productive banks in the bottom quartile have a median branch productivity of just $24 million in deposits (rounding the number).

The median ROE for these least productive banks is 8.79%. As the banks’ branch productivity rises, so does the ROE. The top quartile has a whopping median branch productivity of $107 million in deposits and an ROE of 11.40%.

We see that the least productive banks in the bottom quartile have a median branch productivity of just $24 million in deposits (rounding the number).

<table>
<thead>
<tr>
<th>Quartile</th>
<th>Deposits per Branch ($000)</th>
<th>ROE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>23,970</td>
<td>8.79</td>
</tr>
<tr>
<td>Q2</td>
<td>38,563</td>
<td>10.28</td>
</tr>
<tr>
<td>Q3</td>
<td>57,033</td>
<td>11.31</td>
</tr>
<tr>
<td>Q4</td>
<td>106,986</td>
<td>11.40</td>
</tr>
</tbody>
</table>
With a relatively flat yield curve and a degree of uncertainty regarding the future path of U.S. monetary policy, the immediate economic environment will present challenges for bank asset/liability managers as they continue to strive for stable or improving net interest margin (“NIM”) and core deposit growth.

During 2019, the Federal Reserve cut benchmark interest rates three times but a changing competitive landscape for deposits has constrained the ability to quickly reduce offered deposit rates given the growing number of alternatives for depositors. Combined with the reduction in prime and intermediate benchmark yields, slowing macro-economic growth and non-bank competition for loans, bank executives need to utilize all tools and strategies at their disposal to manage balance sheets and maximize franchise value.

Despite the ever changing competitive landscape the franchise value of community banks often rests in deposits that are classified as liabilities (counterintuitively) on financial statements. Core deposits, which we define as all deposits other than certificates of deposit and other time deposits, are especially prized in a flat yield curve environment due to their greater stability and relatively lower cost of funds.

Core deposits, which we define as all deposits other than certificates of deposit and other time deposits, are especially prized in a flat yield curve environment due to their greater stability and relatively lower cost of funds.

Core deposits, particularly if dispersed across a large number of accounts, also imply customer relationships that can be potentially used to cross-sell other fee-based products and services reducing the reliance on NIM while also reducing interest rate risk.
Overall across the banking sector, credit quality remains strong but loan growth is decelerating as the domestic economic expansion enters the late innings pressuring quoted borrowing rates and softening lending agreement terms. On the back of these trends NIM spread is getting tighter so banks having access to strong core deposits, reliable loan growth and practicing more active balance sheet management including securities portfolio allocation and derivative strategies are experiencing improvement in franchise value.

In summary:

- Institutions with a high percentage of core deposits typically are accorded higher trading multiples relative to peers.

- Noninterest-bearing deposits are especially treasured by investors and potential merger partners given the extremely positive effect on net interest margins and interest rate risk.

- Not all banks will be able to meet core funding needs organically, and therefore, the quest for core deposits will continue to be an important merger and acquisition driver for the foreseeable future, especially for banks growing faster than their sustainable growth rate.

- Core deposit premiums realized in acquisitions decreased significantly since 2005, as shown in Figure 1.

- Core deposits premiums are valued more on core deposits premiums, rather than earnings growth, are vulnerable if investors decide those companies are not likely sellers and/or those deposits are not deployed into desirable assets. Earnings and asset growth still matter.

### Movement in Core Deposit Premiums

Bank acquisition deposit premiums have increased since 2016 as buyers have taken advantage of stronger currencies that make higher-priced deals more financially viable. Nationwide, the median core deposit premium paid since January 1, 2019 was 8.5%, compared with the low and high marks of 1.1% in 2011 and 18.0% in 2006, respectively. Core deposit premiums receded in 2019 relative to 2017 and 2018 as a result of several large mergers of equal or similar size transactions which are typically completed with lower deal premiums. Our analysis uses S&P Global Market Intelligence’s definition of core deposits: “deposits, less time deposit accounts with balances over $100,000, foreign deposits, and unclassified deposits.”

Another reason for slightly lower core deposit premiums in 2019 is buyers anticipating softer loan demand (use of funds) along with slowing economic activity that could lessen the need for additional core deposits. However, offsetting that development is the opportunity to gain customer relationships through core deposits which can facilitate greater fee-based income through cross-selling. Accordingly we expect core deposit premiums to remain supported even if they are below peak levels. Buyers are generally more willing to pay premiums for core funding, but less so for lending relationships.

### Elements of a Comprehensive Strategy

As part of a comprehensive asset/liability strategy, financial officers need to determine the expected runoff, or decay, rate of deposit products that lack a defined maturity date; the costs associated with gathering and maintaining core deposits (i.e., branch network, advertising); and how profitably and quickly these funds can be deployed into interest-earning assets. Obtain core deposits through a merger may be preferable versus organic growth, but potential buyers must consider the possibility of unintentional deposit runoff from acquired institutions.
Regardless of a bank’s funding composition, PNC FIG Advisory believes the majority of investors favor conservative investment policies. That said, the current environment requires more active management across the entire balance sheet. Treasurers should take advantage of any yield spikes to selectively add duration in the securities portfolio but keep short term allocations sufficient to meet spikes in loan demand. To the extent the yield curve remains relatively flat and loan demand softens derivative strategies can be utilized to synthetically lower funding costs or enhance yields.

Growing evidence suggests that stock prices of many institutions are supported by the perceived franchise value on a takeout basis, rather than on earnings power. It seems to us that bank stocks that are valued more on core deposit premiums than on earnings are vulnerable if investors decide those companies are not likely sellers and/or those funds are not deployed into desirable assets. We view the premiums paid for core deposits as fully valued, given the lack of assurance that core deposits, which increased when interest rates were at historically low levels, will be maintained in the unfolding more competitive rate environment.