Bank Strategy Insights
FINANCIAL SERVICES GROUP | BALANCE SHEET STRATEGIES
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A Deep Dive into Liquidity: Part I

Please see this week's Rate Sheet and Yield Curve Opportunities.

As always, we open this week by saying thank you to the first responders, medical professionals, government officials, and researchers who are on the front lines of the fight against COVID-19. Thanks to their heroic work, infection curves are flattening, testing is scaling, and research is progressing on therapeutics and vaccines.

We remain deeply concerned about the public health and economic ramifications of a second wave of infections as states reopen with unproven and, in some instances, inferior, testing, tracing, and mitigation protocols. Until there is a vaccine, rising regional infection rates could force us to "relock" state and local economies to contain the spread. The market has been pricing in a V-shaped economic recovery, but recent events seem to presage a very lazy U.

Since the start of the virus-related shutdowns in March, 36.5 million people have filed for unemployment insurance. The official unemployment rate is 14.7%, but some economists place the real unemployment rate closer to 20% after accounting for misclassifications. We are rapidly approaching the Great Depression's peak of 25%. Consumer sentiment and spending, the pistons of our economy, have collapsed in turn.

Facing this grave threat, the Federal Reserve has been pumping an unprecedented amount of liquidity into the system. The Fed has knocked Fed Funds down to zero, pledged unlimited bond purchases in QE4, deployed eight liquidity facilities with over $3.7 trillion of lending capacity, and, in a substantial break from tradition, introduced a $600 billion Main Street Lending Program. Through QE4 alone, the Fed has pumped more than $2 trillion into the economy. Consider this: the Fed has injected more liquidity in two months than it did over the entire QE1 program. Congress has also poured nearly $3 trillion into the economy through four pieces of emergency legislation.

"Whiplash" is the word of the day. This is particularly latent in the conversations we're having with our clients about liquidity. Heading into the year, the key question was whether banks had enough liquidity after years of remixing from cash and securities into higher-yielding loans. Today, we're exploring options for deploying excess liquidity with only a tenuous grasp of what the new normal might look like.

This week, in Part I of a two-part series on liquidity, we examine liquidity trends through the cycle, drill down into the Liquidity Ratio and identify other metrics required for a comprehensive liquidity dashboard, and conclude with best practices for assessing the health of your bank's liquidity profile. Next week, in Part II, we will explore tactics for boosting liquidity or deploying excess liquidity to create a more efficient balance sheet.

A Brief Look Back in Time

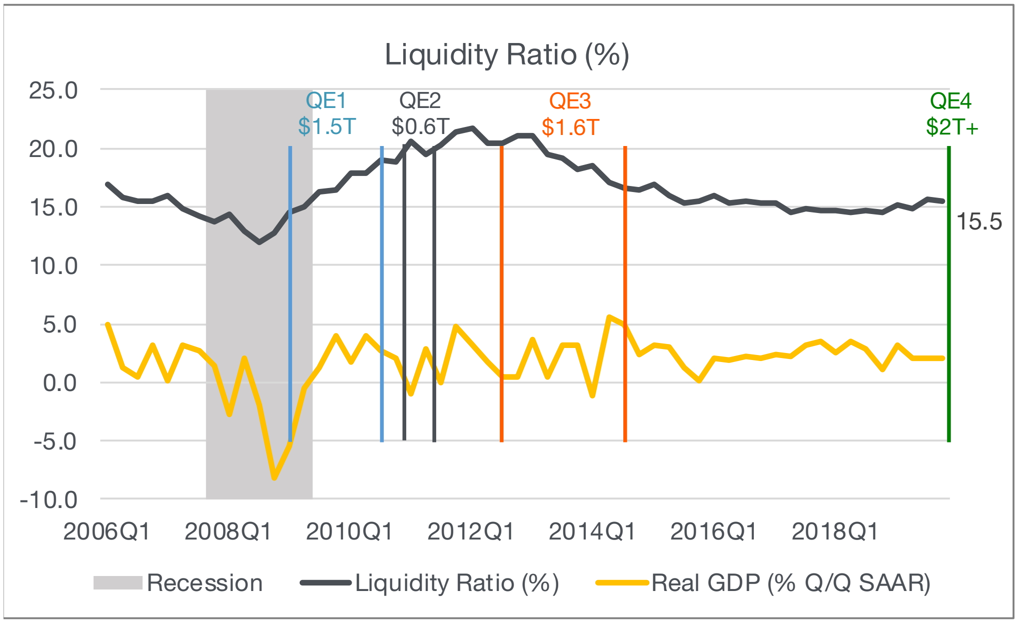
These might be unprecedented times, but history can always help us find our bearings. For simplicity, we took a deep dive into the Liquidity Ratio for all banks and thrifts with assets between $1 billion and $10 billion. Thus, we allow survivor bias to work in our favor, to get a feel for how liquidity profiles changed through the cycle. We selected the Liquidity Ratio, among a bevy of liquidity ratios, because our clients are increasingly managing to it.

The Federal Reserve executed three quantitative easing programs from June 2009 to October 2014. Specifically, QE1 infused $1.5 trillion, QE2 $0.6 trillion, and QE3 $1.6 trillion into the economy. This totals $3.7 trillion.

According to the National Bureau of Economic Research, the official scorekeeper of recessions, the Great Recession began in December 2007 and ended in June 2009, which is marked by shading in the graph below.

The median Liquidity Ratio declined from the onset of the Great Recession to a low of 12.0% in 3Q08 as the economy deteriorated. As the economy strengthened, the median Liquidity Ratio improved in turn. The median Liquidity Ratio touched a high of 21.7% in 1Q12, at which point it again reversed course, settling at 15.5% in 4Q19.

It is an exercise in futility to isolate for what portion of the change in on-balance sheet liquidity is attributable to economic growth and what portion is attributable to direct liquidity injections from the Federal Reserve. Don't miss the forest for the trees. Rather, focus on the key takeaway: on-balance sheet liquidity reacts to loan demand, which tends to be closely associated with the health of the economy.



Sample: Banks and thrifts with assets between $1 billion and $10 billion.
Source: Regulatory data as aggregated by S&P Global Market Intelligence

The lessons of the Great Recession coupled with color from our clients tell us that a liquidity wave may be building, though we can't see it in the numbers just yet. Consider these five points:

- The Fed has injected over $2 trillion into the economy under QE4. In two months, the Fed has pumped more money into the economy than it did in 1.5 years during QE1. This is a massive jolt, but much more might be required to sustain the economy and fend off deflation let alone foment a recovery.

- Congress has poured nearly $3 trillion into the economy through four pieces of emergency legislation. The relief included direct payments and expanded unemployment insurance (i.e., an additional $600 per week). A fifth relief package is beginning to take shape. Americans appear to be hoarding this cash.

- The Fed's H.8 data show that "small bank" deposit growth has been outpacing loan growth much more meaningfully since the pandemic struck. In mid-March, small banks were growing loans at 6.2% and deposits at 8.6% on a year-over-year basis. At the end of April, loans advanced 12.7% while deposits spiked 17.6%. (Author's note: "small banks" refer to all domestic banks ex. the 25 largest institutions). To be sure, a portion of the deposit surge is attributable to parking the proceeds from line draws at the bank. Given that small business confidence just touched its lowest level since March 2013, this money could stick around for a while.

- The Federal Reserve's 2Q20 Senior Loan Officer Survey shows that underwriting standards have tightened across the board, as one might expect. Tightening underwriting standards coupled with weakening demand for bread-and-butter commercial real estate loans suggest that loan growth could be sluggish for some time.

- Prepayment speeds are accelerating. Prepayments increased in April (May Factors) across all three agencies. A wave of refis from rates falling in March and loans closing in 45-90 days likely had a lot to do with that activity. 30-year mortgage rates may have bottomed in early May. Given the drop in mortgage rates and seasonally stronger sales activity, the vast majority of the mortgage world is expected to prepay very fast.

- PPP creates a sizeable short- and long-term deposit gathering opportunity. The banks our Equity Research Department follow originated more than $227 billion of PPP loans during Phase 1 of the program. PPP loans accounted for 6.9% of loans, though some exposures exceeded 30%. Assuming a 3% origination fee and a 21% tax rate, PPP could infuse $5.4 billion of liquidity and capital into this group as soon as 2Q20. Still, the liquidity impact of the gain pales in comparison to the long-term impact from creating a loyal customer.

Drilling Down into the Liquidity Ratio

This report shines a bright light on the Liquidity Ratio to facilitate a broader examination of tactics to deploy excess liquidity or improve liquidity to create a more versatile balance sheet. Before diving into this specific metric, we should caution that liquidity, like every balance sheet component, needs to be analyzed holistically by focusing on the full constellation of metrics within the appropriate competitive context.

The Liquidity Ratio measures liquid assets to total liabilities. By definition, the Liquidity Ratio tries to quantify the ease with which assets can be converted into cash to satisfy liabilities. Liquid assets consist of total cash and balances due from depository institutions, total fed funds and repurchase agreements, total securities (trading, AFS and HTM) *less pledged securities.* The denominator is total liabilities (excluding minority interest). There is no regulatory minimum, though we hear that the regulators like the Liquidity Ratio to be in the double-digits.

The median Liquidity Ratio for community banks with assets between $1 billion and $10 billion was 15.5% at year-end, which is just about a turn below the cycle average. Drilling down into the numbers shows that the bottom quartile (the 25% most illiquid balance sheets) is 11.4%, which just clears the double-digit hurdle. We also see a massive gulf between the bottom decile (8.4% most illiquid balance sheets) and the top decile (32.2% most liquid balance sheets), with both measures warranting managerial attention.

Percentile				
10th	25th	Median	75th	90th
8.4	11.4	15.5	22.0	32.2

Source: S&P Global Market Intelligence

The Liquidity Ratio is *generous* in that it assumes that all securities can be liquidated at their current carrying values (we can't help but think of the adage: "liquidation value is what you can sell it for when you need it most."). Conversely, the Liquidity Ratio is *punitive* in that readily marketable loans are not considered liquid assets.

Build a Comprehensive Liquidity Dashboard

Again, the Liquidity Ratio is just one of several important measurements of a bank's liquidity profile. For more granularity and actionable insights, build a comprehensive liquidity dashboard. This dashboard includes the five regulatory liquidity ratios – the Liquidity Ratio, the On-hand Liquidity Ratio, the NonCore Funding Dependence Ratio, Net NonCore Funding Dependence Ratio, and the Reliance on Wholesale Funding Ratio – and a host of other basic measurements. Specifically, for starters, incorporate the Cash-to-Assets Ratio, the Securities-to-Assets Ratio, the Cash-and-Unencumbered Securities-to-Assets Ratio, the Loan-to-Deposit Ratio, the Borrowing-to-Assets Ratio, and the Brokered Deposits-to-Deposits Ratio. Then, put these findings in perspective by showing your current and projected ratios relative to those of similarly-sized regional and national peers.

Fundamentally, on-balance sheet liquidity, as measured by this family of metrics, reflects the supply of and demand for funds. So resist the temptation to analyze these metrics in a silo. Rather, incorporate real-life observations about economic growth, capital issuance, and M&A for a full view of current and projected liquidity.

Five Specific Steps for Determining if You Have Excess Liquidity

- **Bulldoze internal silos.** It's never been more important to connect the front office with the middle office. Specifically, treasury, credit, and relationship managers need to be working hand-in-glove to ensure that feedback from the field informs business decisions. Consider forming a cross-functional liquidity task force to serve as a central clearinghouse, and give this team a direct line to the top of the house.

- **Formalize customer outreach.** Task marketing and IT with crafting a formal outreach and monitoring plan. The idea is to connect regularly with your largest depositors, borrowers, as well as those in particularly hard hit industries (i.e., hospitality, restaurants, travel, transportation, energy, and retail), to assess their short- and intermediate-term liquidity needs. Pay close attention to new customers (perhaps those for whom you processed PPP loans) and consider random sampling the rest of your customer base at regular intervals.

- **Get a ballpark sense of your current liquidity profile…** Compare all of the liquidity metrics on your dashboard to their peak, trough, and average during the Great Recession. The goal is to determine how your balance sheet performed during the crisis. From there, make qualitative adjustments based on changes in your balance sheet and customer mix since that time. You're looking for a "gut feel" of your liquidity position.

- **… Then stress test with a purpose.** Establish a base case for sources and uses of cash over the next twelve months. Run multiple scenarios stressing various levels of loan growth (including line draws), deposit growth, prepayments, and net charge-offs, among numerous other inputs. Build a base case and stress scenarios, and then probability weight the outcomes based on feedback from the field.

- **Tap into your network of experts.** Sanity check key observations and findings with partners you trust. This could be your risk management advisors, your regulators, or other banks in the region or across the country that you respect. It could be one or all three. The more information-sharing, the better, in times like these.

Next week, in Part II, we will explore specific tactics for boosting liquidity or deploying excess liquidity to create a more efficient balance sheet.

If any of these observations pique your interest, please contact your Piper Sandler representative or email us at PSbankstrategyinsights@psc.com. For derivatives, email FSG-Derivatives@psc.com

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