

## Strategy

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## Revisiting Bank Deposits as a Liquidity Solution

Popularity, ECR, Opportunity Costs and Credit Issues

### Abstract

*Treasury organizations maintain deposit relationships despite uninsured credit risk and lost yield opportunity. Earnings credit rates may become less competitive than market-based rates. Including separate accounts in the mix helps address both credit and yield objectives in institutional liquidity management.*

### Introduction

The search for liquidity management solutions reached a new level of significance when institutional prime money market funds were required to float net asset values (NAVs) last fall. While treasury organizations may consider bank deposits as a fallback liquidity solution, regulatory changes, interest rate dynamics and other external factors demand a refresher course.

In our previous whitepapers, we discussed the transformation of corporate deposits as liquidity vehicles and reduced appetite of large systemically important banks (SIBs) for overnight deposits. Banks do not appear to have benefitted from the recent money market fund (MMF) reform through deposit inflows. Instead, asset declines in prime funds were met with almost identical increases in government fund assets.

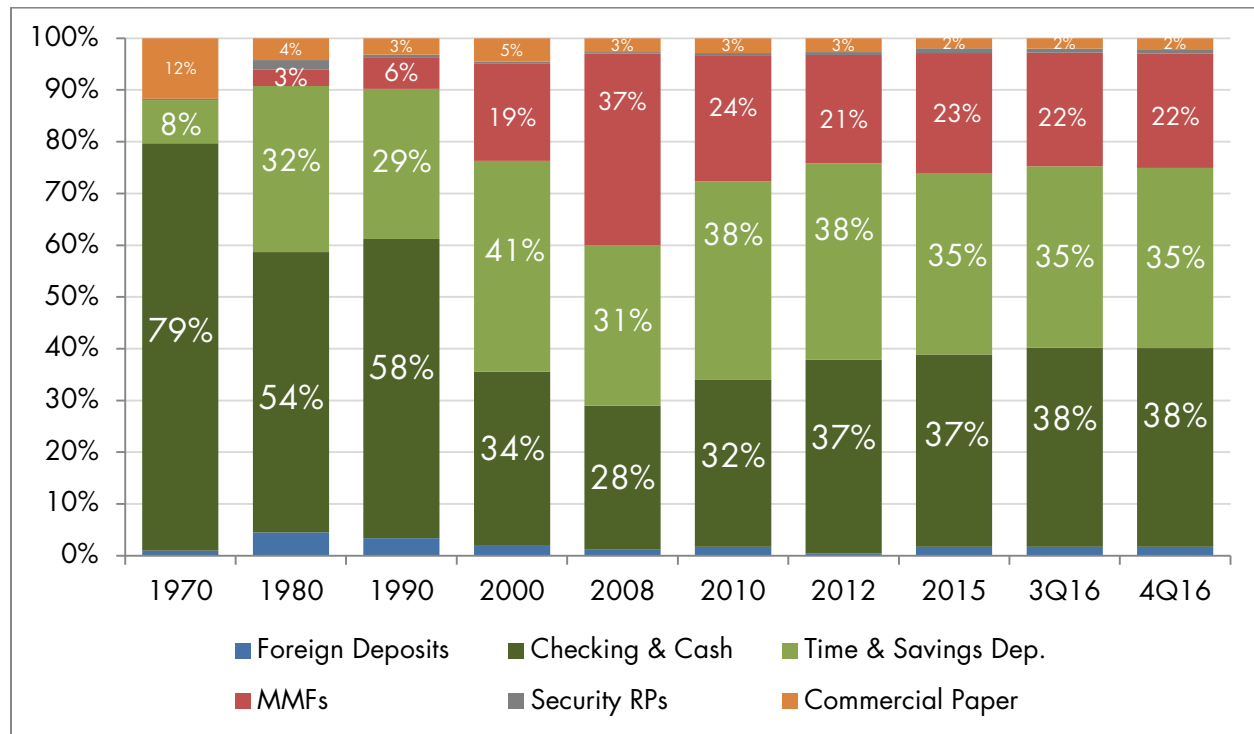
Still, treasury organizations generally maintain deposit relationships, often with multiple banks, for liquidity, savings, escrow, trade, business relationships or other reasons. Institutional deposits tend to be greater than \$250,000, and not protected by the FDIC deposit insurance. Some are placed with US branches of foreign banks under different sets of banking rules than those of the US financial authorities.

In this update, we review recent deposit growth among institutional liquidity accounts, issues surrounding the earnings credit rate (ECR), and the lagging yield effect of deposits in a rising interest rate environment.

### Deposits Held Steady Since 2012

For as long as the history of modern banking, bank accounts were the primary, and often only, liquidity tool for businesses and other institutional entities. This reliance started to change with the introduction of money market mutual funds in the 1970s. The Federal Reserve's Flow of Funds reports ([Figure 1](#)) show that 79% of the liquid balances at non-financial firms in the United States were in checking accounts or cash in 1970, with another 8% in time and savings deposits. Commercial paper investments (12%) made up the rest.

Figure 1: Liquid Balances at Non-Financial Firms



Source: Federal Reserve Board, Financial assets of the United States 1970-2016, L102

The popularity of MMFs in the next four decades resulted in a substantial reduction of deposits in corporate liquidity balances. By 2008, the year an institutional prime fund broke the constant dollar, MMFs made up 37% of the liquidity balances, while combined checking and savings deposits were reduced to 59%.

The FDIC’s Transaction Account Guarantees (TAG) program, effective October 14, 2008, and the Dodd-Frank Act provided unlimited deposit guarantees on all noninterest bearing transaction accounts through December 2012. Checking deposit representation expanded from 28% to 37% between 2008 and 2012, while savings also grew from 31% to 38%.

Despite TAG’s expiration and well publicized campaigns by large SIBs to turn away non-operating deposits to comply with federal liquidity regulations, deposits as a percentage of corporate liquid balances held steady through 2016. Checking and savings accounts represented 38% and 35%, respectively, of such balances.

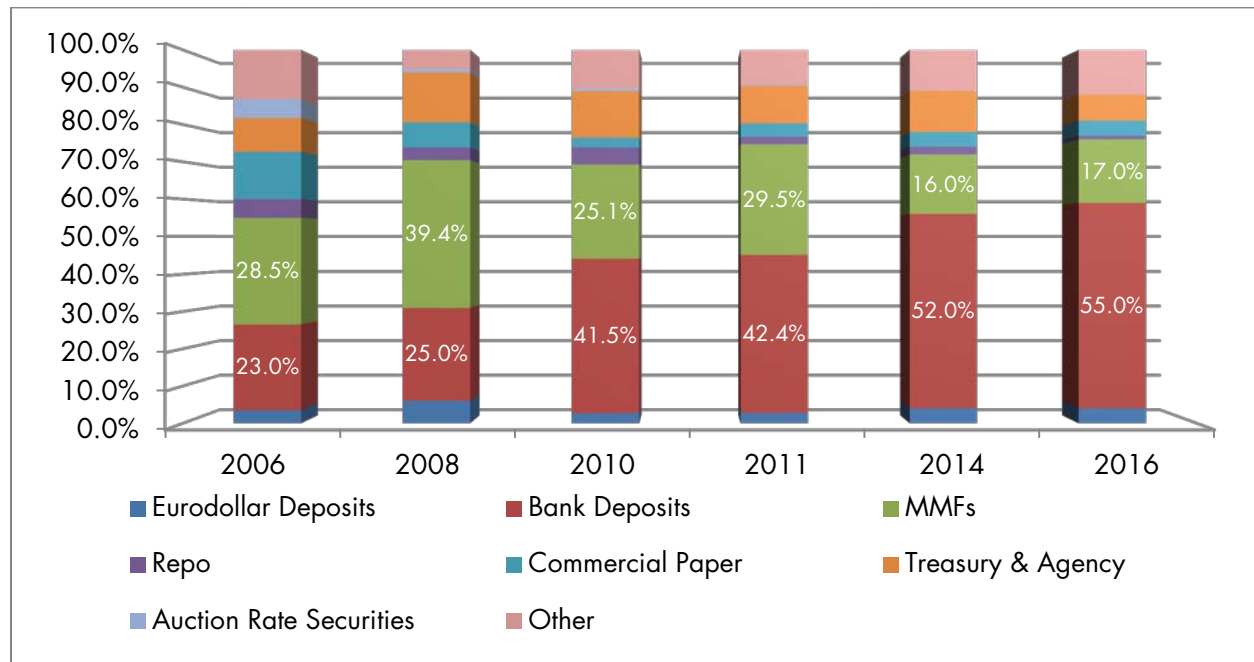
Deposits did not decline after 2012 partly due to the lack of alternative liquidity options in the near zero interest rate environment. The anticipated floating NAV MMFs in 2016 was another factor. Figure 1 also shows that the distribution of checking, savings and MMF balances remained the same from the third to the fourth quarter of 2016, during which the MMF reform took effect. This suggests that the floating NAV requirement on prime funds did not drive MMF investors to deposits, but rather led to the reshuffling from prime to government funds.

**Liquidity Surveys Reveal Corporate Deposit Conundrum**

Surveys of members of the Association for Financial Professionals (AFP) seem to suggest that the average treasury organization increased concentration in bank deposits since 2008 and continued through 2016. Annual surveys conducted by Capital Advisors Group and other liquidity managers also confirmed this general trend. Survey data presents a snapshot of liquid balances in the “average” treasury organization based on member responses,

as opposed to the Federal Reserve data that covers the overall non-financial corporate sector in the United States. The two sets of data do not necessarily correspond to each other.

Figure 2: AFP Surveys: Allocation of Short-term Investment Vehicles (All Responses)



Source: AFP liquidity survey reports, 2006-2016

The mean percentages of cash and short-term investment holdings (Figure 2) show that, up to 2008, MMFs were the liquid investment vehicle of choice for non-finance corporations with 39% allocation, followed by bank deposits at 25%. The rankings flipped since 2010, when deposits surpassed MMFs to be the liquidity vehicle of choice. The 2016 survey indicates that 55% of the average corporate cash balance was in deposits while 17% was in MMFs.

The graph above also suggests that the TAG expiration in 2012 did not stop deposit growth, but rather propelled it. The trend came despite reduced implicit government support on banks in the US, UK, most of continental Europe and Canada over this period. Also, deposits grew despite large banks' efforts to rationalize their deposits business by passing their FDIC assessment fees on to depositors and turning away those deposits that no longer justified their cost of capital.

Part of this conundrum may be attributed to the 2016 MMF reform, when corporate treasurers moved some of their fund balances to deposits in anticipation of the reform. This is supported by the 8% reduction in MMF holdings between 2010 (25%) and 2016 (17%). However, deposits grew 13.5% to 55% over the same period, more than the reduction in MMFs. The 9.1% decline in direct Treasury and agency securities and repo investments accounted for much of this discrepancy.

Although survey responses can be inaccurate, one may draw the conclusion that the "average" institutional investor still views deposits favorably - more favorably at the time of the 2016 survey than in 2010. This impression endured despite developing regulatory headwinds and increased uninsured credit risk. What has kept corporate cash investors as loyal depositors? The answer lies in the earnings credit rate.

### ECR Became Popular

A simple answer to the popularity of deposits as a preferred cash vehicle is the accounts' dollar-in dollar-out transactional utility and daily accessibility, the same convenience factor that made MMFs popular. With the decline of a market proxy (prime funds) and the lack of yield performance of another (government funds), it was not a surprise for deposits to be back in vogue when overnight interest rates were essentially zero.

Other things being equal, institutional cash investors would have been indifferent to deposits or government MMFs, although one may argue that government funds represent a better risk choice than uninsured deposits. What helped tip the balance in the direction of deposits was ECR.

ECR is a way for banks to reward business checking account holders by allowing them an "earnings credit" on noninterest bearing deposit balances to offset banking fees. The history of ECR traces back to Regulation Q in the 1930s, when the Federal Reserve prohibited banks from paying interest on transaction deposit (business checking, or DDA) accounts. In the 1960s, banks began to offer "soft dollar" credits on noninterest bearing accounts to offset banking services.

The TAG program in 2008-2012 resulted in explosive growth of noninterest deposits. MMF yields were close to zero during this time. The ECRs on TAG balances, ranging from 0.25% to 0.50% or higher, were attractive to corporate treasurers. Under Basel III liquidity requirements, banks liked to attract corporate operational deposits to receive favorable liquidity coverage ratio (LCR) treatment.

Despite TAG expiration in 2012, corporate treasurers and banks continued to find ECR mutually beneficial in the near-zero yield environment. Depositors stayed on as banks passed through higher FDIC assessment charges to them, as the net effect was still better off than other alternatives.

### ECR's Future Is Uncertain

ECRs help institutional investors reduce banking charges from deposits that earn no interest income. What is the future prospect for ECR? With the Federal Reserve embarking on interest rate increases, will ECRs keep pace? At what point will the opportunity cost catch up and when will merely covering banking fees no longer be enough? Will higher rates entice assets out of deposits into higher yield instruments?

Answers to these questions are not easy due to the lack of industry data on ECRs. Anecdotal evidence from this AFP blog seems to indicate that ECR has increased since the Fed started hiking rates in December 2015, although the increases have not been the same for everyone<sup>1</sup>.

The AFP blog suggested that banks tend to sweeten their ECR deals to lure new clients with significant operational balances. Regional banks also tend to be more willing to pay up than SIBs thanks to Basel III-related profitability structures. For example, in the accompanying graph, regional banks were willing to pay up to 0.20% higher than their money center bank counterparts.

One solution to compensate depositors above their bank charges may be a hybrid account that calculates the amount of balances needed to offset the fees, with the rest of the balances earning "hard dollar" interests. Such products have been in the market since 2011, but corporate and bank adoption has been slow, according to the blog. With the abolishment of Regulation Q by the Dodd-Frank Act in 2010, banks are no longer prohibited from paying interest on business checking accounts, which puts the future of ECR in doubt.

<sup>1</sup> Bridget Meyer, CTP, Earnings credit rate: predicting the cloudy future of ECR, afponline.org, April 25, 2016, <http://afponline.org/trends-topics/topics/articles/Details/earnings-credit-rate-predicting-the-cloudy-future-of-ecr>

To summarize, the willingness for banks to offer higher ECRs may be influenced by the bank’s size, its cost structure, type and account status of the depositor and perhaps the share of the client’s wallet in bundled products. This does not take into account the general practice for banks to delay deposit rate increases to match the Fed’s moves.

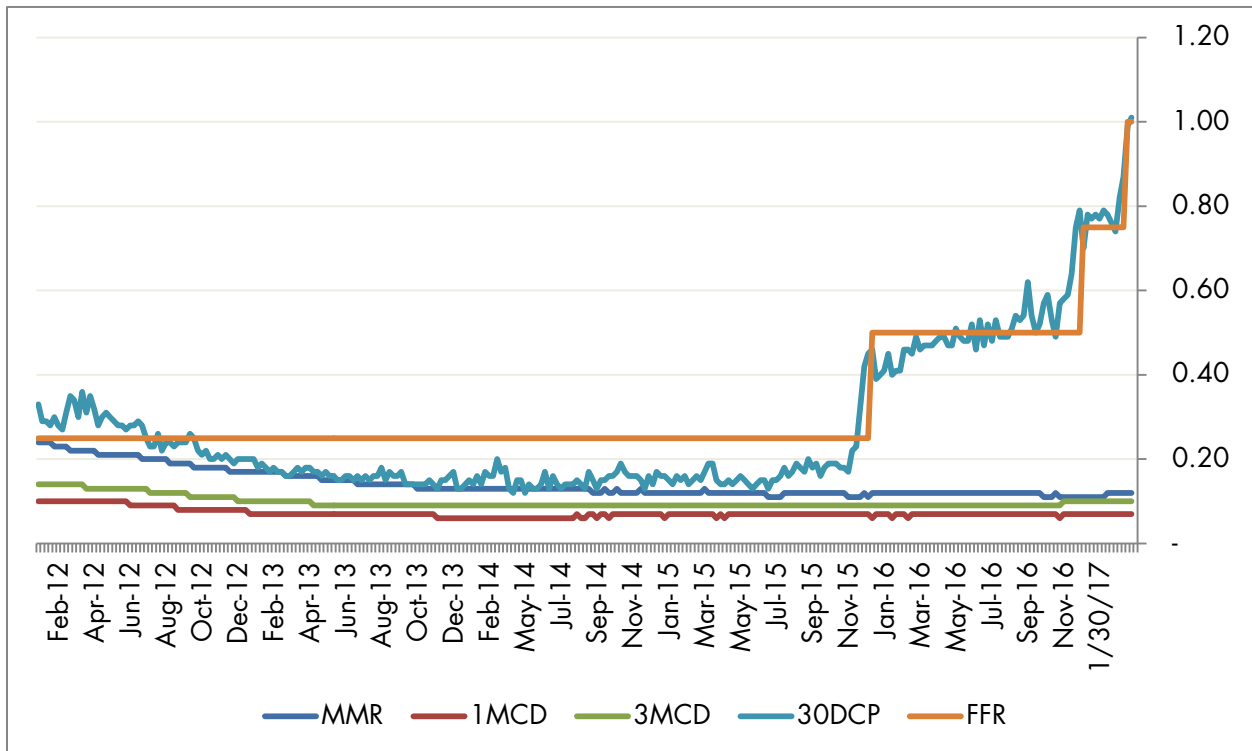
**Opportunity Costs in a Rising Interest Rate Environment**

Since December 2015, the Federal Reserve has raised the short-term rates three times at 0.25% each for a total of 0.75%, and is poised to do so again two more times this year. Short-term market rates rose in response, although bank rates have yet to see meaningful increases. The opportunity costs of overnight bank deposits have become more evident.

Figure 3 provides a snapshot of short-term rates for the last five years. The top range of the fed funds rate (FFR) moved up from 0.25% in December 2015 to 1.00% in March 2017. The 30-day dealer-placed A1/P1-rated commercial paper (30DCP) index rate rose from 0.16% to 1.01%, closely matching the Fed’s rate increases.

By contrast, national average deposit rates published by the FDIC hardly budged. Among jumbo deposits (greater than \$100,000), money market rate (MMR) rose only 0.01% to 0.12% since December 2015. The one-month certificate of deposit rate (1MCD) stood unchanged at 0.07% and the three-month CD rate (3MCD) rose 0.01% to 0.10%.

Figure 3: Comparative Short-term Interest Rates



Source: FDIC’s weekly national rates and Bloomberg

If past cycles were to serve as a guide, one would expect substantially higher deposit rates a year after the Fed started lifting rates. This time around, banks may need more time to recuperate from the ultra-low interest environment before passing on higher yields to depositors. The unusually large reserve balance in the Federal

Reserve System, at \$2.2 trillion at the end of March 2017 also means ample liquidity for banks to borrow from each other, reducing demand for deposits.

Some depositors may see ECR increases, but few, if any, are expected to receive the full benefit of the 0.75% increase. With the Fed poised for two more rate hikes this year and perhaps three more in 2018, the opportunity costs of deposits versus market rates may grow even larger.

### **Uninsured Deposits as Unsecured Loans to Banks**

Deposit balances above the \$250,000 FDIC limit are essentially loans without collateral to banks. While recent financial regulations have made large banks safer, there are still plenty of risks in the banking system. Investors need to be knowledgeable of and equipped to deal with developing bank credit issues.

**SIB Resolution:** The FDIC has the authority to resolve failing SIBs in the United States, forcing some creditors to shoulder the losses before depositors. Uninsured deposits are paid out after insured deposit, and institutional depositors are paid after retail depositors. Since 2016, foreign banks with at least \$50 billion in assets in the U.S. came under to the same rule as US banks through an intermediate holding company structure.

**Other Resolution Rules:** Deposits at a US branch of a foreign bank are subject to the rules and laws of the bank's home country, not the US. Smaller, non-SIB US banks are subject to another set of FDIC resolution rules. Offshore deposits, of course, face rules and regulations in respective local jurisdictions. In most cases, uninsured institutional depositors have the lowest priority of payouts among all depositors.

**Asset Quality Risks:** The seemingly healthy bank balance sheets in the US may face tough tests in the days ahead. Adverse credit issues are developing in below-investment-grade energy company loans, subprime auto loans and leases, a looming student debt crisis, softening commercial real estate loans and other areas. Higher interest rates are in fact a double-edged sword, helping with bank profits but also reducing borrowers' ability to make principal and interest payments. Since such credit concerns exist disproportionately at smaller non-SIBs, the LCR liquidity rule forcing depositors in their direction may catch unsuspecting institutional investors by surprise.

**Risks from Global Markets:** A stronger dollar from higher interest rates or the border adjustment tax reform could hit holders of emerging market debt hard. Banks with large investment banking activities or credit exposure in those markets may experience credit issues. Others must contemplate the aftermath of Britain's separation from the European Union, the threat of further EU separation, banking challenges in Italy and credit negotiations in Greece. Growth prospects in China and its financial stability present new challenges to banks exposed to the world's second largest economy. Elsewhere in the world, macro prudential policies to dampen property market overvaluation in Australia, Canada and northern Europe were met with mixed successes.

**Mindset Change:** The mindset of letting the regulators' fix failed banks is no longer sufficient in the new regulatory environment. New tools, such as intermediate holding companies and living wills, allow regulators to fix parts of a failing bank and let other parts fail, presenting new challenges to bank creditors. Through the financial crisis, investors also learned that long operating histories and impressive bank buildings do not equal strong credit, neither do high credit ratings. Uninsured deposits are unsecured loans to banks, and institutional investors must have a change in mindset to act as credit underwriters to banks.

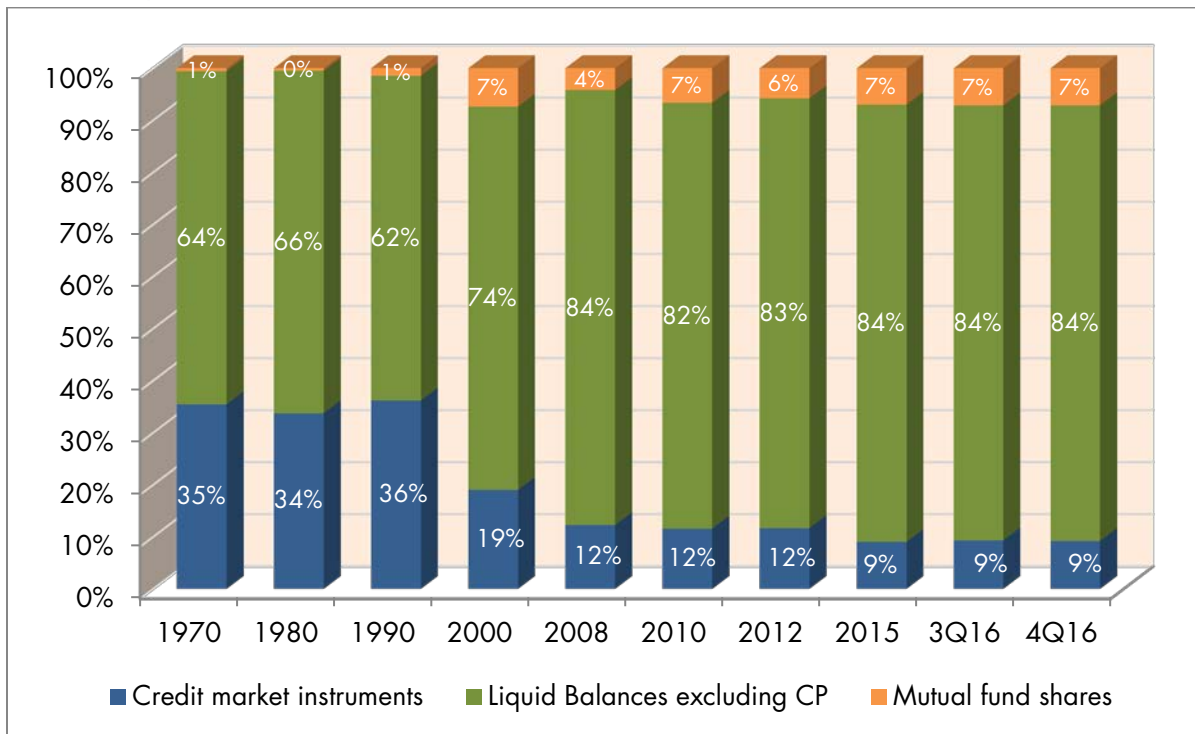
### **Conclusion – Address Risk and Opportunity Costs with Separate Accounts**

Deposit accounts as the original liquidity tool will continue to be important for institutional liquidity management. As interest rates move higher, investors should be aware of bank credit risk and opportunity costs. We think separately managed accounts provide diversification benefits and yield enhancing opportunities to address both risk and return aspects of an institutional cash portfolio.

**Risk Diversification:** Compared to uninsured deposits at a single bank, a separate account diversifies risk by investing in a number of credit instruments. The separate account format provides the investor the discretion to decide on the types of credit exposure, per issuer concentration limits, geographic and industry allocations and exclusions. For example, the portfolio may include government and non-bank corporate investments to balance out the organization’s exposure to financial names in the deposit portion of the liquid portfolio.

**Responsive Yield Potential:** As demonstrated in [Figure 3](#), earnings credit rates and bank money market rates tend to lag the fed funds rate in a rising rate environment. Market instruments (for example, the 30-day CP) tend to reflect rate changes rather quickly. A portfolio of short-term instruments with conservative maturities may realize this market yield potential and also allow for reinvestment opportunities as the Fed continues with its tightening cycle.

**Figure 4: Liquid Balances and Credit Market Instruments at Non-Financial Firms**



Source: Federal Reserve Board, Financial assets of the United States 1970-2016, L102

**Back to the Future:** [Figure 4](#) shows that, up to the 1970s, about two-thirds of corporate liquidity was in “liquid balances” and one-third in “credit market instruments”. Liquid balances refer to deposits, money market funds and repos. Credit market instruments include Treasury and agency securities, municipal, mortgage and consumer credit. Commercial paper investments are included in both categories. As MMFs popularity grew, the balance of the mix changed such that credit market instruments represented only 9% of corporate liquidity.

Today’s treasury management professionals may learn from our predecessors in rebalancing our liquid balances. The allocation of roughly one-third to directly purchased instruments and two-thirds to deposits and government money market fund shares may be a reasonable model to follow. Adding direct purchases through separate accounts may provide both risk and yield benefits to an institutional portfolio.

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