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market notes: Plumbing matters... especially for CBDCs.

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The banking crisis has been a boon for crypto-asset markets. Snaking through the plumbing pipes, the value of decentralized, programmable tools over centralized monetary tools is clear.

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4/28/23 – Marcel Kasumovich, Deputy CIO

1. There have been plenty of clogs in the pipes of the financial system in recent history. Plumbers have been the invisible superheroes of finance. The megatrend of increased policy transparency made plumbing fertile soil for investing, too. It's a great way of identifying risks – balance sheets are a market blind spot. And this week was a big one for pipe dreamers. The New York Fed recognized a key policy tool, reverse repurchases (RRPs), is a problem.

2. Let's cut through the jargon. What's the RRP facility? It's a way of lending money to the Fed. The tool was important when policy rates were zero, and asset purchases led to a surge in excess reserves in the banking system. Some of those excesses ended up with institutions that couldn't deposit funds at the Fed, like government agencies who are (still!?) critical to housing finance. The RRP facility allowed them to lend to the Fed at the policy rate to avoid negative market rates. Fund managers embraced the new Fed service, too! And that's now the problem.

3. The RRP tool protects against negative rates – check. But what happens when rates rise? There has been a rush of money market funds lending to the Fed. With the yield curve at its most inverted since the 1980s, the incentive to hoard cash is the greatest in decades. And with uncertainty about potential US default, there's no better counterparty than the Fed. Investors are doing exactly what the RRP facility told them to do – lend to the best counterparty. But every dollar lent to the Fed is a dollar drained from the banking system.

4. And they are big dollars. The RRP liability was $2.6 trillion on April 26, 2023. That's larger than the currency in circulation. RRPs are an accelerant to liquidity tightening in the banking system, far more important than quantitative tightening (Figure 1). Depositors leave the banking system that is paying roughly 0.5% rates for money market funds that are lending to the Fed at 5%. The Fed turns around and lends back to the banks that are short liquidity at 5%. So, the marginal cost of financing for the weakest banks rises to 5% from 0.5%. Equity values crater.

5. The solution is simple. Think about every financial paper cut in recent decades. The solution is a rush to the emergency room with rapid monetary easing. Inflation was low, making it a safe choice. Today, cutting rates is the most natural solution to financial instability, too. After all, it would make cash holdings like RRPs less attractive. But today, there are repercussions. Inflation is not low. Nor is it stable.

Cutting aggressively with low unemployment would be waving the white flag to inflation. These are all the quiet consequences of QE.

6. Think it doesn't matter for digital asset markets? Think again.

7. There's the direct channel – banking. US banking strains have been boon for digital asset markets. Why? Rising demand for narrow banks and real assets. And what does US stablecoin legislation and Europe's MiCA propose to do? In effect, create a narrow bank, a cash-like instrument that is fully reserved, so users don't have to worry about proper bank runs, especially as laws propose stablecoin issuers having access to central bank liquidity facilities.

8. There's the centralization channel – censorship. Purge, merge, or splurge are natural policy options in a financial crisis. Purge is the dominant feature of crypto asset markets. Systems with design flaws are exposed and eradicated from the ecosystem. Merge is a natural outcome for a softer financial crisis. Bank equity values get cheap enough that big players take them over. Splurge is the policy choice of recent history that has led to market concentration. That's the first response to RRP channels – censor who can use the tool.

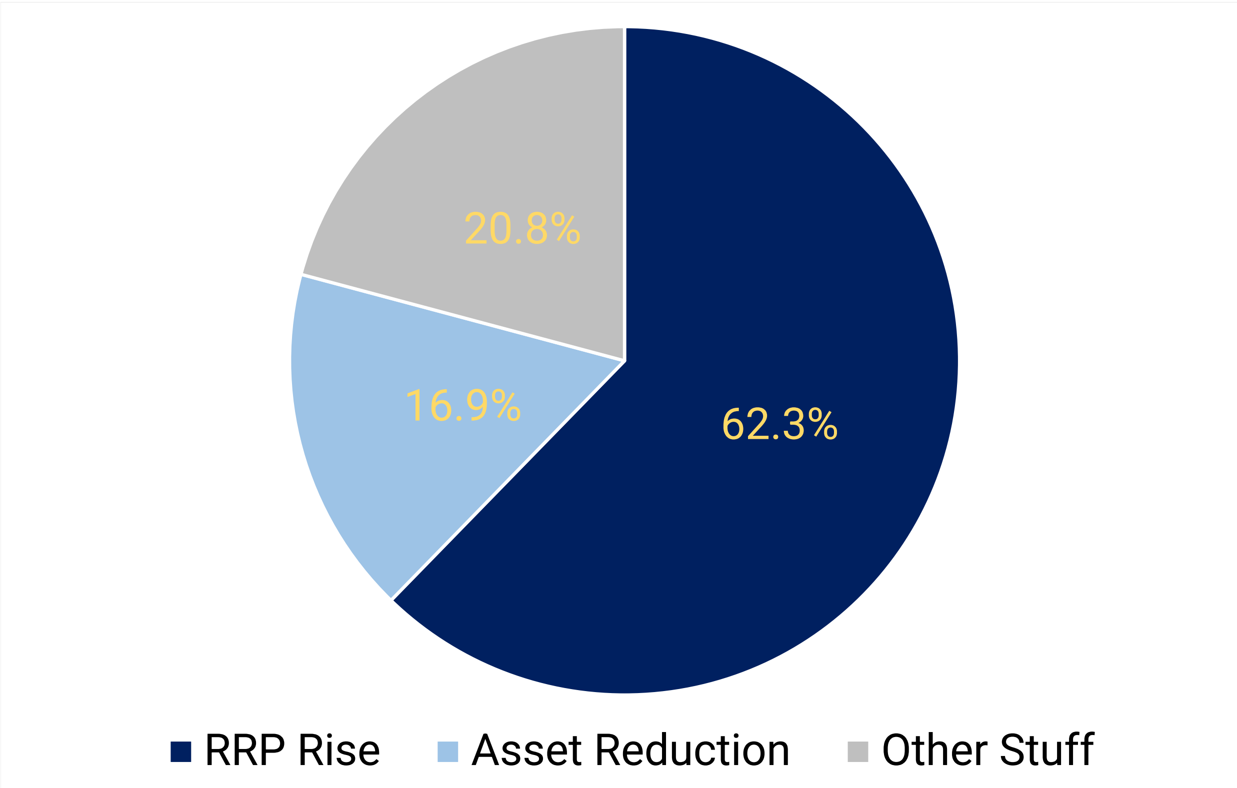
9. And then there's the strategic channel – central bank digital currencies (CBDCs). Central bank balance sheets are the center of currency issuance. What's the appeal of CBDCs? Efficiency. You need far less cash for intermediating economic and financial activity. The velocity of digital currencies is much higher, and bad guys avoid using traceable currency. Cash buffers decline. Currency in circulation falls sharply. And central bank reliance on excess reserves rises.

10. What can a commercial bank do with excess reserves? Nothing. It is the hot potato of finance. Any individual bank can rid themselves of an excess reserve, but only the central bank can extinguish the excess from the overall banking system. Excess reserves are what make commercial banks an extension of central banks, an awkward joining by the hip. CBDCs reinforce commercial banks as agents of central banks. But with a twist.

11. Demand for CBDCs will surge in periods of rising financial risk. That's the lesson from the RRP tool. Only you can't censor cash demand! Everyone will want the central bank as a counterparty when times get tough. CBDC demand will surge at the expense of liquidity draining from the banking system at an inopportune time. What to do? Cap the size of CBDC wallets. That's an obvious endgame, leaving central banks with little hope of otherwise competing with decentralized tools.

12. The regulatory battle for money and payments is not fiat versus digital – it is centralized versus decentralized technologies driving the change. The winner will be the most resilient as it will draw users. Stablecoin versus CBDCs will be the most obvious battle to watch. RRPs are a window into the frailties of CBDCs. Digital asset markets are rewarding tools that proved resilient – Bitcoin, Ethereum, and the US dollar Tether stablecoin. Surviving is alpha.

Figure 1: Quantitative Tightening Dominated by Reverse Repos



Source: Federal Reserve Board. Coinbase Asset Management Calculations. The figures represent the contribution to the change in Reserve Balances with Federal Reserve Banks from the peak on December 15, 2021, to April 26, 2023, the latest data. Asset reduction is the change in Reserve Bank Credit, the par value of asset holdings like US Treasury securities.

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