



**Fed Funds Disrupted.** Last month as fed funds broke out of their policy range. Fed funds have been kept mostly in a target range by the Fed's New York desk, as it *both* controls the price of its fed funds liabilities while gradually running down the extremely large amount of those funds as a consequence of quantitative ease (QE).

Operationally, the Fed solved its rate control problem under QE by paying banks its Interest on Excess Reserves (IOER) rate. By the simple expedient of paying interest on reserves, banks should willingly hold any amount of excess reserves at that posted rate. Mortgage agencies (which use fed funds but cannot be paid the IOER) give up their funds at a discount to banks who can get the full IOER return at the Fed. For many years the IOER rate was set at the top of the desired fed funds trading range and the system worked.

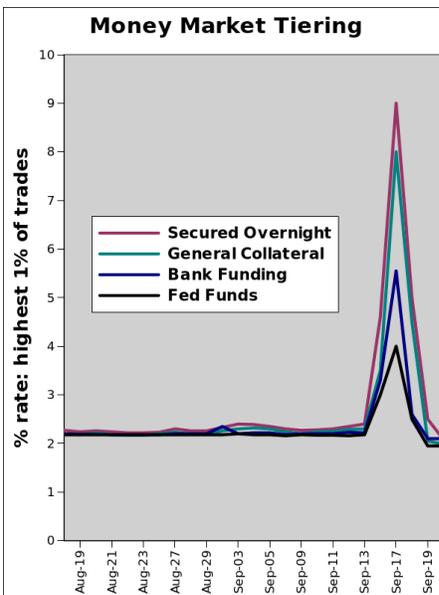
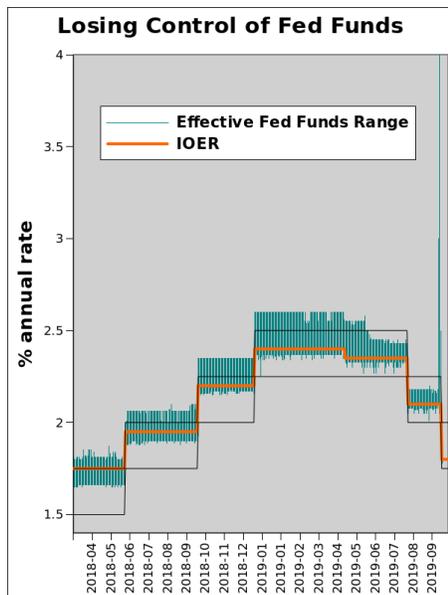
But over time, and despite still enormous excess reserves in the fed funds market, actual trading in fed funds has been tightening up. Daily fed fund trading ranges have migrating upwards compared with the IOER rate, so the Fed has been forced to lower its IOER setting compared to the upper end of its desired overnight rate. Somehow even enormous excess reserves seem not to be enough to hold down fed funds. (See chart below, left.)

While managing the over-supplied fed funds

market, the Fed has also become involved in other, neighboring markets. After 2008, which saw incipient bank-like runs in short-term credit outside the fed funds markets, the Fed's interest is understandable. These other markets are normally linked to the central fed funds market by arbitrage as one agent or another has access to two markets and borrows or lends in the one with the better price, driving them all to nearly the same level.

In particular, the Fed is very interested in the great repurchase market where the legal device of posting collateral has been perfected on an industrial scale to produce nearly as risk-free and perfect a rate as in fed funds, but available for all other agents, including money managers, foreign banks, and investors hedging their US bond portfolios.

Just now, when the Fed lost control of fed funds, the disruption was felt suddenly, as in an experiment in splitting the atom, across all these linked short-term markets. A brief disruption was transmitted in greater scale according to how weak the linkage to our core fed funds market. (See chart below, right.) Since then, the Fed regained control of all the markets by providing funds through repurchases, first for one day at a time, then over two weeks. Still, we just saw a disruption in the great force of massive QE and flooded money markets. What does it mean?



**Who Needs All These Dollars?** The immediate trigger for this disruption in fed funds was a combination of US Treasury debt sales with a corporate tax payment. Together these transferred funds held by banks in the fed funds market into the Treasury's General Account at the Fed. As Treasury balances jolted up, it triggered a self-reinforcing panic that briefly spread throughout the linked funding markets. (See chart below, left.)

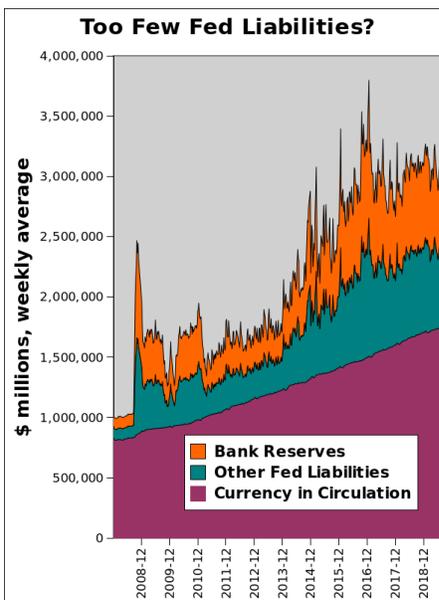
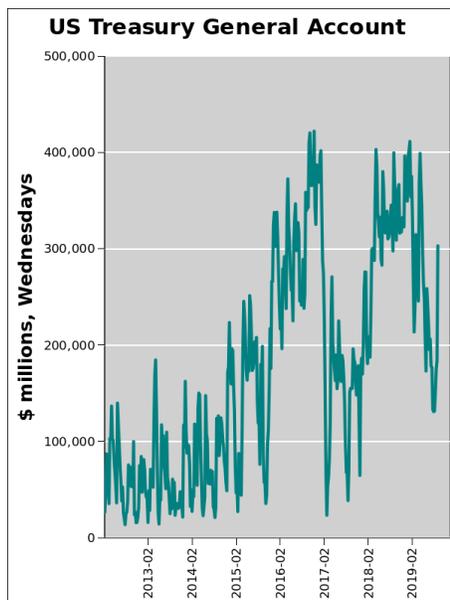
But this was at most a moderate jolt in the Treasury's balances, no larger than many before it over the years. Why the panic? Because other agents have come to depend on fed funds, which are perfectly liquid and reliable, to meet their own sudden and sometimes unexpected cash needs. To do so is now effectively costless, since fed funds pay the market rate. Certainly, the IOER system has created a great demand for fed funds in place of earlier cash management methods which actively conserved funds that paid zero compared to much higher market rates.

The real question is how much of the obviously growing demand for fed funds is simply a reaction over time to the zero opportunity cost of reserves in fed funds. Just consider how before the crisis this market worked fine with fed funds to meet reserve requirements of about \$10 billion. Now required re-

serves, lifted somewhat since the crisis, are about \$150 billion but excess reserves are fully \$1350 billion. At zero opportunity cost, relaxed cash management practices have become the norm, absorbing at least part of our excess fed funds. (See chart below, right.)

But something more may be going on. Ever since the panic of 2008, dollars, so urgently needed in the crisis, may have actually become the ultimate means of payment for many global agents, including European banks, commodity exporters, and emerging market central banks. And growing financial transactions in booming asset markets also call for liquidity management. So fed funds seem to have come to be demanded by a growing global pool of users, to meet their accidents of cash management just as the US Treasury has been doing.

So, was the fed's loss of control a minor speed-bump or a sign of something more? The biggest risk could be that a global asset price cycle is very advanced and is felt in the global demand for fed funds for cheap liquidity management. Once upon a time, in a galaxy far, far away, monetarists thought that rising pressure on short term markets was a signal of excess demand in the system. And interest rates should be permitted to *rise*, not fall.



**The European Connection.** Strongly influencing the Fed's decision to ease rates, the ECB chose to restart a broad package of monetary ease. It did so in supposed reaction to a lower inflation forecast that reflects a developing manufacturing slow-down centered on Germany and its capital goods exports. The package included a rate cut on deposits held at the ECB, a revived bond buying program, new extended bank funding programs, and a tiering of the application of negative deposit rates to only a portion of bank reserves. The impact should be to lower rates for the short-term and out the curve while preserving the motivation of banks to continue lending even under these extreme conditions.

Steering their evolving financial system, Draghi and his new replacement, Madam Lagard, need all the subtlety they can muster. Without a responsive fiscal policy for the region overall, Draghi has struggled to skirt recession using only his limited monetary tools, but ones that work across a great economic area with strong and sometimes surprising indirect effects. That means quantitative ease has worked across unexpected paths to reflate and hold together Europe when needed.

The indirect effects are what matter. I would

not put too much weight on the classical path of lower rates to bolster investment spending. More importantly, lower rates may reduce the value of the euro, and so boost export industries at the expense of the the US. This effect is already visible in a weakening euro. Yet another path could be by depressing global bond yields with a magnified effect on global demand through the far larger US bond market and on US households that use mortgages and companies that use bond issues for finance.

Also, and very importantly for the ECB, European fiscal policy is poised to potentially turn expansionary. The ECB's contentious monetary ease comes just as fiscal programs for next year are being finalized across Europe's fractured jurisdictions. In particular, we know that Germany's concentrated sharp drop in manufacturing, in a country with plenty of room to engage in fiscal policy, means a substantial fiscal push is possible. Almost certainly the ECB is demonstrating how increasingly counter-productive monetary policy might be best averted with a wider fiscal expansion. That should help the German economy and spill over to stabilize Europe, including Draghi's Italy, which remains the sick man of Europe.

**I see several reasons to suppose that doom, gloom, and the fear of goods price deflation around the corner are illusions. One reason is that I still think the global trade and inventory cycle is more likely than not to swing back toward expansion. Another is the strong possibility that expansionary ECB policies are more designed to prompt a turn to fiscal expansion in Germany than any indication of global deflation.**

**Certainly, frantic and aggressive actions by the US administration in trade, finance, and other policies could derail a weakened global economy. With time running out for this problematic administration, the incentive for bold and disruptive gestures is rising. But barring anything disastrous, my main case remains a grudging recovery which starts from a relatively high inflation base that can quickly produce upside inflation surprises.**

**The additional lesson I draw from last month's fed funds disruption is that there is growing evidence of financial excess in the system. Some part of the excess may be showing up in the greater need for fed funds. If so, it adds to the evidence that this financial cycle ends ahead of the economic one, because the financial cycle has been deliberately brought forward by central bank policies driving for recovery. The moment normal fiscal policy becomes politically acceptable, extraordinary monetary policy becomes less necessary and both inflated bond and stock valuations become vulnerable.**