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Quantitative Tightening Risks Decoupling Money Markets from Fed Funds Rate

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Summary

Fixated on Federal Reserve interest-rate policy, the risk markets could be missing 90% of the monetary iceberg: the Fed's $3.8 trillion balance sheet and the more than $3.3 trillion U.S. money market. A decade ago, the central bank embarked on so-called quantitative easing (QE), bond-buying on a colossal scale to flood the banking system with excess reserves and avert a meltdown of the financial system. Now, with the U.S. economy showing years of continued improvement in employment, the Fed has reduced excess reserves. This effort at policy normalization is tightening financial conditions. Such quantitative tightening (QT) is at odds with recent signals by the Fed of its intent to ease official short-term interest rates. This policy divergence poses two threats. First, QT could choke off credit just as the U.S. is entering an economic slowdown, raising the odds of recession. Second, QT could derail the Federal Funds rate as an effective monetary lever. Indeed, signs of "Fed Funds" losing its efficacy are already appearing in the overlooked but vital money markets. In fact, money market rates could decouple from Fed policy actions. Such a development would jeopardize market confidence in the Fed's ability to transmit monetary policy to markets, threatening a major risk sell-off.

Money-Market Mechanics

Most people who follow the Fed focus on the Federal Funds target rate rather than the central bank's primary and actual policy tool, the Effective Federal Funds rate. The target rate is the Fed's goal for the overnight rate at which member banks loan and borrow excess reserves, set eight times a year at meetings of the Federal Open Market Committee (FOMC). The actual rates on these overnight loans, however, are not set by Fed fiat but instead are negotiated between the lending and borrowing banks themselves. The central bank adjusts the money supply to cause those interbank negotiations to move toward the target rate. The Effective Federal Funds rate is the weighted average of the actual rates of the overnight lending of excess bank reserves.

The interbank market for loans of excess reserves is a key part of the "money market," the market for debt instruments with maturities of less than one year. In fact, the money market aggregates a series of money markets, all of them interacting among themselves as well as responding to official short-term rates. Historically, the Effective Federal Funds rate has held the whip hand over the money markets whose instruments reprice in adjustment to it. Those rate adjustments in turn feed through the capital markets (longer-term debt and equities) and ultimately into the U.S. economy. My focus here is on the overnight segment of the money markets.

The money markets fulfill a vital role by enabling holders of cash or excess reserves to earn extra interest by lending overnight to institutions in need of cash for intraday payments or reporting purposes. Due to regulations, not all borrowers of short-term capital have access to all these markets. However, when one market rate experiences spikes, lenders of short-term capital usually have the ability to move their lending activity to an alternative market, thereby putting pressure on the market the lender has just left. Through myriad shifts in lending activity, the money markets' rates can be thought of as loosely linked.

Of particular interest, with significant implications for monetary policy, are overnight general collateral finance repurchase agreements or O/N GC repo. In these transactions, a seller sells high-grade collateral – typically, U.S. Treasury bills – for cash to meet overnight financing or accounting needs under an agreement to buy back the collateral at an agreed-upon price the next business day. The GC repo market is showing signs of stealing the whip hand from the Effective Federal Funds rate. The reason for this lies in the Fed's balance sheet reductions, which have resulted in quantitative tightening.

Money-Market Mechanics (cont'd)

Total Money Market Fund Investment Holdings by Instrument

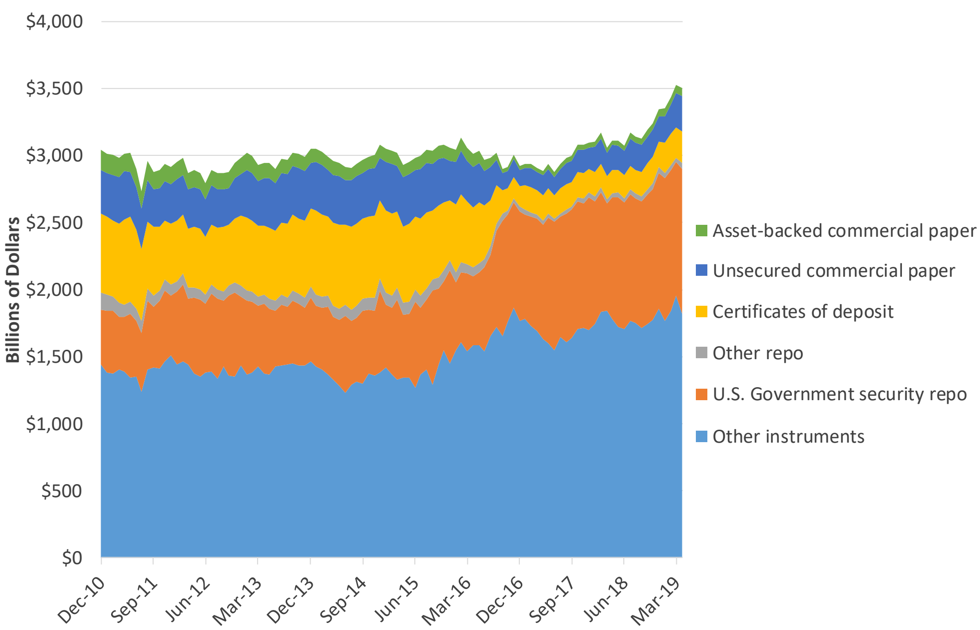

Figure 1
Source: DoubleLine, Federal Reserve

Total Money Market Fund Investment Holdings by Instrument
(Percent of $3.5 Trillion)

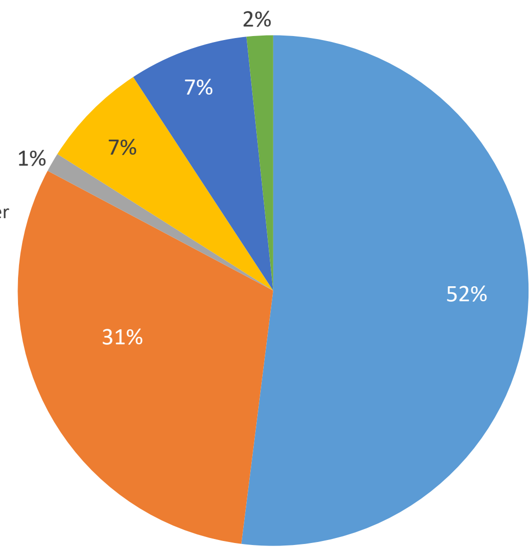

Figure 2
Source: DoubleLine, Federal Reserve

QT's Impact: Higher, More Volatile Short-Term Rates and a Threat to the Fed Funds Rate

In the decade-long expansion of the Fed's balance sheet via QE, the central bank "purchased" Treasuries and Agency mortgage-backed securities (MBS) from banks not by paying for those assets in cash but by crediting the banks' excess reserve accounts at the Fed. Starting in October 2017, the Fed reversed that accounting exercise, taking excess reserves from a peak of $2.7 trillion to $1.4 trillion as of July 2019. As the Fed and new government regulations have drained excess reserves, banks have been forced to replace them by borrowing short-term capital at higher rates in money markets. That higher cost of capital impedes banks' ability to engage in market-making activities and, by extension, puts upward pressure on the rates at which banks lend to consumers and companies. This obviously is at odds with signals from the Fed of an openness to ease the Federal Funds rate in response to the recent softening of economic data.

Of no less concern, the rising cost of short-term money could undercut the Fed's ability to maintain stability across all asset markets. Today, rates are spiking across the money markets as the demand for short-term capital is exceeding the available supply. Banks and other financial institutions are increasingly being forced into these higher-cost markets to borrow short-term capital. As noted previously, money markets serve as a key part of the Fed's monetary transmission mechanism, starting with the Effective Federal Funds rate. In normal conditions, the Fed Funds rate would exert a kind of benign domino effect on rates throughout the broader money markets and ultimately into the capital markets. However, to the extent that QT heightens volatility in the money markets, it counteracts the downstream effect of cutting the Fed Funds rate on rates in other money markets.

QT's Impact: Higher, More Volatile Short-Term Rates and a Threat to the Fed Funds Rate (cont'd)

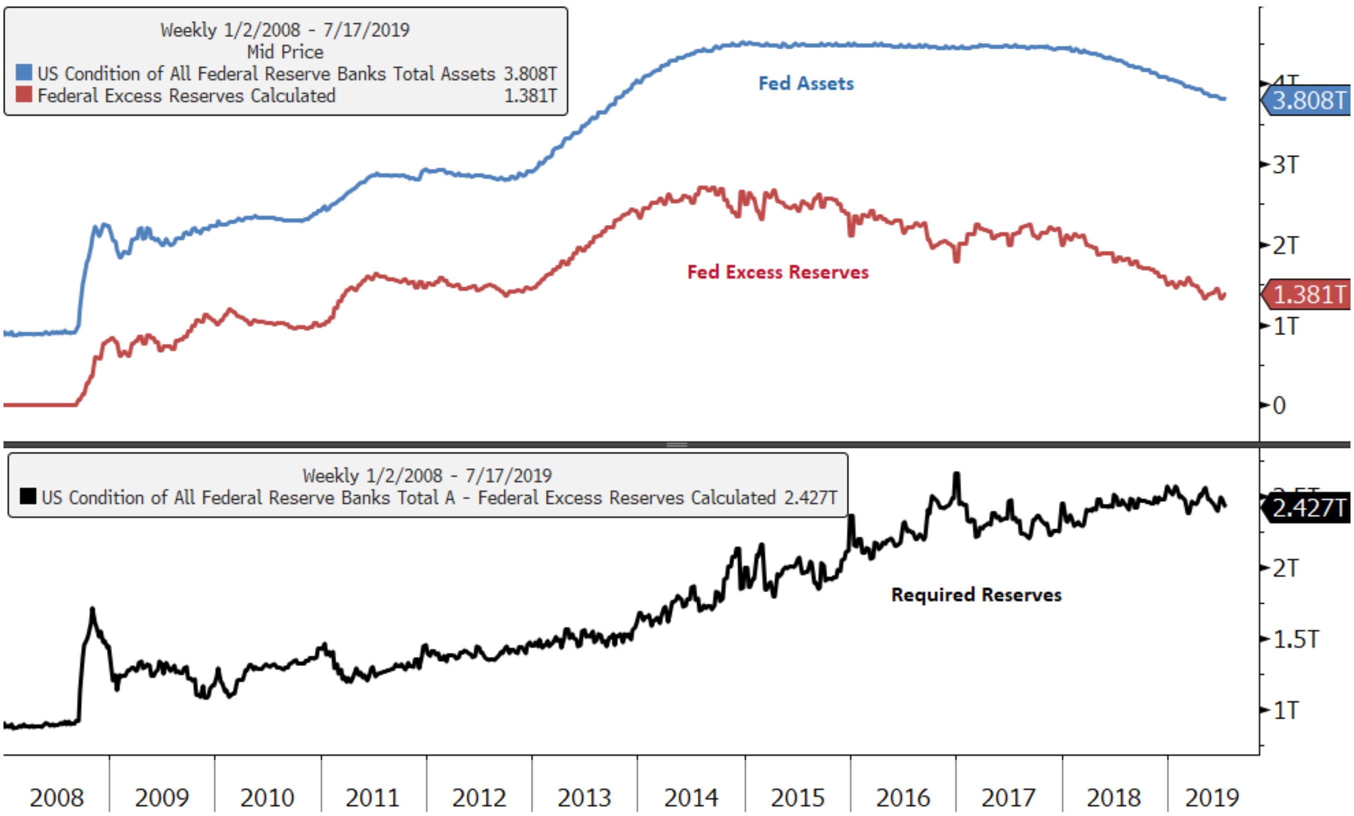

Figure 3
Source: DoubleLine, Bloomberg

Trouble Brewing in the GC Repo Markets

Complicating matters is an upcoming change to the one short-rate benchmark, which underlies almost every floating-rate fixed income instrument employed today, including adjustable rate mortgages. The London Interbank Offered Rate (LIBOR), the interest rate currently used for all floating-rate securities, is due to be replaced by the Secured Overnight Financing Rate (SOFR). The LIBOR rate is calculated by a bank survey, which has been criticized as not reflecting true market rates as it rarely exhibits large spikes. In contrast, SOFR represents a weighted average of several different money-market rates. Those markets have been exhibiting large spikes. One such jump involved a move in the O/N GC Repo rate from 2.5% to about 6% on December 31, 2018. Thus, the shift from LIBOR TO SOFR will compound the increased volatility in the money markets already resulting from QT.

Other contributors to higher rates and higher rate volatility in the money markets are heightened regulations following the global financial crisis and expanding U.S. Treasury debt incurred to finance widening federal budget deficits. Three forces – QT, increased regulations and increased debt issuance by the U.S. Treasury – are combining to both reduce the supply of short-term capital and increase the demand for it. The instability of market conditions could undermine lenders' willingness to lend in the money markets.

Trouble Brewing in the GC Repo Markets (cont'd)

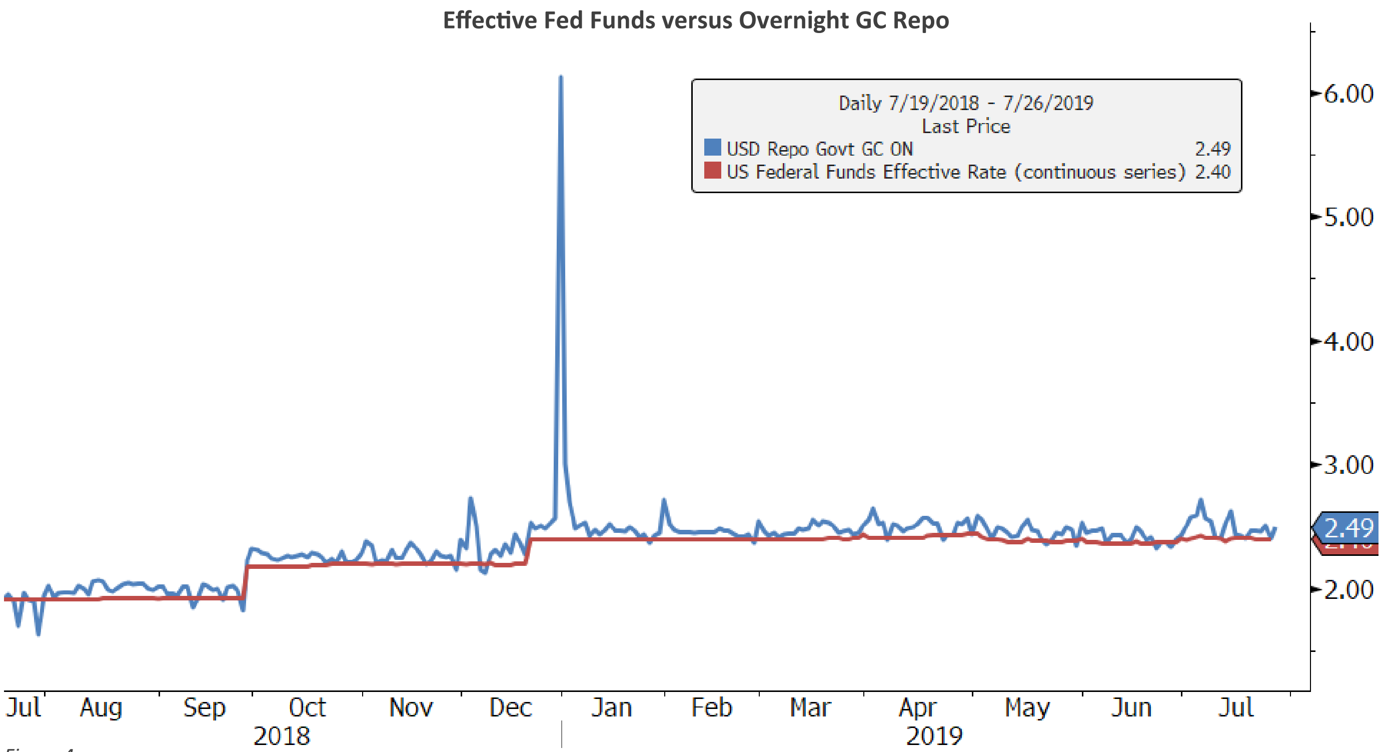

Figure 4

Source: DoubleLine, Bloomberg

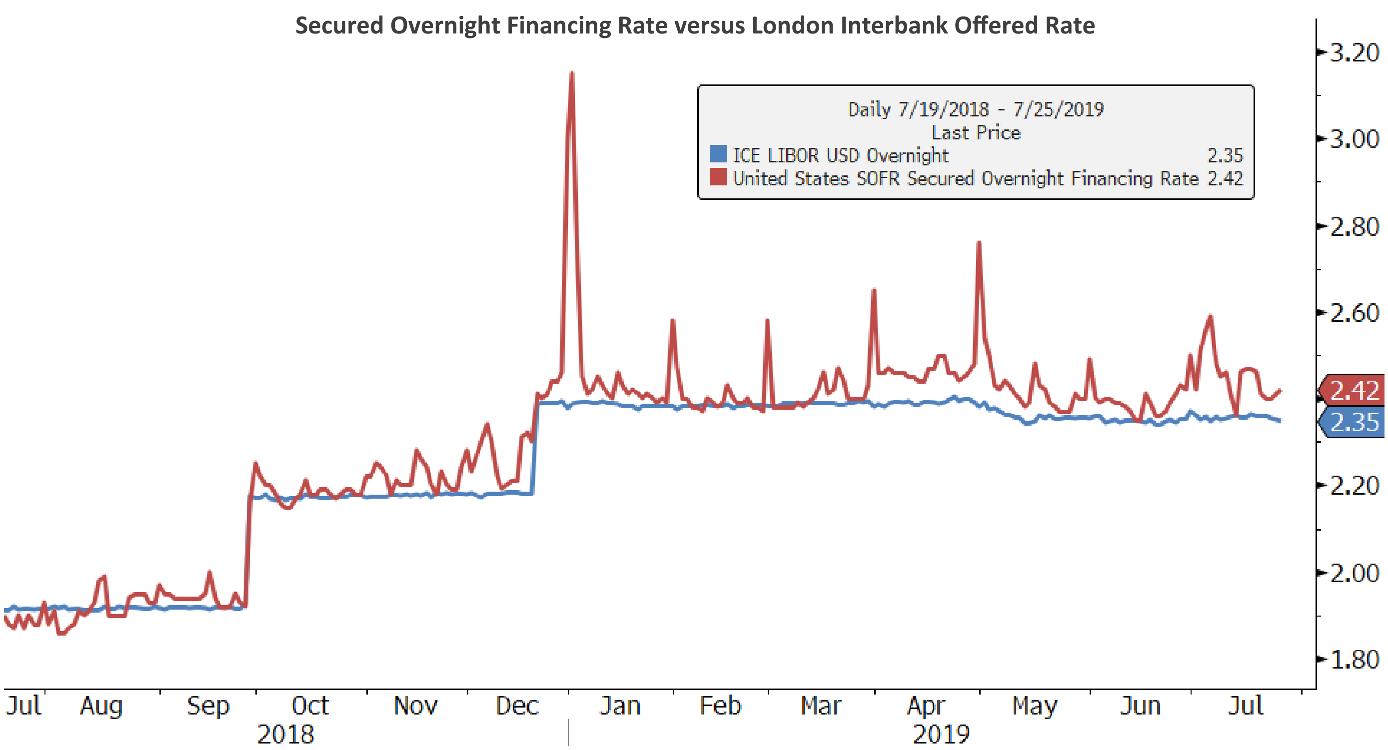

Figure 5

Source: DoubleLine, Bloomberg

Trouble Brewing in the GC Repo Markets (cont'd)

At the time regulators designed and implemented new regulations to stabilize and strengthen the banking system, it was flush with safe assets as a consequence of QE. No one had a clear understanding of the implications of the stricter and more complex reserve and regulatory regimes under a future of declining excess reserves from QT. That "future" has arrived, and we can already see how one of these regulations is playing out in the O/N GC repo market.

Among the banking reforms, preferential status was given to banks' holdings of excess reserves credited to their reserve accounts at the Fed and cash obtained by the banks through the O/N GC repo market. In other words, excess reserves and cash obtained through GC repo receive similar regulatory treatment. This parallelism forged an effective linkage among money-market rates and explains the transmission of rate spikes through those markets. In the past year, demands for liquidity via the overnight GC repo market have risen for multiple reasons, causing the prevailing rates to spike at month and quarter ends. Simply put, in the absence of the large stockpiles of QE-created excess reserves, banks have turned to the next-most favored source of overnight capital – the GC repo market – to meet their reserve requirements. Increased demand by financial institutions managing end-of-period reporting requirements is one cause of these spikes. In fact, a 2018 Board of Governors of the Federal Reserve Senior Financial Officer Survey showed that the most common reason for banks to borrow in these markets is to offset a shortfall in capital reserves. In my view, QT and increased regulation have clearly exacerbated these shortfalls.

> **"The GC repo markets risk becoming the tail which wags the Effective Federal Funds dog."**

Primary dealers have also placed greater demand on the GC repo market. Primary dealers intermediate the U.S. government's sales of Treasury securities to market participants. From mid-2018, increased Treasury bill supply has put further pressure on money markets, as dealer inventories have exploded while tighter regulation has forced dealers to find short-term capital in the money markets. Dealers have sought alternative liquidity sources to offset declining market participants' appetites for Treasuries at the same time issuance of Treasuries has increased.

Recently, there has been discussion of increased Treasury supply following a potential agreement on the debt limit. The risk is that this increased issuance could coincide with falling investor appetite for holding Treasuries after the very large rally we have seen in global yields at the beginning of 2019. These two forces could boost the already large glut of Treasury inventories sitting on primary dealers' balance sheets, which then would put further upward pressure on the GC repo market.

Both of these developments have increased demand for cash in GC repo markets, pushing repo rates higher. Because money markets are a web of interlinked markets, a spike in the rates in the GC repo market has the effect of luring lenders of cash from other money markets, including the market for Fed Funds, to obtain the higher rates, thus lifting the Effective Federal Funds rate as well. The Fed and bank regulators need to be careful to monitor the impact of their policies on money markets as a whole, not just one specific money market, in order to truly understand the impact of their changing policy mix in the context of changing investor behavior and preferences.

The GC repo markets risk becoming the tail which wags the Effective Federal Funds dog. The spikes in GC repo rates appear to signal that the banking system is reaching a limit on the amount of reserves needed to meet its safe capital requirements. The Federal Reserve is reducing the amount of reserves in the banking system via QT, which, along with new bank regulations requiring increased capital holdings, is restricting the supply of cash into the money markets, thereby putting upward pressure on these short-term interest rates. In their public statements, Fed officials seem to suggest that they are monitoring these markets to see if an equilibrium level for reserves in the system has been met. I would caution that a search for some sort of static equilibrium in any market is a risky assumption, as clearing levels change dynamically in response to changes in market conditions and investors' risk tolerances and preferences.

Many policy prescriptions are under discussion to help address this issue. Proposals include implementation by the Fed of its own repo facility, targeting the Interest on Excess Reserves (IOER) instead of the Effective Federal Funds rate and adjusting the composition of regulations on financial institutions, among others. But with federal deficits rising, the supply of U.S. Treasuries must increase. If market appetite wanes for these securities and root causes of higher and more volatile money-market rates remain unaddressed, upward pressure will build even further on money-market rates.

Trouble Brewing in the GC Repo Markets (cont'd)

I believe the Fed's reduction of excess reserves in the system is reaching a limit beyond which our financial institutions will enter increasingly turbulent waters within the money markets. Therefore, the Fed should cease its liquidity-draining efforts. Arising out of the wake of policies by the Fed and the broader government, these troubled seas have the potential to swamp the economy and financial system and blunt the Fed's principal policy tool: the Effective Federal Funds rate. The Fed currently plans on ending QT by the end of this September. Let's hope that comes in time to avert striking the monetary iceberg. ■

Mr. Campbell is a Portfolio Manager for the DoubleLine Global Bond Strategy and is a permanent member of the Fixed Income Asset Allocation Committee. Mr. Campbell joined DoubleLine in 2013 as an Emerging Markets Sovereign Analyst. He covers Developed Markets, Central & Eastern Europe, Middle East and Africa (CEEMEA), and China. Prior to joining DoubleLine, Mr. Campbell worked for Peridiem Global Investors as a Global Fixed Income Research Analyst and Portfolio Manager. Previous to that, he spent over five years with Nuveen Investments, first as a Quantitative Analyst in its Risk Management and Portfolio Construction Group, then as a Vice President in its Taxable Fixed Income Group. Mr. Campbell also worked at John Hancock Financial as an Investment Analyst. Mr. Campbell received his BS in Business Economics and International Business, as well as his BA in English, from Pennsylvania State University. He received his MA in Mathematics, with a focus on Mathematical Finance, from Boston University.

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