THE VIEW

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THE U.S. MONEY MARKET HAS THE SHAKES

04 Tensions on the U.S. money market have triggered a prompt reaction of the Fed

05 The causes of the problem in the U.S. money market are diverse

07 Risks related to instability in the U.S. money market

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After several episodes of stress observed in the U.S. money market, the Fed decided to inject liquidity into the banking system and restart Treasury Security purchases. We identify three factors that explain the mismatch between supply and demand on the money market:

- Technical factors such as liquidity needs for tax collection purposes or regulatory aspects, though they do not represent an entirely convincing explanation for us.
- A larger volume of debt issuance by the U.S. Treasury, despite normally being well coordinated and telegraphed to banks.
- Margin calls, i.e. liquidity flows related to the functioning of the derivative markets.

In our view, the situation needs to be closely monitored for the following reasons:

- Wholesale funding, which in the past nurtured risky activities and contributed to the subprime crisis, has not totally disappeared.
- New episodes of stress on the U.S. money market could have repercussion effects on the credit market, which is close to a bubble situation.
- Smaller banking institutions could suffer from more difficult access to liquidity funding, meaning that Small and Medium Enterprises (SMEs, mainly financed by smaller banks) could in turn be exposed to tighter credit conditions and therefore higher risk.
- Any accident in the U.S. money market would potentially create a shortage of liquidity at a global level, with severe consequences for emerging economies.
- With tightened access to cash, highly leveraged investors could face difficulties in financing, for example, their margin calls, and therefore be incited to initiate fire sales with a strong and negative impact on the markets.

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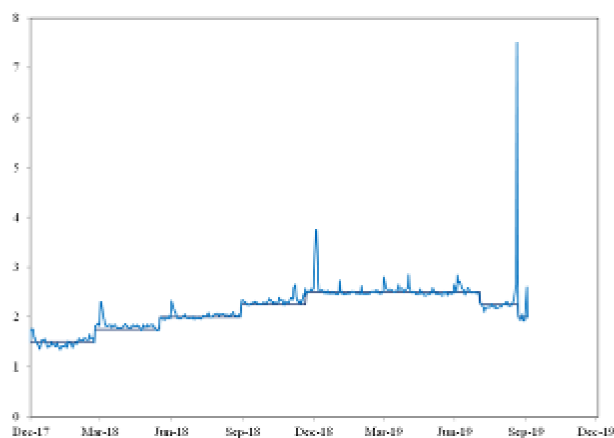
10%

intraday high of the overnight repo rate on 12 September 2019

TENSIONS ON THE U.S. MONEY MARKET HAVE TRIGGERED A PROMPT REACTION OF THE FED

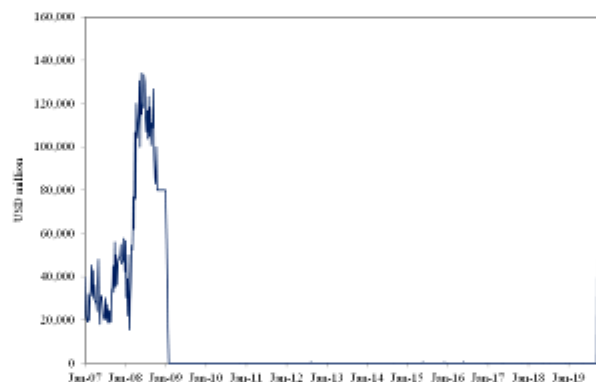
On 12 September 2019, the overnight repo rate rose to an intraday high of 10% and averaged 7.50%, well above the Federal Funds target, which was then at 2.25% and was cut two days later to 2% (Figure 1).
The Federal Reserve responded to this tension in the money market by lending USD 75bn through repos the following day and another USD 105bn in the following week, ended on 25 September 2019 (Figure 2). The last time the Fed made such large repos was during the first nine months of 2008, as the Great Financial Crisis was going from bad to worse. As another illustration of the seriousness of the situation, the Fed announced that it would restart its Treasury purchase program in order to prevent any new accidents in the U.S. money market. Even if Fed Chair Jerome Powell insisted on the fact that this was not comparable with a large-scale asset purchase program, amounts such as USD 200 bn-USD 300 bn over the six coming months, coupled with USD 10 bn per month of Treasury securities purchases, are regularly mentioned. The final decision should be announced during the next FOMC meeting.
So, why did it happen this time?

Figure 1: The overnight repo rate and the Federal Funds Target rate



Sources: Euler Hermes, Allianz Research

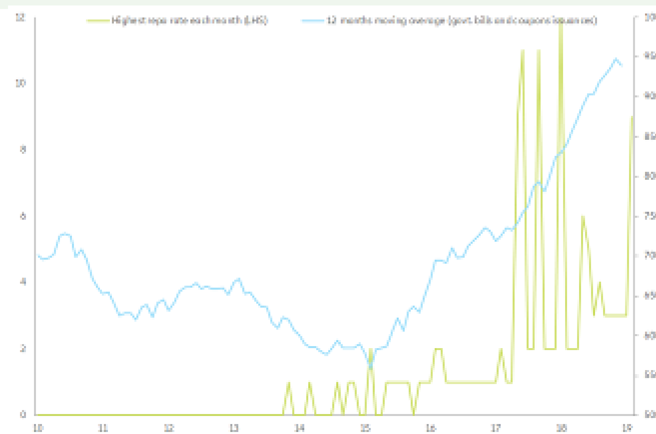
Figure 2: Outstanding repurchase agreements by the Federal Reserve



Sources: Euler Hermes, Allianz Research

THE CAUSES OF THE PROBLEM IN THE U.S. MONEY MARKET ARE DIVERSE

Figure 3: Highest overnight repo rate (%, source Bloomberg, USRG1T ICUS Curncy) and U.S. government Bills and Coupons issuances



Sources: Euler Hermes, Allianz Research

Someone, either at the Fed or somewhere in the banking system, must have underestimated the system's need for reserves, the central bank money that banks use to settle their own transactions, as well as those initiated by their customers. The repo market is essentially an interbank market through which banks lend or borrow reserves to manage their cash positions.

The provision of reserves takes two forms : the non-borrowed reserves that the Fed issues when it buys securities in the open market (this is the whole purpose of QE), and the borrowed reserves the Fed lends overnight against collateral (repurchase agreements or repos).

Data about reserves are published every two weeks, the reporting period ending on Wednesdays. As of 11 September 2019, non-borrowed reserves were USD 1,462bn and borrowed reserves only USD 114 million.

Borrowed reserves are the system's safety valve. They are used for marginal fine-tuning operations. Clearly, a USD 180bn increase in borrowed reserves is not business as usual.

What we do not know, and this is a source of concern, is why there has been such a surge in the demand for reserves. In the European Economic and Monetary Union (EMU), the answer can be found in the so-called "autonomous factors of banks' liquidity", a time series published by the European Central Bank (ECB). In this framework, banks lose or gain reserves :

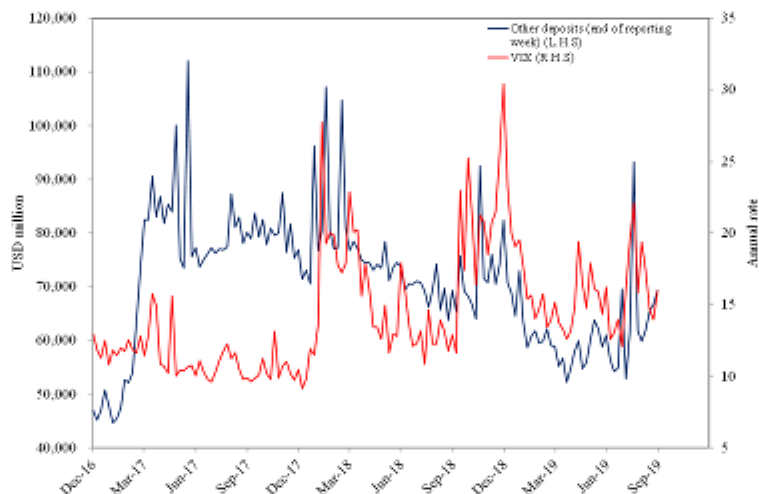
- if the demand for bank notes increases or falls,
- if the Treasury account at the central bank is credited or debited,
- or if the market sells or buys the domestic currency against foreign currencies.

The Fed publishes enough data about its balance sheet to conduct a similar investigation, albeit in a less formal way:

1. Bank notes in circulation barely changed during the two weeks ended 25 September: this factor has not drained reserves from the banks.
2. Admittedly, the Treasury account swelled by USD 120bn in the week ended 18 September. But such a rise is not unusual, and if there is something easy to anticipate, it should be the payment of taxes and the settlement of Treasury issues. The Treasury publishes a tentative auction schedule over the next four months. Between the announcement date of an auction and its settlement, the usual lag is one week. Between the auction date and its settlement date, the lag is at least three trading days.

In our view, even if there is a link between episodes of high volatility in the repo market and the volume of government bond issuance (Figure 3), there are probably other hidden factors behind the recent episode of stress in the U.S. money market.

Figure 4: Other deposits and implied volatility (VIX)



Sources: Euler Hermes, Allianz Research

3. More interestingly, something more unusual happened with an item called "others", which swelled by USD 18.5bn in terms of the weekly average. This item started to increase in April-May of this year. In terms of the end of the reporting period, it rose to a peak of USD 93bn on 14 August.

4. This "others" category includes the so-called "designated financial markets utilities" (i.e. The Clearing House Payments Company L.L.C., CLS Bank International, Chicago Mercantile Exchange Inc., The Depository Trust Company, Fixed Income Clearing Corporation, ICE Clear Credit LLC, National Securities Clearing Corporation, The Options Clearing Corporation), namely the clearinghouses that underpin derivatives markets through cash collateral and margin calls. If a bank or one of its clients faces a margin call, it has to transfer reserves to the clearinghouse. Margin calls suck reserves out of the banking system.

5. Therefore, an alternative explanation is that margin calls, which by nature are difficult to forecast, have caused tensions in the repo market.

6. This hypothesis is all the more plausible because the two previous episodes during which these "others" accounts have swelled, in Q1 and Q4 2018, also coincided with periods of heightened market volatility (historic as well as implied), as shown in Figure 4.

7. A lack of information about the operators incurring these derivatives losses may also have caused some credit rationing in the repo market and contributed to the spike in the overnight repo rate.

RISKS RELATED TO INSTABILITY IN THE U.S. MONEY MARKET

As a reminder, the freezing of the money market in the U.S. was the main trigger of the subprime crisis. The accumulation of bad assets was the root cause of this crisis, but the sudden interruption of liquidity circulation in the money market is what triggered the fall of Lehman. Doubts about the solidity of this institution and others incited banks to stop lending and borrowing in the short-term money market. So today's situation is a worrying signal and should be closely monitored as:

- Wholesale funding could be at risk if similar episodes of stress occur, which in turn could have a direct consequence on credit conditions. Banks could significantly tighten their credit conditions and hamper the investment cycle. Another freezing of the money market, even if it is not our central scenario, could have devastating consequences. Wholesale funding has diminished over the last few years but certain banking institutions and less traditional actors remain exposed to this source of funding. The credit market is already in a bubble situation (See our report: U.S. corporate leverage is probably underestimated). In this scenario, a freezing of the money market, or a shock on the short-term interest rate, if not rapidly solved, could have direct repercussions on corporate yields and severely hamper highly leveraged companies from rolling over their debt.

- Smaller banking institutions, with no direct access to funding from the Fed, could face liquidity shortages as a result of the concentration of reserves in major broker dealers, and their relative unwillingness to participate in inter-banking activities. This is a risk for SMEs, which heavily rely on smaller banking institutions for credit. We could also observe a shortage of Dollar liquidities at a global level as foreign banking institutions are also important actors of the U.S. money market. The current context of the high value of the USD reflects that there is currently a thirst for this currency, which could be associated with a certain aversion of risk. A strong Dollar or Dollar liquidity shortages express the same thing and are consistent with the current instability observed in the U.S. money market. This is not a coincidence. Facing difficulties in accessing USD liquidities represents a lower capacity for international banks to distribute credit and liquidity at a global level. A Dollar shortage scenario would have a negative impact on all risky assets, including global equity, global credit and emerging assets as a whole.

- There is also the risk of fire sales if financing institutions are unable to answer to margin calls in the short-term due to the lack of liquidity in the money market. This in turn could trigger a severe correction of the equity market.

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