Ask an Economist: The implications of unrealized losses for banks

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A Kansas City Fed study explores how recent interest rate changes and banks' associated unrealized losses can affect banks' decision-making.

Since the Federal Open Market Committee (FOMC) began tightening monetary policy in March 2022, interest rates have risen across the yield curve, increasing borrowing costs for firms and households alike. Commercial banks too have been affected because rising interest rates erode the market value of their assets. Currently, declines in the value of banks' securities portfolios, known as "unrealized losses" because they do not affect reported income, exceed $550 billion, or about 30 percent of regulatory capital.

For an April 2023 Economic Review article, Senior Economist Blake Marsh and Research Associate Brendan Laliberte investigated how recent interest rate changes and banks' associated unrealized losses can affect banks' decision-making. The authors' complete article is available here.

How have banks' liquidity and capital been affected?

During the pandemic, bank loan demand fell sharply due to declining economic activity and government support programs that sent cash to firms and households. Those high cash balances, combined with an expansion of the Federal Reserve's balance sheet to support market functioning and economic activity, increased bank deposit levels. Facing limited investment options, banks purchased longer maturity, government-backed debt which are free of default risk and pay higher returns than shorter-maturity debt instruments. However, bond prices tend to be more sensitive to interest rate changes as maturity lengthens. Therefore, the decision to purchase longer maturity securities exposed banks to greater interest rate risk.

Once rates began to rise, the market value of banks' securities portfolios declined and book equity fell, pushing many banks closer to technical insolvency. Lower securities prices also reduce the amount of cash banks expect to receive when they sell securities outright or offer them as collateral on the loan market. That puts banks at risk of a cash shortfall should they face a sudden liquidity need. In turn, banks could be forced to tap capital market financing such as issuing longer-term debt or equity. However, investors are likely to demand higher returns due to falling valuations in order to meet banks' liquidity needs. In short, as asset prices fall, bank risk increases, and a bank's funding costs are likely to rise.

How do accounting practices play a role?

Accounting practices may have allowed banks to minimize interest rate risk concerns rather than taking remediating actions sooner. Under current accounting practices, banks typically classify securities as either "held-to-maturity", meaning they intend to hold the security, or "available-for-sale", meaning they may sell the security at any time. Unrealized losses on each portfolio are publicly reported by banks each quarter, but only valuation changes on available-for-sale securities affect equity levels. Furthermore, only the largest banks' regulatory capital ratios— a key measure of bank health— are affected by valuation changes at all. Large banks, however, were able to minimize the most concerning balance sheet effects of rising rates by classifying sizable portions of securities purchased during the pandemic as held-to-maturity.

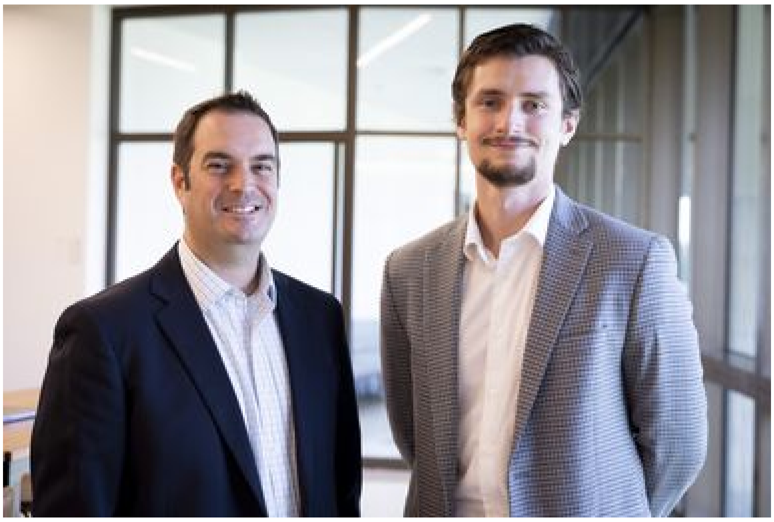
These accounting practices allowed banks to largely ignore the extent of interest rate risk they had incurred. For example, banks did not have to worry about regulatory capital falling below required minimums because valuation losses mostly did not affect regulatory capital levels. Perhaps, more desirably, banks may have limited their interest rate risk exposure if they anticipated having to raise additional capital should interest rates rise.

What are the implications going forward?

We've already seen a major change in the banking landscape due to valuation pressures. While the exact causes are still being debated, a likely trigger of the Silicon Valley Bank run was their publicly announced intention to raise additional capital due to securities losses. The SVB event, in particular, seems to have awoken investors to the reality that banks are holding substantial unrealized losses. In response, both the U.S. Treasury and the Federal Reserve have taken steps to shore up confidence in the banking system.

Nonetheless, investors will likely consider banks riskier going forward because their asset values have declined. Consequently, debt and equity investors will likely demand larger risk premia, increasing bank funding costs. Banks, in turn, will likely pass those costs on to businesses and consumers through higher loan rates. Higher borrowing costs can curtail investment demand and spending resulting in reduced economic activity. However, a unique aspect of the situation is that should economic activity slow, interest rates may decline, boosting securities valuations. That scenario could provide a potential off-ramp for banks to reduce interest rate risk, so long as non-bank investor demand to hold government debt is high.

Media



(From left) Senior Economist Blake Marsh and Research Associate Brendan Laliberte.