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Global Banks, Local Branches, and Faraway Crises

Correa, Ricardo, Horacio Sapriza, and Andrei Zlate. "Wholesale Funding Runs, Global Banks' Supply of Liquidity Insurance, and Corporate Investment." ***Journal of International Economics*****, November 2021, vol. 133.**

How do financial crises affecting banks in one part of the world ripple through the global economy? The answer to this question provides insight into how market actors — including investors, borrowers, and banks — respond to risk, as well as the effects of their reactions on the wider economy.

Past research has shown that in times of crisis, international banks can experience "liquidity shocks" that limit their access to funding due to a range of factors, including concerns about their solvency. As a result, these banks are unable to lend to their own branch offices abroad. The branches, in turn, reduce their lending to local firms, limiting the firms' ability to invest and grow.

In an article recently published in the *Journal of International Economics*, Horacio Sapriza of the Richmond Fed and Ricardo Correa and Andrei Zlate of the Fed Board of Governors suggested an alternative pathway for the spread of financial shocks. In particular, they used the case of the 2011 European debt crisis to show that local branches of global banks can also amplify shocks through pathways distinct from any effects stemming from their parent banks' capitalization levels.

These branches are immersed to a surprising extent in the economies of the countries where they are located. In the United States, for example, they play an active role in the wholesale funding market, gaining access to dollars from money market funds looking for short-term investments. These branches then use that money to provide loans and revolving credit, known as liquidity insurance, to local firms.

Money market funds invest in these local branches primarily through large time deposits, which are uninsured deposits of $100,000 or more. Also, the Securities and Exchange Commission instituted a requirement in late 2010 that these funds publicly disclose their asset portfolios. As a result, the authors posited that as the crisis in Europe grew more severe, these foreign branches became vulnerable to "inefficient liquidation" — a run on the branch — as fund managers pulled their deposits because of general public concern over what was happening in Europe rather than any factors related to the specific banks or their local branches.

The authors found support for this hypothesis using data on large time deposits between 2010 and 2011 from the Federal Financial Institutions Examination Council, which also showed that these runs were isolated to euro-area bank branches specifically and did not affect branches of banks from other parts of the world. Putting it in terms of numbers, between the second and fourth quarters of 2011, large time deposits into U.S. branches of euro-area banks declined by almost $250 billion.

The authors next used Fed data on the U.S. branch networks of foreign banks to show that the more a local branch lost in deposits, the more the parent bank tried to fill in the gap so that the branch could continue lending. A significant shortfall in funding remained, however; the authors' modeling showed that branches that had larger drop-offs in deposits still decreased their lending activity.

To delve into the size of the effect, the authors used U.S. bank supervisory data capturing all syndicated loans (that is, loans with multiple lenders) over $20 million to publicly traded firms with at least three U.S. banks participating in the loan. After controlling for loan demand at the firm and sector levels, they found that the funding shock led to a decrease of $11 billion in commercial and industrial loans in the United States between 2010 and 2011. They also found that the decrease mainly took the form of lending to fewer firms rather than smaller lending amounts to each firm.

How did affected firms react to the lost loans? The authors used balance sheet data from S&P Compustat to show that the U.S. firms that lost funding from euro-area bank branches reduced their investments in 2011 relative to firms that did not have such relationships by about $22 billion, or about 7 percent of all 2010 investment by publicly traded firms in the sample. These firms instead tried to build up their own liquidity insurance, accumulating about $17 billion more in cash reserves in the wake of the crisis than similar firms with no euro-area bank exposure.

Typically, firms experience liquidity shocks when banks come to view them as risky investments. In this case, however, as the crisis in Europe deepened, wholesale investors in the United States believed the opposite: Branches of euro-area banks were no longer safe places to put their money. The resulting chain reaction ultimately left vulnerable U.S. firms sacrificing growth to cover cash shortfalls. **EF**