## ATTHERICHMONDFED How Do Banks Use the Discount Window?

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**Highlighted Research** 

"The Fed's Discount Window: An Overview of Recent Data." Felix P. Ackon and Huberto M. Ennis. Federal Reserve Bank of Richmond *Economic Quarterly*, First-Fourth Quarter 2017, vol. 103, nos. 1-4, pp. 37-79.

The discount window is the Fed's lending facility to depository institutions, meant to provide short-term loans to institutions with temporary liquidity shortfalls. But should the Fed have a discount window open at all times, including outside of widespread financial crises?

The potential costs of having a discount window have long been recognized. As an example, renowned economist Anna Schwartz regularly expressed reservations about having a discount window open and argued that historically it has been used to lend to not just illiquid, but insolvent banks. When this is the case, the discount window can have the effect of allowing uninsured depositors to pull out of the bank before incurring losses — increasing the costs of a bank's failure on the FDIC and ultimately on taxpayers. Forcing banks to rely only on private shortterm funding sources can create greater market discipline.

Richmond Fed economist Huberto Ennis has been studying these issues for several years. "We need to better understand the role of the discount window and what it is being used for," he says. "Looking at recent transactions data, for example, can help us determine if we should continue having a discount window open at all times."

This has previously been difficult because the details around discount window activity weren't made public on a regular basis. That changed with a provision in the 2010 Dodd-Frank Act that requires the Fed to publish transactions data with a two-year lag. In a recent article, Ennis and research associate Felix Ackon analyzed 16,514 loans from July 2010 to June 2015 to identify patterns.

The loans fall into one of the discount window's three programs. Primary credit and secondary credit are emergency credit programs that constitute a backup source of funding for eligible financial institutions. In the former, institutions in good financial standing can get overnight loans with "no questions asked," paying an interest rate higher than the Fed's policy rate. Institutions not eligible for primary credit can access secondary credit; those loans come at an even higher interest rate and with greater Fed scrutiny. A third program, seasonal credit, is aimed at smaller institutions with a predictable and demonstrable seasonable pattern in their funding needs.

Ennis and Ackon found that even though this period covers the post-crisis years, when banks generally were

awash with liquidity and large quantities of excess reserves, many of them still borrowed nontrivial amounts from the discount window.

To estimate just how common borrowing was, Ennis and Ackon needed to filter out "test" loans, which depository institutions conduct to make sure the systems involved in processing discount window loans are working as expected. Because the data don't state which loans are tests and which aren't, they assumed that loans in amounts greater than \$10,000 were of the nontest variety (while noting that some smaller loans likely are actual loans, and some larger loans might be tests). Roughly one-third of the total loans were categorized as test loans.

In the primary credit program — the biggest of the three programs — there were almost 6,800 nontest loans over the five-year period, mostly overnight, with an average amount of \$3.8 million. After 2012, primary credit borrowing dropped significantly (by 40 percent). Some banks were frequent users: While almost 600 banks took only one nontest loan during the five-year period, 28 banks took 30 or more nontest loans.

As might be expected given its higher interest rate, the secondary credit program is used much less often than primary credit. Of 650 total loans, only 39 were nontest loans.

Discount window lending is collateralized, which reduces the credit risk (to the Fed) of providing those loans. Ennis and Ackon studied the composition of collateral that borrowers pledged with the Fed (including consumer and commercial loans, securities, and other bank assets) and the loan-to-collateral ratios. In general, borrowing banks had more collateral than the amount they borrowed, although in some cases, collateral utilization was high, close to 100 percent.

Overall, Ennis says, "depository institutions do seem to see routine provision of backup funding by the central bank as a valuable option for short-term liquidity. However, a more clear understanding of the circumstances that trigger discount window borrowing is needed to better assess the value of having the discount window open at all times."

Ennis and Ackon's study is part of a broader range of questions Richmond Fed researchers have asked about the roles and implications of Fed lending. In 2016, Ennis and policy advisor John Weinberg looked at the role of Fed lending in the implementation of monetary policy. Ennis has also studied how discount window stigma — the fear banks may have that discount window borrowing connotes poor financial health — could affect the ability of Fed lending to smooth market distress. **EF**