

Gross Credit Flows of U.S. Commercial Banks until 2008:Q3

Economists and analysts are devoting much attention to the commercial banking sector, whose health is fundamental to directing household savings to firms, institutions, and other consumers in need of loans. During the financial crisis of 2007-2008, aggregate data on bank lending show little deviation from trend until mid-October 2008. However, aggregate data may hide much of the microeconomic diversity that characterizes the U.S. banking system.

To understand what is behind the aggregate figures, we compute two measures of changes in loans on a quarter-to-quarter basis using publicly available balance-sheet data for all U.S. commercial banks.¹ We construct nominal credit expansion and contraction series using the methodology suggested by Dell’Ariccia and Garibaldi (2005).² According to this method, the flow of credit can be divided into two parts: credit expansion (banks making new or expanding old loans) and credit contraction (banks terminating nonperforming loans). Net bank loan changes are the differences between these two and provide some idea about the extent of the reallocation of credit across commercial banks in any phase of the business cycle. After taking into account the effects of mergers, acquisitions, and failures (to avoid double counting of loans), we compute measures of loan changes for each quarter for 1999:Q3–2008:Q3, the latest data available at the time of this writing.

The weighted sum of increases in credit in banks that increased loans is then a measure of credit expansion, whereas the weighted sum of decreases in credit is a measure of credit contraction. (The weights are determined by the relative size of each bank in the commercial banking sector.) We plot these series in the chart and focus on three interesting elements.

First, large gross credit flows—both positive and negative—coexist at any point of the business cycle, a feature that persists when we construct similar series distinguishing among types of loans (commercial and industrial loans, real estate loans, and loans to individuals). Second, peaks of credit contraction tend to coincide with drops of credit expansion, particularly during recessions (indicated by the gray bars in the chart). Finally, the lack of a noticeable net credit contraction in the

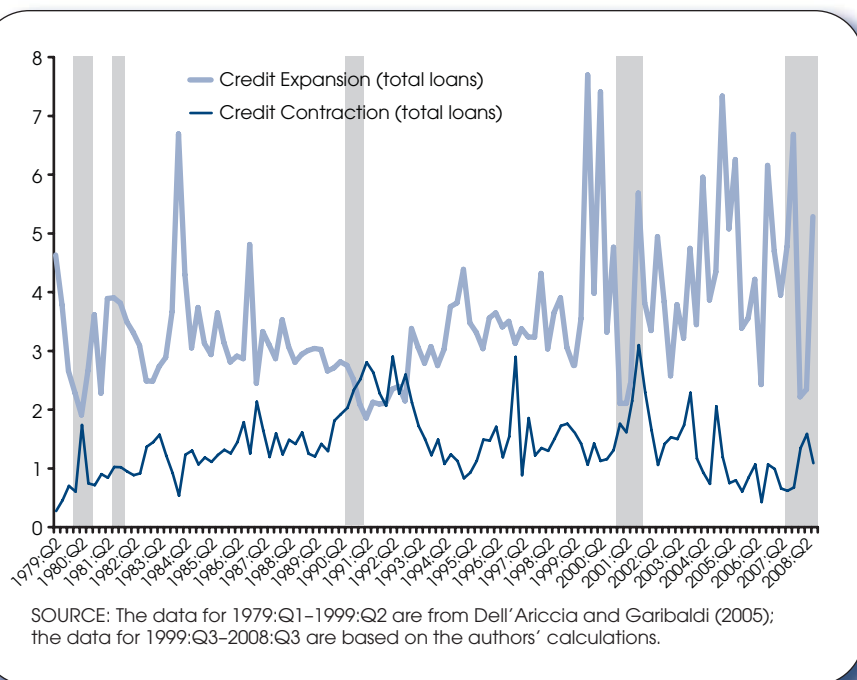
aggregate data is confirmed in our micro data, at least until the end of September 2008. However, the first two quarters of 2008 show sharply decreased expansion and increased contraction, followed by a third-quarter rebound. This pattern is consistent with previous recessions, but luckily not as marked as during the savings and loan crisis of the early 1990s.

Unfortunately, our data do not show each individual loan granted or canceled by every bank. Bank-level data might still hide significant heterogeneity in changes in individual loans that are likely affected by the creditworthiness of individual firms and borrowers. Firms and individuals may face limited access to other lending sources and thus may be relying more on banks. Such heterogeneity may partially explain some of the anecdotal evidence on the difficulties faced by agents in obtaining credit.

—Silvio Contessi and Johanna Francis

¹ See Reports of Condition and Income database at www.chicagofed.org/economic_research_and_data/commercial_bank_complete_files_2001_2008.cfm.

² Dell’Ariccia, Giovanni and Garibaldi, Pietro. “Gross Credit Flows.” *Review of Economics Studies*, July 2005, 72(3), pp. 665-85.



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