

Online appendix for
“U.S. Commercial Bank Lending through 2008:Q4:
New Evidence from Gross Credit Flows” *

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Figure 1: The Davis, Haltiwanger, and Schuh (1996) approach to job flow analysis and the Dell’Ariccia and Garibaldi (2005) and Craig and Haubrich (2006) approach to gross credit flow analysis

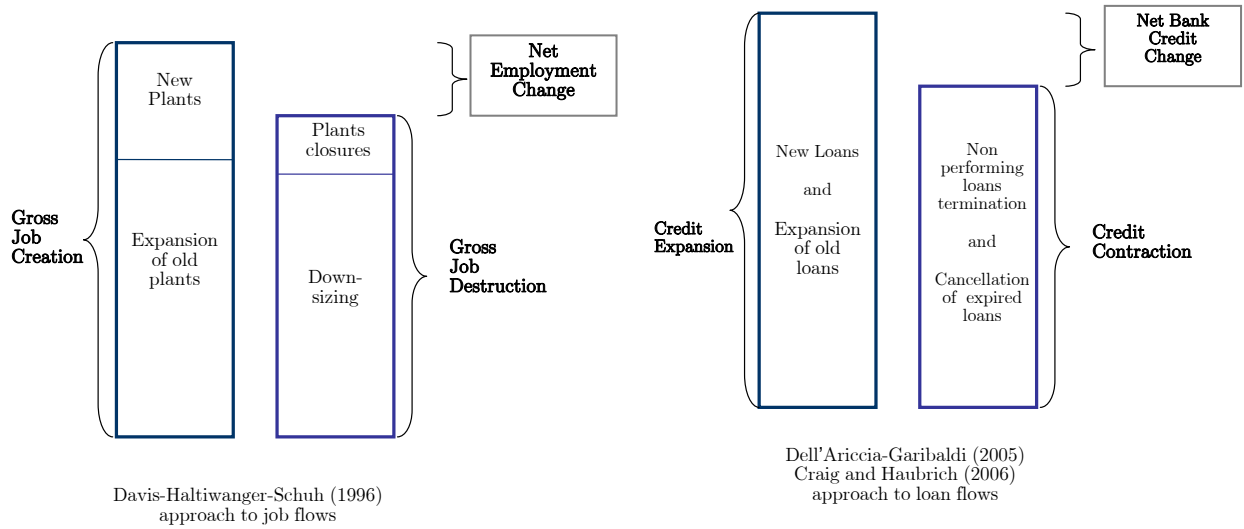
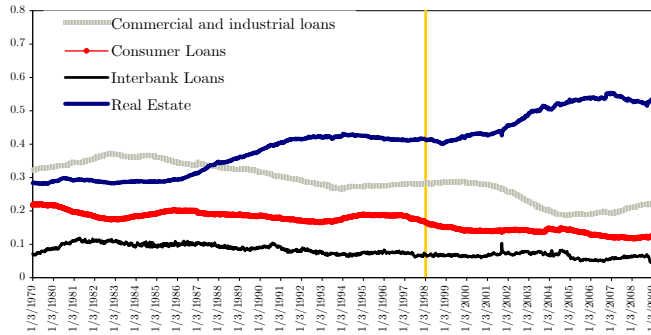
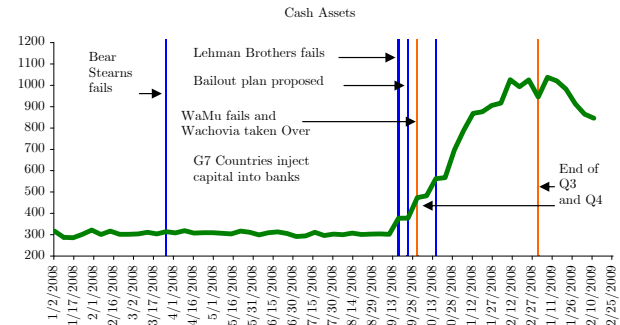
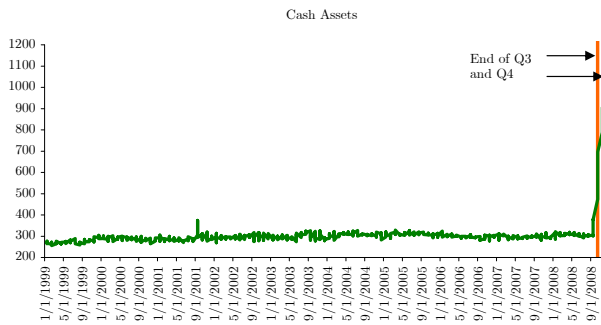
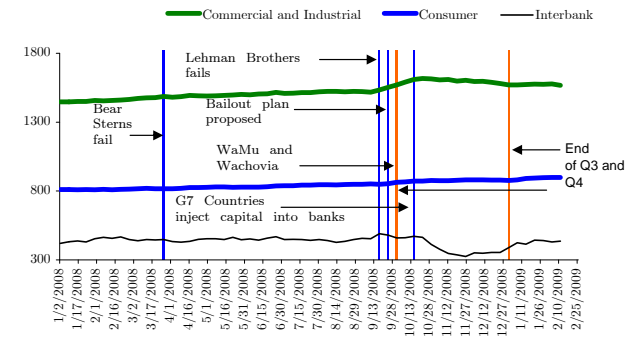
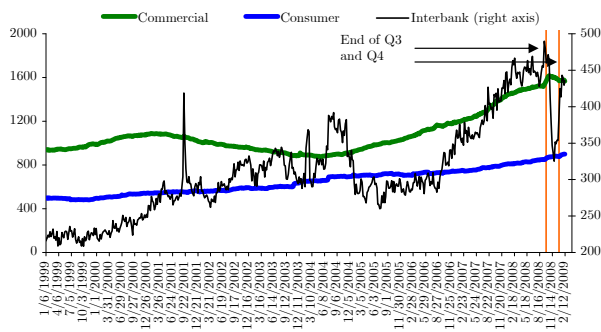
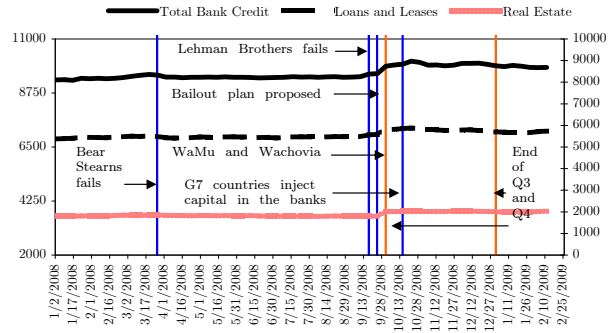
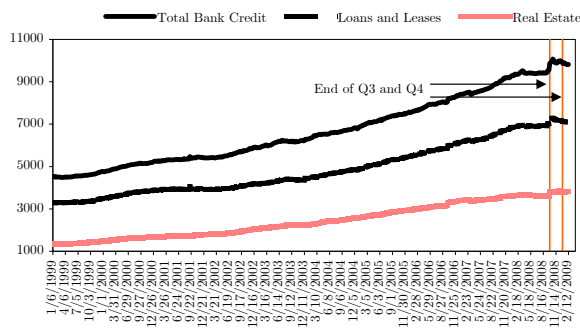


Figure 2: Different types of loans as a share of Total Loans and Leases



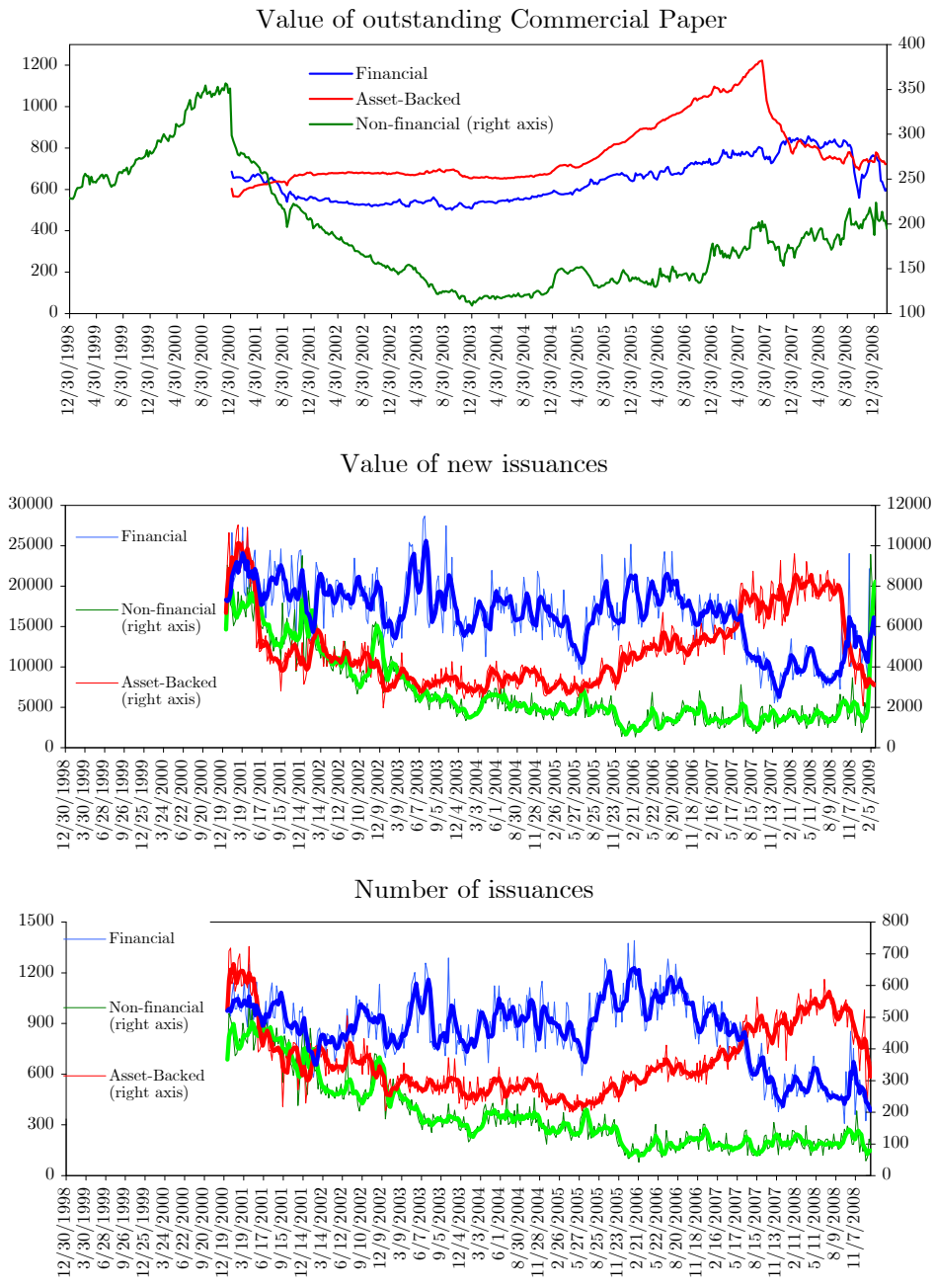
Source: H8 data, Board of Governors of the Federal Reserve System
<http://www.federalreserve.gov/releases/h8/data.htm>.

Figure 3: Total Bank Credit; Loans and Leases; Commercial, Individual, and Consumer loans; Cash Assets (including deposits to the Federal Reserve 1999-2008), H8 weekly data



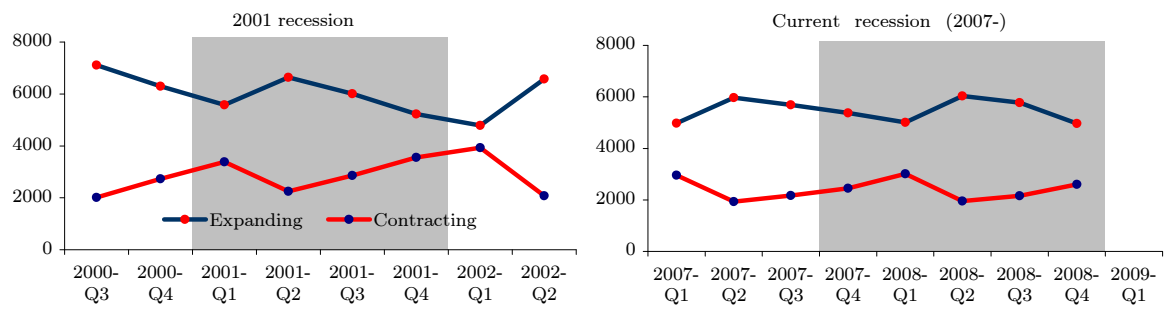
Source: H8 data, Board of Governors of the Federal Reserve System
<http://www.federalreserve.gov/releases/h8/data.htm>.

Figure 4: Outstanding commercial paper, 1999-2008



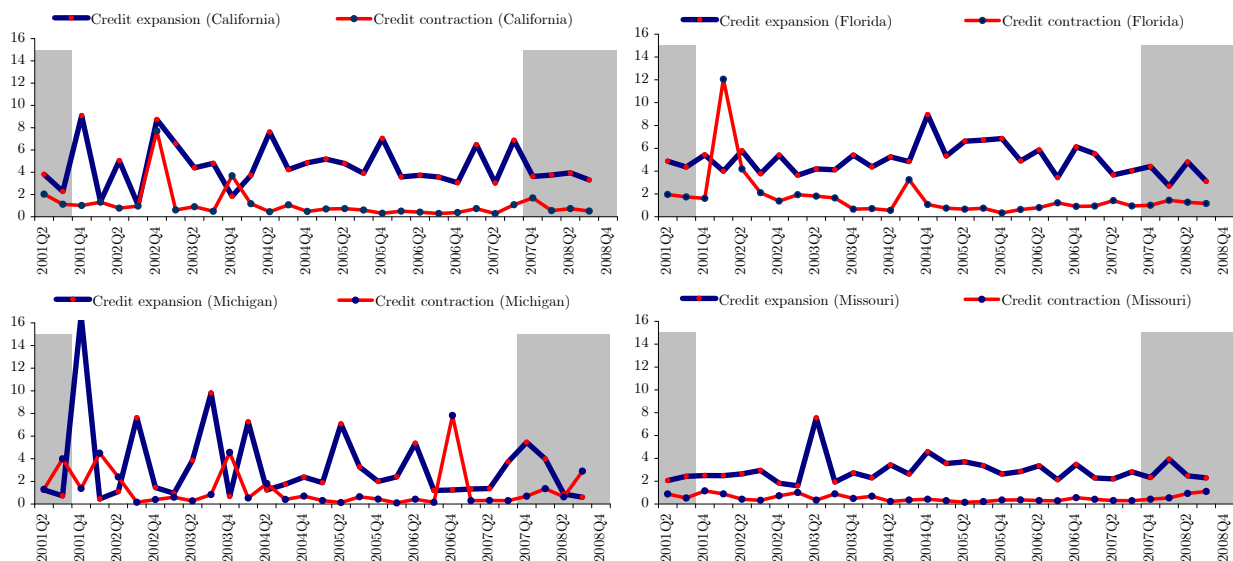
Source: Haver Analytics.

Figure 5: Number of banks expanding and contracting loans over two recessions



Source: Authors' calculations based on Call Report data.

Figure 6: Gross Credit Flows for Four States (2000:Q1-2008:Q2)



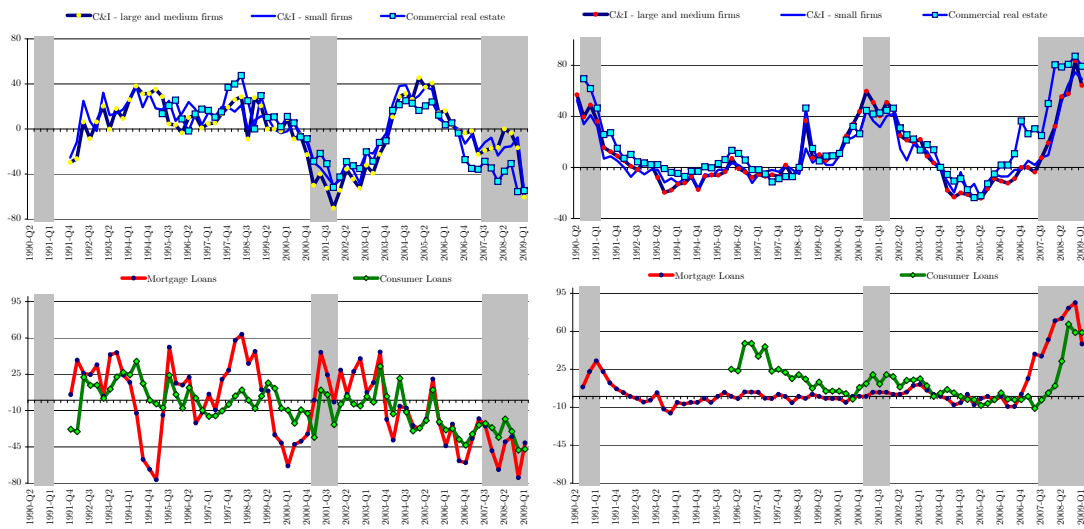
Source: Authors' calculations based on Call Report data. State-level differences.

Total loans for banks incorporated in California, Florida, Michigan, and Missouri. California and Florida were chosen for the state graphs as they experienced some of the steepest drops in real estate prices and an attendant sharp rise in defaults and foreclosures. California and Florida also had two of the largest declines in state GDP between 2006 and 2007 (BEA, 2008).

Michigan and Missouri represent states with a relatively large industrial and manufacturing base and were in the lowest two quintiles of states ranked by changes in gross state product between 2006 and 2007. The major caveat about state-level flows is that we can observe banks only on a consolidated basis, and not on the basis of the actual state where the affiliate banks that may be extending the loans are located.

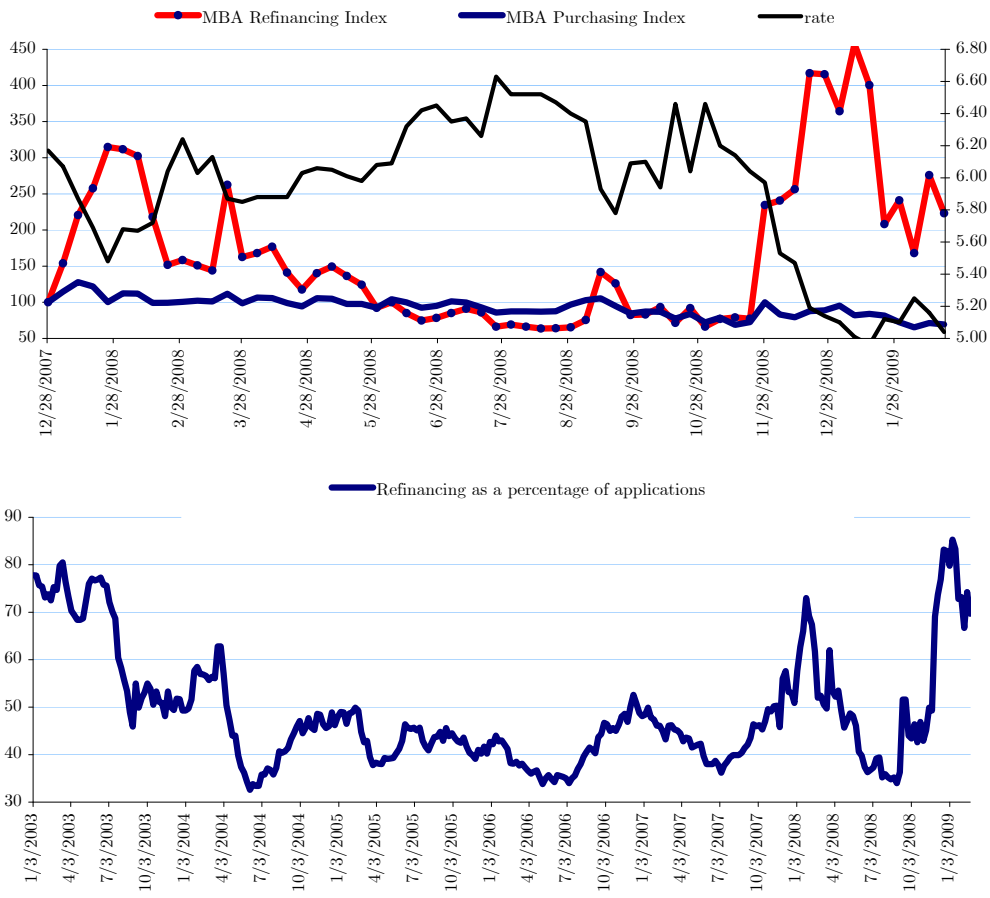
The credit reallocation we observe at the aggregate level could be the result of regional shocks or be explained by heterogeneous trends in credit across states. To address this issue, we look at idiosyncratic gross flows in individual states. We find that average state reallocation is 5.2 percent (looking at \widehat{SUM}), compared with an aggregate reallocation of 5.7 percent. However, we found 10 states had average growth rates that were more than 1 percent different from the aggregate trend, suggesting that while regional shocks are not the main force driving the reallocation of credit, regional trends have become more pronounced. However, there is no clear pattern among the states with excess growth rates as they come from all regions. Dell'Ariccia and Garibaldi (2005) similarly find that only 6 of the 50 states had average growth rates that differed from the aggregate trend by more than 1 percent and that average state reallocation was 4.2 percent, which is identical to their aggregate reallocation.

Figure 7: Net Percentage of Domestic Respondents Reporting Stronger Demand for Loans (left graphs) and Tightening Standards for Loans (right graphs), by Type of Applicant



Source: Senior Loan Officer Opinion Survey on Bank Lending Practices Chart Data;
<http://www.federalreserve.gov/boarddocs/snloansurvey/>.

Figure 8: Purchase vs. Refinance Applications and Refinancing as a Percentage of All Applications 2008, weekly data



Source: Mortgage Bankers Association through Haver Analytics.

References

BEA (2008): “State Economic Growth Slowed in 2007,” Discussion Paper BEA 08-24, Bureau of Economic Analysis, News Release.

Dell’Ariccia, Giovanni, and Pietro Garibaldi (2005): “Gross Credit Flows,” *Review of Economic Studies*, 72(3), 665–685.