Mortgage Applicants Turn to Credit Unions after the Crisis

By Yang Liu and Rajdeep Sengupta

The origins of the recent financial crisis have often been traced to the excesses in the U.S. mortgage market. Most accounts of the crisis tend to focus on a significant decline in underwriting standards for mortgages since 2000. After the crisis, the pendulum appears to have swung in the other direction. Anecdotal evidence suggests that borrowers are finding it difficult to obtain housing loans. Some observers have remarked that this difficulty may be one of the causes of the slump in the U.S. market for housing.

Using a data set of loan applications and originations, we analyzed these trends for the Federal Reserve's Eighth District, based in St. Louis.[1] Our data came from the Home Mortgage Disclosure Act (HMDA) files for 2004, 2009 and 2010.[2] The HMDA data for 2004 were used as an indicator of the precrisis mortgage market conditions, whereas HMDA data for 2009-2010 were used to indicate postcrisis mortgage conditions. We restricted our observations to first-lien, one- to four-family home mortgage loans.

As expected, the data show that the financial crisis adversely affected the demand for mortgage loans in the District. Figure 1 displays a panel of scatter plots showing pre- and postcrisis mortgage applications in each county of the District. The horizontal axis of each plot measures the level of 2004 mortgage loan applications, while the vertical axis measures the annual average of 2009-2010 mortgage loan applications. Each dot in the chart represents one of the 339 counties. The plot also shows the 45-degree line where the level of 2004 applications equals the annual average of 2009-2010 applications. Simply put, a dot below the 45 degree line indicates that postcrisis applications for that county were fewer than precrisis applications; a dot above indicates the opposite.

For the District, there were 290,091 fewer mortgage applications annually during 2009-2010 than in 2004 (a reduction of 33.3 percent). Figure 1A shows that 327 out of the 339 counties in the District were located below the 45-degree line—a widespread drop in mortgage applications across the District.

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The drop was greater for new purchases (Figure 1B) when compared with refinances (Figure 1C). Annual applications for purchases fell by 47.3 percent (139,707 applications) after the crisis; 319 counties experienced a decline in purchase applications. In contrast, applications for refinances fell by 25.3 percent (138,634 applications); 307 counties experienced a decline in refinance applications. Clearly, the drop in numbers was roughly the same for both purchases and refinances, but purchases constituted a smaller proportion of applications near the peak of the boom in 2004.

Interestingly, HMDA data also allowed us to sort the applications by the agency that supervises each lending institution to which the application is made. Since different agencies supervise different types of lending institutions, we could use this variable to examine the differences in pre- and postcrisis applications by lending institutions. We sorted loan data by three different types of financial institutions: banks and thrifts, credit unions and "HUD-supervised mortgagees." This last category denotes loans made by institutions that are not supervised by any of the major agencies.[3]

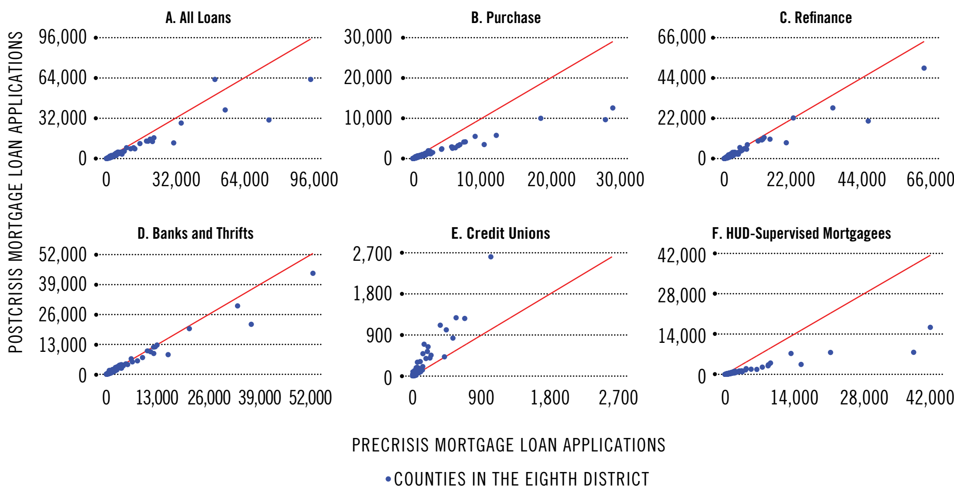
Banks and thrifts in the District experienced a moderate decrease in annual mortgage applications of 14 percent (or 71,738 applications) after the crisis (Figure 1D). Consumers filed fewer mortgage application loans to banks and thrifts in 252 counties. HUD-supervised mortgagees suffered the largest loss in mortgage loan applications on an annual basis (Figure 1F). They received 229,219 fewer loan applications, or a decline of 65.5 percent. In all but one of the District's counties, consumers filed fewer mortgage loan applications to HUD-supervised mortgagees. It is important to point out that the reduction of 229,219 applications in this sector accounted for 79 percent of the annual loan application decline in the District.

In contrast, credit unions enjoyed a surprising boom in home mortgage applications (Figure 1E). On an annual basis, mortgage applications rose by 10,813—an increase of 122 percent. Of the 275 counties in the District that recorded loan applications filed with credit unions, 222 counties recorded an increase in applications. Furthermore, annual applications increased by more than 100 percent in 123 District counties.

Although further research is needed to account for this rapid and anomalous increase, some anecdotal evidence may explain this rapid growth in the popularity of credit unions. First, there has been

FIGURE 1

Mortgage Loan Applications in the Eighth District Pre- and Postcrisis

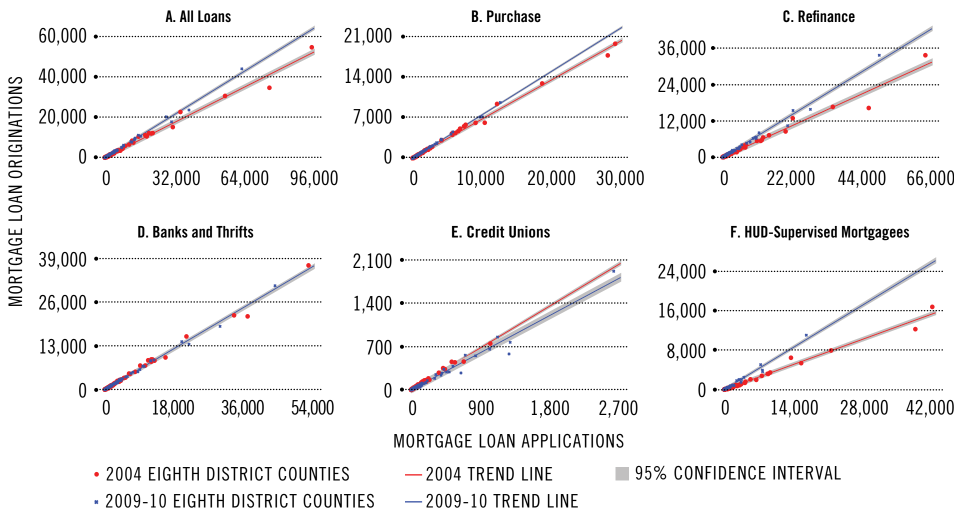


In Figure 1, the horizontal axis of each panel shows the level of 2004 mortgage loan applications, while the vertical axis shows the annual average of 2009-2010 mortgage loan applications. Each dot in the chart represents one of the 339 counties in the District. The plot also shows the 45-degree line where the level of 2004 applications equals the annual average of 2009-2010 applications. Simply put, a dot below the 45-degree line indicates that postcrisis applications for that county were fewer than precrisis applications; a dot above indicates the opposite.

Figure 2 displays a panel of scatter plots showing pre- and postcrisis mortgage origination vis-à-vis applications for each county of the District. The horizontal axis shows the number of applications in the county, while the vertical axis measures the number of originations. The dots in red show the 2004 levels for each county, while the blue dots show the annual average for 2009-2010 in the same counties. The red and blue lines are the corresponding lines of fit for each period. A higher line indicates a higher origination rate for a given level of applications.[10]

FIGURE 2

Mortgage Loan Applications vs. Originations in the Eighth District



record growth in the membership of credit unions—much of this has been attributed to consumer disillusionment with big banks.[4] Moreover, a large share of the growth in mortgage business is concentrated among the largest credit unions—which typically have lower limits on membership.[5] Second, at least two of these large credit unions have reportedly been offering members mortgages without requiring any down payment or mortgage insurance.[6]

To find out how loan-approval patterns in 2009-2010 differed from those in 2004, we examined the mortgage loan origination rate during the two periods. Figure 2 displays a panel of scatter plots showing

ENDNOTES

1 The Eighth Federal Reserve District includes all of Arkansas and portions of Illinois, Indiana, Kentucky, Mississippi, Missouri and Tennessee.
2 In what follows, we use the annual average for the 2009-2010 HMDA data. However, the choice of years for pre- and postcrisis indicators is ad hoc.
3 The major supervisory agencies include the Federal Reserve System, Federal Deposit Insurance Corp., Office of the Comptroller of the Currency, Office of Thrift Supervision and National Credit Union Administration.
4 See Prevost.
5 Credit unions are nonprofit depository institutions that are democratically controlled by their members. Membership in a credit union is usually limited by law and is organized around a common bond or "field of membership."
6 See Morrison.
7 The term "origination" here implies the actual disbursement of funds upon approval of the mortgage application. All originations require approval of the mortgage application. However, not all approved applications lead to originations since the borrower can still reject the terms of the loan.
8 A "line of fit" (shown in Figure 2) is a line that is drawn through the data on a scatter plot to describe the trend of the data. This is different from the 45-degree line in Figure 1.
9 A word of caution is in order here: While the plots include confidence intervals for the lines of fit, stricter criteria may not reveal statistically significant differences between the lines of fit in some of the plots. Nevertheless, this remains a simple and useful way to distinguish between pre- and postcrisis origination rates.
10 The majority of the dots and crosses overlap in the lower left of each figure.

REFERENCES

Prevost, Lisa. "The Credit Union Alternative," *The New York Times,* Dec. 13, 2012. See www.nytimes.com/2012/12/16/realestate/mortgages-credit-unions-grow-in-popularity.html?_r=0.

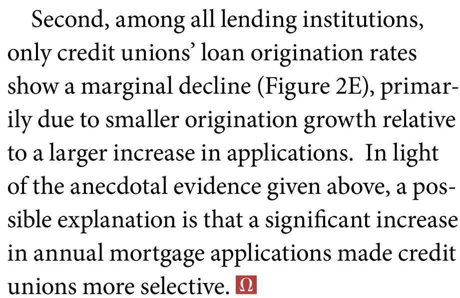
Morrison, David. "Two Credit Unions Offering No Money Down Mortgages," *Credit Union Times*, March 14, 2013. See http://www.cutimes.com/2013/03/14/two-credit-unions-offering-no-money-down-mortgages.

pre- and postcrisis mortgage origination vis-à-vis applications for each county of the District. The horizontal axis of each plot shows the number of applications in the county, while the vertical axis measures the number of originations.[7] The dots in red show the 2004 levels for each county, while the blue dots show the annual average for 2009-2010 in the same counties.

We plotted the corresponding "line of fit" for each period.[8] A higher line indicates a higher origination rate for a given level of applications.[9] At first glance, therefore, it is surprising that the postcrisis line of fit in almost all plots of Figure 2 appears higher than the precrisis trend lines. A possible explanation of this feature of the data is that although there are fewer applications postcrisis, their quality is significantly better. This may be partly due to the fact that real-estate salesmen are only willing to do business with preapproved buyers.

Figure 2 reveals two important patterns. First, the differences in origination rates for refinances (Figure 2C) appear to be greater than those for purchases (Figure 2B). Refinancing after a sharp decline in home prices can be tricky because existing homeowners would likely have to cover for the shortfall in home equity if they wanted to take advantage of lower mortgage rates. While this reduces the set of applicants, it can also ensure an improvement in the applicant pool, thereby resulting in higher origination rates.

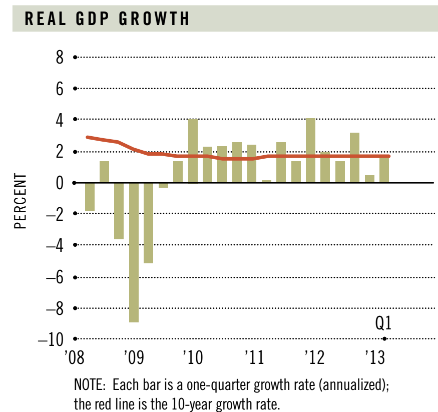
Second, among all lending institutions, only credit unions' loan origination rates show a marginal decline (Figure 2E), primarily due to smaller origination growth relative to a larger increase in applications. In light of the anecdotal evidence given above, a possible explanation is that a significant increase in annual mortgage applications made credit unions more selective. Ω



Rajdeep Sengupta is an economist formerly with the Federal Reserve Bank of St. Louis. Yang Liu is a senior research associate at the Bank.

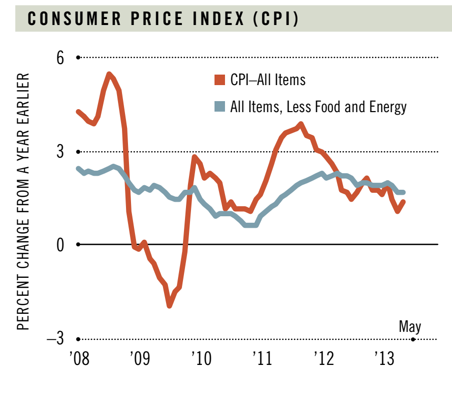
Eleven more charts are available on the web version of this issue. Among the areas they cover are agriculture, commercial banking, housing permits, income and jobs. Much of the data are specific to the Eighth District. To see these charts, go to www.stlouisfed.org/economyataglance.

REAL GDP GROWTH

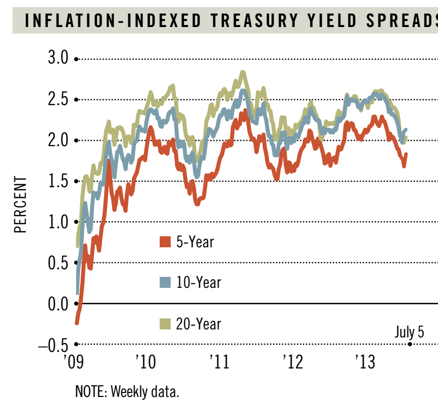


NOTE: Each bar is a one-quarter growth rate (annualized); the red line is the 10-year growth rate.

CONSUMER PRICE INDEX (CPI)

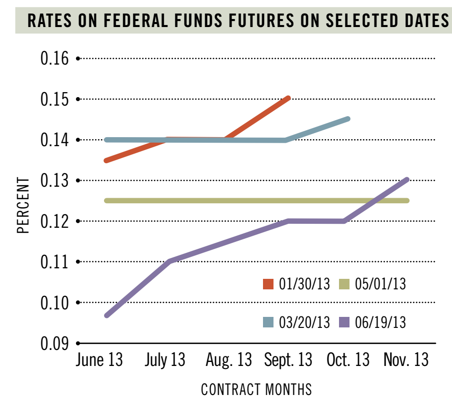


INFLATION-INDEXED TREASURY YIELD SPREADS



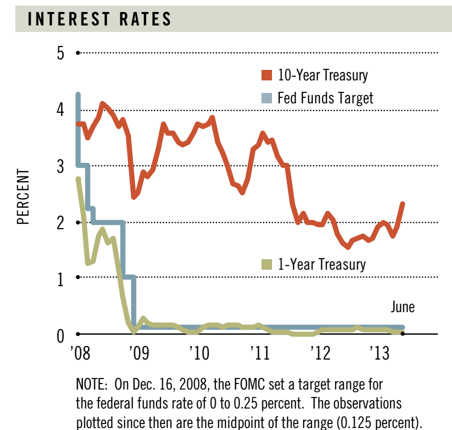
NOTE: Weekly data.

RATES ON FEDERAL FUNDS FUTURES ON SELECTED DATES



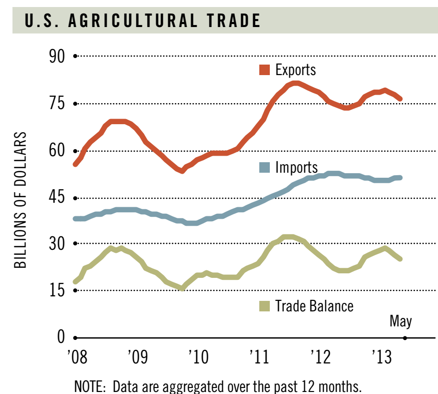
CIVILIAN UNEMPLOYMENT RATE

INTEREST RATES



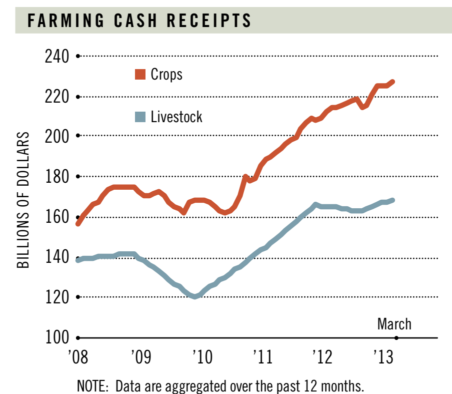
NOTE: On Dec. 16, 2008, the FOMC set a target range for the federal funds rate of 0 to 0.25 percent. The observations plotted since then are the midpoint of the range (0.125 percent).

U.S. AGRICULTURAL TRADE



NOTE: Data are aggregated over the past 12 months.

FARMING CASH RECEIPTS



NOTE: Data are aggregated over the past 12 months.