
Since the housing bubble burst, a large body of research has studied homeowners’ decisions to default on their mortgages. Contrary to theory, most empirical work has found that unemployment is a weak predictor of default. Using new data from the 2009 and 2011 waves of the University of Michigan’s Panel Study of Income Dynamics, however, researchers at the Boston Fed find that households hit by job loss are significantly more likely to default. In the propensity to default, an unemployed household head is equivalent to a 56 percent increase in the loan-to-value (LTV) ratio, and an unemployed spouse is equivalent to a 43 percent increase.

The researchers then compare their data to the “double trigger” model, which holds that negative equity combined with a household shock, such as job loss or divorce, leads to default. They divide the households in their data into those that “can pay” and those that “can’t pay” their mortgages. They find that about 81 percent of households the model predicts would default — those with negative equity that can’t pay — did continue paying their mortgage, perhaps by liquidating assets such as retirement funds. The researchers also find few instances of “strategic default”: Only 1 percent of “can pay” borrowers with negative equity in the sample opted to default.

One implication of their findings is that lenders might be less willing to offer distressed homeowners payment or principal reductions, since lenders’ willingness to offer loan modifications increases with the probability of default.


Recent work by Ronel Elul and Sebastian Tilson of the Philadelphia Fed also examines the mortgage market. They study occupancy fraud, which occurs when borrowers claim they intend to live in a home, not rent it out or resell it quickly. (Banks typically require higher down payments and charge higher interest rates to declared investors.)

Previous research on occupancy fraud in the mortgage market has focused on privately securitized loans and relied on zip-code changes to identify fraudulent investors. Elul and Tilson use a dataset that matches mortgage data from McDash Analytics with Equifax credit bureau data for mortgages originated between 2005 and 2007. This allows them to study loans guaranteed by Fannie Mac, Freddie Mac, and the Federal Housing Administration (FHA) in addition to privately securitized loans, and to identify fraudulent investors who live in the same zip code where they purchased their investment property. They flag as fraudulent those borrowers who do not change their address around the time the mortgage was initiated and who have more than one first-lien mortgage.

Overall, 6.1 percent of the loans in the sample were taken out by fraudulent investors. The share was much higher — 39.2 percent — in the “bubble states” of Arizona, California, Florida, and Nevada. Fraudulent investors were nearly twice as likely to default as honest owner-occupants or declared investors. Those defaults were likely to be strategic: Elul and Tilson find that among all seriously delinquent borrowers, fraudulent investors had much more liquidity as measured by bank card utilization than owner occupants and were more likely to be current on their bank card payments. The authors conclude that fraudulent pledges to live in mortgaged homes played an important role in the housing boom and bust.


The “college-educated barista” was a popular stereotype after the Great Recession. In a recent paper, however, economists at the New York Fed show that while many college graduates were underemployed — that is, working in jobs that do not require a college degree — most were not working in low-skill service jobs.

Underemployment is not a new phenomenon. Since 1990, about one-third of all college graduates have been underemployed. Following the Great Recession, the underemployment rate for recent college graduates rose to more than 46 percent, from a low of about 37 percent in the early 2000s. Abel and Dietz find that between 2009 and 2013, about 40 percent of underemployed workers were in relatively high-paying jobs, making more than $50,000 per year. Still, nearly one-fifth of underemployed recent college graduates (around 9 percent of all recent graduates) were employed in low-skill service jobs, making around minimum wage.

Some college graduates are more prone to underemployment than others. Graduates who majored in a field that provides occupation-specific training, such as nursing, or emphasizes quantitative skills, such as engineering or accounting, are much less likely to be underemployed. For many workers, underemployment is a temporary phase, as they transition to college-level jobs by their late 20s.