

We discuss below the main segments of the U.S. residential mortgage market and the associated lenders active in these markets.

II.A.1 Banks, Shadow Banks, and Loan Origination Business Models

The two main groups of mortgage originators in the U.S. are banks and shadow banks (nonbank lenders). Buchak et al. (2018) document a decline in traditional bank originations and the growth of shadow banks, with the shadow bank market share growing from less than 30% to more than 50% by 2015. These originators differ on at least three dimensions. First, banks (traditional banks and credit unions) partially fund their lending through insured deposits. Shadow banks do not take deposits. Second, they differ in terms of their business models. There are two business models a loan originator can follow: portfolio lending or originate-to-distribute. Portfolio lending implies the originator retains the loan on their balance sheet. Conversely, in the originate-to-distribute model, originators can sell the loan as well as service rights. Banks engage in both models, with portfolio loans comprising about 40% of their originations during our sample period. Shadow banks, on the other hand, almost exclusively originate to distribute (see Buchak et al. (2018)). The third difference is in regulation. Banks face a substantially higher regulatory burden than shadow banks, including capital requirements; enhanced supervision from a wide set of regulators, such as the FDIC, FED, OCC, and state regulators; as well as extensive compliance and rules.

II.A.2 Mortgage Products

We focus on two main residential mortgage market segments in the U.S.: the conforming loan market and the jumbo loan market. Together these two segments account for more than 80% of all U.S. residential mortgages originated during our sample period (based on the Home Mortgage Disclosure Act). The largest residential market segment in the U.S. consists of conforming loans. These are usually extended to borrowers with relatively high credit scores, conservative loan-to-value (LTV) ratios (e.g., up to 80%), and fully documented incomes and assets. Conforming mortgages must be below the conforming loan limit, which grew from \$417,000 in 2006 to \$453,100 in 2018 for a one-unit, single-family dwelling in a low-cost area, and from \$625,000 to \$679,650 for the same unit type in a high-cost area. In addition, the American Recovery and Reinvestment Act of 2009 temporarily increased these limits in certain high-cost areas to up to \$729,500. Mortgages that exceed the conforming limit are termed “jumbo.”

Conforming loans are much easier to sell than jumbo loans, because conforming loans are eligible for securitization with the participation of government-sponsored enterprises (GSEs), while jumbo loans are not. GSEs allow for substantially easier securitization of conforming mortgages. For example, Fannie Mae and Freddie Mac, the two most prominent GSEs, purchase conforming mortgages and package them into mortgage-backed securities (MBS), insuring default risk. These MBS are particularly attractive to investors interested in relatively safe assets. In 2017, conforming loans in mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac comprised about 50% of the outstanding residential loans (Source: Securities Industry and Financial Markets Association Data). Because jumbo mortgages are ineligible for GSE financing, they are issued without government