

banks to engage in jumbo loan origination. In other words, shadow banks now compete with traditional banks also in the jumbo lending market.

To understand the effect of introducing jumbo securitization markets, we assume that jumbo securitization would be 25 bps more expensive than conforming securitization, since it is not supported by GSE. The results are shown in Appendix Table A2. The introduction of a jumbo securitization market would change the equilibrium even at the baseline 6% capital requirement, with a large market share migration towards shadow banks. Jumbo lending would increase by \$46 billion, which would be partially offset by a \$32 billion decrease in conforming lending, as some conforming borrowers substitute towards jumbo loans. Shadow banks' origination would increase by \$42 billion, \$28 billion of which would come at the expense of traditional banks. Shadow banks market share of jumbo loan originations would jump 14%. This market increases consumer welfare by \$92 billion, with \$54 billion of these gains falling to the highest-income markets, while only \$5 billion of these gains accrue to the lowest-income markets.

After the introduction of jumbo securitization markets, changes to capital requirements have muted effects on overall lending volumes and welfare. In other words, the tradeoff between bank stability and mortgage origination becomes even less severe than our baseline model would suggest. This is because the bank balance sheet retention margin and the shadow bank migration margin now apply to jumbo loans in addition to conforming loans.

Increasing capital requirements to 9% decreases lending volumes by only \$5 billion, in comparison to the decrease of \$54 billion when there are no jumbo securitization markets. Without jumbo securitization markets, increasing capital requirements increases jumbo origination costs because these mortgages must be retained on balance sheet. With jumbo securitization, in contrast, as higher capital requirements increase balance sheet lending costs, banks can adjust on the retention margin. Figure A4 illustrates these dynamics. Panel A shows that while origination volume falls slightly as capital requirements are raised, the effects of higher capital requirements are much smaller. Panel B shows that there is a large margin of adjustment along the share of jumbo mortgages that are securitized. With the baseline 6% capital requirement, roughly 50% of jumbo originations are securitized. With a 9% capital requirement, nearly all jumbo loans are financed through securitization. Additionally, shadow banks can now originate jumbo mortgages, and so the shadow bank migration margin functions in all segments of the market.

These extensions suggest that the importance of the shadow bank migration margin and the balance sheet retention margin play an important role when it comes to policy. The existence of securitization markets—conforming, jumbo, or both—gives lenders considerable flexibility in mortgage financing. Analyses that overlook this and focus on, for example, only bank balance sheet lending, miss significant economic forces and lead to misleading policy analyses.

Effects Due to House Price Changes

In our counterfactuals, we abstract away from general equilibrium effects on house prices due to tractability. It is possible that by changing access to credit, house prices will endogenously change (Palmer 2015). While important to consider, we argue that the feedback effects onto house prices are