

mortgage. The higher the disutility from taking on a smaller than ideal mortgage, the less bunching we observe. Having estimated demand, we estimate supply-side parameters using intermediary price setting and financing decisions.

Our model captures the salient features of the data, such as the market shares of banks and shadow banks, as well as pricing of mortgages. The model estimates match the extent of bunching at the conforming discontinuity across markets and price elasticity estimates from the literature (see DeFusco and Paciorek (2017)). As out-of-sample validation of our model, we study model performance following policy changes in conforming loan limits. Our model predicts changes that are quantitatively very close to the realized changes. Moreover, we find that consumers are very price elastic, with lower price elasticity in the jumbo market. Since this market faces less competition from shadow banks, it is a source of rents for banks.

On the supply side, our estimates suggest that financing jumbo mortgages is more expensive than financing conforming mortgages, even when the latter are retained on the balance sheet. The difference declines with bank capitalization and declines to less than 5 basis points (bps) for very well-capitalized banks. Moreover, post-2012 increases in the regulatory burden of traditional banks substantially constrained their mortgage origination. Noncapital requirement-related regulatory constraints, such as risk of enforcement actions and lawsuits, provided a large advantage to shadow banks and contributed more to shadow bank migration than the increased capital requirements.

Next, we use our estimated model to consider three policy relevant counterfactuals: changing capital requirements (Acharya et al. 2011; Benetton 2019); unconventional monetary policy such as QE or GSE interventions (see Di Maggio et al. (2019) and Wong (2018)); and changing the access to a secondary loan market through the GSE-conforming limit. These policies lead to changes in the quantity, pricing, and distribution of mortgage credit, as well as where the credit is held in the intermediation sector.

One overarching insight from the counterfactuals is that adjustments on the shadow bank migration margin and the balance sheet retention margin are both critical to understanding quantitative consequences of policies. For example, the tradeoff between bank stability and lending is much less severe than anticipated by models that feature only on-balance-sheet lending. Our model predicts that increasing bank capital requirements from current levels to 9% reduces bank *balance sheet* lending by two thirds, but *overall* mortgage lending declines by only 2.5%. The critical margin of adjustment in this case is the balance sheet retention margin: while balance sheet lending declines by two thirds, *total bank* lending declines by only 9.5% as banks move their lending from retention to selling. Accounting for migration of lending to shadow banks fills 7% of this gap. Both margins are equally important in quantitatively shaping responses to other policies. A model of financial intermediation must therefore account for both of these margins when evaluating policies.

The second general insight is that the overall adjustment depends on whether policy interventions target traditional banks or secondary markets. When tighter regulation only targets traditional banks (e.g., increased capital requirements), solely focusing on bank balance sheets overstates the adverse effect of such policies on overall lending volume. The adjustments on the shadow bank migration