

corresponds to roughly a 4.35% marginal cost. This implies a negative conforming-jumbo marginal cost spread, which is roughly in line with patterns in Figure 1C.

Finally, the model suggests that originating refinancing mortgages is less costly than originating mortgages for purchase by approximately 5–10 basis points. In refinancing, lenders benefit from many on-the-ground activities having already taken place at the time of purchase, such as a title check, structural examination, and negotiations between buyer and seller, which reduces costs.

IV.C.3 Bank Regulatory Burden and Fintech Quality

Table 8 shows two primary reasons why banks have been losing market share during the period from 2010 to 2015: an increase in the regulatory burden from 2012 onwards and the entrance of new fintech competitors. Part of the reason why banks have lost market share during the period is an increase in capital requirements, which has increased their costs of funding, as we discuss above. On the other hand, the period following the crisis has been profitable, increasing banks' capitalization and undoing some of the capital requirement increases. Despite that, banks have lost substantial market share in the conforming market. Table 8 explains these trends.

The regulatory burden measures the noncapital requirement-related regulatory constraints faced by the banking sector relative to shadow banks, such as risk of enforcement actions and lawsuits, which constrain bank origination. The estimates show that the banking sector regulatory burden even declined a bit, but then started increasing from 2012 onwards. This is the period of implementation of the Dodd-Frank Act, the establishment of the Consumer Financial Protection Bureau, and increased mortgage lawsuit activity targeted at traditional banks. These results are consistent with those of Buchak et al. (2018), who estimate the regulatory burden in a simpler model, but on a longer sample, and show reduced-form evidence on the different aspects of the regulatory burden such as tougher regulatory enforcement and lawsuits leveled against banks. The substantial changes in the regulatory burden emphasize that the singular focus on capital requirements misses a large degree of regulatory and enforcement changes in the banking sector following the crisis, which a model has to account for.

The second reason that banks have been losing market share over this period is the entrance of new fintech lenders. These fintech lenders entered on the promise of providing a better user experience, with a more consumer-convenient online interface. Table 8 suggests that it took fintech until 2013 to achieve that, and they were only successful in the market for mortgage refinancing. Our post-2013 results are consistent with consumer survey evidence, which consistently measure high consumer satisfaction associated with borrowing from Quicken Loans, the largest fintech lender.¹⁵ The model estimates suggest that fintech are at a disadvantage in the market for new originations, i.e., when the borrower is purchasing a house. These borrowers on average prefer non-fintech shadow banks over the whole sample, although by 2012 the disadvantage has decreased significantly. This result is consistent with the idea that the online origination is not well-suited to originating new mortgages, which require on-the-ground activities such as a structural examination (Stroebel 2016).

¹⁵ <https://www.jdpower.com/business/press-releases/2019-us-primary-mortgage-servicer-satisfaction-study> [Retrieved September 19, 2019].