

for purchase by Government-Sponsored Enterprises (GSEs). Jumbo mortgages, on the other hand, are not eligible for GSE support and—especially since the disappearance of the private securitization market after the financial crisis—are more difficult to securitize; the vast majority of jumbo loans are retained on the lenders' balance sheets. We exploit this difference to understand the role of banks' balance sheet capacity in shaping the migration of activity between banks and shadow banks.

We begin by documenting large swings in the share of balance-sheet intensive (jumbo) mortgage originations during this period. From 2007 to 2009 the share of jumbo originations declined precipitously relative to easy-to-sell (conforming) mortgages, from 29% to 10%, only to reverse back to 30% by 2016. These market swings coincided with a dramatic migration of mortgage origination activity to shadow banks (Buchak et al. 2018). We document that the migration was limited to the conforming sector, where shadow banks gained 25% of market share from 2008 to 2015. In balance-sheet intensive jumbo mortgages, shadow banks did not gain market share; traditional banks' share persisted well above 80% despite large declines in the quantity they lent.

We argue that this market segmentation arises because traditional banks and shadow banks differ in their ability to extend balance-sheet intensive (jumbo) and easy-to-sell (conforming) mortgages. Traditional banks' comparative advantage in the jumbo market arises from their ability to retain these loans on their balance sheets. To separate this explanation from alternatives, we exploit the sharp size discontinuity in the ability to securitize a mortgage. Any mortgage that exceeds the conforming loan limit becomes a jumbo mortgage and is much more difficult to securitize. This institutional feature is also a source of variation in our structural estimation.

Most alternative explanations for banks' comparative advantage in jumbo lending suggest that this advantage would increase continuously with mortgage size. For example, if richer borrowers prefer borrowing from banks, one would imagine that borrowers' demand for banking services would increase continuously with mortgage size, as one transitions from conforming to jumbo mortgages. Instead, we find a sharp 25 percentage point (pp) increase in banks' market share at the conforming limit. Moreover, balance sheet capacity is the likely cause of market segmentation, as opposed to other regulatory differences between banks and shadow banks. We compare better-capitalized banks with larger balance sheet capacity to less well-capitalized banks, which face the same regulation. The market share of well-capitalized banks jumps by about 10% at the conforming limit. These results are consistent with the view that the limited balance sheet capacity of shadow banks prevents migration of balance-sheet intensive activities to the shadow banking sector.

The behavior of mortgage prices is also consistent with our hypothesis. The relative price differential between jumbo mortgages and conforming mortgages (jumbo spread) experienced significant variation during our sample period. Periods during which jumbo origination quantity was low were periods of high jumbo spreads, and vice versa. Moreover, the jumbo spread decreased with the aggregate relative capitalization of jumbo versus confirming lenders. The contemporaneous decrease in quantity and increase in price suggests supply shocks (balance sheet capacity of jumbo lenders) contributed to these aggregate changes.