American Predatory Lending

Duke University | Bass Connections

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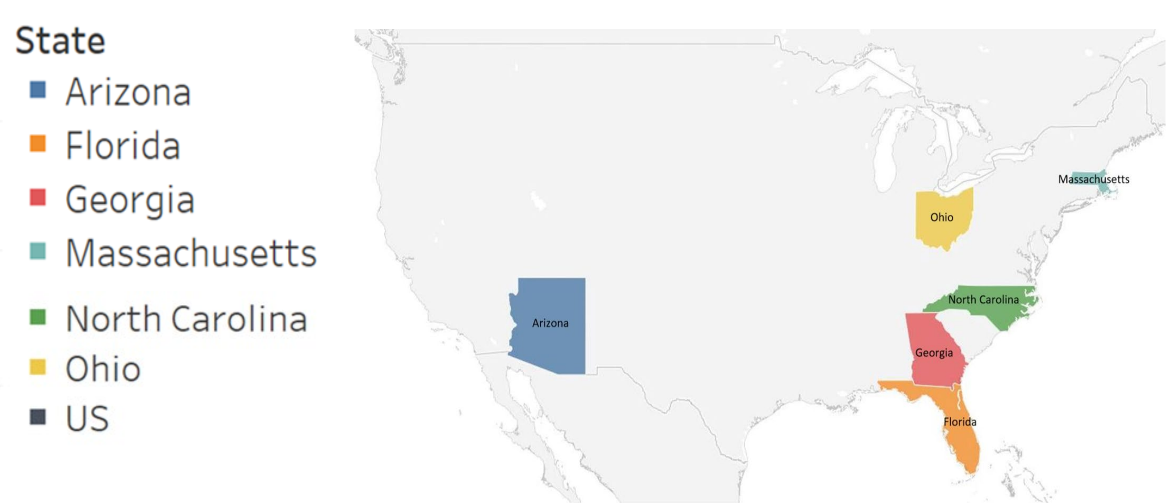
Data+

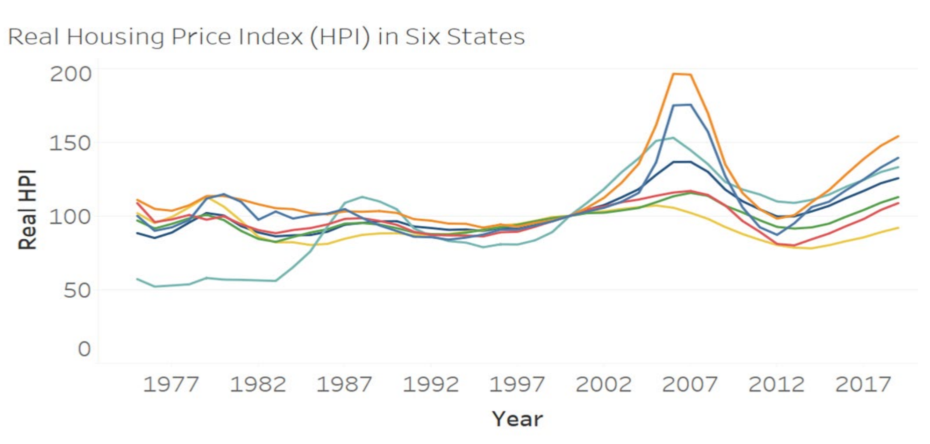
Abstract

This summer's 2020 American Predatory Lending team was tasked with extending work performed the previous summer that examined the mortgage market from 2000-2010 in North Carolina. Our goals this year were to expand the research into several new states, while also diving deeper into a county-level examination of North Carolina. Over the course of the summer, we compiled data to provide an in-depth overview of the mortgage markets in Arizona, Florida, Georgia, Massachusetts, and Ohio. For North Carolina, we specified a number of rural regions and urban counties to consider as separate entities with their own socioeconomic characteristics. For each of those regions and counties, we examined specific racial and income trends in the mortgage market.

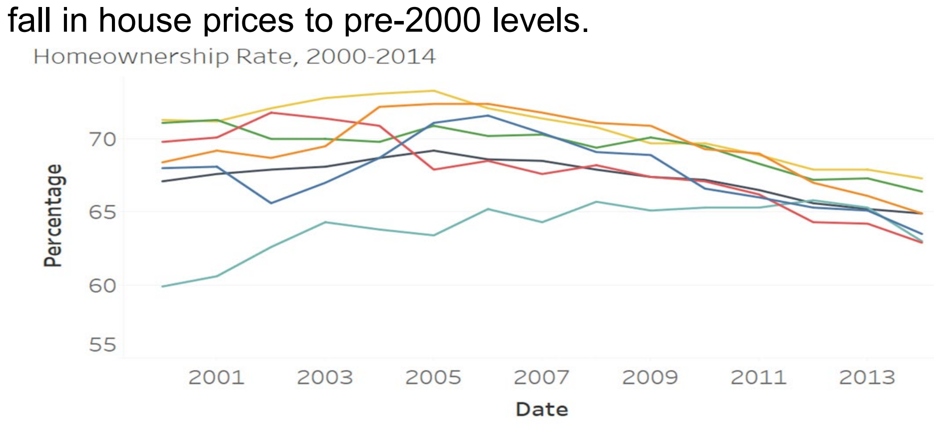


Note: This color code is used in all of the following plots.

Overview of Housing Market

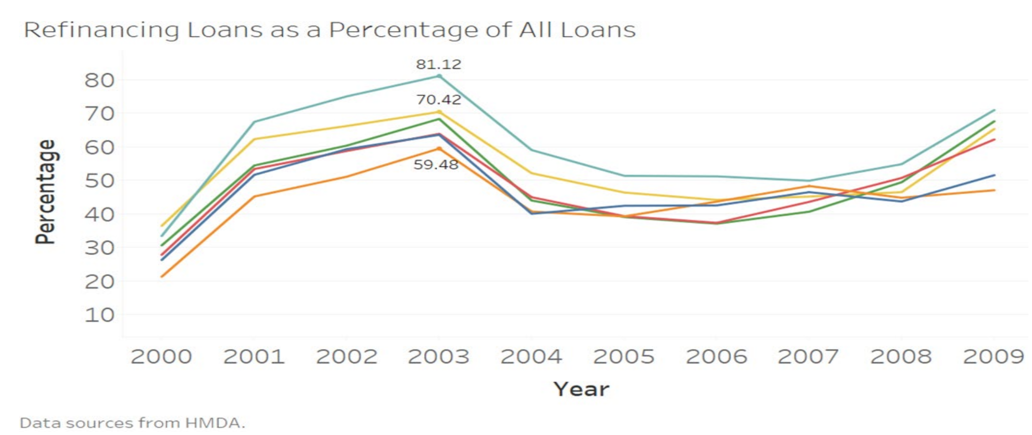


The FHFA House Price Index is an indicator of house price trends and measures changes in the average price for repeat sales or refinancing on the same single-family properties across the nation. The rising prices in the early part of the decade led to a growth in the mortgage markets, before lenders began minimizing their risks. As the crisis began in 2007, triggered in part by subprime and predatory lending, foreclosures increased leading to a dramatic fall in house prices to pre-2000 levels.



The homeownership rate grew overall from 2002 to 2005, where it peaked at around 70% across the country. It began falling in 2005, to ultimately reach a level of about 65% by the end of the decade.

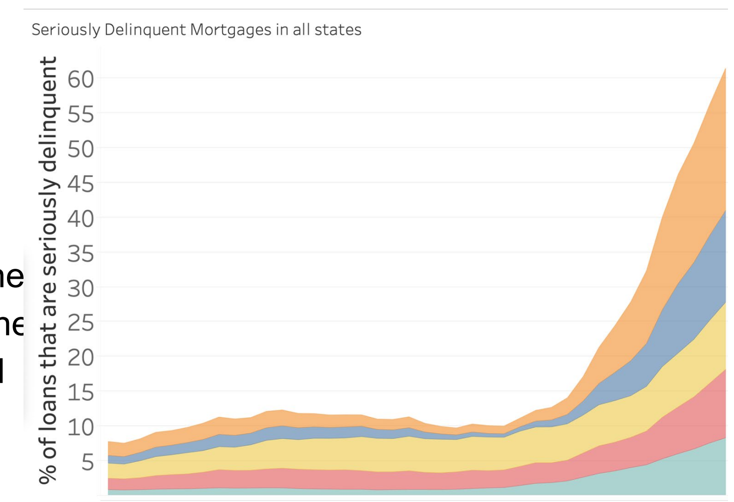
Overview of Mortgage Market



A refinancing loan is used to pay off an existing loan with updated conditions and terms. Refinancing practices often stripped equity out of the borrowers' properties, and it was often used in predatory lending. The share of refinancing loans peaked in 2003, fell in 2004, and remained stable until the financial crisis. It is likely that the increase in federal funds rate starting in May, 2004 lead to a cool down in mortgage market.

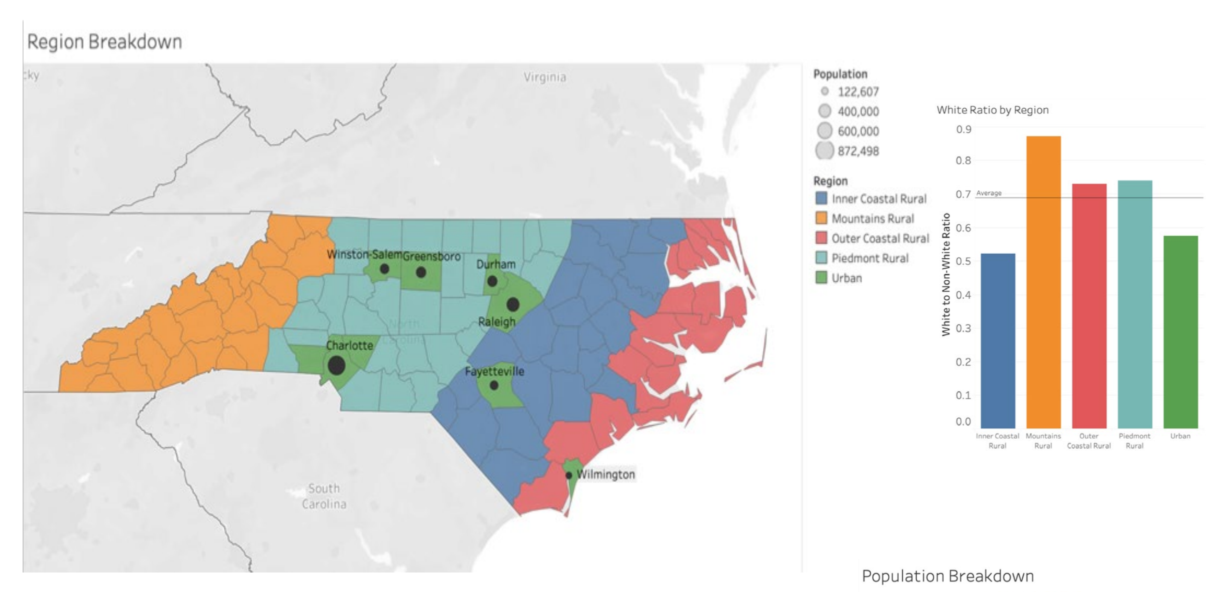
Delinquency Rates

A seriously delinquent loan is one in which a mortgage payment is 90 days or more past due. The combination of loose credit requirements in the early part of the decade and the 2007/2008 financial crisis lead to inflated home prices and a sharp rises in unemployment.

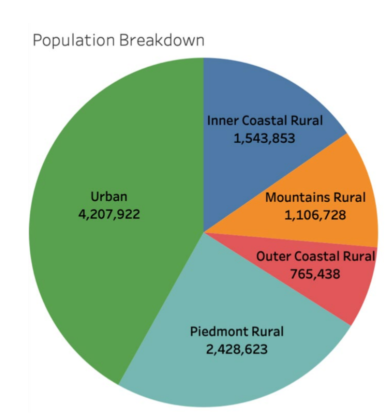


This means that homeowners could no longer afford their mortgages, which caused delinquency and foreclosure rates to skyrocket. Florida, which was the worst affected of the six states examined, saw its percentage of "seriously delinquent mortgages" increase from 18.42% from Q1 2000 to Q4 2009.

North Carolina Cultural Regions

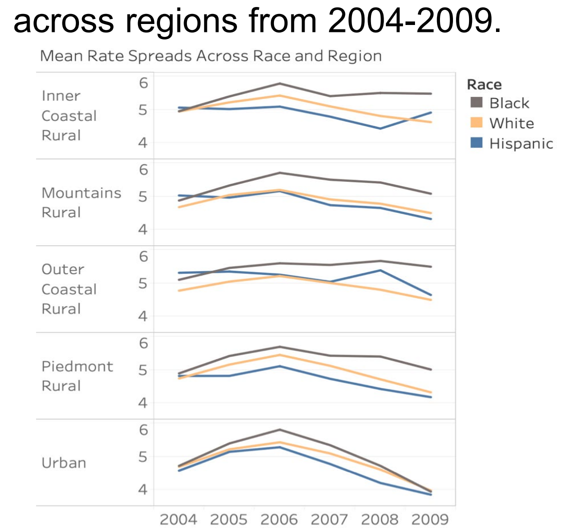


In order to take a deeper dive into North Carolina's predatory lending market, we divided the state into its main geographic and cultural regions. To separate the state's urban centers as their own unique grouping, we identified the counties where less than 20% of the population lives in rural areas.



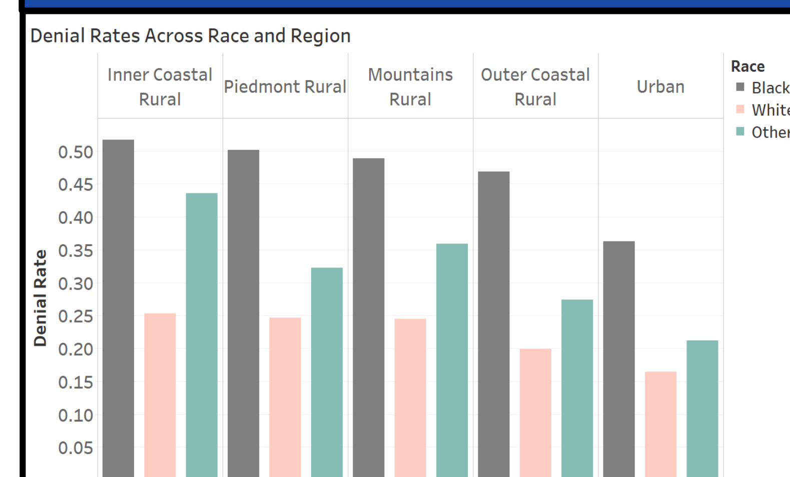
Rate Spread Analysis

A loan's rate spread is the difference between its APR (Annual Percentage Rate) and a survey-based estimate of current APRs on prime mortgage loans with comparable characteristics. In the absence of interest rate data, rate spread serves as a useful metric for comparing what different groups are paying for their mortgages. The chart on the left shows how Black borrowers received consistently higher rate spreads than White and Hispanic borrowers across regions from 2004-2009.



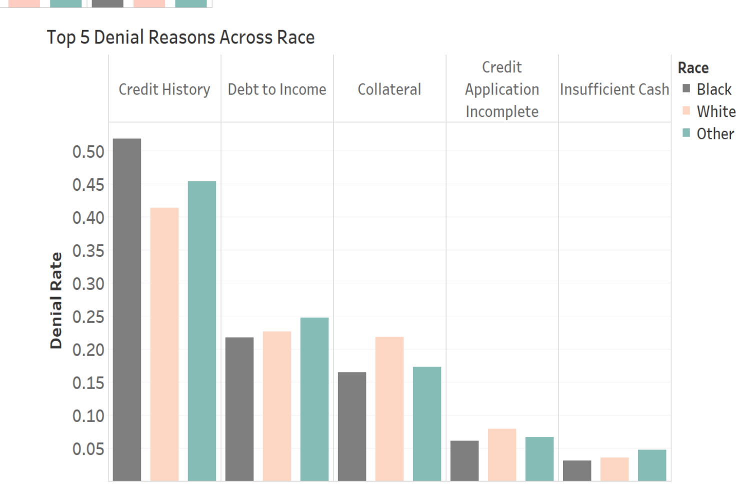
Even when controlling for income percentile, Black borrowers consistently received higher rate spreads than their White counterparts, as shown in the table below.

Denial Rates



The mortgage application denial rate is often used as a measure of credit accessibility, and the HMDA data (Home Mortgage Disclosure Act) allows a comparison of loan denial rates by race. These comparisons revealed that minorities were denied loans far more frequently than white applicants across all regions in the state.

According to HMDA's rule, a total of three denying reasons can be reported for each loan application, although only 58.4% of the denied loans actually provided a reason for denial. The plot on the right shows the top five denial reasons by race and region. Loan applications were denied largely due to weak credit history, a high degree of household indebtedness, or a lack of collateral.



Conclusion

Through our work this summer, we have provided a broad summary of the behavior of the mortgage markets in Arizona, Florida, Georgia, Massachusetts, and Ohio. Meanwhile, our regional examination of North Carolina revealed some concerning trends with regard to racial discrimination in the lending market there, and can act as a road map for a deeper examination of other states in the future.

Our work this summer will be furthered by a Bass Connections team during the upcoming academic year. We recommend that this team expand their analysis to consider more states around the country, while also performing a regional analysis of the states we considered this summer. To further explore the trends in North Carolina, we recommend conducting a regression analysis or applying other mathematical models to examine the relationship between variables such as income, race, loan amount, rate spreads, and denial rates, which could yield more concrete conclusions.