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Does mortgage deregulation increase foreclosures? Evidence from Cleveland ☆

Yilan Xu

Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, 309 Mumford Hall, 1301 W. Gregory Dr., Urbana, IL 61801, USA

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ABSTRACT

This paper examines how relaxing a local anti-predatory lending law for mortgages affects foreclosures. The empirical evidence is drawn from a quasi experiment in Cleveland, Ohio, where the State Supreme Court repealed an ordinance that imposed lending restrictions on home mortgages of high annual percentage rates (APRs). Empirical evidence shows that observable loan and borrower characteristics were not affected by the repeal, nor did the overall originations appear to increase; yet the APRs were 20% more likely to exceed the regulatory thresholds that were nullified. Moreover, the foreclosure rate increased by six percentage points to 20%.

1. Introduction

The soaring foreclosures leading to the Great Recession re-ignited a debate about the impact of regulating consumer mortgage markets. Several scholars and prominent policymakers argue that the under-regulated mortgage market has caused a large number of loan defaults and foreclosures. The United States Senator Elizabeth Warren (D-MA), for example, argues that non-transparent contract terms associated with product features such as teaser rates, prepayment penalties, balloon payments, and negative amortization have lured misinformed borrowers to take on loans inappropriate for their financial circumstances (Warren, 2007, 2008). However, former Federal Reserve Chairman Ben Bernanke argues that financial deregulation spurred mortgage product innovations that broadly benefited low-income households (Bernanke, 2009). Specifically, these innovative product features may better account for credit risk and hence increase the supply of loans to worthy low-income and minority households.

This paper uses a court-ordered repeal of home mortgage regulation in Cleveland, Ohio, to investigate the impact of relaxing mortgage regulations. On November 20, 2006, the Ohio State Supreme Court ruled predatory lending a "statewide concern" outside of local governments' home-rule power and hence overturned Cleveland's anti-predatory lending ordinance for mortgages. Having a framework similar to the Home Ownership and Equity Protection Act (HOEPA)[1] and other mini-HOEPA laws at the state and municipality levels, Cleveland's ordinance prohibited lenders from making aggressive mortgage terms whenever the lenders made a loan with an APR exceeding certain thresholds.[2] Such prohibited terms included loan flipping, prepayment penalties, balloon payments, advance payment, increased interest rates following a default, negative

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E-mail address: yilanxu@illinois.edu.

[1] Coded as a part of the Truth in Lending Act as 15 USC 1639 et seq.

[2] The APR thresholds are 4.5 to 8 percentage points above comparable Treasury rates for first-lien loans, and 6.5 to 10 percentage points above comparable Treasury rates for second-lien loans.

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amortization, mandatory arbitration, financing of credit insurance or home improvement payment, lending without counseling, and lending without due regard for repayment. Following the court order, mortgage lenders could freely charge an APR beyond the thresholds and include these terms as they saw fit.

The court-mandated repeal based on a home-rule analysis provides an exogenous mortgage deregulation. When Cleveland's ordinance was effective, mortgage loans secured by home properties within the city limits of Cleveland were governed by the ordinance, regardless of the location of lenders' offices. I use loans made in neighboring suburban municipalities as a control group to construct the counterfactual time trend for loans made in Cleveland. I exploited the abrupt cessation of mortgage regulation to identify the precise local effect on loans originated within 24 weeks before and after deregulation. A difference-in-difference (DID) design compares the APRs and foreclosure rates in Cleveland before and after deregulation and identifies the impact of deregulation as the deviation from the counterfactual time trend.[3]

Drawing upon unique mortgage data matched to home foreclosures, I have found that deregulation had a profound impact on the APR and the foreclosure rate. During the first 24 weeks following deregulation, the APR was 20% more likely to exceed the repealed regulatory thresholds, even though the observable loan and borrower characteristics remained similar to those for mortgages originated prior to the deregulation. The foreclosure rate increased by six percentage points to 20%.[4] Estimations based on loans with enhanced comparability across the treatment and control groups present similar increases. However, foreclosure rates appeared to be stable among loans made in suburban areas contiguous to Cleveland and among Cleveland loans made in the same season a year ahead.

Several other studies have set the stage for this paper. Ho and Pennington-Cross (2006) and Bostic et al. (2008) exploit cross-state variations in mini-HOEPA laws to examine the impact on the subprime sector. These two papers show mixed evidence on whether mortgage regulations impede subprime credit flow. The subprime credit is measured as applications to subprime lenders identified by the Department of Housing and Urban Development (HUD) and as loans originated by these lenders. Subprime credit measured by lender types provides limited insight into the effect of mortgage regulation on loan quality because subprime lender may also originate prime loans.[5] My paper fills this gap by investigating the foreclosure rate of home loans originated before and after an exogenous repeal of a local mortgage regulation.

My study is among the first to identify the causality between mortgage (de)regulation and home foreclosures. Due to data limitations, only a few studies were able to address the quality effects of mortgage regulations. Using a proprietary loan data set with foreclosure rates aggregated at the zip-code level, Ding et al. (2011) found that a strong state mini-HOEPA law is associated with a 0.17 percentage point reduction in foreclosure rates between 2006 and 2008, when the zip code level foreclosure rates ranged from 0.62% to 1.39% in their sample of unregulated states. The proprietary data set of Ding et al. (2011) covers only around 50% of the home mortgage market and underrepresents the subprime sector.[6] As an alternative, the public Home Mortgage Disclosure Act (HMDA) data provide extensive mortgag]e market coverage but no information about loan performance. My unique data set supplements the HMDA loan records with precise origination dates and home foreclosure records. This enables analyses of loan performance at the individual loan level.

My paper provides a new perspective to track home mortgage performance. In most reports of regional foreclosures (Ding et al., 2011; Richter et al., 2011; Schiller and Hirsh, 2008; Nelson, 2008), snapshots of foreclosure rates among active loans usually reflect changes in the macroeconomic environment at the time of foreclosure. Factors such as the housing market's collapse, a sluggish economy, and a prolonged period of high unemployment will contribute to an increase in contemporaneous foreclosures. By tracking the origination dates of foreclosed loans, I compare the performance of loans originated in different legal environments and investigate the impact of deregulation. Moreover, my paper provides the first evidence that removing a mortgage regulation on high-cost loans led to a shift to higher APRs.

There is great social and economic importance in quantifying the effects of deregulation on foreclosures. Foreclosures cause more crimes in the neighborhood (Immergluck and Smith, 2006b; Cui, 2010; Ellen et al., 2013), lower the property values of nearby homes, and reduce the tax base of local governments (Immergluck and Smith, 2005, 2006a; Schloemer et al., 2006; Schuetz et al., 2008; Lin et al., 2009; Campbell et al., 2011; Gerardi et al., 2012; Whitaker and Fitzpatrick, 2013). Moreover, foreclosures hinder residential investment and consumption for durable goods (Mian et al., 2011).

2. Cleveland deregulation and identification design

2.1. Federal and local home mortgage regulation

During the 1970s and early 1980s, efforts at the federal level to protect consumers against so-called predatory lending were focused on truthful information disclosures. Landmark legislation such as the Truth in Lending Act and the Fair Credit Reporting Act as well as executive agency regulations against discrimination in lending relied heavily on this approach. The Home Ownership and Equity Protection Act (HOEPA) of 1994, however, introduced a new model of banning "predatory" contract terms on high-cost loans. The first part of the law defines "high-cost loans" as those carrying fees and an annual percentage rate (APR) that exceed certain thresholds. The second part outlines requirements and restrictions that are imposed on such high-cost loans. Prohibited features include balloon payments, negative amortization, increased interest rates after default, etc. By 2005, many states and cities had passed anti-predatory lending laws that extend the coverage and restrictions of HOEPA. The recent Dodd–Frank Financial Reform Bill incorporates the same price-trigger structure of mortgage regulation.

The Cleveland Mortgage Lending Ordinance[7] fits into this broader framework of home mortgage regulation across the nation. It enhanced both coverage and restrictions mandated under HOEPA and the Ohio home mortgage regulation.[8] The Cleveland ordinance extended the state law's coverage of home equity loans to all home loans including home-purchase loans, which are the majority of foreclosed loans. In addition, the Cleveland ordinance implemented lower interest thresholds. For instance, among first-lien loans, Ohio law covers only those having an APR that exceeds the yield on comparable Treasury securities by more than 8 percentage points. The Cleveland ordinance extended the coverage to those having an APR between 4.5 and 8 percentage points above the yield on comparable Treasury securities.

[3] Agarwal et al. (2009) use a similar method when they study the effects of mandatory mortgage counseling on home mortgage lending in Cook County, Illinois.

[4] The additional foreclosures were worth of a total of $3.6 million dollars in loan amount. This is calculated by $91,625.95 × 655 × 6%, where $91,625.95 is the average loan amount in Cleveland during the first 24 weeks post-deregulation, 655 is the number of loans originated in the same period, and 6% is the percentage increase in the foreclosure rate. Since those loans were foreclosed within the first two years after origination, most of the loans' principal amounts would be unpaid.

[5] Department of Housing and Urban Development (HUD) had updated its subprime lender list until 2005. For more details about the methodology and limitations, see http://www.huduser.org/portal/datasets/manu.html.

[6] The subprime share of the proprietary data set was about 2.8% as of June 2006, whereas the subprime share reported by Mortgage Brokers Association was 13.4% in 2008 (Ding et al., 2011).

[7] Ordinance 737-02, coded as Section 659.02, passed on April 24, 2002, and was meant to be effective as of April 25, 2002.

[8] Sub.H.B. No. 386, 149 Ohio Laws, Part IV, 6938, and R.C. 1.63 and 1349.25 through 1349.37, enacted on February 12, 2002.