

RESEARCH INSTITUTE FOR HOUSING AMERICA SPECIAL REPORT

THE HISTORICAL ORIGINS OF AMERICA'S MORTGAGE LAWS

ANDRA GHENT, PH.D.

W.P. CAREY SCHOOL OF BUSINESS
ARIZONA STATE UNIVERSITY





RESEARCH INSTITUTE FOR HOUSING AMERICA SPECIAL REPORT

THE HISTORICAL ORIGINS OF AMERICA'S MORTGAGE LAWS

ANDRA GHENT

Assistant Professor of Real Estate
Department of Finance
W.P. Carey School of Business
Arizona State University

Research Institute for Housing America

BOARD OF TRUSTEES

Chair

Teresa Bryce, Esq. *Radian Group Inc.*

E.J. Burke Vice Chairman, Mortgage Bankers Association Key Bank

> Trisha Hobson *Citi*

Gleb Nechayev *CBRE*

E. Michael Rosser, CMB *United Guaranty Corporation*

Dena Yocom IMortgage

STAFF

Jay Brinkmann, Ph.D.

Trustee, Research Institute for Housing America
Senior Vice President, Research and Business Development
Chief Economist
Mortgage Bankers Association

Michael Fratantoni, Ph.D.

Executive Director, Research Institute for Housing America

Vice President, Research and Economics

Mortgage Bankers Association

ACKNOWLEDGEMENT

The author would like to thank Loan Marsanico for the excellent research assistance.

TABLE OF CONTENTS

Executive Summary	.7
Introduction	.9
Mortgages and Foreclosures in America Today	13
The English Origins of American Mortgages	17
Title versus Lien Theory	21
The Development of Foreclosure Procedures	27
Redemption Rights	33
Restrictions on Deficiency Judgments and the One Action Rule	37
Conclusions	43
References	45
Author Biography	49

Tables and Charts

Table 1: Dominant Legal Theory of Mortgages in the Various U.S. States over Time
Table 2: Pairwise Correlations Between Title Theory States, Usury Laws and State Age
Table 3: Marginal Effects from Probit Estimation on Title versus Lien Theory
Table 4: Availability of Non-judicial Foreclosure in the Various States over Time
Figure 1: Availability of Non-judicial Foreclosure, 1863
Table 5: Redemption Periods in Usual Non-agricultural Residential Foreclosure Procedure
Table 6: Foreclosure Rates for Urban and Farm Mortgages during the Great Depression
Table 7: Marginal Effects from Probit Estimation on Deficiency Judgment Bans

EXECUTIVE SUMMARY

U.S. states vary dramatically in their mortgage laws. The laws across states differ in the legal theory underlying the mortgage contract and in how they balance the rights of creditors with those of borrowers. Moreover, the differences across states arose relatively early in America's history. In a popular 19th century American treatise on mortgage law, Jones (1879, ch. 30) observes

An examination of the statutes of the several states in relation to the foreclosure of mortgages can hardly fail to surprise one at the great diversity of systems in use, and at the difference in detail between those which are based on the same general principles.

Despite at least four distinct attempts over the last century to create a uniform mortgage code, mortgages today continue to be governed by a very diverse set of state laws.

To better understand the variation in foreclosure laws across states, this paper traces the history of mortgage laws in the United States. The paper is largely descriptive but, to the extent possible, I try to explain why the laws differ across U.S. states. I document when states enacted the various statutes that now govern real estate security instruments (i.e., mortgages or deeds of trust) therein. I explore the historical forces that led states to follow either title or lien theory, or to adopt a nonjudicial foreclosure procedure, that led to differences in redemption periods across states and that led some to restrict deficiency judgments.

I find that older states are much more likely to have adopted *title theory*, which governed English mortgages. Under title theory, the lender has formal ownership of the mortgaged property for the duration of the mortgage while, under *lien theory*, the borrower legally owns the property during the term of the mortgage. Younger states, founded after independence from Great Britain and thus less likely to have precedents based solely on English law, may have felt freer to deviate from it. There is some tentative evidence for the role of title theory in circumventing usury laws. Most states that followed title theory in the late nineteenth century continued to follow some version of it in the late twentieth century.

1

There is a much less obvious pattern in foreclosure procedure and redemption rights, the rights some states afford borrowers to redeem the property during a specified period of time before or after the foreclosure sale if the borrower pays off the entire mortgage balance. The procedure that lenders must follow to foreclose on a mortgage is determined very early in states' histories, typically before the U.S. Civil War. The validity of power-of-sale clauses and deeds of trust is mostly determined by case law and there do not seem to be clear economic reasons for why states adopted different procedures for the remedies they offer lenders. There has been a tendency among states since the 1930s to shorten or reduce redemption periods.

Finally, restrictions on deficiency judgments on residential mortgages arose during the Great Depression. In a deficiency judgment the lender recovers the debt by pursuing the borrower personally if the property securing the mortgage is not worth enough to cover the debt owed. Many states tried to enact similar laws regarding deficiency judgments with varying degrees of success, but in some the courts ruled that the law was unconstitutional while in others the law was upheld. States that had higher farm foreclosure rates were more likely to attempt to prohibit deficiency judgments but there is no evidence that the foreclosure rate on urban mortgages affected the likelihood that a state would enact a sweeping anti-deficiency statute.

In summary, there do not seem to be clear economic reasons for the different patterns of development in America's mortgage laws. With the exception of anti-deficiency statutes, mortgage laws seem to be the outcome of path-dependent quirks in the wording of various proposed statutes and decisions of individual judges. Rather than responses to differences in economic circumstances, mortgage laws are extremely slow to change. While slow adjustment of laws is perhaps necessary to maintain the integrity of the rule of law in a common law legal system, the result is a diverse set of laws that seem poorly suited to a mortgage market that is increasingly integrated across state borders.

INTRODUCTION

U.S. states differ dramatically in their mortgage laws. The laws across states differ in the legal theory underlying the mortgage contract and in how they balance the rights of creditors with those of borrowers. Moreover, the differences across states arose relatively early in America's history. In a popular 19th century American treatise on mortgage law, Jones (1879, ch. 30) observes

An examination of the statutes of the several states in relation to the foreclosure of mortgages can hardly fail to surprise one at the great diversity of systems in use, and at the difference in detail between those which are based on the same general principles.

Despite at least four distinct attempts over the years to create a uniform mortgage code, mortgages today continue to be governed by a very diverse set of state laws.

Differences in mortgage laws have real consequences. For example, foreclosure is much slower in states that require a judge's approval for a foreclosure ("judicial" foreclosure). Delay in foreclosure may increase the number of foreclosures by extending the free-rent period (see Ambrose, Buttimer, and Capone [1997]). Mian, Sufi, and Trebbi (2011) argue instead that judicial foreclosure *decreases* the number of foreclosures. Even if judicial foreclosure affects only the timing of foreclosure, rather than affecting whether foreclosure occurs as Gerardi, Lambie-Hanson, and Willen (2011) argue, a prolonged foreclosure process may delay recovery in the housing market by preventing adjustment. Pence (2006) shows that differences in state foreclosure laws affect loan size. Ghent and Kudlyak (2011) show that state laws that restrict deficiency judgments increase the risk of foreclosure.

To better understand the variation in foreclosure laws across states, this paper traces the history of mortgage laws in the U.S. The paper is largely descriptive but, to the extent possible, I try to explain why the laws differ across the states. I document when they enacted the various statutes that now

Durfee and Doddridge (1925) and Pomeroy (1926) discuss at length the provisions of a Uniform Mortgage Act. This act does not ever seem to have been passed. Reeve (1938) argues for the need to enact a Uniform Real Estate Mortgage Act. That act too does not seem to have become law. Bernhardt (1992) discusses the provisions of the Uniform Land Security Interest Act of 1985 which has yet to be adopted by any state. Nelson and Whitman (2004) analyze the Uniform Nonjudicial Foreclosure Act of 2002 and argue for its adoption at the Federal level.

govern real estate security instruments (i.e., mortgages and deeds of trusts) therein. I explore the historical forces that led them to follow either title or lien theory, or to adopt a nonjudicial foreclosure procedure, that led to differences in the time period the borrower has to redeem the property either before or after foreclosure (redemption periods), and that led some states to restrict the lender's right to deficiency judgments.

I find that older states are much more likely to have adopted title theory as the basis for the law with some tentative evidence for the role of title theory in circumventing usury laws. Most states that followed title theory in the late nineteenth century continued to follow some version of it in the late twentieth century.

There is a much less obvious pattern in foreclosure procedure and redemption rights. The procedure that lenders must follow to foreclose on a mortgage is determined very early in states' histories, typically before the U.S. Civil War. The validity of power-of-sale clauses and deeds of trust is mostly determined by case law and there do not seem to be clear economic reasons for why states adopted different procedures for the remedies they offer lenders. It is thus likely safe to treat differences in state mortgage laws as exogenous which may provide economists with a useful instrument for studying the effect of differences in creditor rights (see, for example, Pence [2006] and Mian, Sufi, and Trebbi [2011]). Differences in redemption rights also change little across time and do not seem to follow any obvious geographic or economic pattern, although there has been a tendency among states since the late 1930s to reduce or eliminate redemption periods.

Laws such as the One Action Rule that exist in some Western states, which in practice requires the lender to exhaust the collateral before he can sue on the promissory note, seem to have arisen largely out of historical accident and misinterpretation of a New York legal precedent (see Guidotti [1943]), a precedent that never actually became law in New York, than for any fundamental economic reasons.

Finally, restrictions on deficiency judgments arose during the Great Depression. What is perhaps surprising is that many states tried to enact similar laws regarding deficiency judgments but in some states the higher courts ruled that the law was unconstitutional while in other states the law was upheld as constitutional. What may have seemed like relatively minor differences in wording of laws permanently altered the balance of rights between debtors and creditors. States that had higher farm foreclosure rates were more likely to attempt to prohibit deficiency judgments, but there is no evidence that the foreclosure rate on urban mortgages affected the likelihood that a state enacted an anti-deficiency statute.

In summary, there do not seem to be clear economic reasons for the different patterns of development in America's mortgage laws. With the exception of anti-deficiency statutes, mortgage laws seem to be the outcome of path-dependent quirks in the wording of various proposed statutes and decisions of individual judges. Rather than responses to differences in economic circumstances, mortgage laws are extremely slow to change.

The next section of the paper describes the nature of mortgage contracts and foreclosure processes in the U.S. and defines some basic terminology that we will use throughout the paper. Section 3 discusses the origins of mortgages in America to better explain the developments in mortgage laws early in America's history. Section 4 explores why some states retained the title theory of mortgages while others adopted lien theory. Section 5 explores the development of the procedure the lender must use to foreclose on the borrower. Section 6 summarizes the history of redemption rights in the various states. Section 7 explores the history of the right of the creditor to a deficiency judgment in the various states. Section 8 offers some concluding remarks.

MORTGAGES AND FORECLOSURES IN AMERICA TODAY

In the United States, what is commonly termed a mortgage actually consists of two legal documents. The mortgage itself merely provides the lender with a lien on the property or, in a title theory state, the ownership of the property until the borrower has paid off the debt. The specific terms under which the borrower must repay the loan are contained in the *promissory note*. The borrower is known in legal terms as the *mortgagor* and the lender is referred to as the *mortgagee*.

The legal theory underlying real estate security instruments differs from state to state. The main division is between *title theory* and *lien theory*. If a state follows title theory, the lender retains title to the property until such time as the borrower pays off the mortgage. That is, the lender is the legal owner of the property for the duration of the mortgage. Under the contrasting theory, *lien theory*, the borrower owns the property during the duration of the mortgage and the lender's interest in the property is limited to situations in which the borrower defaults on the mortgage. While the distinction between title and lien theory no longer has any substantial effect on the balance of power between borrower and creditor, different legal theories nevertheless require different mortgage documents, adding to the paperwork burden of national lenders.

States also differ in whether the standard real estate security instrument is a mortgage or a *deed of trust* although the term mortgage is used to refer to both instruments in everyday usage. In most states, the standard way to finance a property is with a mortgage. However, in some states the standard instrument is a deed of trust wherein the legal title to the property is entrusted to a third party known as the trustee. Unlike a mortgage, where there are only two parties, there are three parties in a deed-of-trust transaction. In a deed-of-trust state, the trustee sells the property if the borrower defaults. In states that follow the lien theory of mortgages, the equitable title nevertheless remains with the borrower. The main reason some states use a deed of trust rather than a mortgage is because, as we discuss in greater detail below, when lenders began including power-of-sale clauses into mortgages, some judges viewed it as improper for the lender himself to be able to sell the property.

When a borrower becomes delinquent on their mortgage, there are two main factors that affect the speed with which the lender can take possession of the property. First, some states require the lender to go to court and receive a judge's approval to foreclose. This is known as *judicial foreclosure*. In other states, the lender may sell the property himself if the mortgage contains a *power-of-sale* clause or, if a deed of trust is the standard real estate finance instrument, the trustee is obliged to sell the property on the lender's behalf. States that allow the lender to sell the property without a judge's approval are known as *nonjudicial foreclosure* states. Even in nonjudicial states, however, the lender usually can pursue judicial foreclosure if he chooses. Given the higher transaction costs and time to foreclose associated with judicial foreclosure, however, lenders usually foreclose nonjudicially if state law permits it without any additional burdens. Lenders in an otherwise nonjudicial state might choose to use judicial foreclosure if there is a problem with the title to the property. Some states also require the lender to pursue judicial foreclosure if the lender wants to obtain a *deficiency judgment* as we discuss later in this section. Finally, some states that technically permit nonjudicial foreclosure give the borrower greater *redemption rights* under nonjudicial foreclosure or impose other burdens on lenders if they foreclose nonjudicially such that lenders more commonly choose judicial foreclosure.

The second main factor that affects the speed with which a lender can foreclose is *redemption rights*. A *redemption right* is the right of the borrower to redeem the property by paying off the entire balance of the mortgage. A *redemption period* is a period during which the borrower has redemption rights. If the redemption period precedes the foreclosure sale, the right of the borrower to redeem during that time is known as an *equitable redemption right*. Such a right might take the form of requiring the lender to wait, say, six months after the first serious delinquency before it can foreclose. In practice, most states have some equitable redemption period that arises because of long notification and advertisement requirements, although some might not necessarily term these waiting times equitable redemption periods. Many states also allow the borrower some time period after the foreclosure sale to redeem the property. The borrower's right to redeem the property for some specified number of months after the foreclosure sale is known as a *statutory redemption right*. Because statutory redemption rights cloud the title of the property for prospective buyers at the foreclosure auction, they are arguably more problematic for lenders than equitable redemption rights. As we discuss in greater detail below, the distinction between equitable and statutory redemption rights likely arose from differences between courts of law and courts of equity and states' subsequent deference to one of the two types of courts.

Finally, some states have laws that restrict the rights of lenders to pursue a residential borrower personally to recover the debt owed to the lender. For example, suppose a borrower defaults on a mortgage of \$300,000 and the fair market value of the property is only \$200,000. The borrower still owes the lender \$100,000 after the lender seizes the property. To recover the \$100,000, the lender in most states can get a *deficiency judgment* which will enable the lender to seize any other assets the borrower has and garnish the borrower's wages. In some states, the lender automatically receives a deficiency judgment if the property is not adequate to cover the debt owed to the lender, but in most states the lender must file a lawsuit to get a deficiency judgment. A mortgage where the lender can get a deficiency judgment is generally known as a *recourse* mortgage. If there is not a specific clause in the promissory note that makes the mortgage non-recourse, a clause known as an *exculpatory clause*, the mortgage is recourse unless state law overrides it. Exculpatory clauses are not generally used in U.S. residential mortgages, although they are common in commercial mortgages. States that have sweeping anti-deficiency statutes that effectively make mortgages non-recourse are known as *non-recourse* states.

Ghent and Kudlyak (2011) empirically examine the effect of recourse on residential mortgage default. Despite deficiency judgments being rare in the United States and the United States having very generous personal bankruptcy laws relative to other industrialized countries, Ghent and Kudlyak (2011) find that recourse substantially affects the borrower's propensity to default in response to negative equity. Their findings indicate that the mere possibility of recourse is enough to deter many households from default which explains the rarity of deficiency judgments. Ghent and Kudlyak (2011) also find that borrowers that default in non-recourse states are more likely to be strategic defaulters in the sense of defaulting in a way that is inconsistent with liquidity constraints being the primary cause of default. Furthermore, they show that borrowers in recourse states are more likely to default in a lender-friendly manner, such as a short sale, because of the borrower's weaker negotiating position in recourse states.

THE ENGLISH ORIGINS OF AMERICAN MORTGAGES

To understand U.S. mortgage laws, it is necessary to understand their history. Our story starts in medieval England where mortgages followed the strict title theory of mortgage law. The structure of early English mortgages in turn derived from Anglo-Saxon mortgages (Jones [1878]). In medieval England, the most common form of mortgage consisted of the lender receiving the rents and profits from the land to satisfy the debt. This prevented the contract from being seen as one in which the borrower was paying interest *per se* to the lender, thus ensuring that the contract was not usurious (Glaeser and Scheinkman [1998]). Until the early 16th century, all lending at interest was forbidden, although occasional exceptions were made for money lending by Jews to gentiles (Temin and Voth [2008]). As a result, it was crucial that the mortgage contract be structured in such a way that the contract not violate usury laws (most mortgage transactions were unlikely to have occurred between Jews and gentiles).

The mortgage contract evolved into a "conditional conveyance" (Jones [1878]) in the sense of the property conveying to the borrower only upon satisfaction of the debt, rather than merely the property serving as collateral in the event the borrower failed to make timely interest and principal payments. This structure further differentiated the contract from an interest-bearing loan. The advantage of title theory in medieval England was that the payment of rents and profits on land that the lender had title to prevented the lender from being in violation of usury laws.

Before the early 17th century, the lender's rights were likely sweeping. The borrower was legally little more than an option holder. The lender had the right to enter the property at will and often the borrower did not even retain the right to use the land during the period of the contract. The borrower could not lease the property (Williams [1866]). After the contractual date of repayment had passed, the lender's ownership of the property became absolute rather than conditional. If the lender was using

Jones (1878) reports that Roman law also had the concept of a collateralized debt under which the lender retained possession of the property until the debt was satisfied (the *pignus* or pawn) and a debt in which the borrower retained possession of the property with the property merely serving as collateral should the borrower violate the provisions of the debt contract (the *hypotheca* or hypothecation). Roman law does not seem to have distinguished between real property and chattel mortgages. Chaplin (1890) notes that some version of a mortgage existed in the law of all civilized societies of which we have knowledge.

the property, no lawsuit to make the title absolute was required on the part of the lender (Chaplin [1890]). If the lender was not the user of the property, early on (certainly in the 12th and 13th centuries), the lender had to bring suit in a court of law to eject the borrower. A shift occurred at some point after the mid-13th century wherein, if the borrower was using the property, the onus shifted to the borrower to provide proof of repayment of the debt in order to reclaim the property (Chaplin [1890]).

The lender did not need to sell the property upon evicting the borrower, and a borrower evicted from the property would lose the entire estate (Williams [1866]) regardless of the amount of the debt that remained unpaid. The property may have been worth many times the debt owed and yet the borrower forfeited the entire property if he did not pay the full sum on the date stipulated. Given the nature of such a contract, the lender often had an incentive to try to claim non-payment of the debt to secure the property for himself, particularly given the large parcel sizes that characterized English realty at the time.

In the early 17th century, the English mortgage underwent a seismic shift with the introduction of the concept of the *equity of redemption* by English equity courts.³ The equity of redemption principle meant that, despite not having made payment on the date stipulated in the mortgage, the borrower could regain his property by paying all principal, interest and fees due on the debt at some time after the expiration of the contract. The equity of redemption principle marked a revolution in law insofar as it abrogated private contracts. Under the equity of redemption, the borrower could not be deprived of the right to his estate regardless of whether he voluntarily entered into a contract that would strip him of his estate if he could not pay the debt (Jones [1878]). Since there was no concept of foreclosure at this time, the term *equity of redemption* is also now used in the U.S. to refer to any redemption rights the borrower has before the foreclosure sale.

The equity of redemption principle still allowed the lender to evict the borrower. However, it required the lender to keep a strict account of the rents and profits he received from the property. Once the rents and profits sufficed to cover the principle, interest and fees (such as late fees) due on the debt, the lender had to convey the property back to the borrower unconditionally (Williams [1866]). It does not seem coincidental that the equity of redemption evolved so soon after the relaxation of English usury laws, since the equity of redemption is predicated on the lender having the right to a fixed amount of income from the property (i.e., interest) and not having an equity interest in the property.

Courts of equity (also known as courts of chancery or simply chanceries) existed to prevent the strict letter of the law from acting too harshly upon subjects. Effectively, the legal concept of equity is the idea that there is a set of principles that might not be explicit in rules of law but that most human beings agree to as a matter of basic ethics or natural law. Chancellors used discretion in these courts far more than in courts of law. In contrast to courts of law, courts of chancery admitted verbal (parol) evidence regarding the conditions under which the mortgage contract was agreed to. Although the concept of equity of redemption was not formally recognized in English courts of law, Chaplin (1890) cites evidence from as early as the 12th and 13th centuries that courts of law exercised some equitable interpretation of mortgages.

Early in the history of the equity of redemption, there seems to have been no limitation on the timeframe during which the borrower could redeem his property (Jones [1878]). Rights of redemption could be used to pay debts and were passed on to the borrower's heirs (Crabb [1846]). Gradually, limitations on the equity of redemption developed. By 1846, Crabb (1846) suggests that the borrower had no more than 20 years to redeem after the lender had taken possession. Kent (1830) similarly notes that, in the absence of a foreclosure, the equitable right of redemption lasted decades in many U.S. states.

Eventually, the lender could petition a court of equity to set a date by which the borrower had to repay the principle, interest and fees. If the borrower had not completed payment by that date, he would forever lose his right to redeem the property and the conveyance to the lender would become unconditional (Williams [1866]). Such an end was known as *foreclosure*. It is important to note that, since the equitable right of redemption was a creation of a court of equity, rather than a court of law, the lender had to bring such suit in a court of equity. Courts thus had wide leeway in determining under what conditions a foreclosure could proceed. Getting a foreclosure was far from a routine procedure.

Such was the condition of the mortgage when it came to America. Until the early 19th century, it seems the mortgage in the American states followed the same legal theory (title) and procedure as the United Kingdom. As early as the 1860s, however, sizable differences had developed between the U.S. states with regard to the legal theory they followed and the remedies available to the lender. It is to these differences we now turn.

TITLE VERSUS LIEN THEORY

In 1878, the British Empire continued to follow the title theory of mortgages (Jones [1878]). By that date, however, only half of U.S. states and territories followed it. Jones attributes the lien theory of mortgages to the eighteenth century English barrister, Lord Mansfield. New York State led the way; as early as 1828, New York was a lien-theory state. As a young state, California tried to emulate New York in its civil code (see, for example, Guidotti [1943]) which may explain why it chose lien theory at an early date. Many younger Western states chose to follow California law, leading to a somewhat greater likelihood of lien theory among the Western states.

As of 1878, the description of state mortgage laws by Jones (1878) permits the theory underlying mortgage laws in the U.S. states (some of which were then territories) to be loosely classified according to Table 1.4 Such classifications are not absolute: for example, many title-theory states' statutes explicitly stated that the lender was not the owner of the property despite having title for the duration of the mortgage.

For comparison, the table also presents the legal theory underlying mortgages in each state in 1957 from Prather (1957) and in 1995 from Geis (1995). Despite more than a century having passed, most states that followed title theory in 1878 retained some vestige of it in 1995. Of the 21 states that followed title theory in 1878, only Arkansas, Florida, Kentucky and West Virginia were considered lien-theory states by 1995. The comparison shows how persistent foundations can be in a legal system based on case law. At present, however, whether a state follows title or lien theory has few, if any, practical implications, since most states' statutes are more explicit about the various rights and responsibilities of each party to the mortgage transaction. Nevertheless, legal theory requires different documents and forms for lien- and title-theory states even if all other aspects of the laws were identical.

Why did states differ in whether they followed title or lien theory? One possibility is that title theory made it easier to get around usury laws. In general, a transaction in which the borrower received less for the loan than the principal he had to repay often would not have been considered in violation of

⁴ Jones (1878) in fact uses the classification "mortgage of common law" vs. "mortgage of equity".

Table 1

Dominant Legal Theory of Mortgages in the Various U.S. States over Time

State	1879	1957	1995	State	1879	1957	1995
Alabama	Title	Title	Title	Montana (Montana Territory)	No Data	Lien	Lien
Alaska	No Data	No Data	Lien	Nebraska	Lien	Lien	Lien
Arizona (Arizona Territory)	Lien	Lien	Lien	Nevada	Lien	Lien	Lien
Arkansas	Title	Intermediate	Lien	New Hampshire	Title	Title	Title
California	Lien	Lien	Lien	New Jersey	Title	Intermediate	Intermediat
Colorado	Lien	Lien	Lien	New Mexico	No Data	Lien	Lien
Connecticut	Title	Intermediate	Title	New York	Lien	Lien	Lien
Delaware	Lien	Intermediate	Lien	North Carolina	Title	Intermediate	Intermediat
District of Columbia	No Data	Intermediate	No Data	North Dakota (Dakota Territory)	No Data	Lien	Lien
Florida	Title	Lien	Lien	Ohio	Title	Intermediate	Intermediat
Georgia	Lien	Title	Lien	Oklahoma (Indian Territory)	No Data	Lien	Lien
Idaho	No Data	Lien	Lien	Oregon	Lien	Lien	Lien
Illinois	Title	Intermediate	Intermediate	Pennsylvania	Title	Title	Intermediat
Indiana	Lien	Lien	Lien	Rhode Island	Title	Title	Title
Iowa	Lien	Lien	Lien	South Carolina	Lien	Lien	Lien
Kansas	Lien	Lien	Lien	South Dakota (Dakota Territory)	No Data	Lien	Lien
Kentucky	Title	Lien	Lien	Tennessee	Title	Title	Title
Louisiana	Lien	Lien	Lien	Texas	Lien	Lien	Lien
Maine	Title	Title	Title	Utah	Lien	Lien	Lien
Maryland	Title	Title	Intermediate	Vermont	Title	Intermediate	Intermediat
Massachusetts	Title	Intermediate	Intermediate	Virginia	Title	Intermediate	Title
Michigan	Lien	Lien	Lien	Washington	No Data	Lien	Lien
Minnesota	Title	Lien	Lien	West Virginia	Title	Intermediate	Lien
Mississippi	Title	Intermediate	Intermediate	Wisconsin	Lien	Lien	Lien
Missouri	Lien	Intermediate	Lien	Wyoming	No Data	Lien	Lien

usury laws (Holmes [1892]). For example, suppose a lender and borrower wanted to agree to a loan of \$1,000 at 10 percent interest for three years, but that the usury law in the borrower's state capped the rate of interest at 6 percent. How could the transaction be structured? If the lender simply provided the borrower with \$900, rather than the \$1,000, and subsequently charged payments of $6\% \times \$1,000 = \60 per year, the result would be an annual yield of 10 percent. This transaction is much less specious if it is legally treated as a sale of the property from the borrower to the lender for the price of \$900 with the agreement on the part of the borrower to repurchase the property at a price of \$1,000. Usury laws generally made no attempt to restrict the prices at which real estate could transact (Holmes [1892]).

Table 2 further investigates the factors that may have led to a state following title or lien theory for the 40 states and territories for which we know whether the state followed the title or the lien theory of mortgages in 1878. The usury laws I use to construct the variables in Table 2 are those in place at the earliest time known and are taken from Holmes (1892). The first measure in Table 2, *usury*, takes a value of one if there was a usury law on the books that restricted the maximum rate of interest lenders could charge and for which there was a penalty for violation. The second measure, *usurypenalty*, is a measure of how severe the penalty for violating the usury law was. I construct this measure using the same weighting system as Benmelech and Moskowitz (2010). The final measure, *maxrate*, measures the maximum rate a lender and borrower could agree to under the usury laws.

In Illinois and Wisconsin, the usury laws for banks differed from those for other lenders. For these states, the decision of whether to use the usury law for banks or the one for other lenders depended on whether or not banks were the dominant mortgage lenders in these states before the Civil War. There is scant and conflicting evidence on the role of banks as mortgage lenders in the U.S. states before the Civil War.⁵

Table 2
Pairwise Correlations Between Title Theory States, Usury Laws and State Age

	Title_1878	Usury	UsuryPenalty	MaxRate	Original13	EarlyState	LateState
Title_1878	1						
Usury	0.33**	1					
UsuryPenalty	0.27*	0.62***	1				
MaxRate	-0.42***	-0.80***	-0.56***	1			
Original13	0.27*	0.45***	0.66***	-0.46***	1		
EarlyState	0.16	0.22	-0.08	-0.40**	-0.48***	1	
LateState	-0.42***	-0.66***	-0.58***	0.85***	-0.51***	-0.51***	1

***, **, * denote significance at 1%, 5% and 10%. Title_1878 takes a value of 1 if the state mortgage laws followed title theory as of 1878, 0 otherwise. *Usury* takes a value of 1 if the state had a usury law on the books at the earliest time known. *UsuryPenalty* is a measure of the severity of the usury penalty. *MaxRate* is the maximum rate that could be charged under the earliest usury laws. *Original 13* takes a value of 1 if the state is one of the original 13 colonies; *EarlyState* takes a value of 1 if the state is not one of the original 13 colonies but became a state before 1840; *LateState* takes a value of 1 if the state or territory was not a state as of 1840.

Grada and White (2003) suggest that mutual savings banks also provided mortgage credit. It is unclear whether such mortgage credit was for purchase of property or whether property was pledged as security for commercial loans.

Dewey and Chaddock (1911, p. 160), for example, assert that "[a]s a rule, banks made loans on real estate." Often, mortgage lending resulted from a requirement that, to receive a charter, a certain portion of a bank's lending had to be to agricultural interests. Lending to agricultural interests would have been primarily mortgage loans. Dewey and Chaddock (1911) go on to describe extensive mortgage lending by banks in Massachusetts and New York in the 1820s, as well as in Florida, Louisiana, Mississippi and South Carolina at least since the 1830s. In the Southern states, banks were often set up explicitly for the purpose of lending on real estate or slaves (Dewey and Chaddock [1911] and Helderman [1980]). Gouge (1833, p. 118) also cites evidence on the role of banks in encouraging land speculation in ante-hellum America

At some point between the mid-1830s and the panic of 1857, mortgages fell out of fashion among banks and their regulators. In 1848, New York lowered the maximum loan to value from 50 percent to 40 percent for mortgages included as assets for the purposes of note issuance (Helderman [1980], p. 22). The fall of mortgages from grace might have resulted from the experience of Michigan with free banking. Michigan's free banking law of 1838, like New York's, explicitly permitted mortgages be included as assets for the purposes of issuing notes. Unfortunately, the mortgages in Michigan were made on land that proved not to be very valuable; see Dwyer (1996). Certainly, by 1858, the New York banks were not involved in mortgage lending on a large scale (Gibbons [1859]) as a result of their negative experience with earlier mortgage lending.

The evidence Stickle (2011) finds for Ohio is likely the most relevant evidence for Wisconsin and Illinois. Stickle (2011) documents that the Ohio Life Insurance and Trust Company was the first trans-Appalachian institutional provider of mortgage credit in the 1830s and 1840s. Stickle (2011)'s finding thus suggests that institutional mortgage credit was rare in Wisconsin and Illinois at the time many of the Western states adopted their foreclosure procedure. The Ohio Life Insurance and Trust Company was also the first company Stickle finds to have facilitated flows of capital from the savings-rich East to the frontier states (personal correspondence with Mark Stickle, Feb. 29th, 2012). As part of his dissertation work, Stickle examined by hand many mortgage documents in several counties throughout Ohio. He finds little evidence of institutional mortgage lending before the 1840s. Based on the evidence Stickle uncovers for Ohio, I use the usury laws that apply to non-bank lenders for Illinois and Wisconsin. Nevertheless, the results are quite similar when the usury law applied to banks is used in the analysis instead.

The correlations in Table 2 suggest that states without usury laws, or with less restrictive usury laws, are much more likely to have adopted the lien theory of mortgages. Of course, all states were relaxing usury laws throughout the 19th century (see, for example, Rockoff [2003]) such that the correlation between the usury laws and title theory may merely be capturing the fact that younger states were more likely to adopt lien theory. Thus, Table 2 also looks at the correlation between the age of the state and whether it followed title theory in 1878. I classify states into three age categories: one of the original 13 colonies (original13), states that received statehood after independence but before 1840 (earlystate) and states or territories that were not states until after 1840.

The original 13 colonies were much more likely to follow title theory than younger states. Of the states incorporated after 1840, only Florida, Minnesota and West Virginia followed title theory. Usury laws were much more common, and stringent, in older than in younger states perhaps because older states were founded as British colonies, and states that followed those states' legal precedents adopted British laws on usury.

Despite the sample size of just 40 states and territories, I attempt to disentangle the role of the age of the state and usury laws using probit estimation. Table 3 reports the increase in the probability of a state following title theory in response to changes in the independent variables when measured at the means of the independent variables. The results reveal that states that had usury laws were 36 percent more to follow title theory in their mortgage laws. Similarly, the original 13 colonies were 47 percent more likely and the early states that were not among the 13 colonies 41 percent more likely to follow title theory. However, when controlling for the age of the state and the existence of a usury law simultaneously, only whether the state is one of the original 13 colonies is a significant predictor of whether the state follows title theory, and the effect is significant only at the 10 percent level. The lack of significance is likely due to the very small sample.

The results in Columns 9 and 10 of Table 3, in which the maximum interest rate allowable and the age of the state are simultaneously controlled for in the subset of states that had a usury law, are the most supportive of the view that usury laws influenced whether or not a state adopted title or lien theory. However, the coefficient on the maximum rate is only significant at the 10 percent level and the sample size is just 28 observations.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Usury	0.36**						0.29	0.10		
UsuryPenalty		0.09*								
MaxRate			-12.19*						-13.04*	-11.69
Original13				0.28*	0.47**		0.17	0.42*	-0.03	
EarlyState					0.41**			0.36	-0.15	
Year of Statehood						-0.008***				-0.00
Pseudo R-squared	8%	5%	21%	5%	14%	17%	9%	14%	22%	22%
No. obs.	40	40	28	40	40	40	40	40	28	28

We can conclude by saying that older states with more restrictive usury laws were more likely to adopt title theory. There is some evidence, although not conclusive, that usury laws had an independent effect on whether the state followed title theory.

When mortgages came to America, foreclosure was a judicial process. The shift in some states toward nonjudicial foreclosure, or a different judicial foreclosure practice, evolved as a result of attempts by the lender to reduce or eliminate the equity of redemption that had evolved in the British court system.

The equitable right of redemption had become quite a nuisance for lenders by the time mortgages became commonplace in early America. Tefft (1937) amasses evidence that, in British chancery courts, the lenders had to petition to foreclose on the borrower's redemption rights, and the courts were usually quite generous to borrowers. Rather than being a strict and rapid procedure, it took lenders several months and sometimes years to get English chancellors to agree to a foreclosure. The English chancellors entertained entreaties for leniency from borrowers for several months. Any suggestion that the lender acted improperly or that the borrower would soon come upon funds to repay him, would often prevent the lender from getting a foreclosure. Even after the lender succeeded in obtaining a decree of foreclosure, the English borrower typically was given six months more to redeem the property (what would now be known as a statutory redemption period). English Chancellors would often grant extensions to the statutory redemption period upon a reasonable request from the borrower.

Certain U.S. states lacked chancery courts altogether. Skilton (1943) reports that some states, such as Pennsylvania, developed the writ of *scire facias* as a rapid foreclosure alternative. Although *scire facias* is a judicial procedure, its rapidity and summary nature makes it a relatively creditor-friendly procedure. It differs from other forms of judicial foreclosure in that the onus is on the borrower to provide a reason why the lender should not be able to foreclose. In the 18th and 19th centuries scire facias was adopted by Pennsylvania and Delaware. The figures Russell and Bridewell (1938) present on the cost and time it took in the 1930s to foreclose in Delaware and Pennsylvania support the idea that this is an expedient if not an inexpensive procedure. In Delaware, the *scire facias* procedure seems to have been adopted to avoid chancery courts rather than because of the absence of chancery courts. Ohio and Illinois also adopted versions of scire facias although it was no longer in use in either state by the end of the 19th century.

As a result of the difficulties in obtaining a strict foreclosure, at some point in the 18th century, British lenders began asking the courts to agree to a sale in lieu of foreclosure. A sale-in-lieu of foreclosure ensured that the borrower would receive any value of the property in excess of that required to pay off the debt, such that the borrower did not forfeit his estate altogether. In the absence of well-developed land and financial markets with small parcel sizes, it is likely that many borrowers had positive equity such that a sale-in-lieu of foreclosure likely seemed fairer to the borrower. In Britain, the lender was not permitted to bid on the property at the sale-in-lieu of foreclosure which ensured that the borrower received fair market value for the property (Tefft [1937]). The success of sales-in-lieu of foreclosure eventually led to the insertion of power-of-sale clauses into many mortgages to further encourage Chancellors to grant a sale-in-lieu of redemption.

THE DEVELOPMENT OF FORECLOSURE PROCEDURES

American states rapidly embraced the concept of a foreclosure sale rather than a strict foreclosure. Early on, a foreclosure sale still necessitated the approval of a judiciary. Gradually, however, courts came to respect power-of-sale clauses and trust deeds in many states. A landmark U.S. Supreme Court ruling in *Newman vs. Jackson* (1827) favored a power-of-sale clause in regulating a dispute in the Georgetown neighborhood of Washington, D.C. and set a precedent for other states. The validity of the power-of-sale clause or trust deed often met with legal challenges prior to their widespread acceptance. Despite the 1827 US Supreme Court precedent of *Newman vs. Jackson*, it took decades for many states to rule that power of sale foreclosure was valid or to begin using mortgages with power of sale. However, by 1863, lenders were able to foreclose by a nonjudicial foreclosure procedure in many states (J.F.D. [1863]). In some states, courts ruled that the lender himself could not conduct the sale which led to the adoption of the deed of trust, wherein a third party sells the property, as the standard real estate security instrument.

Table 4 summarizes the procedure in which lenders could foreclose in 1863, 1879, 1904, 1937, 1957 and 2008. The sources of information are J.F.D. (1863), Jones (1879, 1904, 1915, 1928), Russell and Bridewell (1938), Skilton (1943) and Prather (1957), in the cases cited in the above, and the National Mortgage Servicer's Reference Directory (2008). The similarities between the laws in the different periods are striking. Of the 37 states for which we have data from 1863, only 11 changed their foreclosure proceeding substantially between 1863 and 2008. The pattern is similar for states for which the data start later in the 19th century.

Focusing first on the changes between 1863 and 1937, four states changed their stance on nonjudicial foreclosure substantially. In 1863, J.F.D. makes no mention of Georgia or New Hampshire in his discussion of power-of-sale provisions and trust deeds; by 1937, power-of-sale foreclosure had become standard in both states. In 1863, the validity of power-of-sale provisions in Illinois seemed to be finally settled after several court proceedings questioning it; in 1879, foreclosure again became a judicial procedure in Illinois. While a nonjudicial foreclosure procedure was available in South Carolina as of 1857, J.F.D. states that they were not "in familiar use." By 1904, Jones (1904) finds that trust deeds seem to be in common use. It is unclear when South Carolina eliminated the possibility of nonjudicial foreclosure.

Of the states that adopted power-of-sale foreclosure or a deed of trust later than 1863, likely owing to a late statehood date rather than legal reasons, Arizona, New Jersey and North Dakota had reversed course by 1938. I have been unable to ascertain the exact date of or the reason for Arizona's change in foreclosure law. North Dakota banned foreclosure by advertisement, a nonjudicial foreclosure procedure also in use in Maine, in 1933 (Vogel [1984]) as part of wide-ranging farm foreclosure relief during the Great Depression.

Focusing on the changes between 1937 and 2008, Wisconsin abandoned its usual practice of foreclosing nonjudicially. The reason seems to have been that bankruptcy judges set aside nonjudicial foreclosure sales as improper conveyances. The solution to this problem was to use exclusively nonjudicial foreclosure methods; see Handzlik (1984). It is unclear why New York abandoned nonjudicial foreclosure.

What is perhaps most remarkable about the adoption of power of sale, or the lack thereof, is how early it occurs in the development of financial markets. For example, case law in California validates power-of-sale foreclosure in 1851, although Weber (2006) reports that there are no banks at all in California before at least 1860. New York makes power-of-sale foreclosure legal by statute before there is a bank in the state.

What motivated states to adopt more creditor-friendly or more debtor-friendly foreclosure procedures? Figure 1 maps the states that had adopted power of sale or deeds of trust by 1863. There is no obvious geographical pattern. There is also no significant correlation between either the state's age or whether the state follows the title theory of mortgages or the lien theory of mortgages and whether it allows nonjudicial foreclosure as of 1863.

Table 4
Availability of Non-judicial Foreclosure in the Various States Over Time

State	1863	1879	1904	1928	1938	1957	2008
Alabama	Usual, 1830	Usual	Usual	Usual	Usual	Usual	Usual
Alaska	No data	No data	No data	No data	No data	No data	Usual
Arizona (Arizona Territory)	No data	No data	Available, 1887	Available	Unavailable	Unavailable	Usual
Arkansas	Available, 1848	Available	Available	Available	Available	Available, rare	Usual
California	Usual, 1852	Available	Available	Available	Usual	Usual	Usual
Colorado	No data	Available	Usual	Usual	Usual	Usual	Usual
Connecticut	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Delaware	Scire facias (Judicial), 1827	Scire facias	Scire facias	Scire facias	Scire facias	Scire facias	Scire facias
District of Columbia	Available, 1827	Usual	Usual	Usual	Usual	Usual	Usual
Florida	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Georgia	Unavailable	Available, 1867	Available	Available	Usual	Usual	Usual
Idaho	No data	No data	Explicitly Unavailable, 1898	Unavailable	Unavailable	Usual	Usual
Illinois	Available, 1846	Available	Unavailable, 1879	Unavailable	Unavailable	Unavailable	Unavailable
Indiana	Unavailable by statute, 1852 (avail- able at some point before)	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
lowa	Unavailable by statute, 1861 (avail- able at some point before)	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable without mortgagor's consent
Kansas	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Kentucky	Unavailable by statute, 1820	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Louisiana	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
Maine	Foreclosure by Adver- tisement (Non-Judi- cial), 1821	Foreclosure by Advert.	Foreclosure by Advert.	Foreclosure by Advert.	Foreclosure by Advert.	Foreclosure by Advert.	Foreclosure by Advert.
Maryland	Available, 1859	Available	Available	Available	Usual	Usual	Usual
Massachusetts	Available, 1826	Usual	Usual	Usual	Usual	Usual	Usual
Michigan	Usual, 1838	Usual	Usual	Usual	Usual	Usual	Usual
Minnesota	Available, 1860	Available	Usual	Usual	Usual	Usual	Usual
Mississippi	Usual, 1838	Usual	Usual	Usual	Usual	Usual	Usual
Missouri	Usual, 1840	Usual	Usual	Usual	Usual	Usual	Usual

Table 4
Availability of Non-judicial Foreclosure in the Various States Over Time

State	1863	1879	1904	1928	1938	1957	2008
Montana (Montana Territory)	No data	Available, 1872	Available	Available	Available	Available, not usual	Usual
Nebraska	No data	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Available (if Deed of Trust)
Nevada	No data	Available (without foreclosure), rare, 1876	Available (without foreclosure), rare	Available, not in use	Available	Available, not usual	Usual
New Hampshire	Unavailable	Available, 1874, rare	Available	Available	Usual	Usual	Usual
New Jersey	Unavailable	Available, 1867, rare	Available	Available, rare	Unavailable	Unavailable	Unavailable
New Mexico	No data	No data	No data	No data	Unavailable	Unavailable	Available only for Deeds of Trust origi- nated 2006 or later
New York	Usual, 1774 by statute	Available	Available	Available	Available	Available, Rare	Available, Rare
North Carolina	Usual, 1830	Usual	Usual	Usual	Usual	Usual	Usual
North Dakota (Dakota Territory)	No data	Available, 1877	Available	Available	Unavailable, 1933	Unavailable	Unavailable
Ohio	Available, 1850	Available, rare	Available, rare	Available, rare	Available	Available, Rare	Unavailable
Oklahoma (Indian Territory)	Avail- able, 1848 (followed Arkansas law)	Available	Available	Available	Available	Available, Rare	Available if POS clause inserted (1986), rare
Oregon	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Usual, 1961 Deed of Trust Statute
Pennsylvania	Scire facias (Judicial), 1705	Scire facias	Scire facias	Scire facias	Scire facias	Scire facias	Scire facias
Rhode Island	Available, 1856	Usual	Usual	Usual	Usual	Usual	Usual
South Carolina	Available, 1857	Available	Usual	Usual	Unavailable	Unavailable	Unavailable
South Dakota (Dakota Territory)	No data	Available, 1877	Available	Available	Usual	Usual	Technically Available, rare due to Title difficul- ties
Tennessee	Available, 1818	Available	Available	Available	Usual	Usual	Usual
Texas	Usual, 1849	Usual	Usual	Usual	Usual	Usual	Usual
Utah	No data	No data	No data	Unavailable	Unavailable	Unavailable	Usual
Vermont	Unavailable	Unavailable	Unavailable	Usual	Unavailable	Unavailable	Available, very rare
Virginia	Usual, 1842	Usual	Usual	Usual	Usual	Usual	Usual
Washington	No data	No data	No data	Unavailable	Unavailable	Unavailable	Usual
West Virginia	Usual, 1842	Usual	Usual	Usual	Usual	Usual	Usual
Wisconsin	Usual, 1850	Usual	Usual	Available	Available	Available, not usual	Unavailable
Wyoming	No data	No data	Available, 1899	Available	Available	Usual	Usual

It must be kept in mind that in most cases the validity of power of sale and deeds of trust was determined in case law rather than by statute. As a result, it was usually the decision of a single judge that ended up determining the process. For example, despite the national Supreme Court precedent in 1827, Justice J. Kellogg of the Supreme Court of Vermont judge declared that a power-of-sale clause was not generally valid in Wing v. Cooper (1864). Justice Kellogg's reasoning was as follows:

A power of sale given by a mortgage deed is not an ordinary power, and as between the mortgagor and mortgagee, it should be strictly construed. In this state, it is in practice unusual if not unknown. We have no statute regulating its exercise, and a sale under it might be made without the concurrence of the mortgagor, and even without notice to him. It is too important a power to rest upon implication and local reasoning, and ought not, as we think, to be recognized in any case unless it is conveyed by an express grant and in clear and explicit terms.

While this ruling did not exactly forbid power-of-sale clauses, which would have been inconsistent with the national precedent, the interpretation of the ruling banned them for all practical purposes. The ruling seems to have been interpreted as requiring the lender to get the borrower's permission to use his power of sale after default which is usually even more difficult than getting a judge's approval. It seems likely that the other states that did not adopt power-of-sale foreclosure failed to do so for similarly idiosyncratic reasons.

While there may be theories that can explain why some judges decided nonjudicial foreclosure was acceptable while others ruled against it, the reasons do not seem closely correlated with the state's economic development. Nevertheless, nonjudicial foreclosure was a major victory for creditor rights.



Figure 1
Availability of Non-Judicial Foreclosure, 1863

Available
Unavailable
No Data

REDEMPTION RIGHTS

As foreclosure by sale grew, many states permitted the borrower a statutory right of redemption wherein the borrower could regain possession of the property after a foreclosure sale by repaying the principal, interest and fees. Some states allowed the borrower two years or more while others afforded the borrower no grace period. In some cases, attempts by states to provide for a redemption period were deemed unconstitutional by the courts, such as the attempt by Missouri to allow borrowers a 30-month redemption period (Skilton [1943]). Baker, Miceli, and Sirmans (2008) summarize the rights of redemption afforded to the borrower in the various states and some of the changes over time.

Table 5 summarizes the changes in the rights of redemption over time. Changes in the redemption periods are in bold with the date of the change noted in parentheses when known. A question mark indicates uncertainty of the date of the change. Although there are more changes to redemption rights over time than to the standard foreclosure procedure lenders must follow, there is a surprising amount of persistence in redemption periods highlighting the importance of early institutional developments. More than half of all states did not change their policy on redemption periods substantially between the first available date for which we have data, typically the U.S. Civil War, and 1938. Since 1938 there have been more changes with the tendency being towards reducing the redemption period. Between 1938 and 1957, Arkansas, Idaho and Tennessee eliminated their redemption periods while, over the same period, only Florida increased its redemption period. It seems possible that the difference in Florida's redemption period relates to how Prather (1957) records the redemption period rather than an actual change in the redemption period. There were no other changes in redemption periods between 1938 and 1957.

Between 1957 and 2008, a total of 21 states reduced or eliminated their redemption periods. Only Connecticut increased the redemption period by inserting a three-month equitable right of redemption. It seems more likely to be institutional inertia than any other factor that has led many states to retain their rights of redemption from the 19th century.

Table 5
Redemption Periods in Usual Non-Agricultural Residential Foreclosure Procedure

State	1879	1904	1915	1928	1938	1957	2008
Alabama	24 (1841)	24	24	24	24	24	12
Alaska	No Data	4 (1900)	2	4	No Data	No Data	12
Arizona (Arizona Territory)	6 (1877)	6	6	6	6	6	0
Arkansas	12 (1879)	12	12	12	12	0	0
California	6 (1851)	6	6	6	0	0	0
Colorado	6 (1879)	6	6	6	6	6	6
Connecticut	0	0	0	0	0	0	3
Delaware	0	0	0	0	0	0	0
District of Columbia	No Data	0 (None mentioned)	No Data	No Data	No Data	0	0
Florida	0	0	0	0	0	2	0
Georgia	0	0	0	0	0	0	0
Idaho	No Data	0	0	0	No Data	0	0
Illinois	6 (1864)	12 (1895)	12	12	12	0	0
Indiana	12 (1825)	12	12	12	12	12	3
lowa	12 (1861)	12	12	12	12	12	3
Kansas	12 (1873)	12	12	12	12	12	6
Kentucky	0	0	0	18 (1923)	18	18	3
Louisiana	0	0	0	0	0	0	0
Maine	12 (1871)	12	12	12	12	12	3 (1975)
Maryland	0	0	0	0	0	0	0
Massachusetts	0	0	0	0	0	0	0
Michigan	12 (1844)	6 (1899?)	12	12	12	12	6
Minnesota	12 (1858)	12	12	12	12	12	6 (1967)
Mississippi	0	0	0	0	0	0	0
Missouri	0	12 (1899?) if power of sale used	12	12	12	12	12
Montana (Montana Territory)	6 (1867)	12 (1895)	12	12	12	12	4
Nebraska	9 (1859)	9	9	9	9	9	0
Nevada	6 (1861)	6	6	6	12	12	0
New Hampshire	0	0	0	0	0	0	0
New Jersey	0	0	0	0	0	0	0
New Mexico	No data	12 (1889 or 1897)	9 (1909)	9	9	9 (3 if expressly waived in mortgage instrument, 1957)	1 (1964)

Table 5
Redemption Periods in Usual Non-Agricultural Residential Foreclosure Procedure

State	1879	1904	1915	1928	1938	1957	2008
New York	0 (1838)	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
North Dakota (Dakota Territory)	12 (1877)	12	12	12	12	12	2 (shortened from 6 in 1981)
Ohio	0	0	0	0	0	0	0
Oklahoma (Indian Territory)	No data	12 (1889)	12	No data	6	6	6 (waived if foreclosure with ap- praisal)
Oregon	2 (1872)	2	4	4	12	12	4
Pennsylvania	0 (1879)	0	0	0	0	0	0
Rhode Island	0 (1857)	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
South Dakota (Dakota Territory)	12 (1877)	12	12	12	12	12	6
Tennessee	24 (1820)	24	24	24	24	0 (24 but waived in most secu- rity instru- ments)	0
Texas	0	0	0	0	0	0	0
Utah	6 (1870)	6	6	6	6	6	3
Vermont	12 (1827)	12	12	12	12	12	6
Virginia	0	0	0	0	0	0	0
Washington	6 (1869)	12 (1886)	12	12	12	12	12 (8 if so stated in mortgage and right to a deficiency judgment is waived)
West Virginia	0	0	0	0	0	0	0
Wisconsin	24 (1849)	12 (1889) if foreclosure by advertise- ment, 0 by action	12 if fore- closure by advertise- ment, 0 by action	12 if fore- closure by advertise- ment, 0 by action	12	12	6 (1978)
Wyoming	No data	6 (1895)	6	6	6	6	3

Note: 1) Table provides redemption period for foreclosure under the most common circumstances (e.g., right to a deficiency judgment waived) for residential security instruments. 2) Includes both statutory and equitable periods (e.g., mandatory waiting period before foreclosure sale) of right of redemption. 3) Period rounded to nearest month. 4) Changes in the redemption period are in bold with the date of the change noted in parentheses when known. 5) A question mark indicates uncertainty of the date of the change.

RESTRICTIONS ON DEFICIENCY JUDGMENTS AND THE ONE ACTION RULE

Until the Great Depression, there were few restrictions on deficiency judgments. As of 1879, in most states and territories the lender was free to pursue "all his remedies concurrently or successively" (Jones [1879], Ch. 27). By that time, it had become standard for an American mortgage to consist of both a note and the mortgage itself such that the lender could both sue on the note and seize the property (Jones [1879], Ch. 27), often simultaneously. Only in California and Colorado did the lender have only one remedy (Jones [1879], Ch. 30), what is now known as the "One Action" rule, and only in California could the lender take an action precluding him from the right to a deficiency judgment. In Minnesota and Nevada the borrower had to exhaust the property before suing on the note (Jones [1879], Ch. 27), which is somewhat similar in effect to the One Action rule. In Dakota Territory, Indiana, Iowa, Michigan, Nebraska, New York and Washington Territory, the lender could not simultaneously sue on the promissory note and file a lawsuit for foreclosure; the lender could pursue actions in the sequence of his choice, however.

Over time, many Western states gradually adopted the One Action rule. The One Action rule seems to originate in California around 1860 (Guidotti [1943]) but at the time was not meant to provide any restriction on deficiency judgments *per se*. Guidotti (1943) suggests that it arose as a mistake in interpreting the New York code that California was trying to emulate. New York, however, does not now have nor ever had a One Action rule. At the time California was trying to use New York as a template for many of its codes of civil practice; in turn, many Western states used California as a template. That in practice One Action rules came to make it more difficult to collect a deficiency owes largely to the combination of One Action laws with subsequently enacted anti-deficiency statutes.

By 1911, at least six Western states (California, Colorado, Idaho, Montana, Nevada and Utah) had some version of the One Action law on their books (Milliner [1991] and Jones [1879]). All of these states being young, Western states that started out with little legal foundation of their own, it is almost certain that these states enacted One Action rules because they developed their codes of civil procedures from California's.

Unlike their British counterparts, American lenders could bid at a sale in lieu of foreclosure. Often, they were the only bidders and bid far less than the value of the debt or the fair market value of the property, leaving borrowers liable for the deficiency. Since foreclosure by sale had become the standard procedure, with the lender often the only bidder, this left open the possibility that the borrower would both lose both his property and owe a substantial deficiency judgment in excess of his true debt if the lender bid less than the debt. Vaughan (1940) details several cases of lenders bidding amounts far lower than the fair market value of the property. Starting with Connecticut (Jones [1879]), states gradually modified their statutes to ensure that the borrower received fair credit for the market value of the property.

If a state did not already have a "fair market value" provision with respect to deficiency judgments, it likely did by the end of the Great Depression. During 1933-1935, Alabama, Idaho, Michigan, New Jersey, New York, Pennsylvania, South Carolina and Texas all modified their statutes to include a fair market value provision (Poteat [1938]). In most cases, fair market value restrictions were deemed constitutional when challenged. However, New Jersey, Pennsylvania and South Carolina's restrictions were declared unconstitutional however. In the case of New Jersey, this was likely because the act also included several other procedural requirements on deficiency judgments such that courts may have determined that the law would have been a *de facto* violation of the contract clause of the U.S. Constitution. Similarly, the Pennsylvania statute contained a number of procedural restrictions on the foreclosure process. The Supreme Court of South Carolina judge determined in *Federal Land Bank v. Garrison* (1938) that, because the act that included a fair market value provision was written in such a way as to apply retroactively, the entire act was unconstitutional and thus null and void. The Texas law may have been declared unconstitutional because of vague language; it required the borrower to get credit for the "actual value" of the property.

Many states went much further in restricting the rights of lenders to deficiency judgments during the Great Depression. The first wide-ranging restriction on deficiency judgments that the U.S. Supreme Court held to be constitutional was a 1933 law enacted in North Carolina that applied to purchase mortgages; see *Richmond Mortgage and Loan Corporation v. Wachovia Bank and Trust Co.* (1937) and the analysis provided by Buchman (1948). The concern regarding the constitutionality was whether such bills violated the contract clause of the U.S. Constitution. Several states (Arizona, Arkansas, California, Minnesota, Montana, Nebraska, North Carolina, North Dakota, and South Dakota) attempted to prohibit deficiency judgments during the 1933–1935 period, often only for purchase mortgages.

⁶ The next three paragraphs draw heavily on the material in the appendix of Poteat (1938).

Some such laws were found to be unconstitutional, particularly if the law was meant to apply to mortgages entered into before the act passed. The Arizona statute was upheld for mortgages entered into after the law was enacted, while in Arkansas the courts made it clear that any prohibition on deficiency judgments was unconstitutional. The Arizona, California, Minnesota, Montana, North Carolina and North Dakota prohibitions continue to this day.

The case of Arkansas provides an insightful illustration of why some states' attempts to ban deficiency judgments were successful and others were not. In Arkansas, the statute was written intended to apply to current mortgages as in other states. The judge in Arkansas, as in most other states, struck down the constitutionality of any restriction on the lenders' rights to deficiency judgments on mortgages entered into before the legislature passed the statute as that would violate the contracts clause. However, in most states judges upheld the constitutionality of the law as it applied to *future* mortgages. In the case of *Adams v. Spillyards* (1933), however, Judge J. McHaney of the Supreme Court of Arkansas prevented the act from any permanent effects by writing

Now, as to its application to future contracts, or to mortgages and deeds of trust on real estate executed subsequent to the effective date of the act, we think a careful examination of the act itself discloses that it has no application to the foreclosure of such contracts or mortgages. It does not in express terms apply to foreclosures on mortgages and deeds of trust on real estate to be hereafter executed, but apparently to foreclosures on contracts already in existence. In fact, the words "mortgage" or "deed of trust" are nowhere used in the act. Foreclosures on real estate are several times mentioned, and foreclosures on mechanics' liens and purchase money liens are covered as well as mortgages and deeds of trust. The evident purpose of the Legislature was to relieve a present condition by applying the poultice of the act to the sore spot of deficiency judgments in foreclosures of mortgages, caused by decline in realty values. They made it expressly applicable to cases of foreclosure now pending and sales already made but not confirmed, which could not possibly have reference to future contracts, (section 3); and also to "suits filed after the effective date of this act and real property is sold under foreclosure decree of courts foreclosing same, said sale shall not be confirmed," etc. The whole context, we think, shows the Legislature was dealing with what it deemed a temporary emergency.

Thus, a seemingly minor difference in wording between the anti-deficiency statute of Arkansas and those of states like Arizona and California led to permanent differences in foreclosure law and outcomes.

Many other Great Depression mortgage relief measures, such as the moratoria, were also found to be in violation of the contract clause of the US Constitution; see Bunn (1933), D.P.K. (1933), Poteat (1938) and Skilton (1943) for discussions of the constitutionality of the various moratoria proposed by state legislatures. The vast majority of the compulsory moratoria, and all those without clearly defined end dates, were declared unconstitutional and thus had little effect on the development of the history of U.S. mortgage laws.

Other states (e.g., Michigan, South Dakota) passed laws mandating that lenders follow a particular foreclosure procedure if they wished to secure a deficiency judgment. Georgia, Ohio, Washington and Wisconsin enacted laws with other restrictions, but not outright prohibitions, on deficiency judgments during the 1933–1935 period.

Comparing the restrictions above with those Ghent and Kudlyak (2011) report for 2009, we can see that virtually all of the restrictions on deficiency judgments date from the foreclosure crisis of the early 1930s. To better understand why states differed in whether they tried to enact a ban on deficiency judgments, we look at foreclosure rates from the 1931–1934 period using data from urban mortgages and farm mortgages. The data for the urban mortgages was collected by the NBER in the late 1940s. The NBER survey was designed as a 1 percent sample of mortgages in 1947. However, the survey asked lenders to report mortgages from 1920–1947. The data from the Great Depression is subject to some survivorship bias but is nevertheless the best data available on urban mortgages in the early 1930s; see Ghent (2011) for a discussion of the data collection procedures. The data from the Savings and Loans are especially likely to be affected by survivorship bias with the data from commercial banks less affected and the data from life insurers essentially a 1 percent sample of urban mortgages held by life insurers over the 1920–1947 period. The data for farm foreclosure rates comes from Stauber and Reagan (1935) and includes foreclosures because of tax liens. See Alston (1983, 1984) for more discussion of farm foreclosures in the Great Depression. Deeds in lieu are counted as foreclosures in both the urban and farm data.

Table 6 summarizes the foreclosure rates in each state for 1931–1934. Stauber and Reagan report foreclosures per 1,000 farms (not per 1,000 farm mortgages) for the year ending March 15th. Thus, in Table 6 the farm foreclosure rate is shown for the year previous to the one Stauber and Reagan report (i.e., the foreclosure rate Stauber and Reagan list for 1935 mainly reflects the foreclosure situation in 1934).

The foreclosure rates shown for urban mortgages are per 1,000 *mortgages* outstanding such that the farm and urban mortgage foreclosure rates are not directly comparable. I do not compute a foreclosure rate for a state that does not have at least 10 mortgages outstanding in that year. The samples for urban mortgages are still fairly small for many states but the trend indicates that problems with urban mortgages followed problems in farm mortgages. Furthermore, the evidence indicates that farm mortgages were more likely to be distressed than urban mortgages; the farm foreclosure rates are usually higher than the urban foreclosure rates.

We estimate a probit model in which the dependent variable takes a value of 1 if the state attempted to prohibit deficiency judgments and 0 otherwise. We view the decisions by courts regarding the constitutionality of the prohibition to be idiosyncratic results of different judges rather than the concerted efforts of state legislators. As a result, even if the attempt to prohibit deficiency judgments failed, we code the dependent variable as 1. Since it is unclear whether any relationship between

Table 6
Foreclosure Rates for Urban and Farm Mortgages during Great Depression

	Farm				Urban				Ban on Deficiency	
State	1931	1932	1933	1934	1931	1932	1933	1934	Judgments Attempted in 1933-1935	
Alabama	42.8	56.1	34.8	25.0	16.1	82.0	181.8	69.8	0	
Arizona	40.3	34.1	27.5	22.4					1	
Arkansas	60.5	64.1	50.5	29.4	176.5	0.0	76.9	0.0	1	
California	40.6	45.0	40.0	21.0	7.9	15.7	27.1	22.6	1	
Colorado	38.5	74.5	66.4	48.4	23.3	0.0	0.0	0.0	0	
Connecticut	11.1	8.9	6.8	3.5	17.2	16.4	0.0	48.4	0	
Delaware	16.0	25.0	22.4	21.4					0	
District of Columbia					0.0	0.0	20.0	58.8	0	
Florida	18.5	46.0	29.6	23.7	38.5	148.1	87.0	45.5	0	
Georgia	36.8	48.6	36.2	18.3	22.7	23.3	25.6	55.6	0	
Idaho	46.3	41.0	29.1	27.5					0	
Illinois	34.5	50.7	38.2	25.1	0.0	13.2	50.5	47.3	0	
Indiana	42.0	44.9	33.3	26.1	5.8	12.0	19.7	34.7	0	
Iowa	58.8	85.7	55.5	40.1	0.0	0.0	18.9	18.9	0	
Kansas	43.1	61.1	55.6	48.0	29.9	15.2	0.0	52.6	0	
Kentucky	39.8	48.0	26.2	21.8	0.0	66.7	0.0	0.0	0	
Louisiana	45.8	75.4	64.1	35.3					0	
Maine	23.7	30.3	30.8	27.4	0.0	0.0	0.0	0.0	0	
Maryland	34.3	32.5	28.4	19.9	0.0	0.0	0.0	52.6	0	
Massachusetts	10.5	13.4	15.9	17.1	6.9	20.7	13.8	40.0	0	
Michigan	40.0	50.4	36.5	22.8	3.0	9.5	92.4	155.0	0	
Minnesota	50.3	67.2	42.5	28.8	0.0	17.5	19.0	49.0	1	
Mississippi	99.9	115.3	101.4	61.9	0.0	55.6	294.1	0.0	0	
Missouri	50.1	59.8	41.6	35.8	0.0	9.1	0.0	28.0	0	
Montana	69.6	67.9	52.9	40.8					1	
Nebraska	39.0	63.9	51.0	45.0	0.0	0.0	0.0	45.5	1	
Nevada	35.0	27.2	25.3	22.0					0	
New Hampshire	16.4	23.7	19.3	18.8					0	
New Jersey	16.0	25.6	22.8	22.8	20.3	31.6	38.3	43.7	0	
New Mexico	23.8	33.9	28.8	29.2	76.9	0.0	83.3	0.0	0	
New York	19.9	33.3	31.9	27.4	3.0	10.8	14.5	31.0	0	
North Carolina	68.2	86.6	54.7	32.3	34.1	116.3	54.1	58.0	1	
North Dakota	76.0	92.9	43.3	24.9					1	
Ohio	24.5	34.1	22.8	19.5	15.4	16.2	20.3	22.2	0	
Oklahoma	47.7	64.3	31.5	20.4	8.0	59.8	59.4	34.1	0	
Oregon	31.8	41.3	30.4	24.4	0.0	13.5	27.8	72.5	0	
Pennsylvania	16.6	24.0	21.3	20.5	10.2	14.1	29.7	50.0	0	
Rhode Island	5.0	4.9	5.0	4.7	0.0	52.6	58.8	0.0	0	
South Carolina	53.8	60.2	33.5	24.3	0.0	0.0	0.0	0.0	0	
South Dakota	67.3	103.1	86.8	78.7					1	
Tennessee	33.1	48.7	32.6	22.3	29.7	41.2	32.3	33.7	0	
Texas	25.9	32.8	20.6	18.1	0.0	49.2	0.0	37.0	0	
Utah	31.2	37.4	31.4	24.8	37.0	0.0	115.4	45.5	0	
Vermont	11.4	17.1	19.5	20.7					0	
Virginia	38.8	43.3	33.2	19.7	0.0	0.0	20.8	0.0	0	
Washington	36.5	44.5	36.9	31.4	5.6	11.8	12.0	31.3	0	
West Virginia	45.4	67.1	52.7	28.0	0.0	13.7	27.8	14.5	0	
Wisconsin	33.1	40.4	30.9	24.5	0.0	52.6	55.6	0.0	0	
Wyoming	41.2	41.3	43.0	39.0					0	
Average	76.8	87.1	75.7	66.7	64.6	74.9	90.0	82.9	0	

Note: 1) Farm foreclosure rates are foreclosures per 1,000 farms and urban foreclosure rates are foreclosures per 1,000 mortages outstanding. Urban mortgage foreclosure rates not calculated for state-years with less than 10 mortgages outstanding.

foreclosure rates and prohibitions on deficiency judgments is contemporaneous or lagged, we estimate the model using the combined foreclosure rate for 1931 and 1932, the combined foreclosure rate for 1931–1933 and the combined foreclosure rate from 1931–1934.

Table 7 contains the results of the probit estimates. The table shows the effect of a one-unit change on the probability the state attempted to ban deficiency judgments estimated at the means of foreclosure rates. Only the farm foreclosure rates have a statistically significant relationship with whether the state tried to pass a ban on deficiency judgments. An increase of 10 foreclosures per 1,000 farms per year is associated with a 4–9 percent higher chance of attempting to enact a ban on deficiency judgments. Admittedly, the data on farm foreclosure rates is of a higher quality than the foreclosure rates for urban mortgages.

Table 7
Marginal Effects from Probit Estimation on Deficiency Judgment Bans

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Urban 3132	0.0028		0.0020						
Farm3132		0.0075***	0.0044*						
Urban3133				0.0012		-0.0006			
Farm3133					0.0077***	0.0055*			
Urban3134							0.0015		-0.0001
Farm3134								0.0085***	0.0056
Pseudo R-squared	7%	22%	17%	1%	20%	13%	1%	19%	11%
No. obs.	38	48	37	37	48	37	37	48	37

Notes: 1) Dependent variable takes a value of 1 if state attempted a ban on deficiency judgments in 1933-1935. 2) *Urban3132* is the number of foreclosures per 1,000 urban mortgages in 1931 and 1932 combined. 3) *Farm3132* is the average number of foreclosures per 1,000 farms in 1931 and 1932 combined. 4) *Urban3133*, *Farm3133*, *Urban3134*, and *Farm3134* are defined analogously to *Urban3132* and *Farm3132*. 5) *, **, and *** denote significance at the 10%, 5%, and 1% levels. 6) See also notes to Table 6.

CONCLUSIONS

In this paper, we have reviewed the history of America's foreclosure laws. We find that, with the exception of anti-deficiency statutes, most differences in state mortgage law date from the 19th century and in many cases from before the Civil War. The laws also change infrequently. There is little evidence that differences in state economic conditions led to divergences in the law. In fact, the only discernible patterns in the data are 1) a tendency for younger states to be more likely to follow the lien theory rather than the title theory of mortgages, 2) a tendency for states with more restrictive usury laws in the 19th century to follow the title theory of mortgages and 3) a greater chance of prohibitions on deficiency judgments in states that experienced more farm mortgage foreclosures in the early 1930s.

REFERENCES

Alston, Lee J., 1983. Farm Foreclosures in the United States during the Interwar Period. *Journal of Economic History*, 43:4, 885–903.

Alston, Lee J., 1984. Farm Foreclosure Moratorium Legislation: A Lesson from the Past. *American Economic Review*, 74:3, 445–457.

Ambrose, Brent W., Richard J. Buttimer Jr., and Charles A. Capone, 1997. Pricing Mortgage Default and Foreclosure Delay. *Journal of Money, Credit, and Banking*, 29:3, 314–325.

Baker, Matthew J., Thomas J. Miceli, and C.F. Sirmans, 2008. An Economic Theory of Mortgage Redemption Laws. *Real Estate Economics*, 36:1, 31–45.

Benmelech, Efraim and Tobias J. Moskowitz, 2010. The Political Economy of Financial Regulation: Evidence from U.S. State Usury Laws in the 19th Century. *Journal of Finance*, 65:3, 1029–73.

Bernhardt, Roger, 1992. ULSIA's Remedies on Default — Worth the Effort? *Connecticut Law Review*, 24, 1001–73.

Buchman, John F. III, 1948. "Depression Jurisprudence:" Remaining Effects in Statutory Law. *Michigan Law Review*, 47:2, 254–61.

Bunn, Charles, 1933. The Impairment of Contracts: Mortgage and Insurance Moratoria. *University of Chicago Law Review*, 1:2, 249–65.

Chaplin, H.W., 1890. The Story of Mortgage Law. *Harvard Law Review*, 4:1, 1–14.

Crabb, George, 1846. The Law of Real Property in its Present State; Practically Arranged and Digested in All its Branches, Including the Very Latest Decisions of the Courts, vol. 2. Philadelphia: T. & J.W. Johnson.

REFERENCES (CONT.)

Dewey, Davis Rich and Robert Emmet Chaddock, 1911. *State Banking before the Civil War.* United States National Monetary Commission.

D.P.K., 1933. Constitutional Law: Mortgage Foreclosure Moratoria Statutes. *Michigan Law Review*, 32:1, 71–80.

Durfee, Edgar Noble and Delmar W. Doddridge, 1925. Redemption from Foreclosure Sale: The Uniform Mortgage Act. *Michigan Law Review*, 23:8, 825–69.

Dwyer, Gerald P. Jr., 1996. Wildcat Banking, Banking Panics, and Free Banking in the United States. Federal Reserve Bank of Atlanta *Economic Review*, December, 1–20.

Geis, Norman, 1995. Escape from the 15th Century: The Uniform Land Security Interest Act. *Real Property, Probate, and Trust Journal*, 30, 289–323.

Gerardi, Kristopher, Lauren Lambie-Hanson, and Paul S. Willen, 2011. Do Borrower Rights Improve Borrower Outcomes? Evidence from the Foreclosure Process. Manuscript, Federal Reserve Bank of Boston.

Ghent, Andra C., 2011. Securitization and Mortgage Renegotiation: Evidence from the Great Depression. *Review of Financial Studies*, 24:6, 1,814–1,847.

Ghent, Andra C. and Marianna Kudlyak, 2011. Recourse and Residential Mortgage Default: Evidence from U.S. States. *Review of Financial Studies*, 24:9, 3,149-86.

Gibbons, J.S., 1859. *The Banks of New York, their Dealers, the Clearing House, and the Panic of 1857.* New York: D. Appleton & Co.

Glaeser, Edward and Jose Scheinkman, 1998. Neither a Borrower Nor a Lender Be: An Economic Analysis of Interest Restrictions and Usury Laws. *Journal of Law and Economics*, 41:1, 1–36.

Gouge, William M., 1833. A Short History of Paper-Money and Banking in the United States: Including an Account of Provincial and Continental Paper Money. Philadelphia: T.W. Ustick.

Grada, Cormac O. and Eugene N. White, 2003. The Panics of 1854 and 1857: A View from the Emigrant Industrial Savings Bank. *Journal of Economic History*, 63:1, 213–40.

Guidotti, Aldo P., 1943. Mortgages and Trust Deeds: Enforcement of a Secured Debt in California. *California Law Review*, 31:4, 429–35.

Handzlik, Anthony J., 1984. Comment: Mortgage Foreclosure as Fraudulent Conveyance: Is Judicial Foreclosure an Answer to the Durrett Problem? *Wisconsin Law Review*, 195.

REFERENCES (CONT.)

Helderman, Leonard Clinton, 1980. National and state banks: a study of their origins. Google ebook.

Holmes, George K., 1892. Usury in Law, in Practice and in Psychology. *Political Science Quarterly*, 7:3, 431–67.

J.F.D., 1863. Sales and Titles under Deeds of Trust. The American Law Register, 11:11, 641-58.

Jones, Leonard A., 1878. *A Treatise on the Law of Mortgages of Real Property,* 1st ed. Boston: The Riverside Press.

Jones, Leonard A., 1879. *A Treatise on the Law of Mortgages of Real Property,* 2nd ed. Boston: The Riverside Press.

Jones, Leonard A., 1904. *A Treatise on the Law of Mortgages of Real Property,* 6th ed. Indianapolis: The Bobbs-Merrill Company.

Jones, Leonard A., 1915. *A Treatise on the Law of Mortgages of Real Property,* 7th ed. Indianapolis: The Bobbs-Merrill Company.

Jones, Leonard A., 1928. *A Treatise on the Law of Mortgages of Real Property,* 8th ed. Indianapolis: The Bobbs-Merrill Company.

Kent, James, 1830. Commentaries on American Law. Volume IV, Part 6, Lecture 57.

Mian, Atif, Amir Sufi, and Francesco Trebbi, 2011. Foreclosures, House Prices, and the Real Economy. Manuscript, University of British Columbia.

Milliner, J. David, 1991. Real Property Collateral: The "One-Action" Rule in Action. *Utah Law Review*, 557.

National Mortgage Servicer's Reference Directory, 2008. 25th Ed.

Nelson, Grant S. and Dale A. Whitman, 2004. Reforming Foreclosure: The Uniform Nonjudicial Foreclosure Act. *Duke Law Journal*, 53:5, 1,399–1,514.

Pence, Karen, 2006. Foreclosing on Opportunity: State Laws and Mortgage Credit. *Review of Economics and Statistics*, 88:1, 177–82.

Pomeroy, Dwight A., 1926. The Uniform Mortgage Act. Journal of Political Economy, 34:3, 383-6.

Poteat, J. Douglass, 1938. State Legislative Relief for the Mortgage Debtor during the Depression. *Law and Contemporary Problems*, 5:4, 517–44.

REFERENCES (CONT.)

Prather, William C., 1957. Foreclosure of the Security Interest. *University of Illinois Law Review*, 1957:3, 420–61.

Reeve, Harold L., 1938. The New Proposal for a Uniform Real Estate Mortgage Act. *Law and Contemporary Problems*, 5:4, 564–91.

Rockoff, Hugh, 2003. Prodigals and Projectors: An Economic History of Usury Laws in the United States from Colonial Times to 1900. NBER Working Paper No. 9742.

Russell, Horace and David A. Bridewell, 1938. Mortgage Law and Mortgage Lending. *Journal of Land and Public Utility Economics*, 14:3, 301–21.

Skilton, Robert H., 1943. Developments in Mortgage Law and Practice. *Temple University Law Quarterly*, 17:4, 315–84.

Stauber, Benjamin Ralph and Mark Matthew Reagan, 1935. The Farm Real Estate Situation 1934–1935. US Department of Agriculture Circular No. 382. Washington: GPO.

Stickle, Mark, 2011. The Ohio Life Insurance and Trust Company: Eastern Capital and Mortgage Credit in Ohio, 1835-1850. Manuscript, Ohio State University.

Tefft, Sheldon, 1937. The Myth of Strict Foreclosure. *The University of Chicago Law Review*, 4:4, 575–96.

Temin, Peter and Hans-Joachim Voth, 2008. Interest Rate Restrictions in a Natural Experiment: Loan Allocation and the Change in the Usury Laws in 1714. *The Economic Journal*, 118, 743–58.

Vaughan, Harold C., 1940. Reform of Mortgage Foreclosure Procedure. Possibilities Suggested by Honeyman v. Jacobs. *University of Pennsylvania Law Review and American Law Register*, 88:8, 957–81.

Vogel, Sarah M., 1984. The Law of Hard Times: Debtor and Farmer Relief Actions of the 1933 North Dakota Legislative Session. *North Dakota Law Review*, 60, 489–513.

Weber, Warren, 2006. Early State Banks in the United States: How Many Were There and When Did They Exist? *Journal of Economic History*, 66:2, 433–55.

Williams, Joshua, 1866. *Principles of the Law of Real Property. Intended as a First Book for Students in the Use of Conveyancing*, 3rd American Ed. Philadelphia: T & J.W. Johnston and Co.

AUTHOR BIOGRAPHY

Andra Ghent

As an assistant professor in the Department of Finance in the Arizona State University (ASU) W. P. Carey School of Business, Professor Andra Ghent teaches courses in real estate and researches real estate finance and financial intermediation. Her research has been published in the *Journal of Economic Dynamics and Control, the Journal of Money, Credit, and Banking, the Journal of Urban Economics,* and the *Review of Financial Studies*. It has been cited by several media outlets such as *The New York Times, The Wall Street Journal* and *The New Republic*. Prior to joining ASU, Professor Ghent held positions with Baruch College, JPMorgan, the Federal Reserve Board of Governors and the Bank of Canada. She holds a Ph.D. from the University of California, San Diego, an M.A. from the University of Toronto and a B.A. (Honors) from the University of British Columbia.



Investing in communities

1717 Rhode Island Ave., NW, Suite 400 Washington, DC 20036 www.mortgagebankers.org