Understanding Manufactured Housing

Kevin Park, Jessica Russell, Nora O’Reilly, Rachel Siegel, Lariece Brown



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Heard of Chattel?

Loan Performance in FHA's Forgotten Manufactured Housing Program

Kevin Park

US Department of Housing and Urban Development



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RURAL RESEARCH SYMPOSIUM November 8-9 | AN ALL FOR HOME EVENT

The opinions expressed are those of the author, and do not necessarily reflect the policies of the Department of Housing and Urban Development or the Biden Administration.



HUD's Role in Manufactured Housing

- The US Department of Housing and Urban Development (HUD) oversees standards for manufactured housing (MH), under the National Manufactured Housing Construction and Safety Standards Act of 1974.
- The Federal Housing Administration (FHA) insures mortgages for MH titled as real property just as site-built homes under Section 203(b) of the National Housing Act of 1934.
- Under the Housing and Urban Development Act of 1969, FHA also insures loans for MH units, titled as personal or chattel property through Title I of the National Housing Act.

FHA Manufactured Housing Lending



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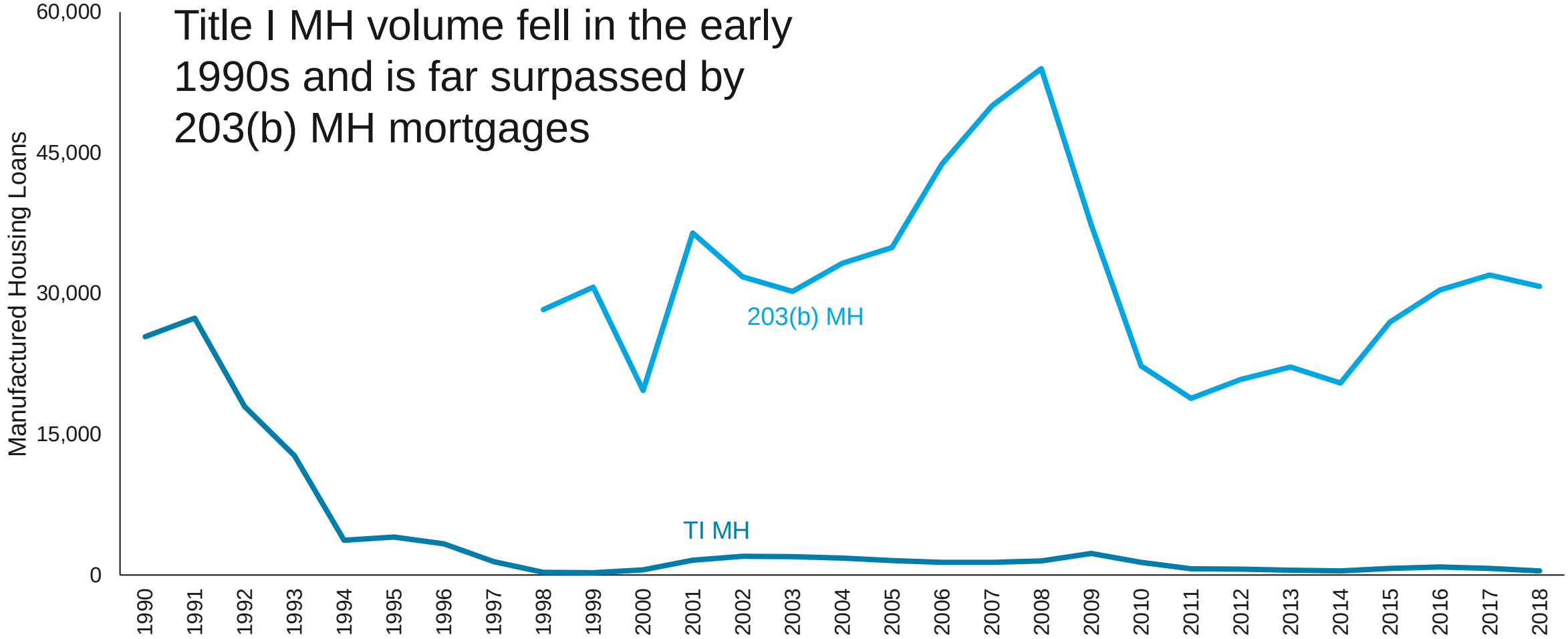
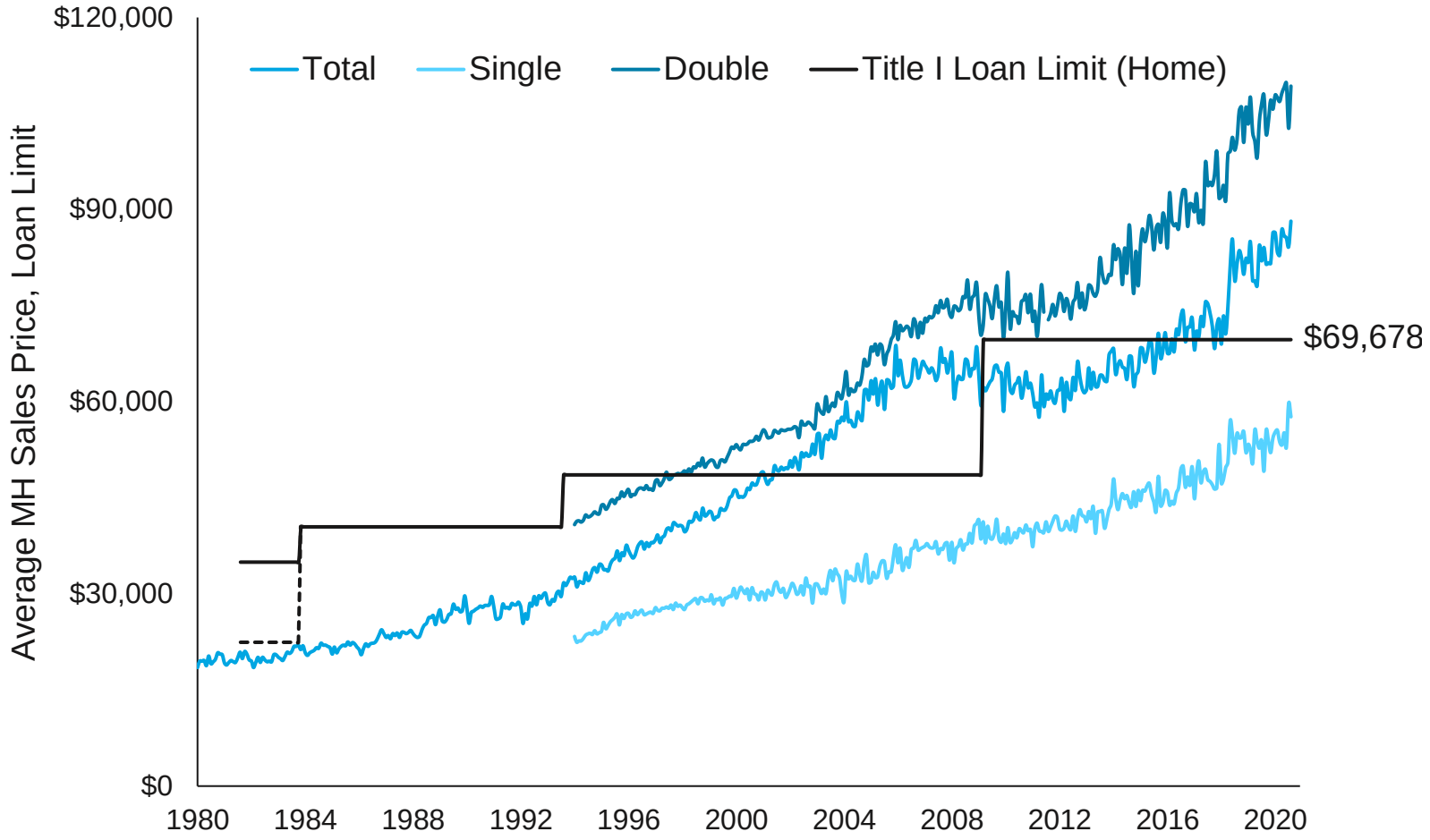
Title I MH volume fell in the early 1990s and is far surpassed by 203(b) MH mortgages





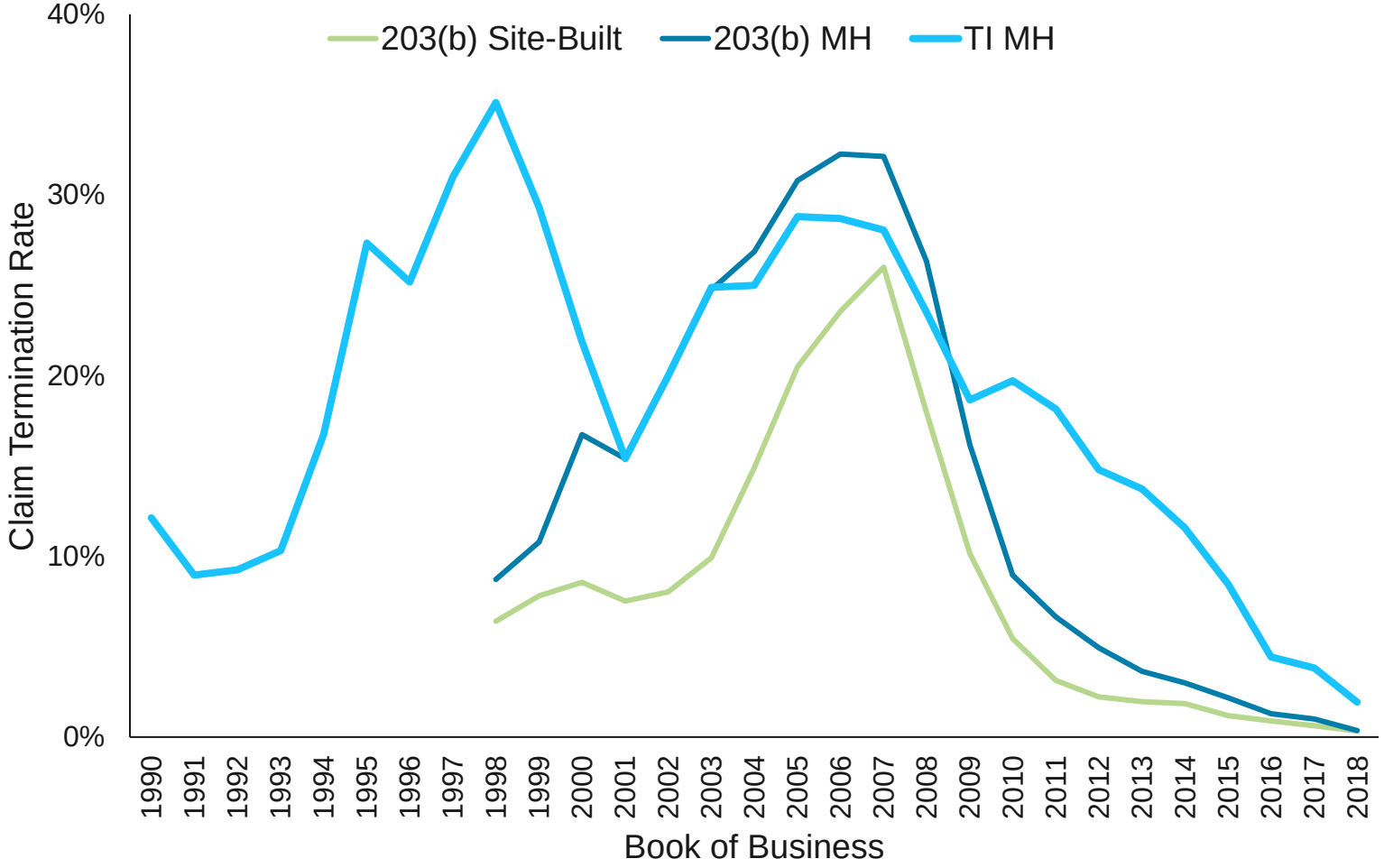
Title I Barriers

- Limited secondary market
- Binding loan limits
- Antiquated processing procedures





Claim Rates



Title I loans typically have higher claim rates than FHA-insured mortgages

Limited existing literature on chattel loan performance

Title I has higher insurance premiums

	Upfront	Annual
TI	2.25%	1.0%
203	1.75%	0.85% (0.45-1.05%)



Overview

- FHA-insured home purchase loans originated between 2012 and 2018 with performance through 2019
  - Propensity score matching based on multinomial logistic model
  - 18K matched sample (9,150 site-built; 6,364 203(b) MH; 2,402 TI MH)
  - Cox proportional hazard model of claim-default
- Borrowers using Title I are disproportionately lower income, lower credit score, older and non-Hispanic
- Manufactured housing is associated with higher risk of default
  - But the difference between real and personal property within MH is not significant after accounting for land tenure

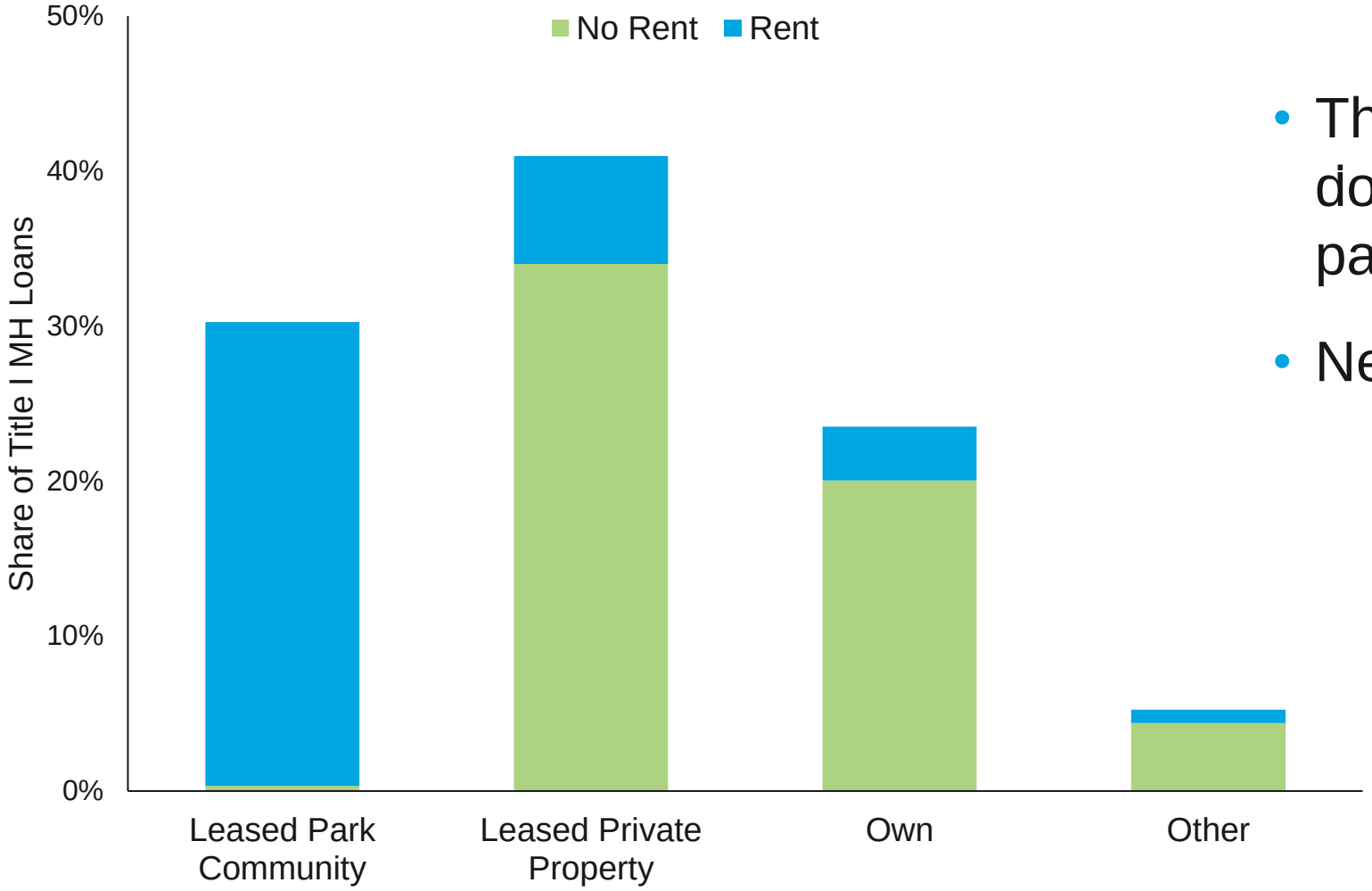


Construction Status

- Most (92%) Title I loans are for *new* MH units
  - Less than 12% of 203(b) loans are for new units
- Price premium for new homes disappears after occupancy
  - Confounds estimates of depreciation for MH without land (i.e., equity)
- Propensity score matching stratified by state, year and construction status



Land Tenure



- Three-in-five Title I borrowers do not report a lot rent payment
- Nearly a quarter own the land



Default Hazard

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		Matched and Weighted							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Manufactured Housing									
203(b)	1.528***	1.496**	1.440*	1.791***	1.778***	1.718**	1.711**	1.653**	1.651**
	(0.123)	(0.232)	(0.239)	(0.298)	(0.295)	(0.290)	(0.284)	(0.289)	(0.284)
Title I	5.532***	2.265***	1.940***	2.295***	2.240***	1.860***	1.439*	2.231***	1.663**
	(0.575)	(0.202)	(0.231)	(0.349)	(0.339)	(0.271)	(0.235)	(0.357)	(0.264)
χ^2: 203(b)=TI	82.23***	11.55***	9.73**	6.93**	6.07*	1.65	1.06	10.52**	0.002
Credit Score			0.995***	0.995***	0.995***	0.995***	0.995***	0.995***	0.995***
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Housing Ratio				1.028**	1.026**	1.021*	1.022*	1.025*	1.026**
				(0.009)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
LTV Ratio				1.046***	1.046***	1.046***	1.046***		
				(0.011)	(0.011)	(0.011)	(0.011)		
New Construction					1.184	1.210	1.202	1.114	1.103
					(0.124)	(0.127)	(0.136)	(0.124)	(0.132)
Rent Lot						1.311**		1.314**	
						(0.120)		(0.114)	
Land Ownership									
Leased Private Community							2.021**		2.091***
							(0.468)		(0.442)
Leased Private Property							1.351		1.439*
							(0.257)		(0.258)
Other							2.612**		2.860**
							(0.967)		(1.026)
AIC		5842	5792	5758	5757	5754	5746	5777	5768

779,293 observations



Default Hazard

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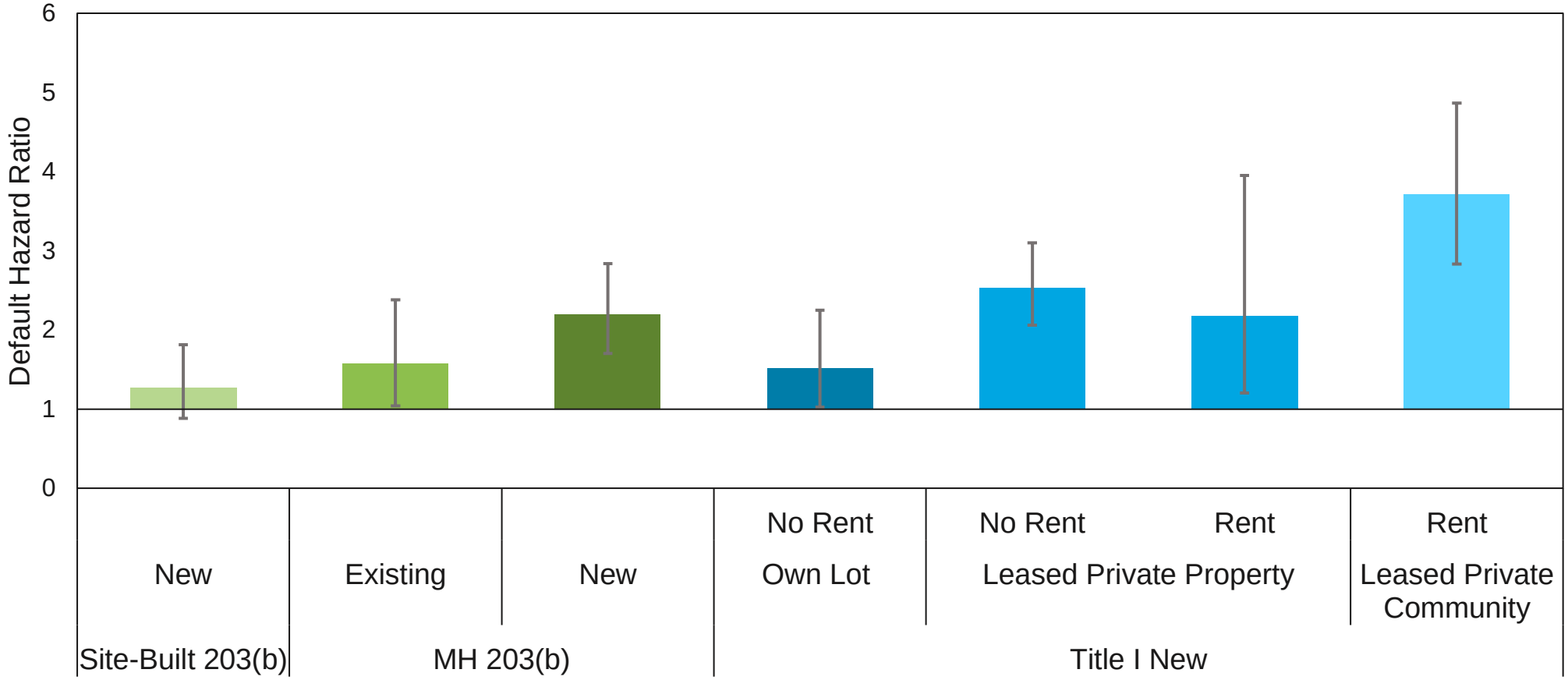



Conclusion

- Loans for manufactured homes, as personal property, are higher risk, mostly because used by higher risk borrowers
- Among borrowers with similar characteristics, land tenure is an important factor
  - Not inconsequential given share of manufactured homeowners that own the land or otherwise do not pay rent yet title housing unit as personal property
- Modernization of Title I is crucial if lending for manufactured homes as personal property is a public policy priority











Thank You

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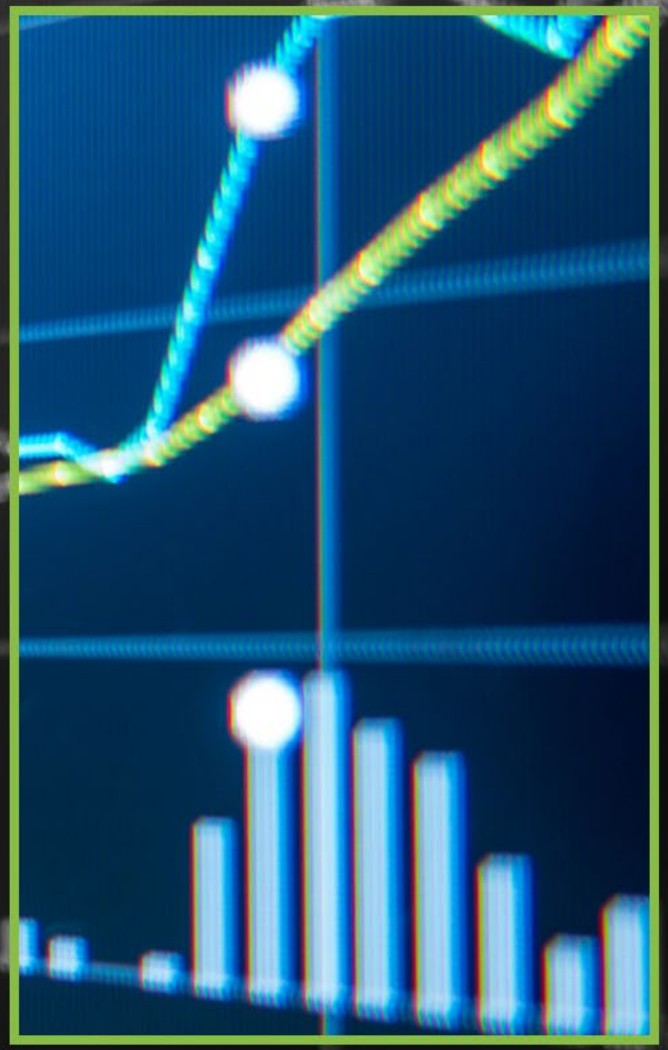
Manufactured Housing Finance

New Insights from the Home Mortgage Disclosure Act (HMDA) Data

Jessica Russell and Nora O'Reilly

Consumer Financial Protection Bureau



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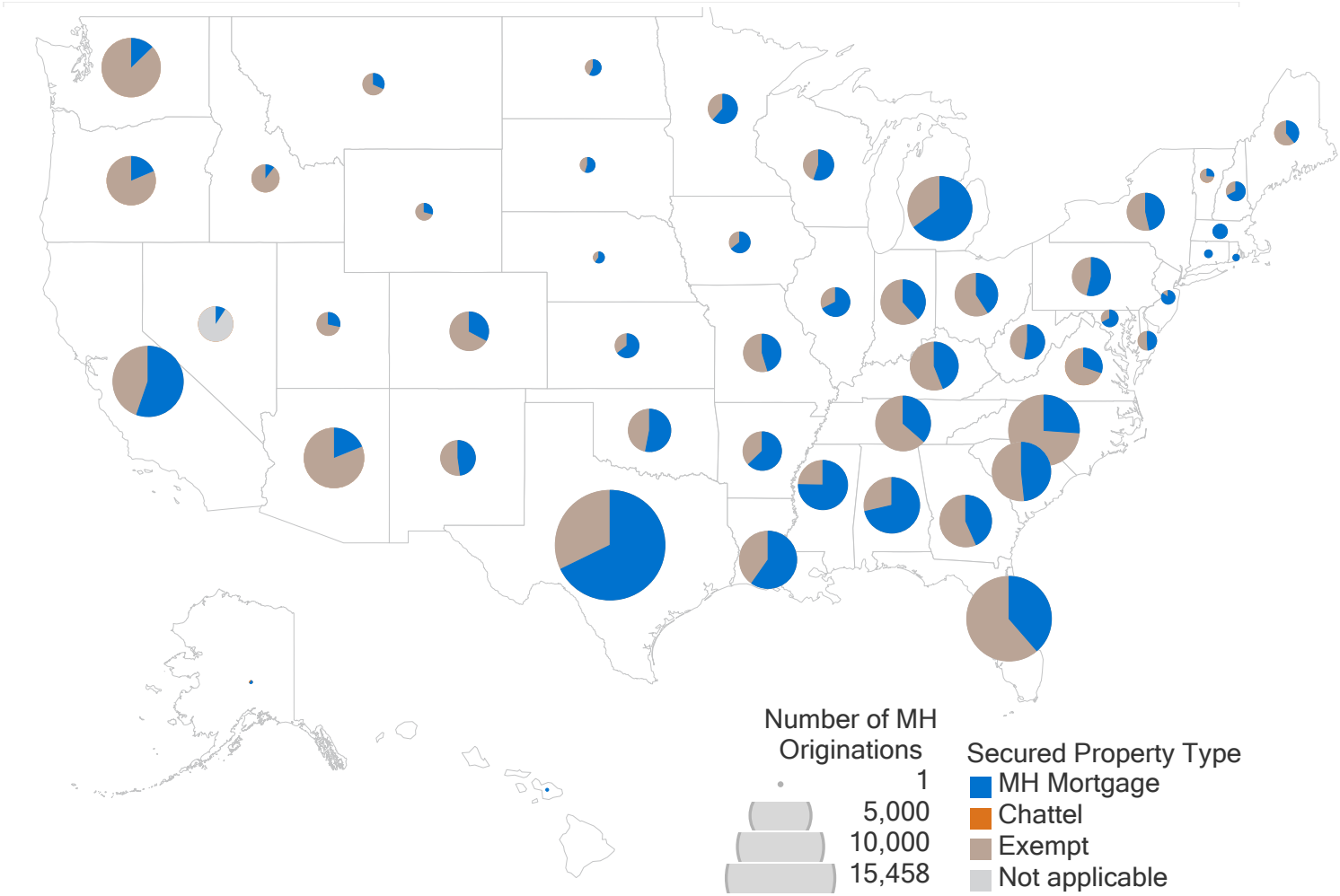
New Datapoints in HMDA

- Manufactured Home Land Property Interest:
  - Direct ownership
  - Indirect ownership (resident owned communities)
  - Paid lease (pay rent)
  - Unpaid lease (rent free)
  - Exempt or NA
- Manufactured Home Secured Property Type:
  - Manufactured home and land (mortgage)
  - Manufactured home and not land (chattel)
  - Exempt or NA

Secured Property Type Varies by Geography

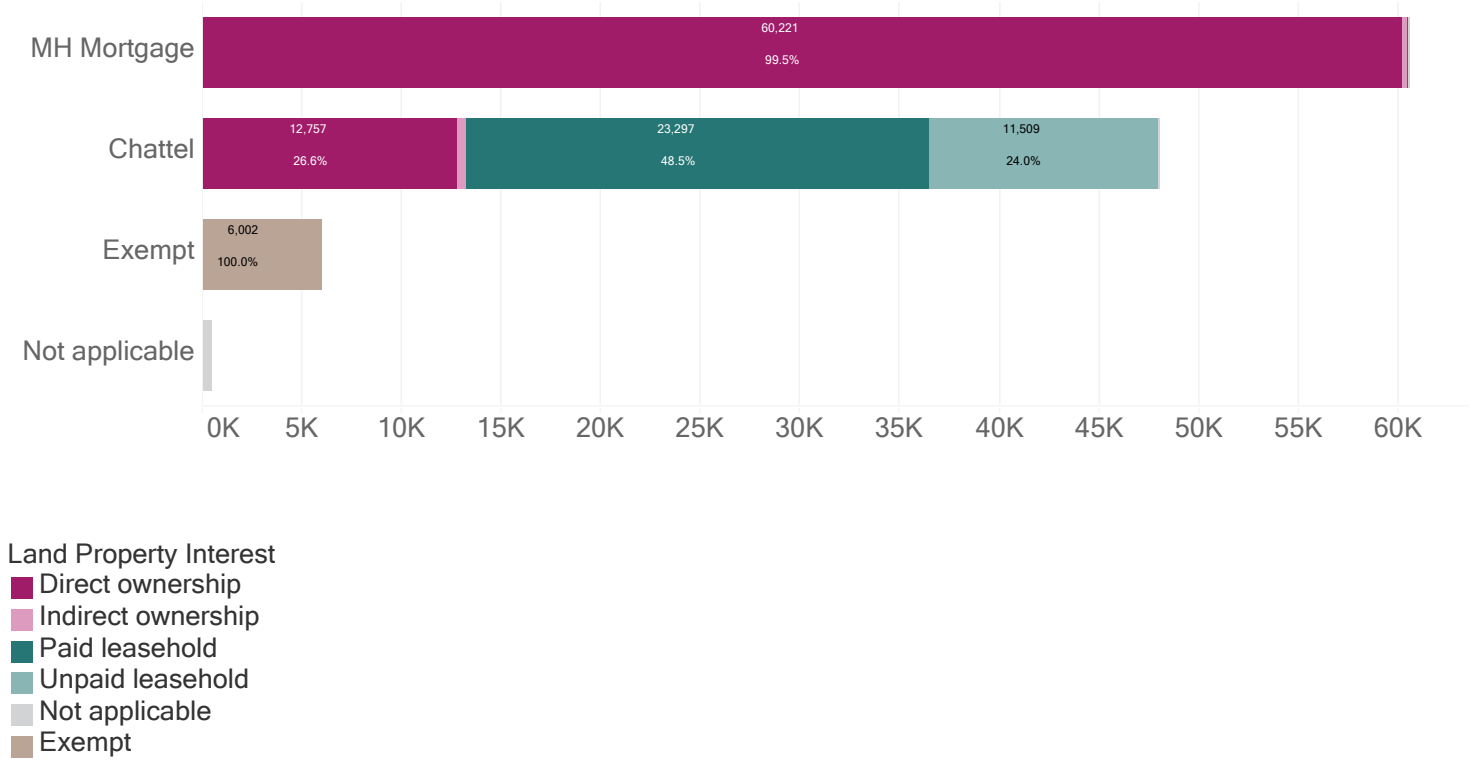
FIGURE 6: HOME PURCHASE LENDING BY STATE: CHATTEL AND MH MORTGAGES



Owned vs. Leased Land

- 27 percent of consumers who received chattel loans owned their land, even though they might have been eligible for mortgage financing.

FIGURE 11: SECURED PROPERTY TYPE BY LAND PROPERTY INTEREST



Underwriting Characteristics of Direct Owners

- Landowners who opt for chattel loans have slightly stronger credit characteristics than landowners who get mortgages, which suggests that chattel borrowers' credit profiles would not have prevented them from getting a mortgage.

TABLE 8: BORROWER CHARACTERISTICS: DIRECT OWNERS

CHARACTERISTIC (MEDIAN)	MANUFACTURED HOUSING: CHATTEL LOANS	MANUFACTURED HOUSING: MORTGAGE LOANS
APPLICANT CREDIT SCORE	688	691
COMBINED LTV	90.8	96.5
DEBT-TO-INCOME RATIO	35.5	39.0
APPLICANT INCOME	$55,000	$53,000
LOAN TERM (YEARS)	23	30
LOAN AMOUNT	$70,731	$127,200

MH Data Sources

- Comparing the data sources commonly used for MH research illuminates key differences between each.

TABLE 1: COMPARISON OF MANUFACTURED HOUSING DATA SOURCES

Data Source	Population	% Chattel National	% Chattel Texas	% Land Ownership
HMDA, 2019	• 2019 originations • New and used homes • Home purchase financed	42%	66%	64%
AHS, 2019	• Homes owned in 2019 but financed at any point in time • New and used homes • Home purchase financed	--	--	73%
MHS, 2019	• Units shipped and placed in 2019 • New homes • Financed and cash sales	76%	--	--
THOR, 2019	• 2019 changes in ownership • New and used homes • Home purchase financed	--	78%	--
UNC/Freddie Mac's MH Survey and Report on Loan Shopping Experiences	• Data is based on survey responses, sample for survey is based on THOR • 2015-2018 purchases • New and used homes • Home purchase financed	--	73%	61% (TX only)

Texas Homeownership Records (THOR)

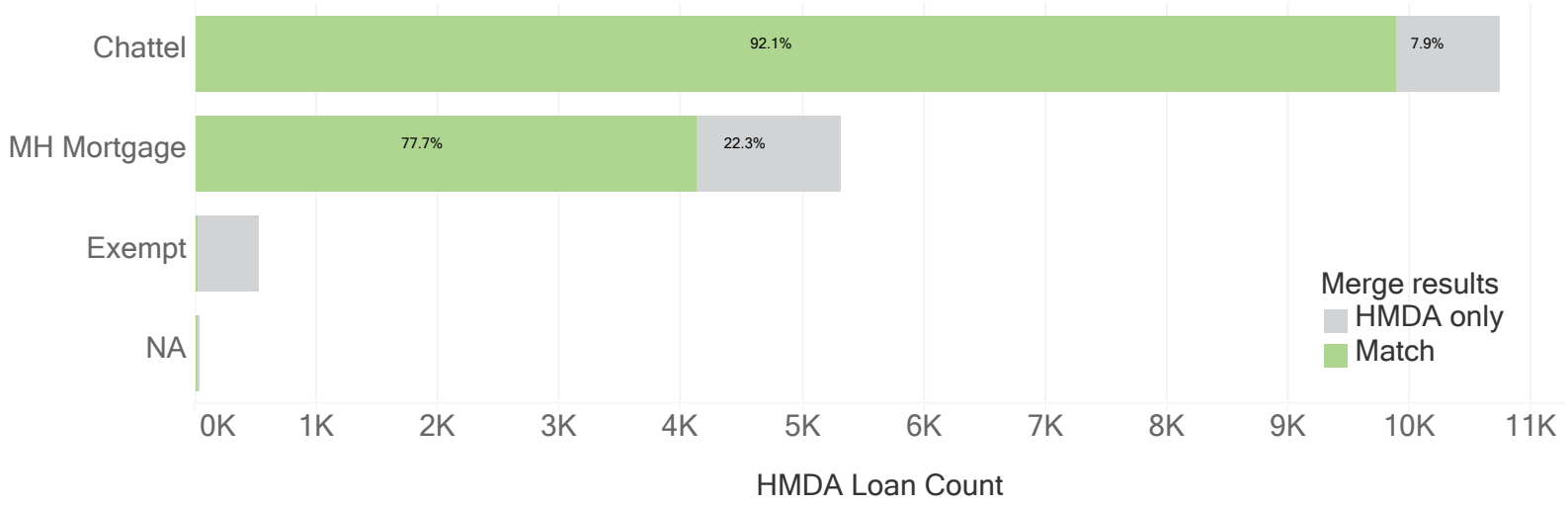
- Updated daily
- Administrative dataset designed for consumers to look up ownership of a manufactured home.

Personal Property	Real Property
• Liens on personal property are recorded on the Statement of Ownership and are legally enforceable.	• Liens for real properties must be recorded with the county clerk, so recording them on the Statement of Ownership is optional. • THOR data notes when the lien has been perfected (recorded with the county). • Lender can report a lien in THOR but it is not legally enforceable. Some lenders do; others don't.

HMDA & Texas Homeownership Records

- Performed an address match between HMDA & THOR.
- Chattel loans have a higher match rate than MH mortgages.

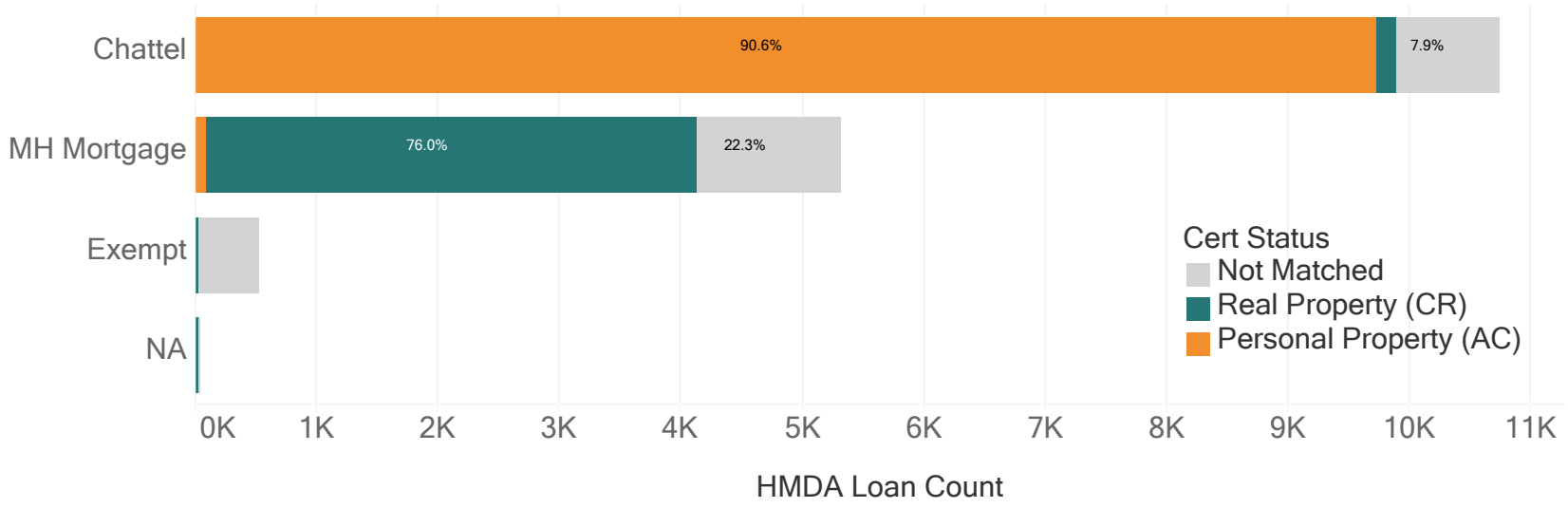
FIGURE 19: ADDRESS MATCH RESULTS FOR HMDA AND THOR BY HMDA SECURED PROPERTY TYPE



HMDA and THOR: Titling

- HMDA Mortgages appear as real property in THOR.
- HMDA Chattel loans appear as personal property in THOR.

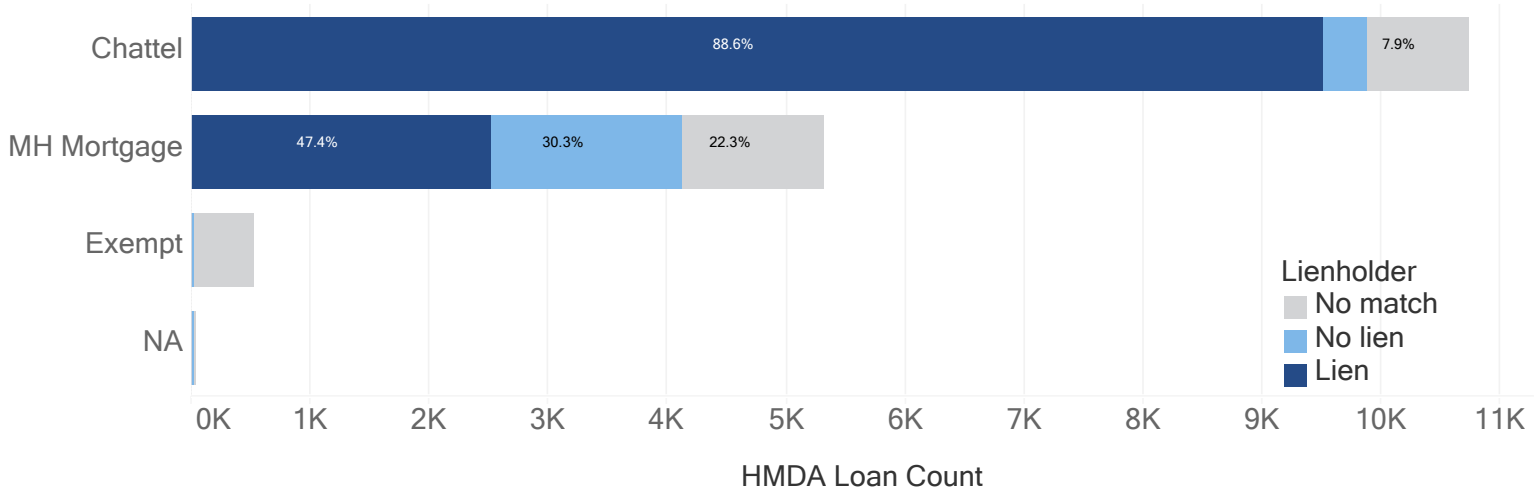
FIGURE 21: CERTIFICATION STATUS (THOR) BY SECURED PROPERTY TYPE (HMDA)



HMDA and THOR: Lien Status

- Mortgages are often missing lien information in THOR, whereas chattel loans are typically recorded.

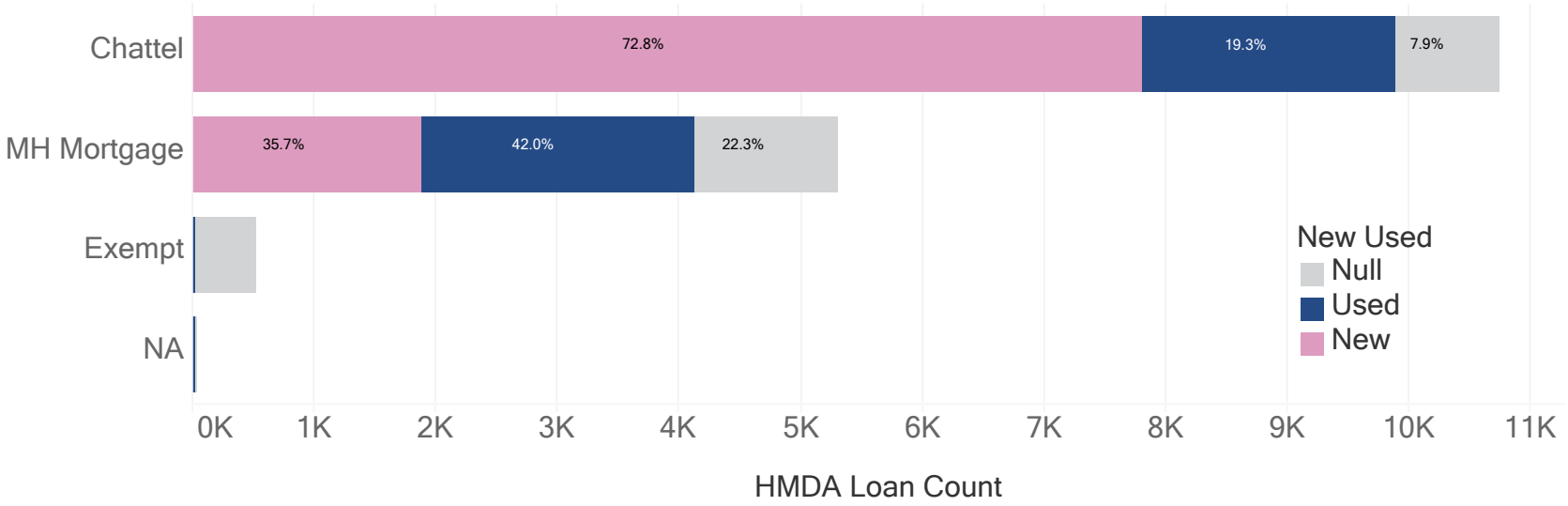
FIGURE 20: LIENHOLDER (THOR) BY SECURED PROPERTY TYPE (HMDA)



New vs Used

- Performing an address match with HMDA and THOR data provides new insight into the proportion of new properties differs by titling type.

FIGURE 22: NEW AND USED PROPERTIES (THOR) BY SECURED PROPERTY TYPE (HMDA)













Thank You

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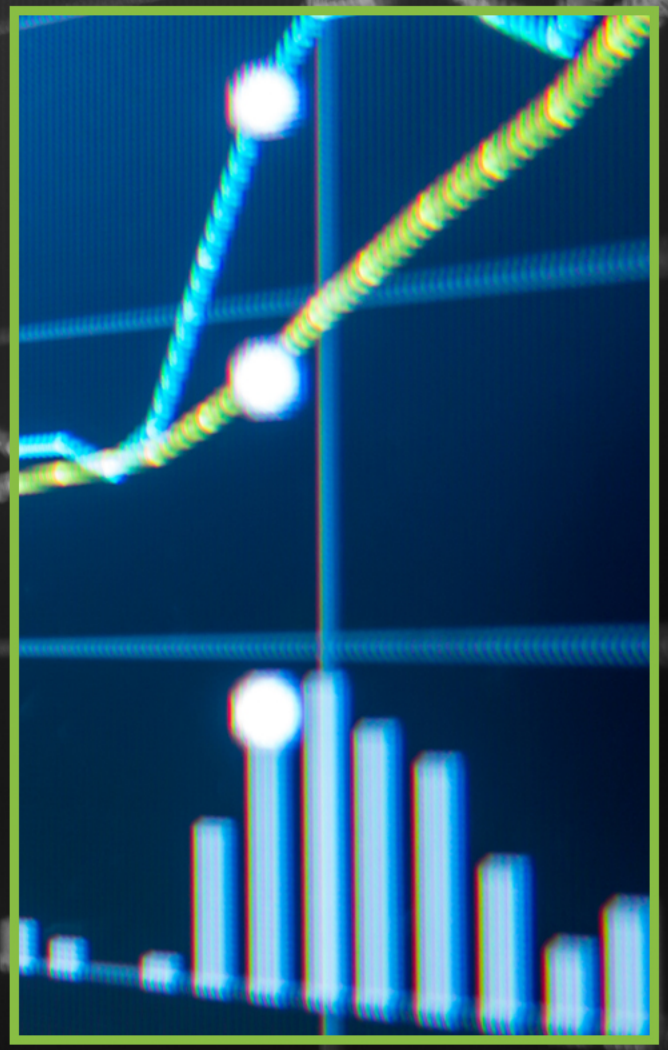
Manufactured Home Financing and Denial Rates

Rachel Siegel

The Pew Charitable Trusts



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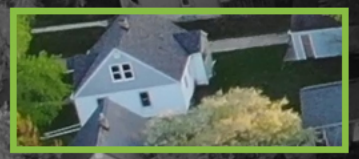
Research from the University of North Carolina

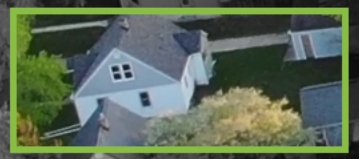


The Pew Charitable Trusts Commissioned Research

Center for Community Capital University of North Carolina at Chapel Hill

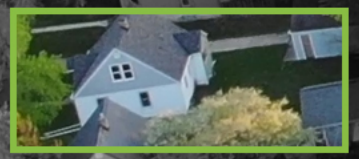
- Sarah Riley, Senior Research Economist
- Allison Freeman, Senior Research Associate
- Jess Dorrance, Managing Director

With generous permission to use the Manufactured Home Owner Survey from Freddie Mac



Roadmap

- Datasets and goals of research
- Geography and demographics of homeowners
- How manufactured home financing differs from site-built
- Research findings: denial rates, determinants, and impacts



Datasets and goals of research

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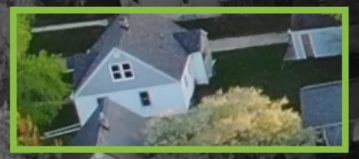
- Datasets used for the analysis included:
  - Home Mortgage Disclosure Act (HMDA) data from 2019
  - American Community Survey (ACS) data from 2018-2019
  - Manufactured Homeowners Survey (MHOS) data from Texas manufactured homeowners who purchased between 2015-2018
  - Texas owner title record data from 2018-2019

- Goal: to understand the financing availability for buyers of manufactured housing and determinants of denial
  - Owner-occupied
  - First-lien (not home equity line of credit)
  - Home purchase (not refinance or reverse mortgage)
  - Completed application (excludes incomplete or withdrawn applications)



Manufactured homes are more common in rural areas, Southeast, Southwest

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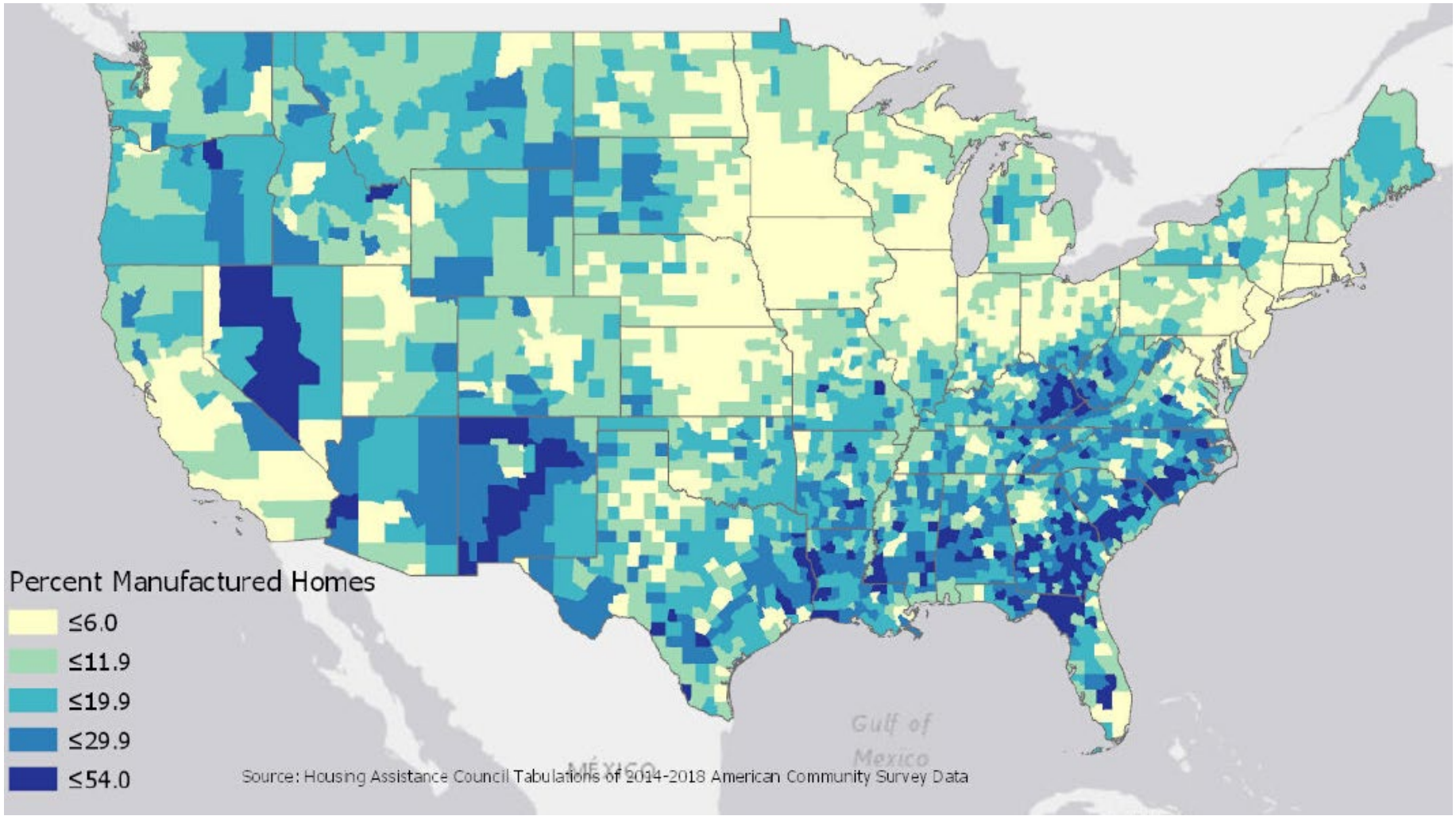

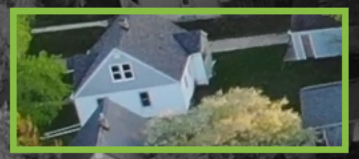

Differences in manufactured and site-built home financing

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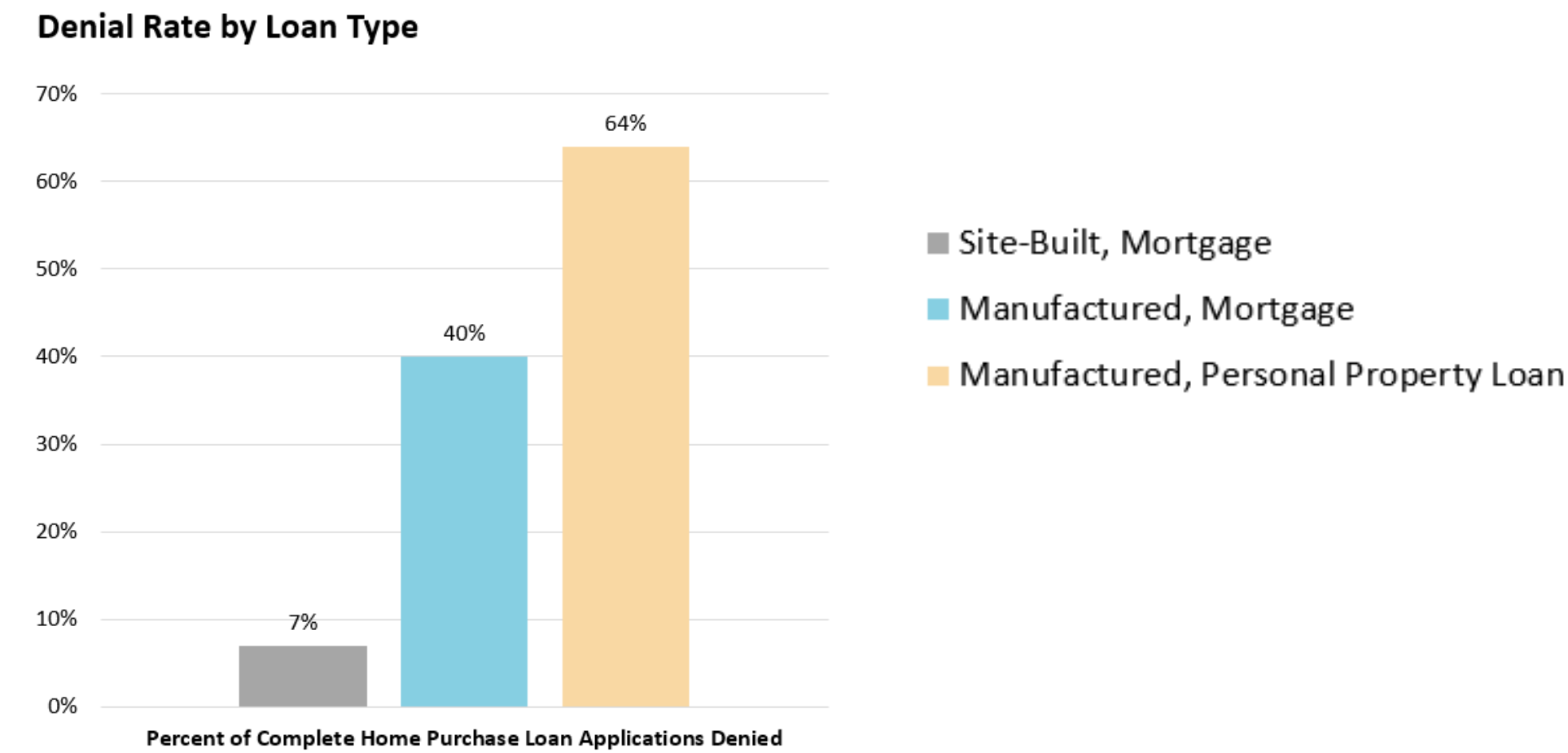
1. Personal property loans carry fewer consumer protections and higher interest rates than mortgages

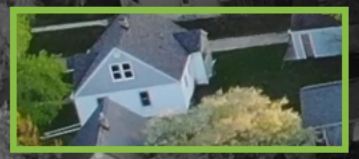
2. More difficult to obtain financing than site-built homes
   (denial rates are nearly 8 times higher than for site-built homes)

3. Cash purchases more prevalent
   (tend to be lower income buyers purchasing less expensive, older homes)

Denial rates are extraordinarily high



Source: Authors' calculations based on 2018-2019 HMDA data. MH applications represent about 7% of the sample. Personal property loans represent about 60% of MH applications and about 45% of MH originations.



Why denial rates are important

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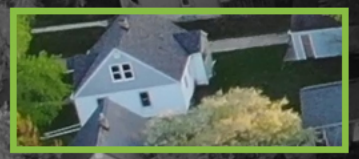
- Lack of access to financing may keep financially stable applicants from purchasing these lower cost homes
- Black, Hispanic, and Indigenous loan applicants are more likely to be denied than White counterparts
- Understanding determinants of denial rates helps identify ways to reduce unnecessary barriers to originating loans, which may help close the racial homeownership gap



Predictors of manufactured housing mortgage denial

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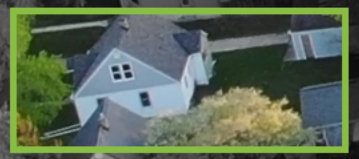
- Conventional loans (loans that are not FHA or VA)
  - Loans backed by the Federal Housing Administration (FHA), or Veteran Affairs (VA) are much less likely to be denied than those without federal backing
- Direct application to lender (different from site-built)
  - Applications made directly to a lender increase the likelihood of denial whereas loans made through a broker or dealer decrease the likelihood of denial
    - Many lenders do not make or specialize in manufactured housing loans
- Debt-to-income less than 20% or more than 50%
- High or not recorded combined loan-to-value
- Loans of $150,000 or less



Predictors of denial: Lack of government endorsement (FHA/VA)

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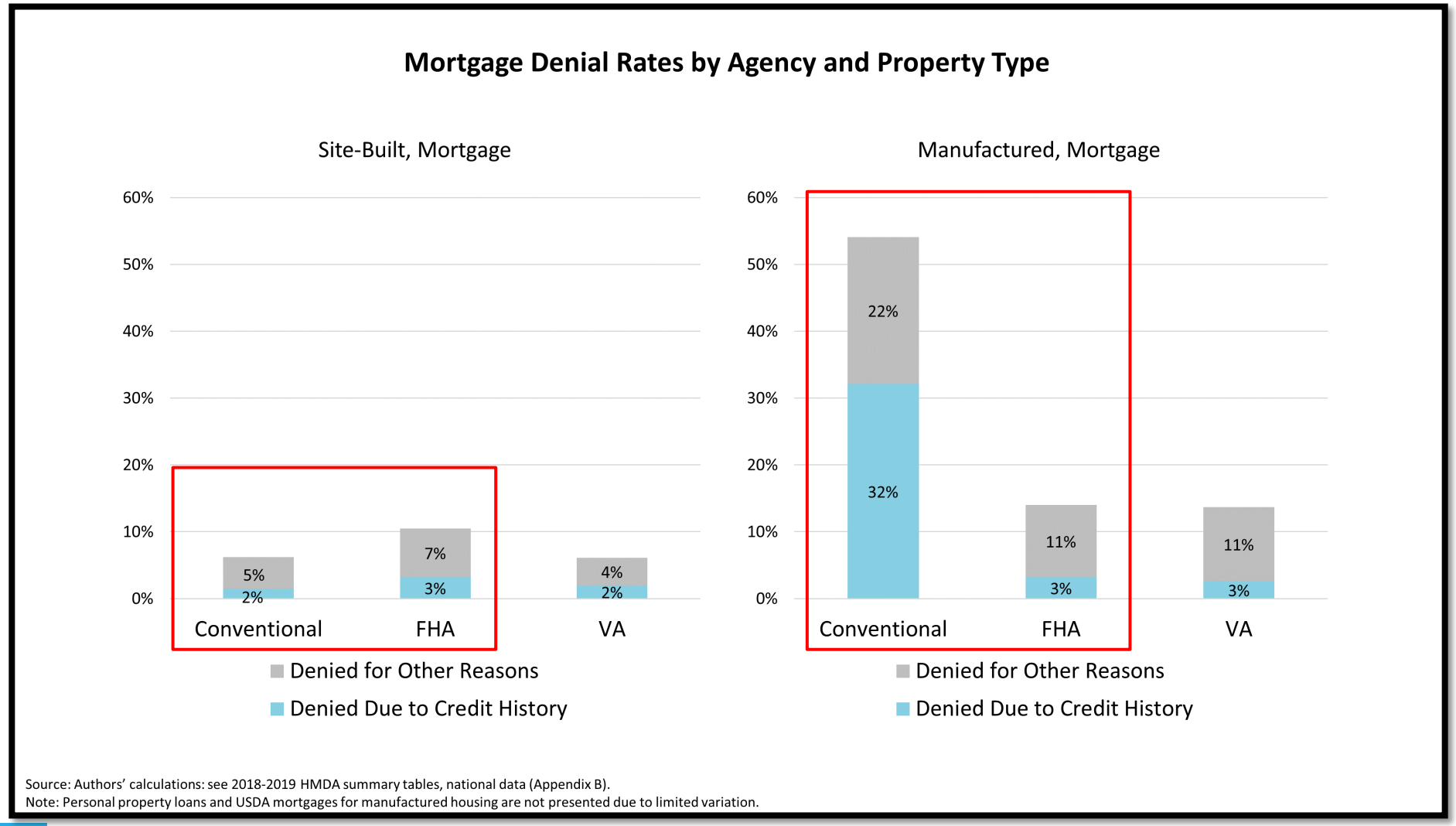
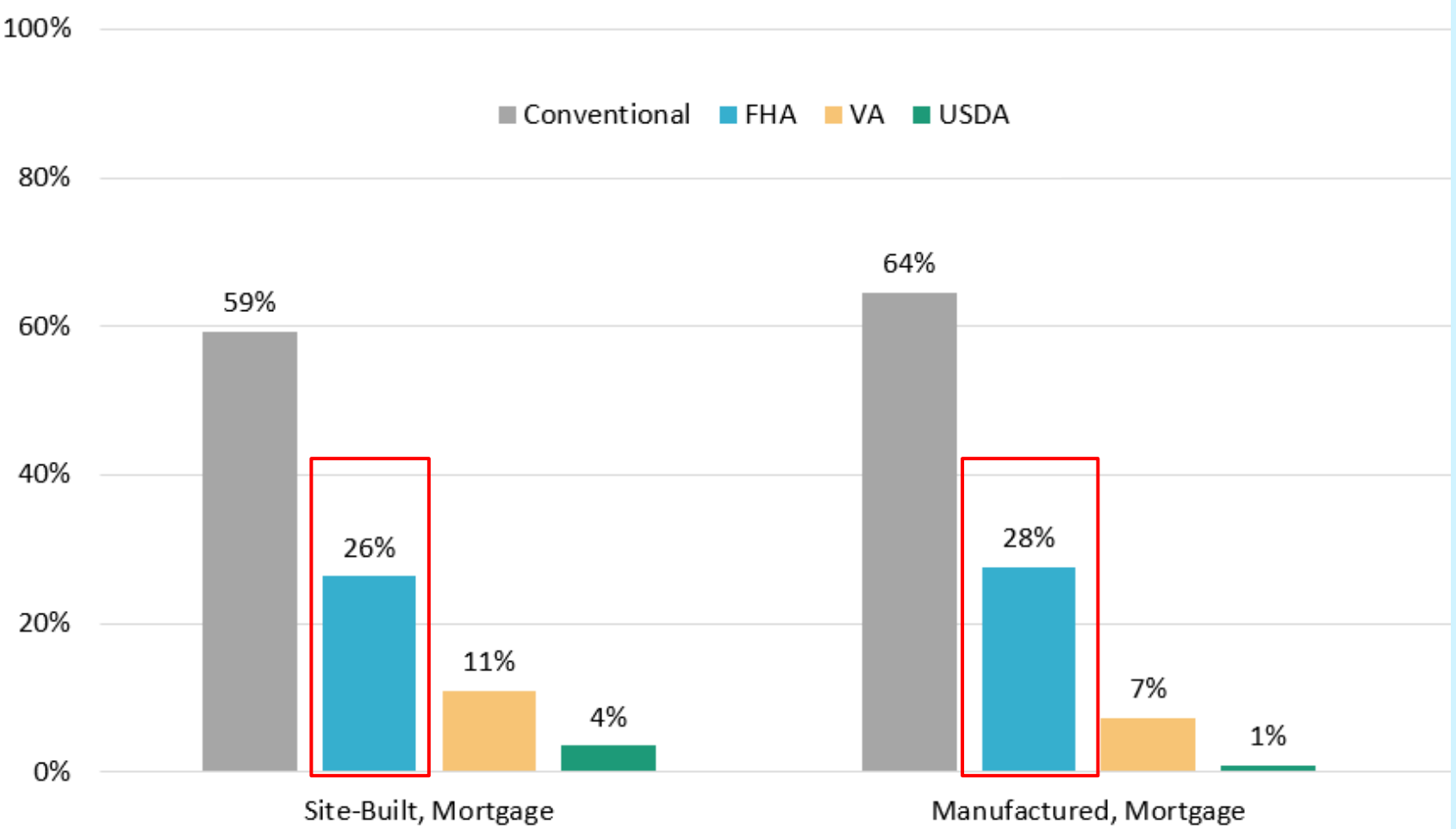
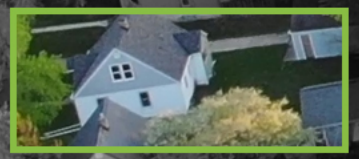


Source: Authors' calculations: see 2018-2019 HMDA summary tables, national data (Appendix B).
Note: Personal property loans and USDA mortgages for manufactured housing are not presented due to limited variation.

Percentage of applications for conventional, FHA, or VA mortgages



Just over a quarter of prospective buyers apply for FHA mortgages – regardless of whether they are buying a manufactured home or site-built house



Top denial reasons vary widely across loan types for manufactured homes

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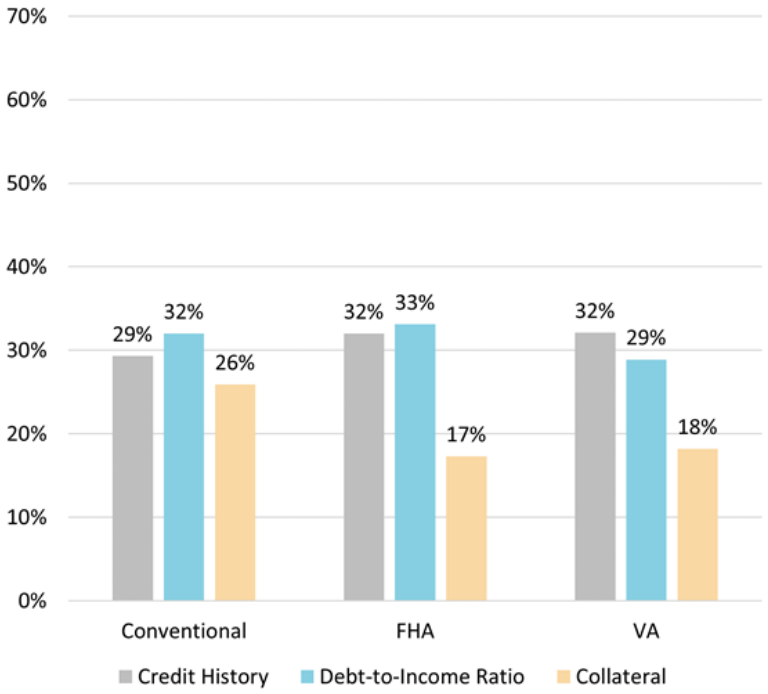
Top Mortgage Denial Reasons by Housing Type and Agency, Where Loan Amount < $150,000

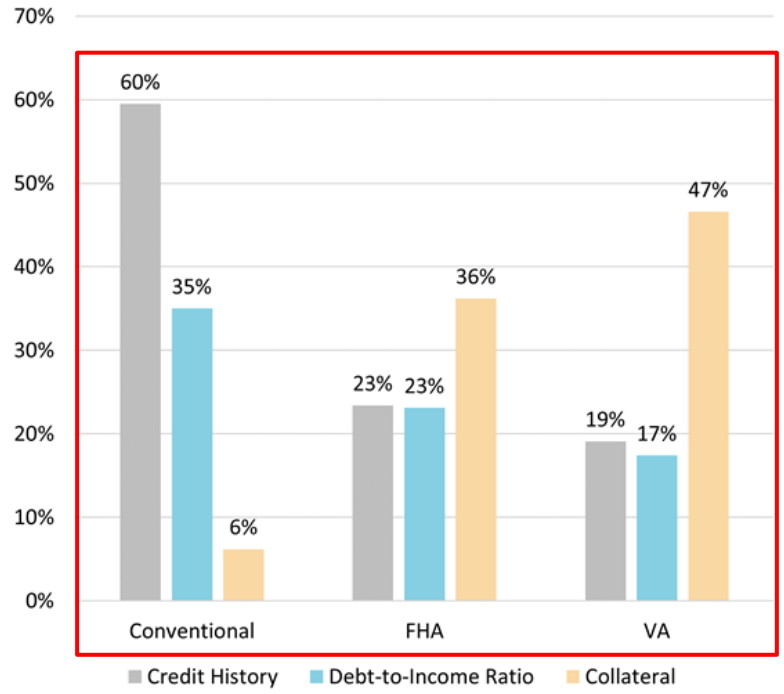
Site-Built, Mortgage

Denial Reasons by Agency

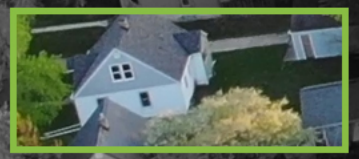


Manufactured, Mortgage

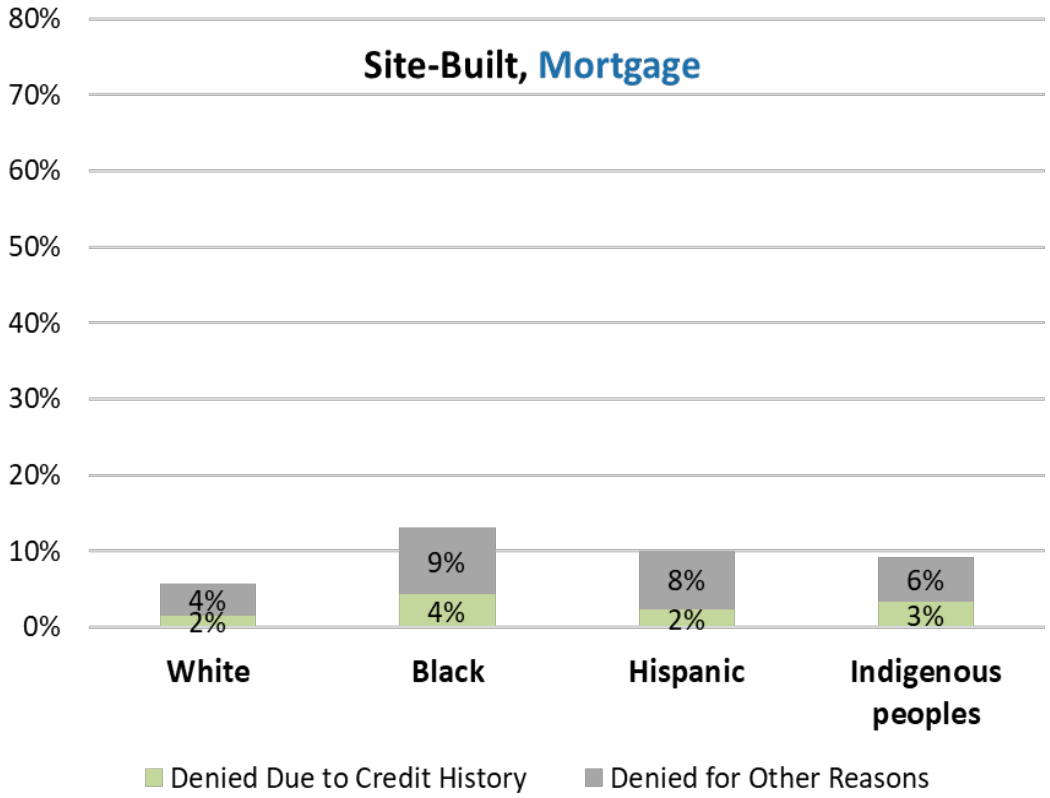
Denial Reasons by Agency

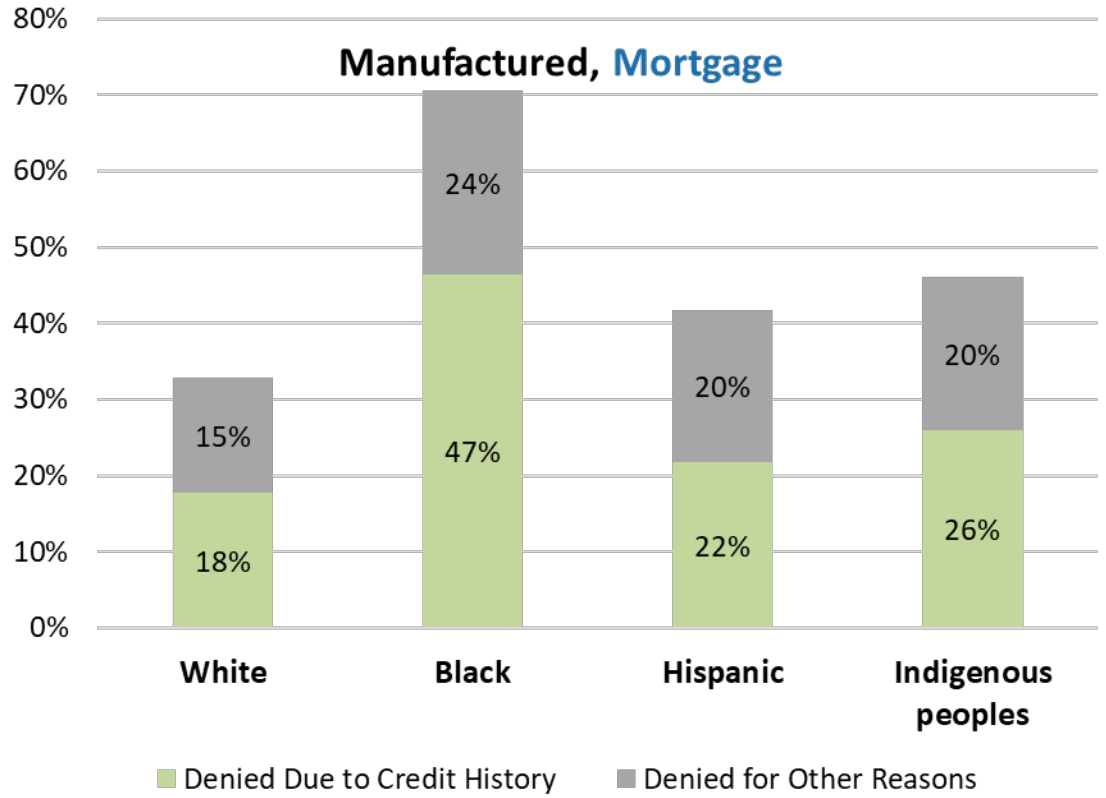


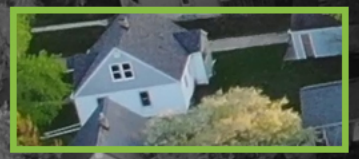
Source: Authors' calculations: see 2018-2019 HMDA summary tables, national data (Appendix B).



Black, Hispanic, and Indigenous applicants more likely denied than White applicants







Key takeaways

- Applications for manufactured home loans are denied nearly 8 times as often as those for site-built structures
- Manufactured homes seem to be underwritten differently – relying more on credit history and less on the value of the house
- Denial rates are lower for FHA and VA manufactured home mortgages
- Black or African American, Hispanic, and Indigenous applicants are more likely to be denied manufactured home loans than White applicants











Thank You

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Heard of Chattel?

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Kevin A. Park is an economist in the Housing Finance Analysis Division of the US Department of Housing and Urban Development's Office of Policy Development and Research. He previously worked as a research assistant at the Center for Community Capital at the University of North Carolina and Harvard University's Joint Center for Housing Studies. He received a PhD in City and Regional Planning from the University of North Carolina, MPA from Brown University, and BA in Economics and Government from the College of William and Mary. He lives in a rural county of Western North Carolina.



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Jessica Russell is the Mortgage Data Assets program manager at the Consumer Financial Protection Bureau (CFPB) in the Office of Mortgage Markets. She runs the market monitoring program, combining qualitative feedback with data to understand trends in the mortgage market. Her research interests have included manufactured housing, mortgage shopping, and reverse mortgages. She currently leads content creation for the homeowners portion of the COVID-19 interagency housing hub (consumerfinance.gov/housing). She joined the CFPB in 2012. Prior to that, Jessica worked in economic consulting. She has an MBA from the MIT Sloan School of Management and a bachelor's in economics from Mount Holyoke College.



NORA O'REILLY

Director's Financial Analyst, Consumer Financial Protection Bureau (CFPB)

Nora O'Reilly is a Director's Financial Analyst at the Consumer Financial Protection Bureau (CFPB). In her first-year rotation in the Office of Mortgage Markets, Nora worked with the market monitoring team to track trends in the mortgage market and provide market research and insights to other offices in CFPB. Outside of market monitoring, her primary responsibilities were forbearance outreach and manufactured housing research. In her current rotation in the Office of Enforcement, her primary responsibilities include investigation and litigation support and market monitoring for case generation.



Manufactured Home Financing and Denial Rates

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RACHEL SIEGEL

Officer, Pew Research Center

Rachel Siegel is an officer with the Pew Research Center's home financing project, conducting original research and analysis on the safety and affordability of mortgages, and on alternative financial arrangements for purchasing manufactured homes and other low-cost forms of housing. Her other work includes research on regulation and consumer use of transaction accounts (checking, prepaid cards, and mobile payments) to inform policy recommendations designed to increase safety and transparency for everyday financial products. She also represented Pew on the Federal Reserve's Faster Payments Task Force. Before coming to Pew, Siegel worked for Santander Bank and Century Bank, and interned at the Consumer Financial Protection Bureau. She holds a bachelor's degree in economics from the University of Vermont and a master's in economics from Boston University.



Discussant

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Lariece Brown is a senior economist and quantitative analytics director with the Single-Family Client and Community Engagement division. She leads a team conducting analytics and research of underserved markets. She has extensive experience in research to support fair lending, affordable lending, and assessing opportunities to expand access to credit. Ms. Brown has also served as a senior financial economist and section chief with the Federal Deposit Insurance Corporation. She earned her M.A. in mathematics and Ph.D. in economics from The Ohio State University.