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POLICY BRIEF

Priced Out: The Unintended Consequences of Federal Moratoriums on Wisconsin's Housing Market

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Executive Summary

The price of housing was an important news story during the summer of 2021. Many families found themselves priced out of the housing market, as a single listing might draw more than 100 competing bids.[i] There are a number of potential causes of this crisis—including the growing cost of building supplies—but one potentially overlooked component has been government intervention in the form of eviction moratoriums and mortgage forbearances.

Under the Coronavirus Aid, Relief, and Economic Security (CARES) Act and several subsequent actions, the federal government effectively banned eviction and foreclosure on millions of homes throughout the country for more than a year. Because this creates a chokehold on the supply of homes, classical economics would tell us that this should have a direct effect on home prices, as supply is unable to keep up with demand. But do we observe that reality?

This study attempts to answer that question by using Wisconsin housing market data over the past three years. Controlling for a number of other factors that could plausibly affect the housing market, we find that these interventions likely did play a role in raising the cost of buying a home.

Key Findings Include:

Housing prices have increased significantly in Wisconsin. The average price of a home has increased by more than 37% since January 2019 from about $175,000 to $240,000 by December of 2021.

The eviction moratorium likely increased housing prices. The implementation of this program is associated with an increase of $3,664 in the average cost of a home in Wisconsin. This represents about 5.4% of the overall increase in the price of a home.

The forbearance option likely increased housing prices. The implementation of these programs is associated with an increase of $11,354 in the average cost of a home in Wisconsin. This represents about 17.4% of the overall increase in the price of a home.

Housing price increases aren't limited to cities. Some of the largest percentage increases in the average cost of a home occurred in rural counties.

Introduction

The COVID-19 pandemic led to unprecedented governmental interventions into the American economy, and parts of our economy are still feeling the ramifications of these interventions. Among the policies implemented to combat COVID-19 was a moratorium on evictions for renters and the ability to enter forbearance for homeowners with federally-backed loans. While these emergency actions were billed as necessary, these decisions may have been made and celebrated without weighing all of their costs, especially the "unintended" ones. This is especially important because the rising cost of home ownership is one of the largest economic problems that Americans face.

This paper examines whether the moratorium on foreclosures and evictions were correlated with changes in the housing market that contributed to this rising cost. Using county-level data from the state of Wisconsin, we examine the change in home prices that can be associated with each of these interventions.

Rising Cost of Home Ownership

Home ownership has long been considered a smart investment because homes have a tendency to increase in value. But, in recent years, the rate of increase in home costs has priced many people out of the market entirely. According to a recent analysis,[ii] nationwide home prices rose by more than 30% during the past decade, while incomes only increased by about 11%. This trend only accelerated during the pandemic, with home prices increasing about 22% nationwide between August 2020 and August 2021.[iii]

While home prices in Wisconsin remain below the national average, our state still experienced these trends. At the peak in June 2021, housing prices had risen 14.7% over the course of a year. Prices have come down slightly since then, but remain high. It is likely that increases in price—to some extent—will begin again once the weather warms if traditional patterns hold.

These price trends are concerning because home ownership has important societal implications in the United States. Owning a home is generally considered integral to the classic "American Dream." Studies have found that home owners have greater life satisfaction in general than others from similar circumstances who don't own a home.[iv] Home ownership rates are also correlated with property maintenance, property values, and increased residential stability.[v] If a sizeable portion of the population is shut out of home ownership due to increasing prices, there is a potential for broad spillover effects for both economically and socioeconomically.

The Moratorium and Forbearance Option

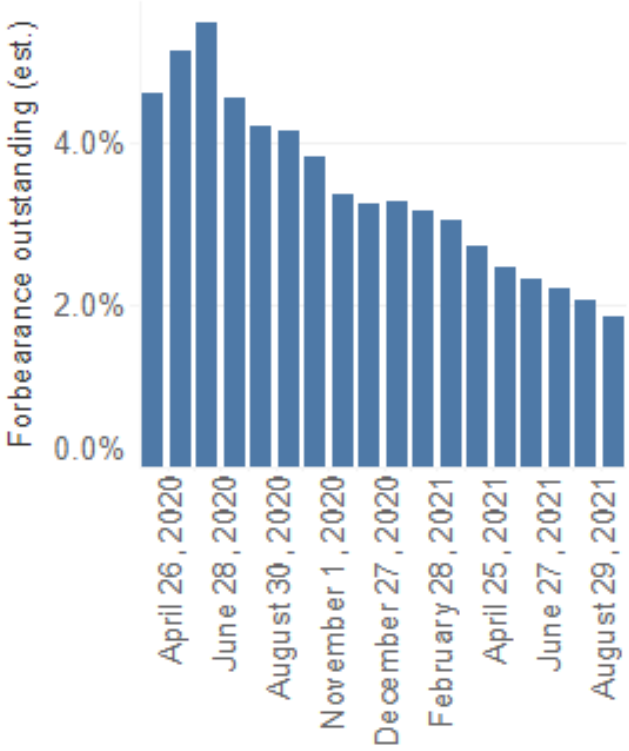
The CARES Act, passed in March of 2020, addressed the housing market in a few different ways. Among the key provisions was a prohibition on eviction for individuals living in "covered dwellings." Such dwellings included those receiving rental assistance, those with a federally-backed mortgage loan, or subject to a multi-family federally-backed mortgage loan. Estimates suggested that this applied to approximately 28% of all renters in the nation.[vi]

The moratorium was allowed by Congress to lapse in 2021, but was temporarily reinstated by the Centers for Disease Control (CDC). The CDC's moratorium was set to expire at the end of December of 2020, but Congress extended it for a month. When this extension expired, the CDC extended it several times before the moratorium was struck down by the United States Supreme Court on August 26th, 2021.[vii]

Another key provision of the CARES Act applied to home owners with federally-backed mortgages. Under the Act, such owners were able to request a forbearance on mortgage payments for up to a year. End dates for this forbearance are based on the time that the initial application by the home owner was made, but the number of homes in forbearance clearly began to decline significantly by mid-2021.[viii]

Figure 1, taken from the Mortgage Analytics and Performance Dashboard of the Federal Reserve Bank of Atlanta,[ix] shows the percentage of mortgages in forbearance in each month since the end of March, 2020 in Wisconsin.

Figure 1. Share of Mortgages in Forbearance by Month, Wisconsin



While the rate of loans in forbearance never reaches a dramatically high number, there is a visible uptick during the early days of the pandemic, and a noticeable decline in the months afterwards. By the end of August 2021, the percentage of loans in forbearance in the state had fallen below 2.0%.

Like any other marketplace, the housing market is subject to the forces of supply and demand. Prior to the COVID-19 pandemic, most academic literature on the relationship between housing supply and demand focused on the role that restrictions on growth could have on housing prices. This literature generally finds that restrictions on the supply of housing have the effects of increasing housing costs, decreasing population growth, and potentially shutting younger would-be buyers out of the marketplace.[x]

There has already been at least one study that examined the relationship between local forbearance rates and price of homes. Conducted by the Federal Reserve,[xi] this study found that the percentage of homes in forbearance is correlated with a reduction in the supply of new listings in a community, which in turn increased housing prices by 12.8 percentage points. The authors of the study point out that, given that home prices increased by about 1 percentage point over the time frame, the moratorium accounted for a large share of this increase. This study builds on that work using a longer time frame of analysis that includes observations after the end of the moratorium, as well as a focus on the specific implications for the state of Wisconsin.

It is important to note that foreclosure rates were falling even prior to the pandemic and associated foreclosure moratoriums. According to University of Wisconsin-Whitewater Professor Robert Kashian, who has tracked foreclosure data in the state for more than a decade,[xii]

2019 represented the lowest rate of foreclosures in two decades. Even in Milwaukee County, where the highest foreclosure rates in the state are, rates had declined by more than 60%.

Foreclosures are always unfortunate. But while it is no doubt sad when an individual can no longer live in their home, it is also sad when potential new buyers are priced out of the market by governmental intervention in the economy. That process unfolding in Wisconsin is what we observe in the following sections of the paper.

Methodology

We gathered data from a number of sources to answer the questions posed here. Chief among the sources was data from the Wisconsin Realtors Association (WRA)[xiii] on the number of new home sales and average price of sold homes by month.

The first analysis looks at the potential correlation between the federal eviction moratorium and housing prices. We compare monthly prices over time before, during, and after the period when the moratorium was in place. Our data begins with the first month of 2019, prior to the pandemic, and takes on a value of "0" through March. Our data set continues through the moratorium with a value of "1" until September 2021, when the moratorium lapsed, whereupon it takes on a value of "0" once again.

Control variables are included for other factors that impact prices. This includes the total number of home sales in the county, the population density of the county, and an indicator variable for year in recognition of the role that inflation and other unmodeled time factors may play in housing prices. We also include indicator variables for each county, reflecting the fact that our model cannot capture all of the unique concerns regarding housing that may be present in every locality. Particularly in Wisconsin, the time of year plays a big role in the housing market. People are less likely to seek out or sell their homes in the cold parts of the year, leading to lower prices in general. Consequently, we include indicator variables for Spring, Winter, and Summer in the model.

Formally, for each county c in month m, let:

$$\text{Housing Price}_{cm} = \alpha + \beta_1 \text{Moratorium}_m + \beta_2 Sales_{cm} + \beta_3 Density_c + \beta_4 Year + \beta_5 \text{Controls} + e$$

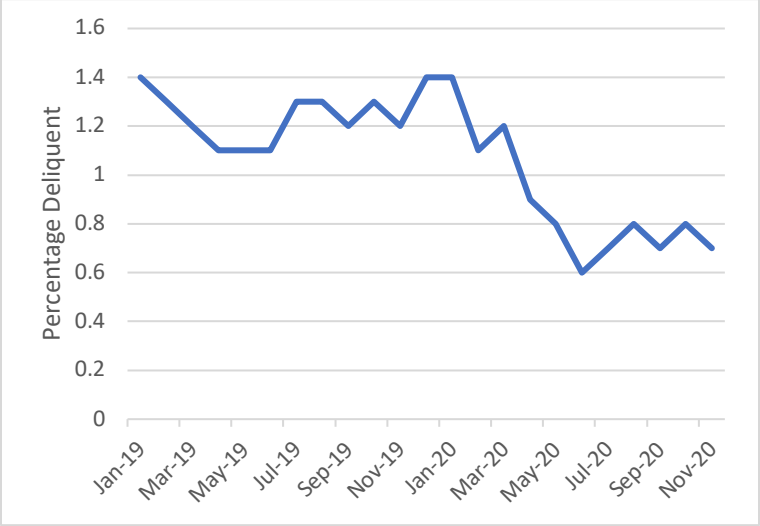
If the Moratorium has the effect of increasing housing prices, we will expect a positive coefficient on β_1.

Our second model investigates the correlation between the mortgage forbearance option and housing prices. Unlike the eviction moratorium, with a clean endpoint, homeowners were able to enter and exit the program at different times. Consequently, we need an alternative variable to

serve as a proxy for the number of individuals taking advantage of the forbearance. Data from the Consumer Financial Protection Bureau on the number of homes delinquent on their mortgage payments for 30-89 days suffices.[xiv]

Because many mortgage companies report a payment as up-to-date when a loan is in forbearance, the rate of delinquencies fell significantly after the forbearance programs were created. Figure 2 show the share of mortgages in this status, with a clear decline from previous norms in the spring of 2020 when forbearances became a viable option. The monthly rate of mortgage delinquency serves as our key independent variable in this analysis.

Figure 2. Percentage of Mortgages 30-89 Days Delinquent Over Time, Wisconsin



Formally this model, for each county c in month m, let:

$$\text{Housing Price}_{cm} = \alpha + \beta_1 \text{Deliquency Rate}_m + \beta_2 Sales_{cm} + \beta_3 Density_c + \beta_4 Year + \beta_5 \text{Controls} + e$$

If Deliquency Rates has the effect of increasing housing prices, we will expect a positive coefficient on β_1.[1]

[1] Note that the findings from the first and second model should not be added together. The two federal interventions occurred concurrently, thus is it is impossible with observational data to isolate the effects independently. If both interventions are put into a single model, it appears that the mortgage forbearance program is the larger driver of housing price change.

Results

Descriptive Results

First, we examine what has happened to the average price of homes in the state on average over time. Since January 2019, prices have increased from about $175,000 on average to $240,000—an increase of $65,000 (37%). Figure 1 depicts the mean home price across Wisconsin's counties over the past 36 months. The two red lines represent the time frame in which the eviction moratorium was in effect. While we cannot demarcate the exact time frame for the mortgage forbearances, the trends in that market roughly line up with these lines as well. With the naked eye, there does appear to be a substantial increase during the period in question, followed by a relatively steep decline following the expiration of the moratorium. However, a deeper analysis is needed to determine whether this is likely related to the moratoriums, or to other factors.

Figure 3. Home Prices in Wisconsin, Pre- and Post-Moratorium

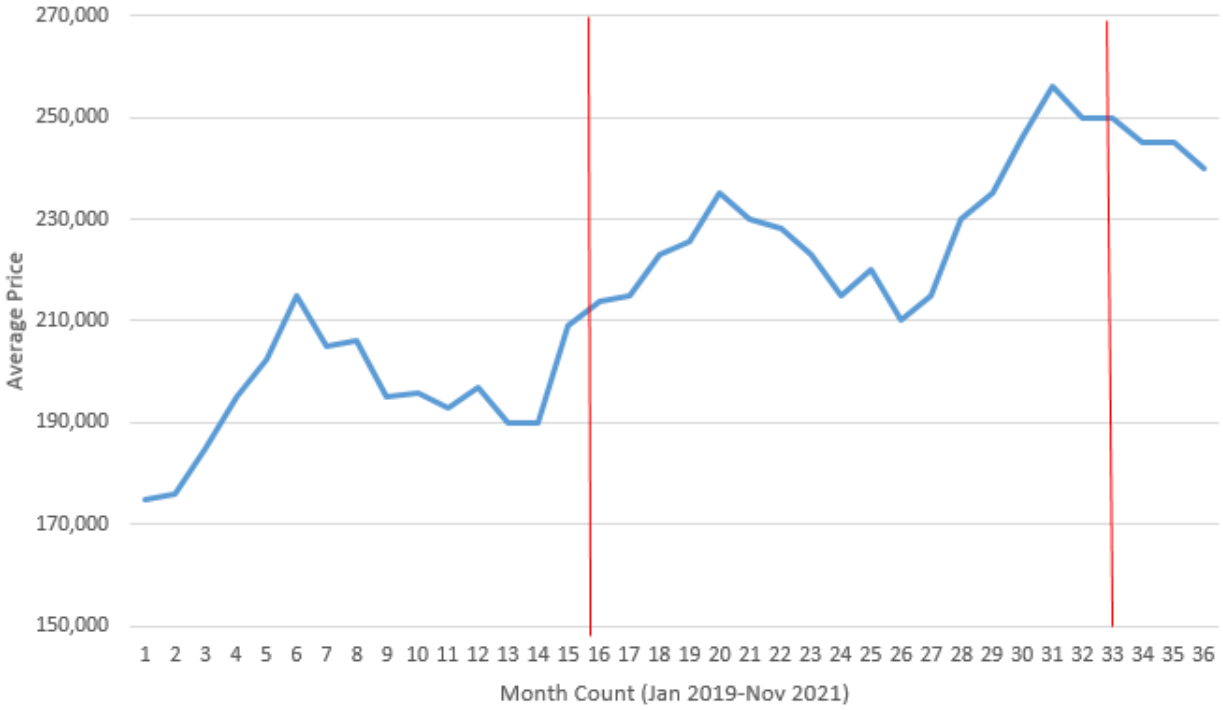
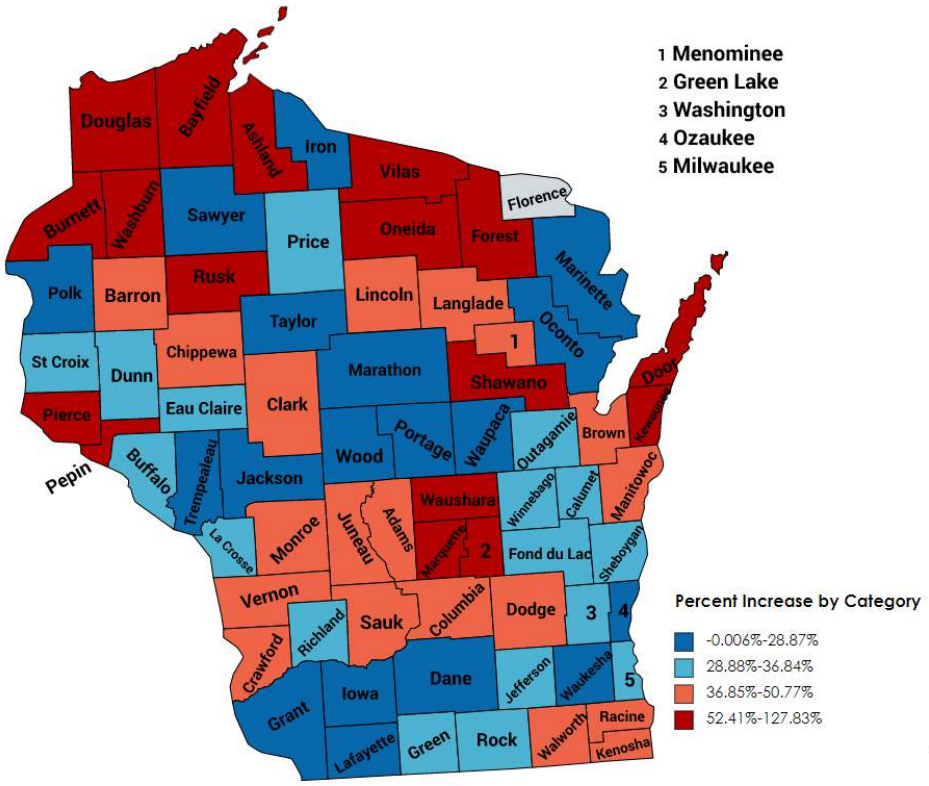


Figure 3 depicts the counties in which prices increased the most using the average of the first three months of 2019 in comparison to the last three months of data for 2021 (through November 2021). The data is divided into quartiles, with each category representing ¼ of the overall distribution. Note that one county (Florence) lacked data for at least one of these months and, as such, is excluded from this analysis.

Figure 4. Home Price Percentage Increases by County, January 2020-November 2021



First, we should note that housing price increases were the norm across almost the entire state. Only one counties saw a decline in home prices over this time frame, and even that was extremely small (Jackson at -.006%). Perhaps surprisingly, the largest percentage increases were not seen in urban and suburban areas in general. For instance, Dane County saw price growth of approximately 24.4%—under the threshold for the lowest percentage growth category. Even Waukesha County in suburban Milwaukee falls just below the threshold for the second quartile (24.2%). Instead, the highest price growth appears to be centered in counties, in general, which are viewed as vacation destinations and rural areas.

This may be a reflection of the manner in which the COVID-19 pandemic changed the choices that people make about where to live as virtual options became more plentiful. Anecdotal evidence abounds of young professionals moving to rural areas that once suffered from the

prospect of continual population declines and an aging population.[xv] In areas with lower housing stock, even a small uptick in demand for housing can significantly increase prices.

We should note that, despite the percentage changes in cost being largest in rural areas, housing remains significantly more expensive in urban and suburban areas. The average home price in Dane County in recent months was over $368,000—compared with $218,000 in the highest-price growth county in our data (Forest). What can be said for certain from this look at the data is that the problem of increased housing costs is not just a problem for residents of large cities and their surrounding suburbs. Instead, Wisconsinites may be priced out of the market in even the smallest towns.

Statistical Results: Eviction Moratorium

The results for our analysis of prices and moratoriums are depicted in Table 1. Note that indicator variables for each county in the state were included in the model but excluded from the Table for ease of readership.

Table 1. Relationship between Eviction Moratorium & Housing Prices

VARIABLES	(1) Home Price
Moratorium	3,664**
	(1,864)
2020	13,542***
	(2,029)
2021	36,272***
	(2,032)
Total Sales	37.00**
	(15.31)
Income	-3.782***
	(1.013)
Winter	-22,361***
	(1,926)
Spring	-12,988***
	(1,808)
Summer	66.69
	(1,836)
Constant	300,429***
	(44,218)
Observations	2,510
R-squared	0.750

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

First, we note that many of our control variables work as they should. For instance, the average price of a home is lowest in winter. According to the model here, the average price of a home in the winter months is $22,361 lower than the reference season, fall. Also, prices are higher in 2021 on average than 2019 by about $36,272 across the state regardless of moratorium status.

For our variable of interest, we do find a statistically significant impact of the moratorium on home prices. We estimate that about $3,664 in the increase in the cost of homes in the state can be attributed to the moratorium. Given the cost of homes increased in Wisconsin by approximately $65,000 since the beginning of 2019, this represents approximately 5.6% of the increased cost.

Statistical Results: Mortgage Forbearance

Recall that our independent variable of interest here is the rate of mortgage delinquencies of between 30 and 89 days. Because this rate fell significantly immediately following the implementation of broad forbearances, we use the percentage of homes that were delinquent on their mortgage in the state as a proxy.

Table 2. Relationship between Mortgage Forbearance and Housing Prices

VARIABLES	Home Price
Delinquency (Forbearance Rate)	-19,557***
	(4,968)
Total Sales	36.11**
	(16.57)
Population Density	181.0***
	(41.95)
Income	-5.115***
	(1.381)
Winter	-16,083***
	(2,410)
Spring	-9,338***
	(2,063)
Summer	2,212
	(2,069)
2020	9,087***
	(2,350)
2021	22,226***
	(4,141)
Constant	369,631***
	(58,035)
Observations	2,151

R-squared	0.731

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In this model, we see similar results on our control variables as in the model of eviction in Table 1. Housing prices are more expensive in 2021 than in the baseline year of 2019, and houses are cheaper in winter months than other times of the year. We also see that a Delinquency Rate is significantly related to the overall price of homes in the state. A 1 percent increase in the Delinquency Rate would be expected to reduce the price of a home by about $19,557.

The average rate of delinquency fell from 1.24% up to April 2020 to an average of 0.66% after—a shift of 0.58%. If we attribute this shift to the forbearance program, we'd estimate an effect of about ($19577*.58) = $11,354 of the forbearance option on housing prices. This represents approximately 17.4% of the overall increase in the price of homes since 2019.

Both the magnitude of the effect and the statistical significance are higher here than in the model of evictions, perhaps foreclosures bear a much closure relationship to the housing market than do rentals, where a landlord may or may not be interested in selling a home.

Conclusion

The increase in housing costs that has been experienced in Wisconsin, and the United States as a whole, was not caused by a single factor. For example, the fastest growing counties in Wisconsin have under-produced about 15,000 housing units according to recent research,[xvi] leading to higher prices as demand outstrips supply. And, as mentioned earlier, the rapid inflation of the price of building supplies likely played a significant role as well. That said, this study has provided evidence that federal intervention, well-intentioned though it may have been, worked to exacerbate price increases in a real estate market that was already seeing increases. While we should not add the effects of the eviction moratorium and the forbearance option together because of high correlation, we can say with some level of certainty that federal interventions raise the price of a home as much as 17%.

Whether a moratorium on evictions and foreclosures was justifiable in the immediate aftermath of the COVID-19 pandemic could be debated. But we ought to approach these policies with the clear-eyed expectations that market distortions could result that have negative long-term implications for the housing market. The moratoriums continued for far too long, and may have played a role in denying many families an important piece of the American Dream.

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