



## Correlation of Homeowners Associations and Inferior Property Value Appreciation

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**Abstract:** *Housing developers' claims of benefits led to exponential growth in neighbourhood homeowners associations in the U.S. during recent decades. Sanctioned by state laws, association rules governing homeowners are usually initiated by developers who claim that the rules protect property values. But the claim is not supported by empirical analysis. Inflation adjusted annual percentage returns in consecutive sales of a sample of 900 most recent home sales in Duval County Florida, Pima County Arizona and St. Louis County Missouri during late 2017 and early-2018 were examined. The results reveal that the annual percentage returns on homes sold in homeowners associations were significantly less than those of homes in other neighbourhoods statistically controlling for property characteristics and prevailing economic conditions at the time of the original purchase. Correlates of home prices at any point in time are not predictive of percentage return from purchase to sale.*

**Keywords:** housing prices; homeowners association; neighbourhood association; community interest associations.



## Introduction

The rapid growth of neighbourhood homeowners associations in the U.S. proceeded with inadequate research on assumptions about their efficacy (McCabe 2011). According to the Community Associations Institute (2018), persons living in homeowners associations increased from 2.1 million in 1970 to 69 million in 2016, more than a fifth of the U.S. population.

Originally based on utopian thinking, homeowners associations evolved to include covenants that excluded home ownership in the neighbourhoods based on race, religion, ethnic origins and other arbitrary criteria (McKenzie 1994). A study of covenants in three New York counties during the 1940s found that 63 percent of deeds in developments of 20 or more homes contained bans on sales based on race (Dean 1947). A court decision in 1948 ruled against racial discrimination in housing and the federal Fair Housing Act of 1968 prohibited various forms of discrimination (McKenzie 1994). Nevertheless, some homeowners associations continue to discriminate by age – allowing ownership only by adults older than a specified age (often 55 years) or prohibiting children as permanent residents and, in some cases, stays beyond temporal limits (McKenzie 1994). Some also use rules to discriminate against the handicapped such as prohibition of wheelchair ramps on homes (Lukas 2012).

In recent decades homeowners associations were mainly formed by real estate developers that turned them over to governing boards elected by the homeowners when the development was at or near completion (McCabe 2011). As populations in southern and southwest urban areas increased, the price of land soared and developers reduced lot sizes and partially compensated by providing some open common areas. They formed homeowners associations to maintain common areas and infrastructure but also added rules regarding exterior home maintenance, house colours, window treatments, landscaping, etc. on the grounds that such rules protected property values.

State laws sanction homeowners associations to operate as non-profit organizations but include few limitations on their powers. Courts have upheld enforcement of the rules based on the theory that members enter the neighbourhood with a binding contract to obey the rules (McKenzie 1994). Local governments sometimes promote homeowners associations with zoning restrictions and advice from planning offices to avoid responsibility for construction and maintenance of local streets. Some even require new home construction to be in a homeowners association (Chadderdon 2006).

In homeowners' association neighbourhoods, membership is required when the home is purchased. The purchaser is alerted to examine the declaration of covenants, conditions, and restrictions that state the rules and is usually required to sign a document agreeing to abide by the rules. States allow homeowners association boards of directors to operate various recreation facilities and maintain common areas and streets and to set and collect fees from homeowners for these and other activities. Homeowners' association boards are also allowed to impose fines on homeowners for late payment of fees and failure to comply with rules. The boards may decide to impose new rules or change existing ones other than those prohibited by state or federal law (Weinstein 2005). Some homeowner's association boards are alleged to target enforcement on individuals and families based on race, religion and ethnic origin to pressure them to leave the neighbourhood (Lukas 2012).



Non-payment of fees or fines can result in liens sometimes leading to loss of the property in foreclosure proceedings and longer term credit issues for the owner (McCabe 2005; Stitzer 2013). One builder included prohibition of criticism of the builder or homeowners association in its covenants until exposed by a newspaper reporter. The practice was abandoned in subsequent contracts but continued in neighbourhoods already built (Casey 2003).

Homeowners' association boards and the architectural committees appointed by the boards usually have the power to interpret and change the rules. Disputes abound and litigation is not unusual (McKenzie 2006; Thomas 2016). An internet search of any topic with homeowner association in the text will result in a list of advertising by law firms. Even minor disputes occasionally escalate to violence, rarely but importantly including homicides (Staropoli 2003).

That homeowners associations protect property values was assumed in various court decisions, Federal Housing Administration and other publications as well as by land developers (McKenzie 1994) but the validity of the assumption has not been well researched. Researchers have focused on the differences in one-time sales prices between homeowners associations and other neighbourhoods, not how much the prices change in time. In a working paper published online Clarke (2017) reviewed several studies that estimated that home prices in homeowners association neighbourhoods were 0 to 5 percent higher than in non-homeowners association neighbourhoods prior to the housing price bubble that collapsed in 2009-2012. One of the studies based on 1992-2001 sales in St. Louis County, MO found no net effect of homeowners associations on prices when controlling statistically for other factors. Subsets of neighbourhoods had higher prices in relation to homeowners associations and others had lower prices depending on the homogeneity of houses in the neighbourhoods. When houses looked similar in design, the prices in homeowners associations were lower, but when the houses had a variety of designs, the prices in homeowners associations were higher (Groves 2008).

More recently, Angjellari-Dajci, et al. (2015) analysed prices of homes sold in Duval County Florida (Jacksonville and its suburbs) during 2002-2013 in relation to a variety of home and neighbourhood characteristics including whether the home was in a homeowners association. They concluded that, other things being equal, homes in homeowner associations commanded higher prices. A study of sales prices in Richardson Texas, an adjacent suburb of Dallas, in 2007-2009 during the financial crisis, found lower sales prices of properties in homeowners' association neighbourhoods (Ayers 2011). In the city of Dallas, housing prices were higher in homeowners' association neighbourhoods in 2004, prior to the crash in prices (Diaz et al., 2008).

The correlation of homeowners' association membership with sales price at a given time does not address the question of whether or not homeowners' association rule enforcement influences the change in price from the time the house was bought until it was sold. Meltzer and Cheung (2014) studied home prices in all Florida homeowners associations and found that price premiums were highest for new homeowners associations but lower the older the homeowner association. This suggests that the premium is associated more with the newness of the house than its location in a homeowner association. Higher house prices associated with homeowners association neighbourhoods could also occur because the developers placed their developments in more desirable locations or included aesthetic or other features desirable to potential buyers that may not be adequately controlled statistically in the mentioned studies.



The most appropriate metric to compare investment gains or losses that are held for different periods of time is average annual percent return (Robertson 2015). A literature search revealed only one study that considered home price changes in time in relation to homeowners associations, but its author did not compute annual percentage returns. He used a regression equation to compare appreciation in value relative to a home value index developed by Zillow.com and concluded that homeowners association based homes did not appreciate in value as much as those not in homeowners associations (Clarke 2017). The purpose of this study is to examine the correlation of annual percentage returns to homeowners' association membership, home characteristics and economic conditions based on consecutive sales of the same properties

## Materials and Methods

Zillow.com, provides a search protocol for recent sales by postal zip code and describes various characteristics of the property. It provided mass data on home sales to Clarke (2017) but refused to allow access to the files for this study. Therefore, a sample of sales in selected counties was obtained by searching the Zillow.com website and other publically available sources on the internet. The original intent was to study recently sold homes in the previously studied Duval County Florida, St. Louis County Missouri, and Dallas County Texas but Zillow's inadequate data on sales histories in Dallas County led to the substitution of previously unstudied Pima County Arizona (Tucson and suburbs).

Ten zip codes were randomly selected in each county. Within each selected zip code, each of the thirty most recent home sales at the time of the search during 2017-2018 was examined at Zillow.com that reports the historical dates and prices of sales from public records. Data were recorded on square footage of the house, acreage of the property, number of bedrooms, number of bathrooms, date of most recent sale, date of the sale, if any, prior to the most recent, and the sales price for each of these transactions.

The indication of whether or not the property is in a homeowners association is not always reported at Zillow.com. Once the property was selected and the mentioned data recorded, if presence or absence of a homeowners association or association fees were not mentioned, an internet search for the neighbourhood in which the property was located was undertaken and the neighbourhood homeowners association website or other descriptions of the neighbourhood regarding the presence or absence of a homeowners association was examined. When no homeowners' association website was found, the address of the property was entered in Google, and various listings of the property were examined for evidence of a homeowners association. Realtors.com or Trulia.com usually specified no homeowners association when the data were missing on Zillow.com but occasionally indicated the existence of one not indicated on Zillow.com. If data were missing on any of the included variables, the property was not included in the sample and the next property that had all of the data was chosen. Most of the sales occurred in the first half of 2018 but it was necessary to include a few from late 2017 when sufficient numbers did not occur in 2018 in a selected zip code.

The two most recent sales prices of each property were converted to April 2018 dollars using the monthly Consumer Price Index (CPI) for urban areas of the U.S. to account for the effects of inflation (Federal Reserve Bank of Saint Louis 2018). The conversion is:



*Adjusted Price = Price / (CPI in the month of purchase or sale) / (CPI in April 2018)*

The dependent variable was annual percentage return on investment (APR), calculated as:

$$APR = (((\text{sale price} / \text{buy price})^{1/\text{years owned}}) - 1) \times 100$$

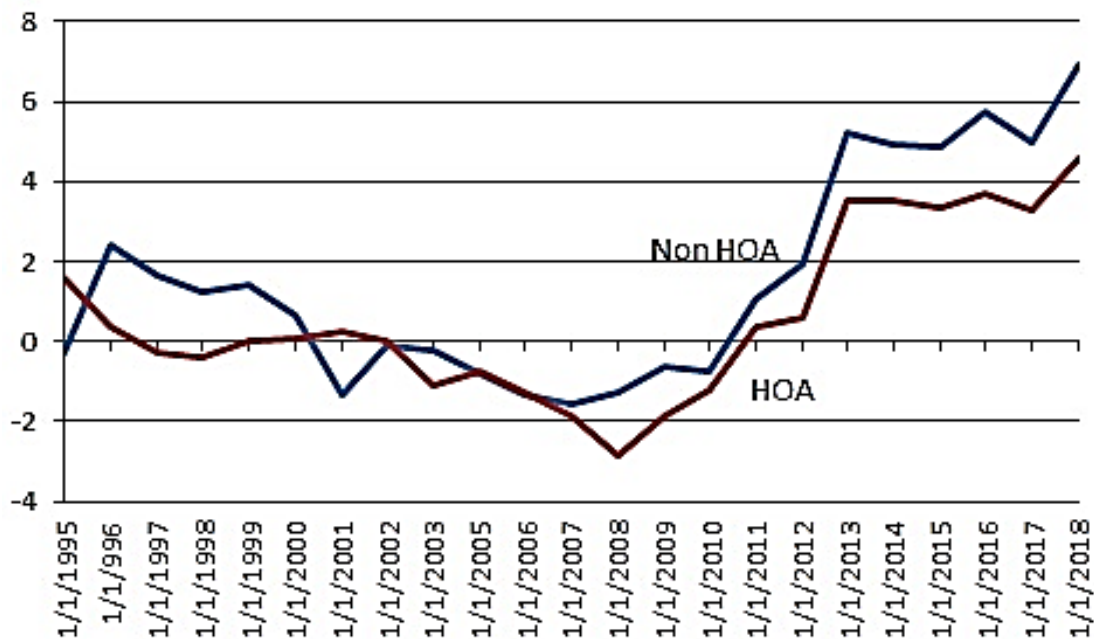
Years owned were calculated as the number of days between buy and sell dates divided by 365. The extra day in leap years was ignored as insignificant.

Least squares regression of annual percentage return in relation to homeowner association membership, home characteristics, and economic conditions at the time of the original purchase was examined. These results were compared to the regression of the recent sales prices on the same factors.

## Results

Fifty-five percent of the properties sold in this sample were in homeowners associations, 47 percent of Duval County properties, 67 percent of Pima County properties, and 52 percent of St. Louis County properties. Figure 1 shows the median annual percent return for homeowners association based properties (HOA) and properties outside such associations by year in which the property was bought.

**Figure 1: Median annual percent return by homeowner’s association membership and year purchased**



The neighbourhoods with homeowners associations had lower median returns in most years, consistently and substantially for houses bought during the economic recovery in the late 1990s



and again during the great recession recovery in the 2010s. Homes bought during the housing price bubble and subsequent recession when the home financing system imploded were usually sold at a loss in 2017-2018.

The results of the regression analyses are shown in Table 1. Average percentage return is significantly lower in homeowner associations and is also related significantly to when the property was bought relative to the price bubble prior to 2007 but the most recent sales price is not. The most recent sales price is related significantly to home characteristics but these are not significantly related to average percentage return. The negative coefficient of bedrooms on price is likely the result of multicollinearity that distorts regression coefficients of correlated variables. Square footage, number of bedrooms and number bathrooms are highly correlated ( $R = 0.6$  and higher). Average percent return is lower in St. Louis County and Pima County than in Duval County but the sales prices were higher in those two counties compared to Duval County.

**Table 1: Regression estimates and 95% confidence intervals for annual percent return (APR) and home sales prices by predictor variables**

	<i>APR</i>	<i>95% C.I.</i>	<i>Price/\$100,000</i>	<i>95% C.I.</i>
Homeowners Association	-0.568	-1.135,-.001	-1.680	-.387,.052
Bought before 2003	1.653	.780,2.526	0.024	-.314,.036
Bought after 2008	5.203	4.581,5.825	0.128	-.111,.367
1000 Square Feet	0.121	-.325,.567	1.193	1.020,1.366
Bedrooms	-0.056	-.457,.343	-0.190	-.036,-.346
Bathrooms	-0.395	-.841,.051	0.716	.547,.885
Acres	-0.247	-.608,.114	0.253	.114,.392
St. Louis	-1.294	-1.985,-.595	0.508	.239,.777
Pima	-0.893	-1.583,-.202	0.136	.043,.577
Intercept	0.557		-4.341	
R square	0.271		0.544	

*Note: Price was divided by \$100,000 to avoid a long string of zeros to the right of the decimal points in the regression coefficients.*

## Discussion

In sum, average percent return on investment is related to market conditions when the property was purchased, local differences in price appreciation and homeowner association membership. Current sales price is related to property characteristics and local market conditions. Current sales prices do not reflect the efficacy of homeowners associations to protect property values as some previous researchers have inferred. These results are consistent with Clarke’s (2017) inference that, other things being equal, property in homeowners associations appreciates in value at a slower rate than property not in associations. While the correlation of homeowner associations with less value appreciation does not necessarily mean that the relationship is causal, the claim that they protect property values cannot be true. Correlation is a necessary condition for causation and the correlation is the reverse of the claim.

There are possible reasons to argue for a causal relation of lower financial appreciation of homes in homeowners associations. Some potential buyers may be unwilling or unable to pay the fees. Disputes in homeowners associations have become more commonly known as their numbers expanded probably leading some potential buyers to avoid them. People who value their freedoms likely resist being governed by homeowners’ association rules and avoid bidding





on houses in such associations. Exclusion of children removes a large pool of potential buyers for those associations harbouring that restriction. These are hypotheses to be examined in future research.

The gains and losses reflected in this study do not include the annual costs of homeowners' association fees that can vary from less than \$100 to several thousands of dollars per year. If the fees were included in the cost of owning the house, the deficit in annual percentage returns compared to non-homeowners association properties would be even larger. If the homeowners association loses a lawsuit, the members must pay assessments to cover court mandated awards and attorneys' fees.

Since annual percent return is a compounded rate over time, the financial consequences of the observed differences in appreciation of home prices are substantial. For example, the median annual percent return of houses bought in 2013 and sold in 2018 was 3.22 percent for properties in homeowners associations and 5.75 percent for other properties. A person who paid \$200,000 for a property in a homeowners association in 2013 and sold it in 2018 at the median gain would realize a \$34,342 profit compared to \$64,503 at the median gain if the property bought at the same price were not in a homeowners association, more than \$30,000 difference. Of course, the actual percent return depends on the equity invested at purchase and the interest paid on the mortgage during ownership. A search of the research literature and mortgage lenders websites produced no evidence of differential down payment requirements or interest rates for buyers in or out of homeowners associations. Homeowner association fees are included in mortgage lenders assessment of an applicant's ability to pay off the mortgage. The number of applicants rejected because of this requirement is unknown.

## Conclusion

The data in this study do not support the widespread assumption that homeowners associations protect property values more than neighbourhoods without such organizations. Indeed, the opposite is true. Increase or decrease in property values are mainly a function of changing economic conditions but financial returns on properties in homeowners associations are significantly lower than those outside such associations, particularly if purchased in years during the economic recovery after recessions. State and local laws that sanction homeowners associations and allow their coercive practices based on the premise of property value preservation are ill founded.



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