

# How Do Foreclosures Impact Nearby Property Values?

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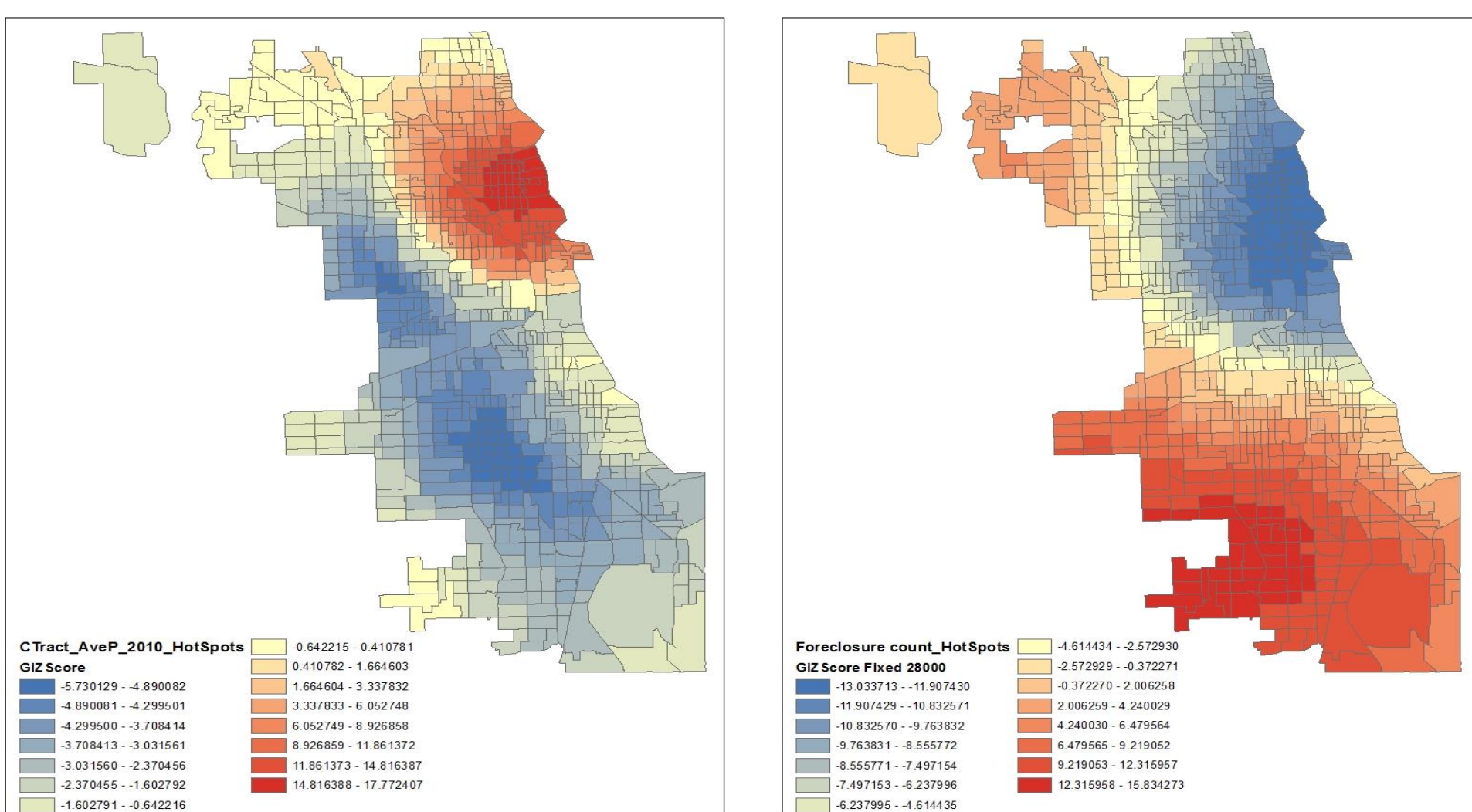
## Introduction

There has been a significant increase in foreclosures after the housing bubble burst in 2006-2007. Foreclosures have negative impacts not just for the homeowner, but also on neighboring property values. This study investigates the impact of foreclosures over time on nearby property values through an endogeneity-controlling hedonic model.

## Background

Illinois has the third highest foreclosure rate in the nation – 1 in every 147 housing units received a foreclosure filing in the first quarter of 2013.

Average housing prices 2010      Foreclosure occurrences 2010



## Method

### Base model

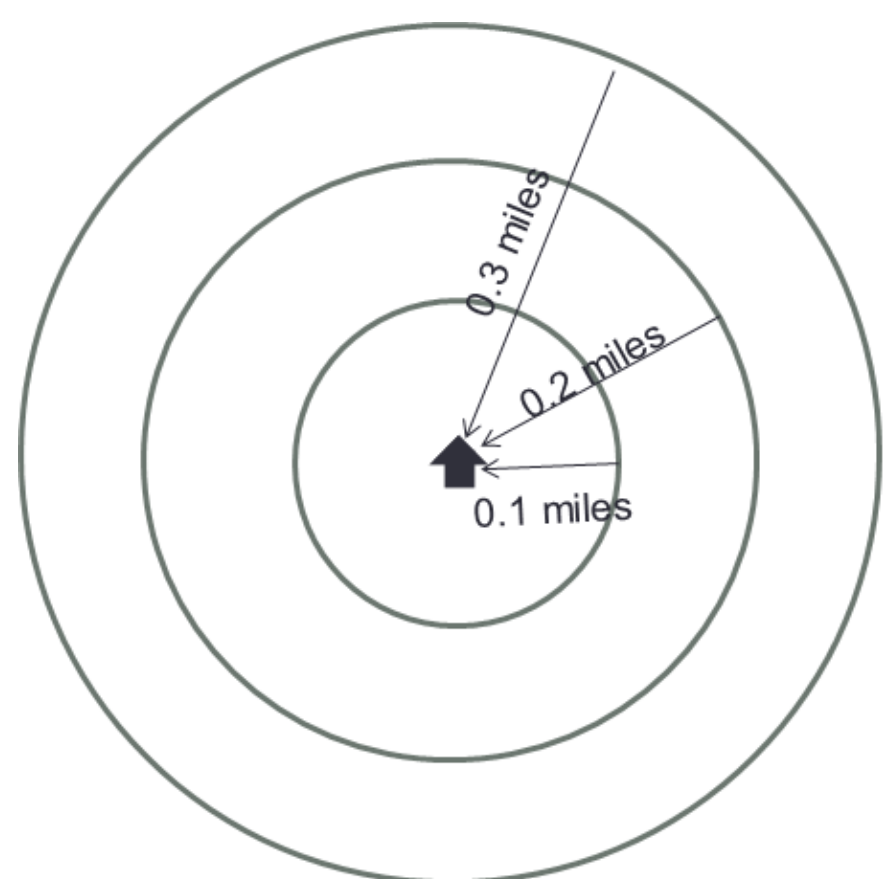
$$\log(P_{ict}) = \alpha + \sum_{m,n,B} \beta_{m,n,B} X_{itB,A \pm m \sim A \pm n} + Z_i \delta + T_{cy} + \epsilon_{ict}$$

Alleviate endogeneity by using:

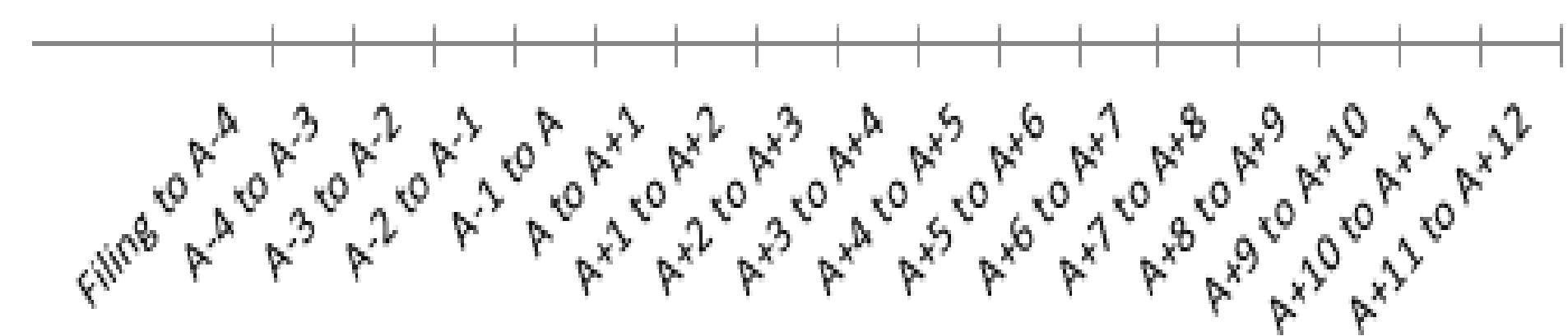
- Preexisting foreclosures
- Census tract by year fixed effect

### Spatial units

**Neighbourhood buffers.**  
Nearby neighbourhood: 0-0.1 miles and distant neighbourhood: 0.1-0.2 miles and o.2-0.3 miles



### Detailed distinction of foreclosure phases



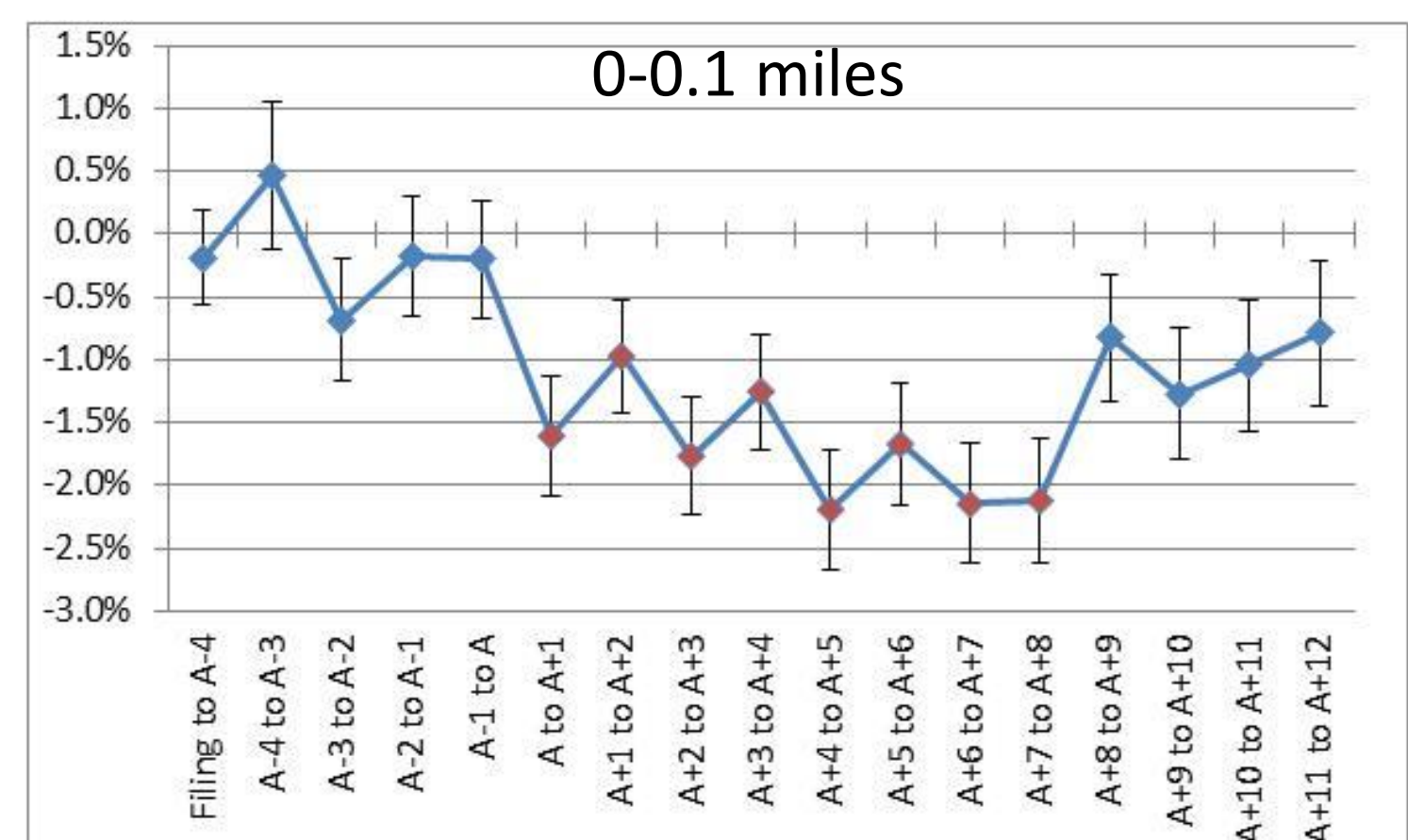
Division of foreclosure timeline.

"A" indicates "Auction"; 1 unit indicates one quarter; "+" indicates after auction and "-" indicates before.

## Results

- On average, no impacts before the auction; -2% to -1% during the two years after the auction

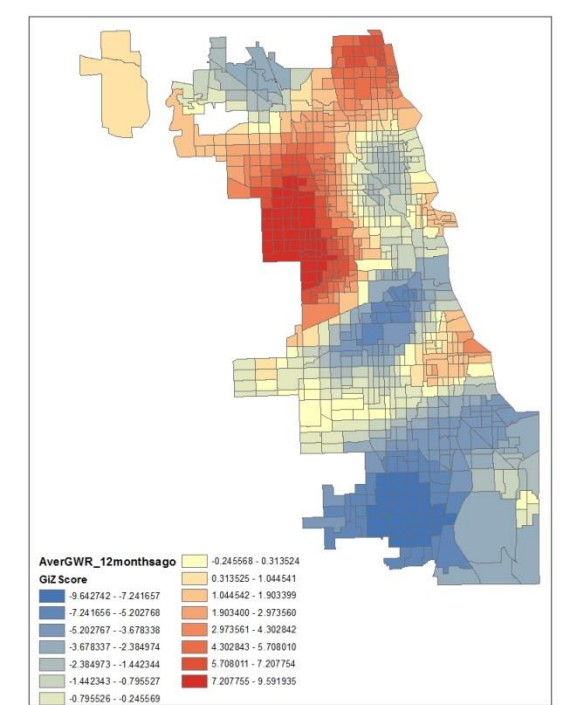
Impacts of foreclosures at various phases



- One more foreclosed property can reduce its nearby property values: (calculated at median housing price)  
In the first year: \$2,100  
In the second year: \$3,000

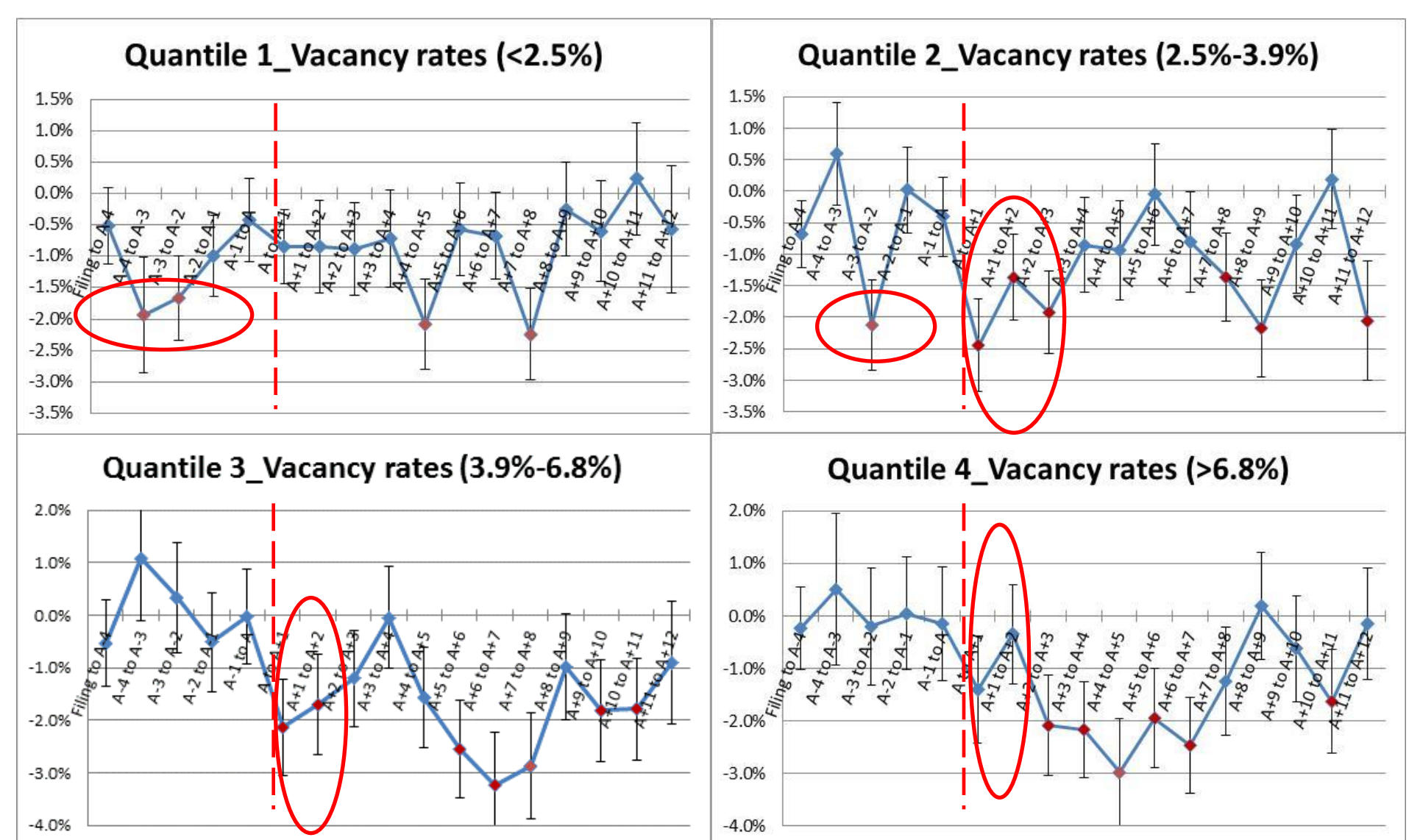
### Geographically Weighted Regression

	Min	Mean	Max
Ongoing	-0.166	-0.003	0.184
Foreclosures completed:			
Last year	-0.271	-0.025	0.15
One years ago	-0.285	-0.032	0.24
Two years ago	-0.331	-0.046	0.109



Average GWR coefficients for foreclosures completed last year

### Interaction with vacancy rates by quantiles



## Conclusions

This study investigates the impact of foreclosures on nearby property values in the single family housing market by analyzing a foreclosure's impact both over time, and over various neighborhood vacancy rates.



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