

# Mortgage Lending, Default and the Community Reinvestment Act

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# Disclaimer

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The analysis and opinions expressed in this presentation are solely those of the author and do not necessarily represent the views of the Board of Governors or other members of the research staff.

# The Community Reinvestment Act (CRA)

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Passed in 1977, intended to bolster lending to underserved populations

Banks are assessed on their record of lending to low and moderate (LMI) households and neighborhoods in the communities they serve

A poor result on a CRA examination may lead to denial of an application for a merger, acquisition or expansion

# Questions and controversies

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Does the CRA actually lead to more LMI lending?

- Weak incentives – non-satisfactory performance evaluations are rare
- Banks may crowd out other lending sources

Does the CRA cause banks to make risky loans?

- Banks may relax underwriting in reach for more LMI loans
- Blamed by some for the financial crisis
  - Wallison (2009), Pinto (2010) Calomiris and Haber (2014)

# Why don't we know the answers?

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No clean experiments in nature

- Banks vs non-banks?
- Lending inside vs outside assessment area?
- Lending before and after CRA exams?

One fruitful approach – look at lending to neighborhoods/borrowers just above vs. just below LMI threshold

- Small difference in income, otherwise similar
- Small estimated effects – do they apply to the whole income distribution?

# This paper

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Take advantage of a quasi-experimental change in banks' incentives

Banks' are evaluated on lending within their assessment areas

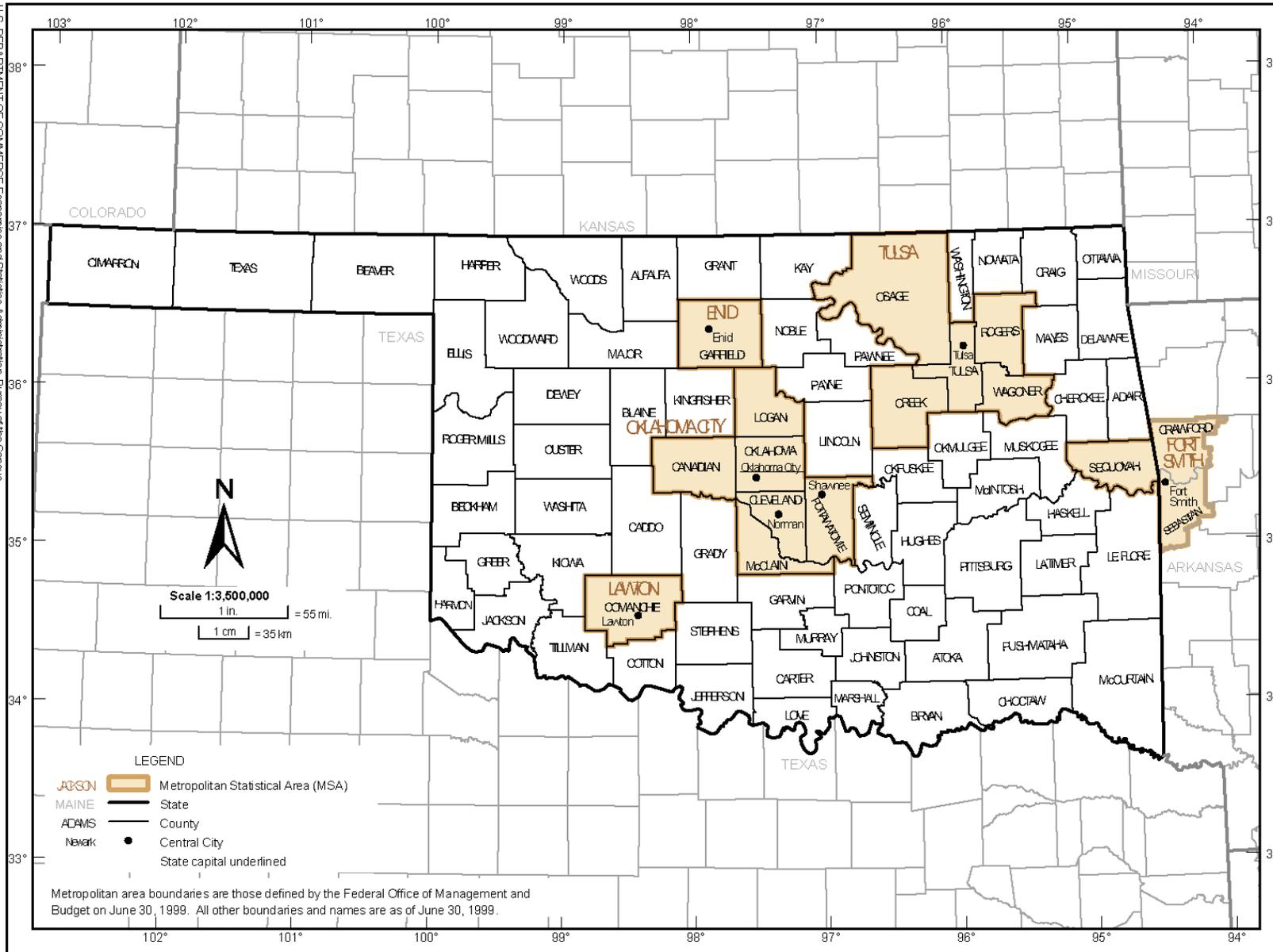
- Often drawn to match MSA or county boundaries

In 2004, new MSA definitions apply to CRA exams

- Resulted in many assessment area boundaries being redrawn
- Banks now have CRA incentive to lend in neighborhoods they previously did not

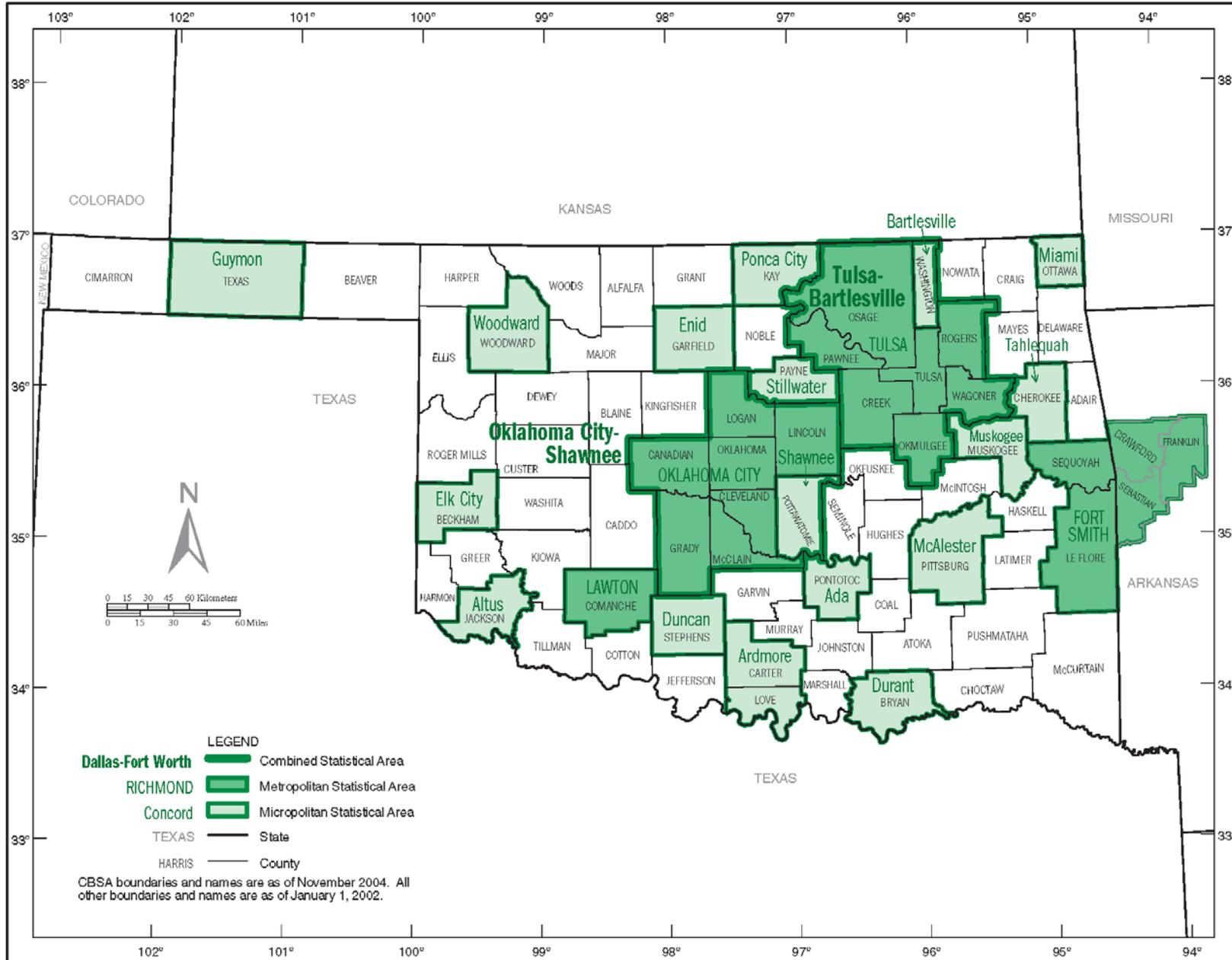
Lead to an increase in mortgage lending to LMI borrowers

No change in average risk characteristics



- LEGEND
- Metropolitan Statistical Area (MSA)
  - State
  - County
  - Central City
  - State capital underlined

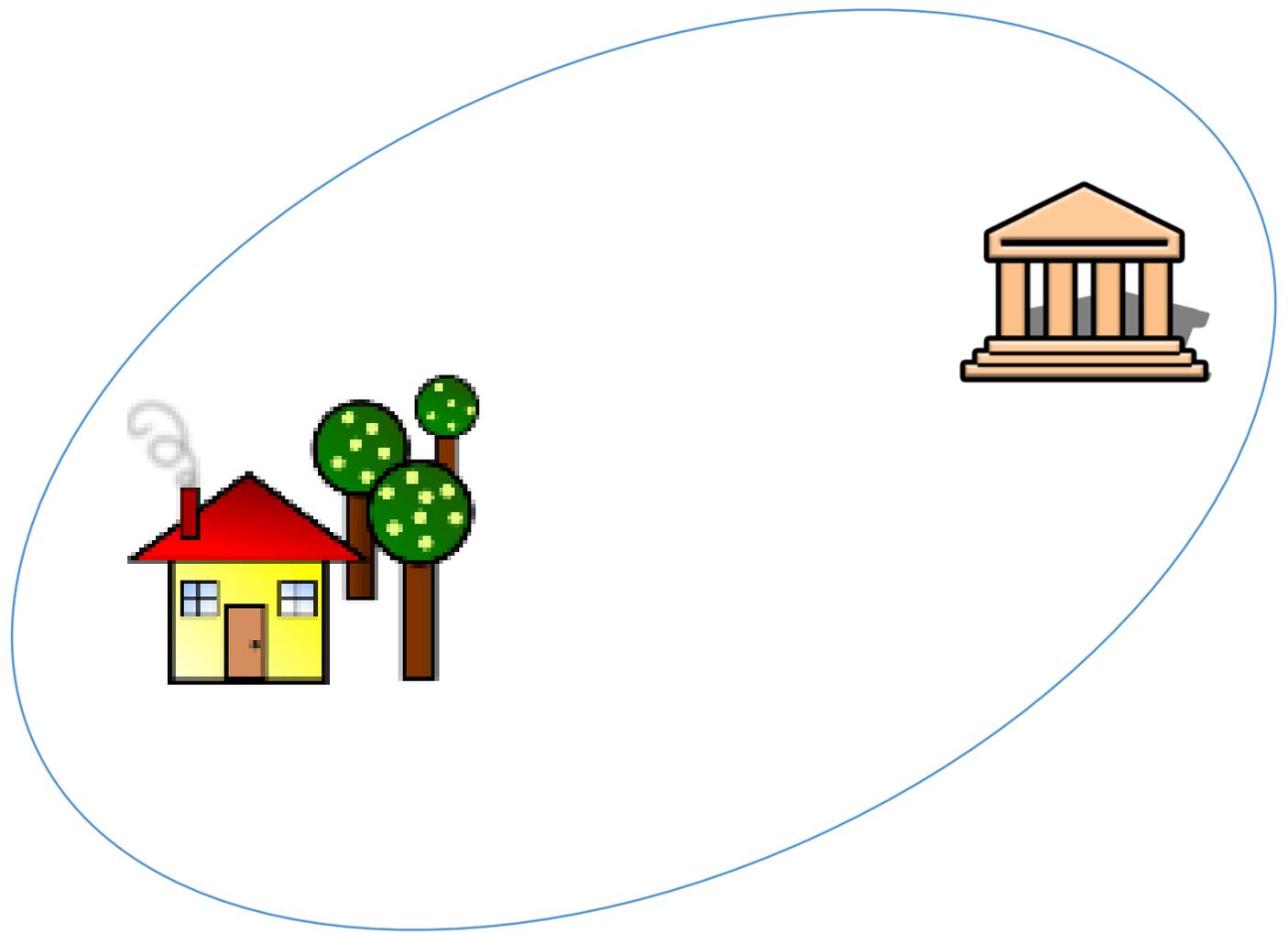
Metropolitan area boundaries are those defined by the Federal Office of Management and Budget on June 30, 1999. All other boundaries and names are as of June 30, 1999.

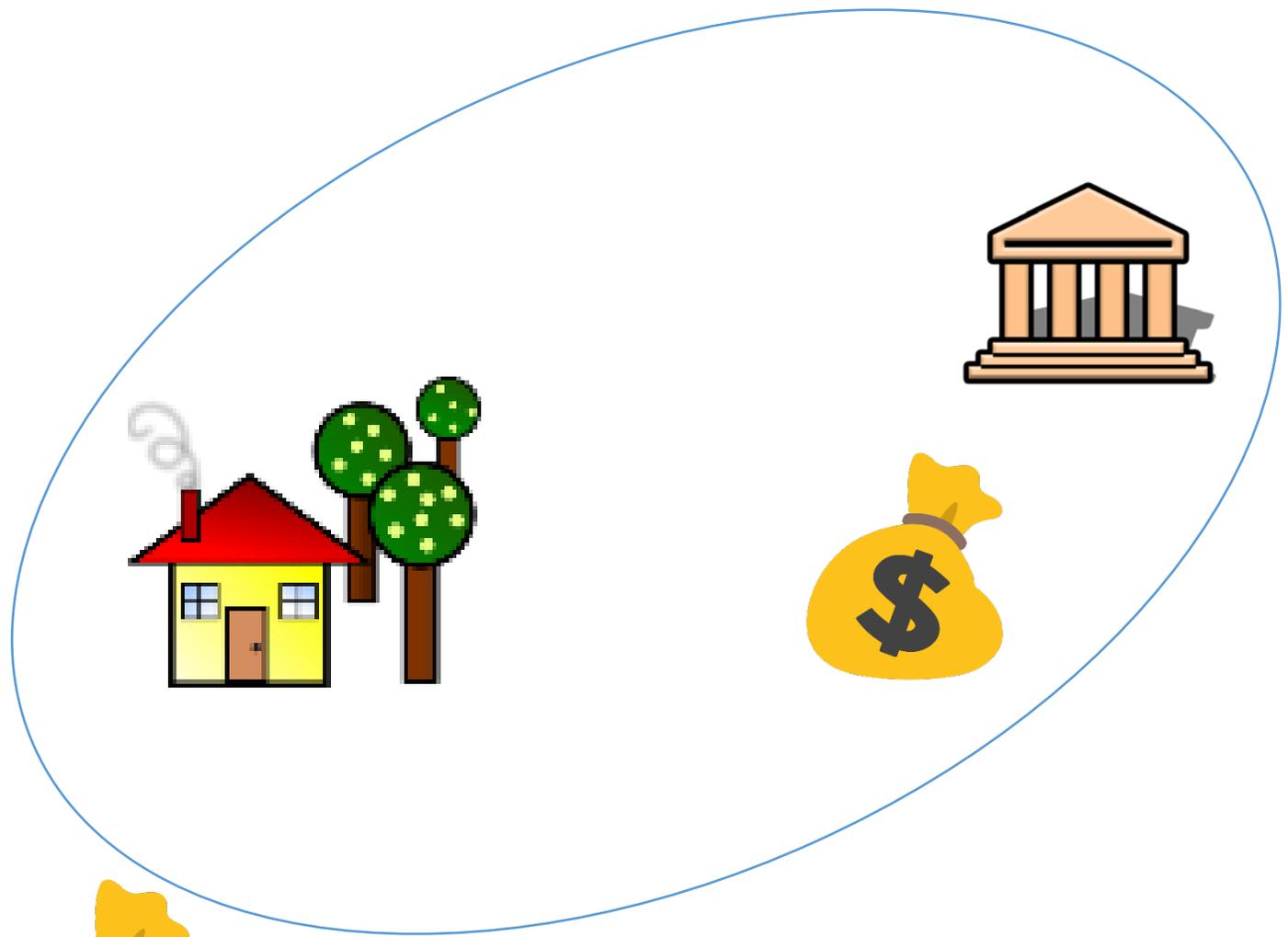
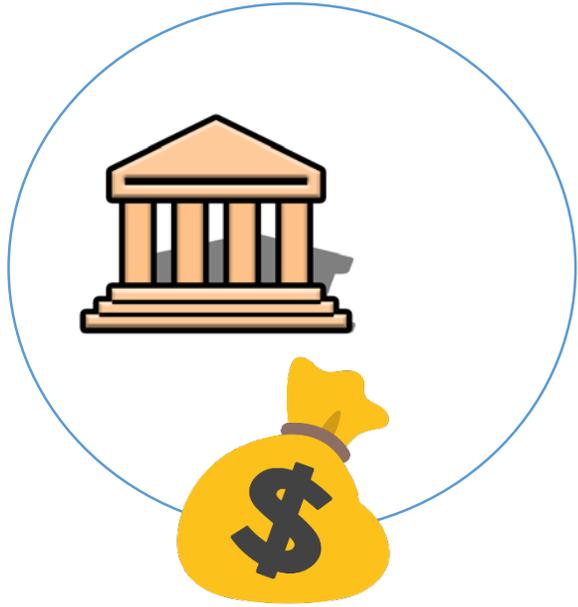


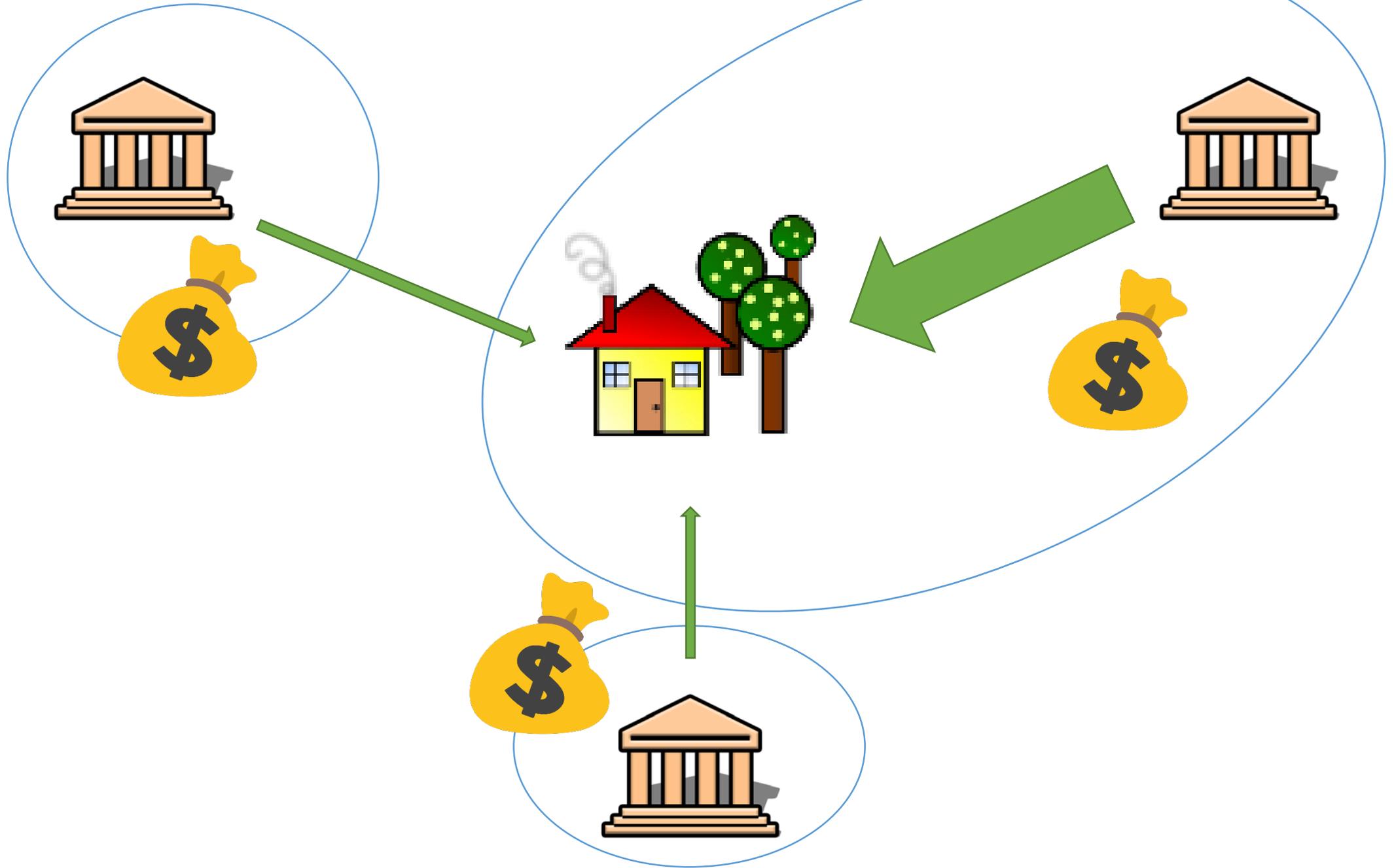
Shifting assessment areas,  
illustrated

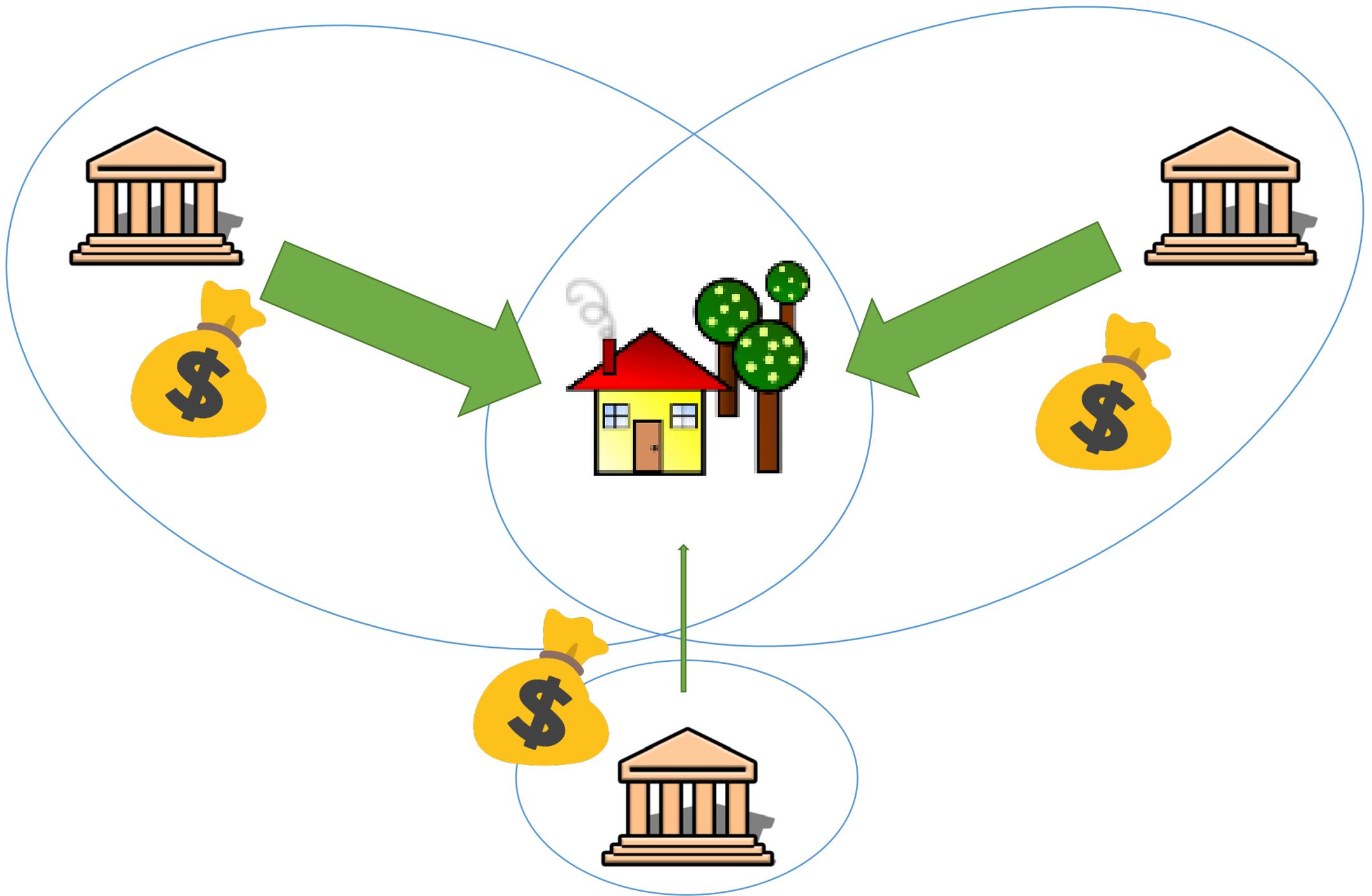












# Estimation strategy

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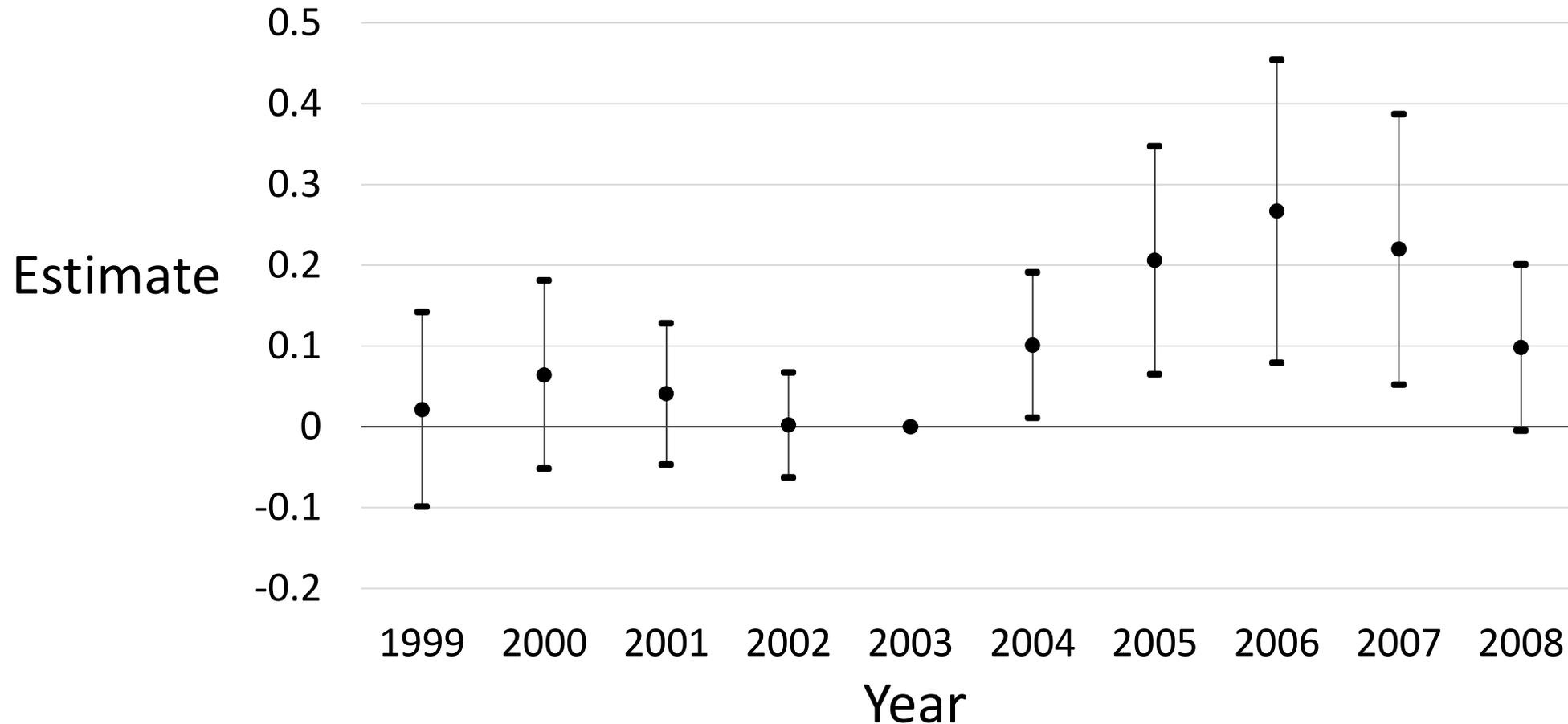
Neighborhoods that found themselves in more new assessment areas should have a greater boost to CRA-induced lending in 2004

Compare increase in LMI lending over non-LMI lending

- Non-LMI acts as “control group” if bank concentration is correlated with other economic trends

# Elasticity of LMI lending to increase in number of CRA assessed banks, relative to 2003

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# Low income borrowers were most affected

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- Households earning less than half the median family income of their new MSA saw the greatest increase in borrowing
- Illustrates the importance of researching effects far from LMI threshold

Elasticity of Mortgage Supply to the Number of Assessed Banks

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Borrower Income	Year	
	2003-04	2002-05
70%-80% AMFI	0.072 (0.051)	0.122 (0.062)
50%-70% AMFI	0.065 (0.045)	0.212** (0.081)
< 50% AMFI	0.223** (0.065)	0.295** (0.083)

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# Increase in lending entirely from banks

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- Non-banks are not subject to the CRA
- Possible incentive through the secondary market, as banks receive credit for purchase loans
- No evidence of a non-bank response, however

Elasticity of Mortgage Supply to the Number of Assessed Banks, by Lender Type

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Lender Type	Year	
	2003-04	2002-05
Banks	0.101* (0.045)	0.169** (0.058)
Non-Banks	-0.0035 (0.021)	0.020 (0.020)

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# LMI loans did not get riskier as a result of the additional CRA assessed banks

- Banks do not appear to have relaxed underwriting standards to boost their LMI lending
- However, LMI borrowers are riskier on average than non-LMI
  - 11% of LMI loans in-sample experienced a 90+ day delinquency by the end of 2008
  - Only 5% of non-LMI loans did so
- Introducing more LMI loans into the pool of outstanding mortgage debt did increase aggregate risk some

Effect of the Number of CRA Assessed Banks on Loan Riskiness and Performance

Outcome	Year	
	2003-04	2002-05
90 Days Delinquent	-0.001 (0.022)	0.013 (0.032)
60 Days Delinquent	-0.005 (0.026)	0.008 (0.035)
30 Days Delinquent	0.001 (0.032)	0.010 (0.039)
FICO Score	0.019 (6.301)	-2.917 (6.603)
Subprime	0.028 (0.024)	0.041 (0.026)
Option ARM	-0.025 (0.061)	-0.018 (0.061)
Loan to Value Ratio	-2.416 (2.038)	-2.305 (2.307)
Debt to Income Ratio	-0.619 (0.136)	-0.037 (1.499)
Low or No Documentation	0.002 (0.052)	-0.022 (0.053)
Interest Only	0.022 (0.016)	0.011 (0.064)

# Conclusions

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- Giving more banks a CRA incentive to lend in a given neighborhood increases LMI lending there
  - Low income households receive most of the new loans
  - Banks responsible for the entirety of the increase
- The new LMI loans are no riskier than LMI lending in general
- Takeaways: the CRA works, increases risk only to the extent that LMI lending is inherently riskier
- Further questions: have things changed since the financial crisis? With the advent of fintech?