The Effects of the Community Reinvestment Act (CRA) on Mortgage Lending in the Philadelphia Market

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Disclaimer

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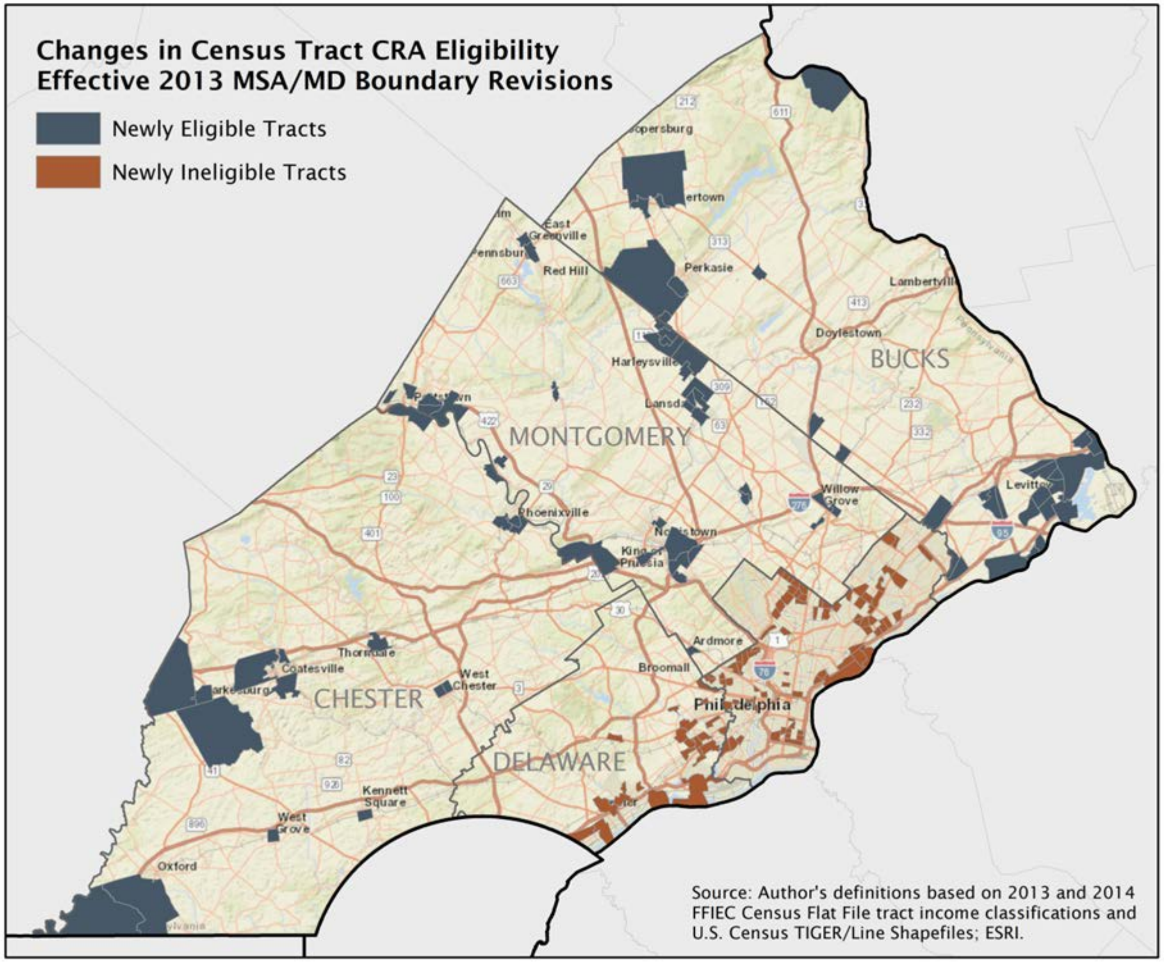
Overview

The Community Reinvestment Act (CRA)

- Enacted in 1977; intended to promote access to credit and other banking services in LMI communities/populations
- Empirical evidence on impact of CRA is scarce and inclusive
- New MSA/MD definitions (2013) provide a unique opportunity to identify effects of CRA:
  - Philadelphia MD was split into two new MDs: new Philadelphia MD and the MBC MD.
  - Radical changes in neighborhood CRA eligibility status: **One-third of previous LMI census tracts in the new Philadelphia MD became CRA ineligible; number of CRA-eligible LMI tracts tripled in the MBC MD** from 2013 to 2014.

Overview



Changes in Census Tract CRA Eligibility
Effective 2013 MSA/MD Boundary Revisions
Newly Eligible Tracts
Newly Ineligible Tracts
BUCKS
MONTGOMERY
CHESTER
DELAWARE
Perkasie
Red Hill
Lambertville
Doylestown
Harleysville
Phoenixville
Willow Grove
Ardmore
Broomall
Coatesville
Thorndale
West Chester
Kennett Square
West Grove
Oxford
Source: Author's definitions based on 2013 and 2014 FFIEC Census Flat File tract income classifications and U.S. Census TIGER/Line Shapefiles; ESRI.

Overview

- Lenders are responsive to the incentive of CRA, especially when a lower-income neighborhood loses its CRA eligibility status.

- Losing CRA eligibility status leads to **a decrease of 10 percent or more in purchase mortgage originations by CRA-regulated lenders. About half, but not all, of the decline in CRA lending can be offset by the increased lending by nondepository institutions** that are not subject to CRA.

- Increased market share of nondepository institutions in previously CRA eligible neighborhoods, however, was accompanied by **a greater involvement in FHA lending**.

Background

More details about CRA

- Covers commercial banks and thrifts only
- Focuses on LMI communities/individuals (<80% of area median)
- Outcome-based evaluation (lending, investment, and services)
- Assessment areas tied to bank branches
- Rating considered when reviewing applications for mergers, acquisitions, or branch opening

Potential effects of CRA:

- Prevent redlining and discrimination
- Generate information externalities
- Little/no effect, altered the sources of credit, or increased volume (new lending) on mortgage lending

Background

Does CRA do anything?

- Incentives are indirect; most banks receive satisfactory rating
- CRA requires considerable regulatory and compliance effort

If CRA was effective in the past, does it still matter today?

- Mobile and online banking and the rise of interstate banking make brick-and-mortar policies from the 1970’s obsolete?
- The rise of FinTech firms: nondepository institutions take a larger share of mortgage lending market

What has been the interaction between CRA-covered lenders and non-CRA lenders?

- Does CRA-related lending just crowd out non-CRA lending?
- Do non-CRA lenders provide products of similar quality and costs?

Background

Evidence on the significance, magnitude, and the mechanisms of the CRA impact is still inconclusive (Getter, 2015)

- Some studies suggest CRA has expanded access to credit in LMI communities (Belsky, Schill, and Yezer, 2001; Bostic and Robinson, 2003; Avery, Bostic, and Canner, 2005; Gabriel and Rosenthal, 2009)
- Others failed to find a consistent, significant, and positive CRA effect (Dahl, Evanoff, and Spivey, 2002; Berry and Lee, 2008; Bhutta, 2011)
- Primarily rely on a regression discontinuity design

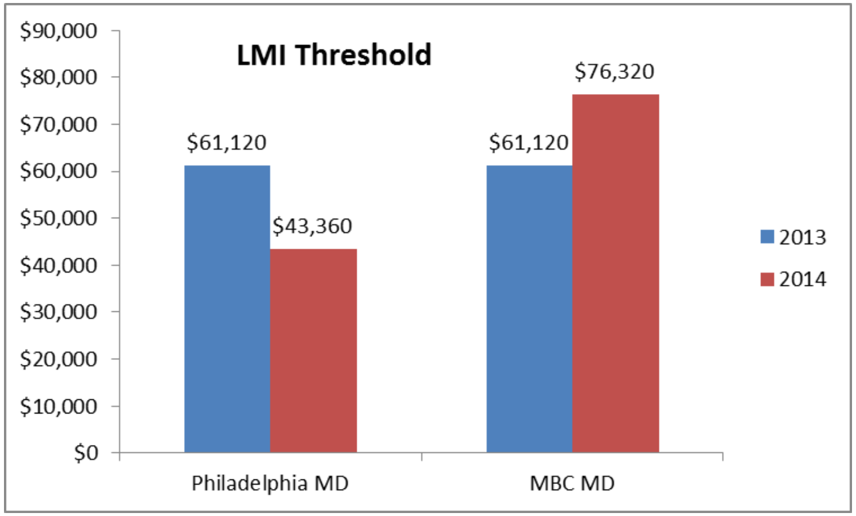
Generally consistent evidence on the performance of CRA-induced lending

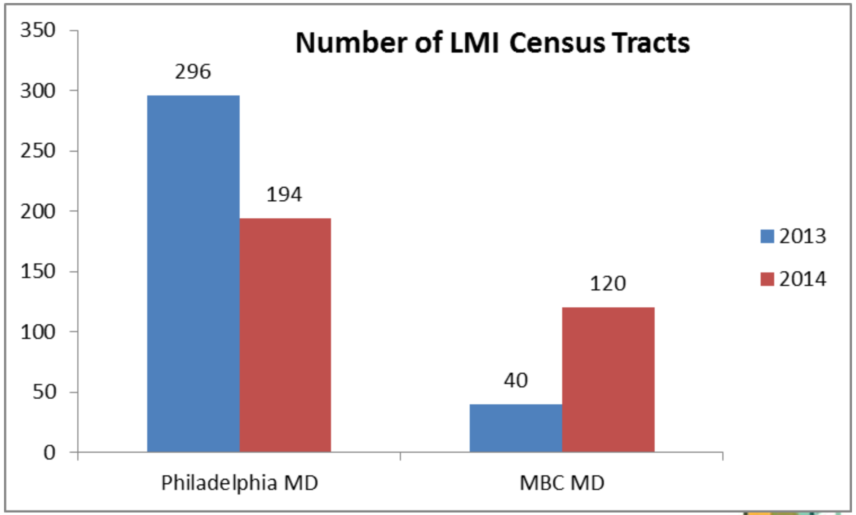
- Loans induced by CRA performed no worse, and often better than, their non-CRA counterparts such as subprime loans (Laderman and Reid, 2008; Ding et al, 2011; Ghent, Hernández-Murillo, and Owyang, 2015; and Avery and Brevoort, 2015)

Background

This study takes advantage of an exogenous policy shock:

- Area MFI declined by $22,200 in Philadelphia MD and increased by $19,000 in MBC MD, after Philadelphia MD was split into two new MDs in 2013.
- This caused significant changes in LMI thresholds and designation of LMI neighborhoods.



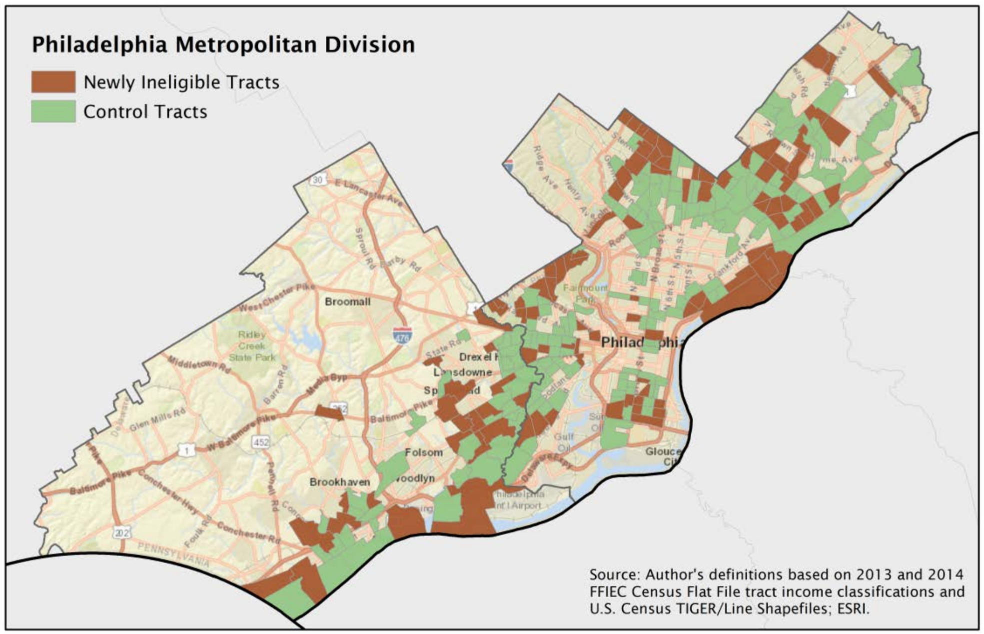


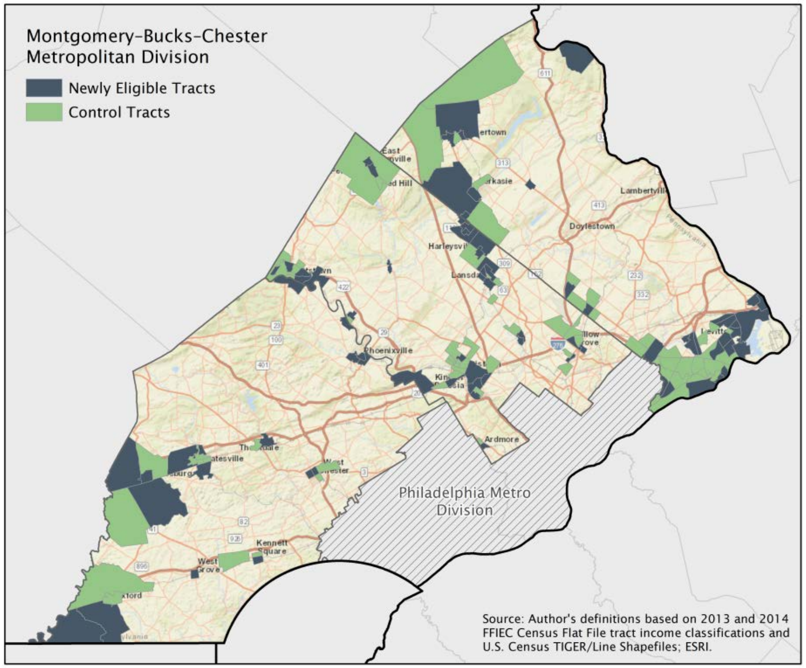
Methodology and Data

Constructing A Counterfactual

Tracts in the control group:

- within ½-mile radius,
- with unchanged CRA eligibility status, and
- with similar income (roughly between 50 percent and 90 percent of area median income)





Methodology and Data

- Standard difference-in-differences (DID) model

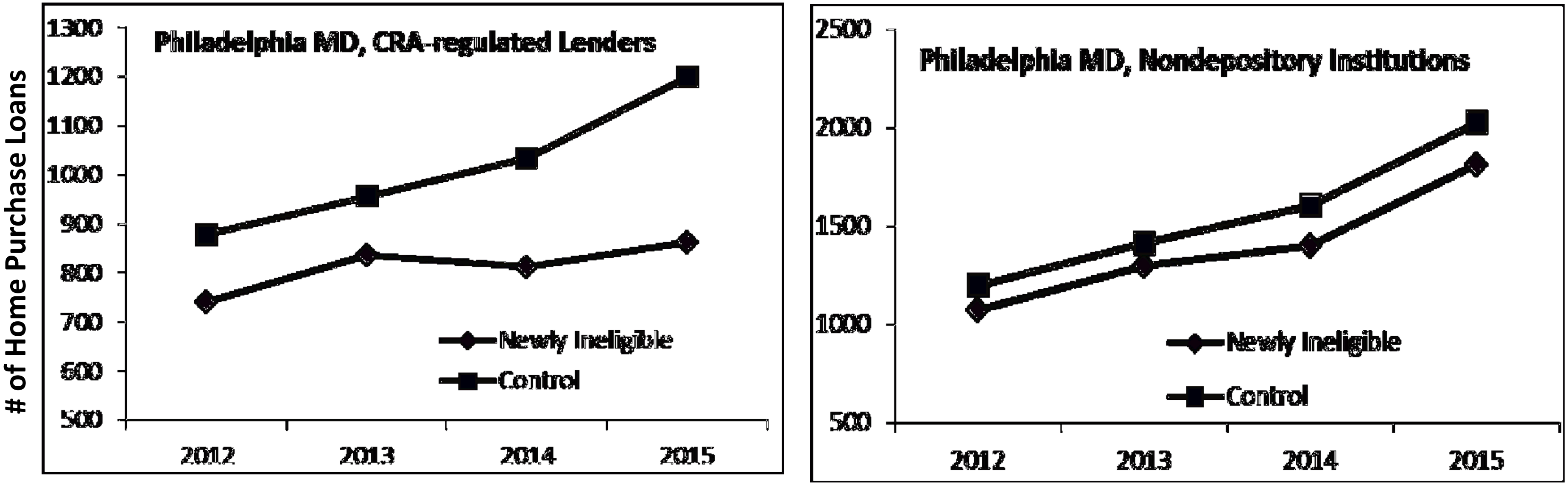
$$Y_{it} = \beta_0 + \beta_1 TREAT_i + \beta_2 POST_t + \beta_3 TREAT_i * POST_t + \gamma N_i + \varepsilon_{it}$$

- Home Mortgage Disclosure Act (HMDA) data: The disposition, loan, and borrower characteristics; the census-tract location of the properties securing the loan; and information about the institution that processes the application

- Federal Deposit Insurance Corporation(FDIC) Summary of Deposits (SODs) data on bank branches

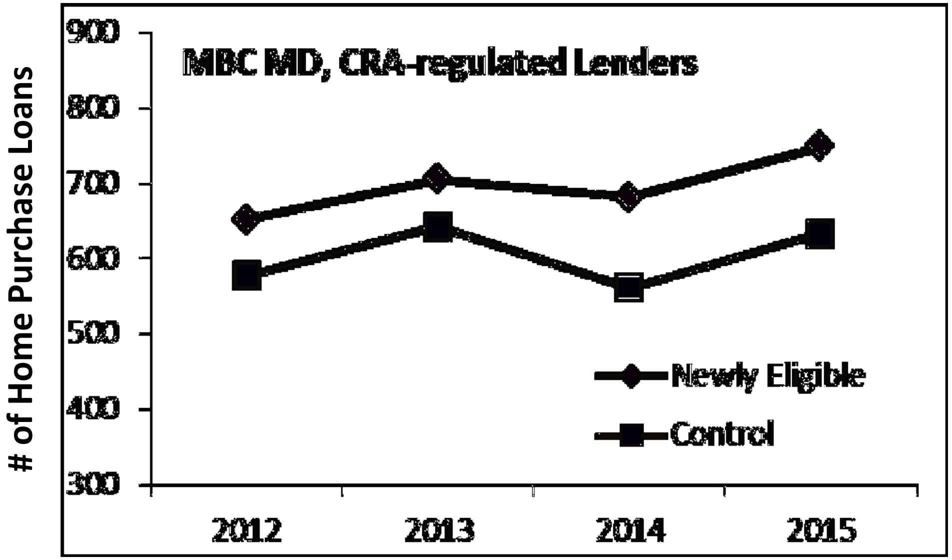
- Proxy of CRA-regulated lenders: Depository institutions with at least one branch in the same county

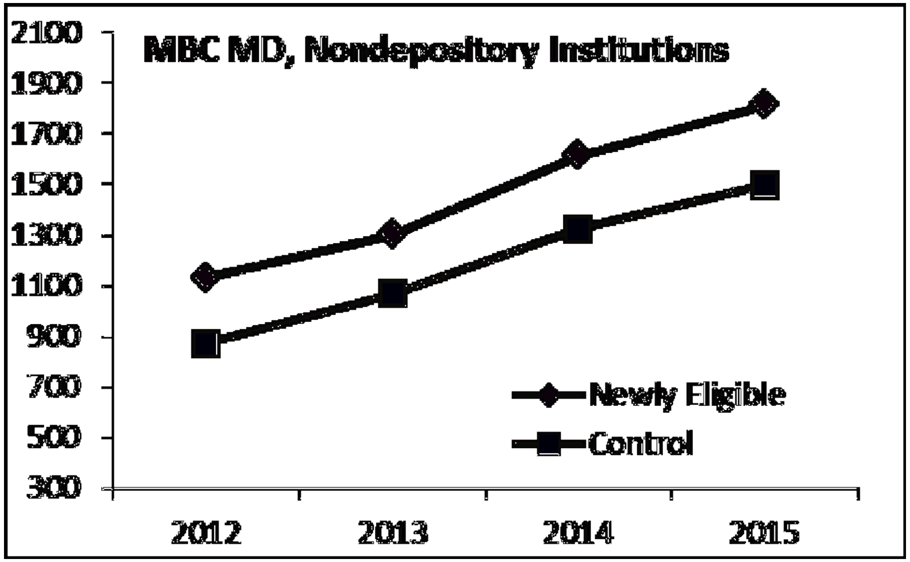
Finding: Losing CRA Eligibility Status Affects Purchase Lending by CRA-regulated Lenders



Source: Authors' calculation based on HMDA data and FDIC SOD data

Finding: Gaining CRA Eligibility Status Has Little Impact on Purchase Lending in MBC MD





Source: Authors' calculation based on HMDA data and FDIC SOD data

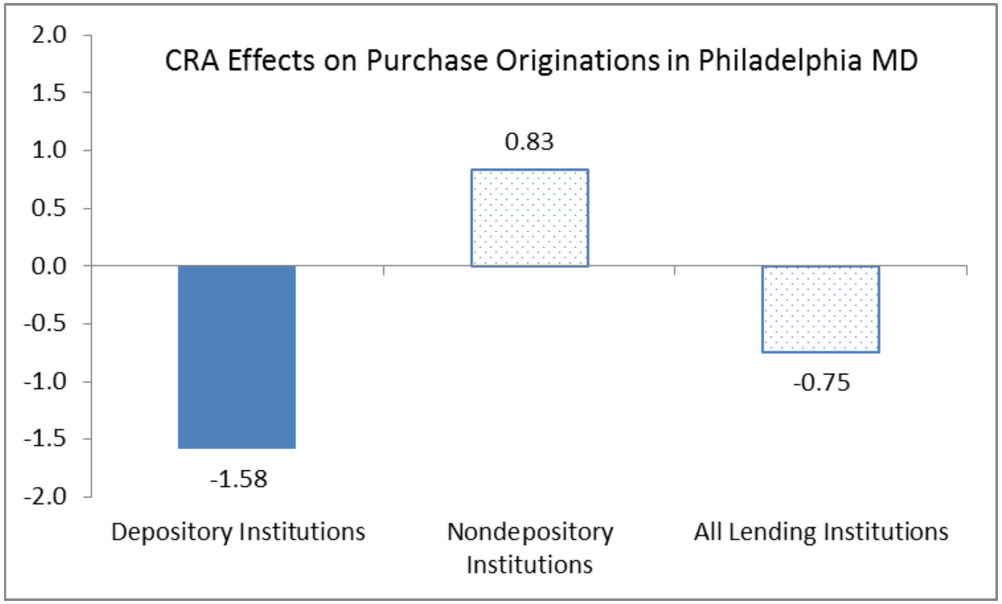
Finding

Summary of CRA Effects from Two-way DID

	Philadelphia MD		MBC MD	
	Coefficient	Std. Err.	Coefficient	Std. Err.
All Depository Institutions				
Purchase Applications	−2.540***	0.737	0.265	0.953
Purchase Originations	−1.580***	0.557	0.456	0.76
Share of FHA (%)	3.635	2.761	2.574	2.134
Nondepository Institutions				
Purchase Applications	0.751	0.848	0.414	1.277
Purchase Originations	0.829	0.655	0.165	0.991
Share of FHA (%)	7.276**	2.832	1.605	2.557
All Lending Institutions				
Purchase Applications	−1.789	1.294	0.679	1.609
Purchase Originations	−0.751	0.988	0.621	1.253
Share of FHA (%)	4.936**	2.073	1.647	1.779

Notes: ***, **, * represent significant at 0.01, 0.05, or 0.1 level. Coefficients can be interpreted as the change in mortgage lending activity in tracts with changed CRA eligibility status relative to that of the control group. Estimation is based on HMDA data.

Finding

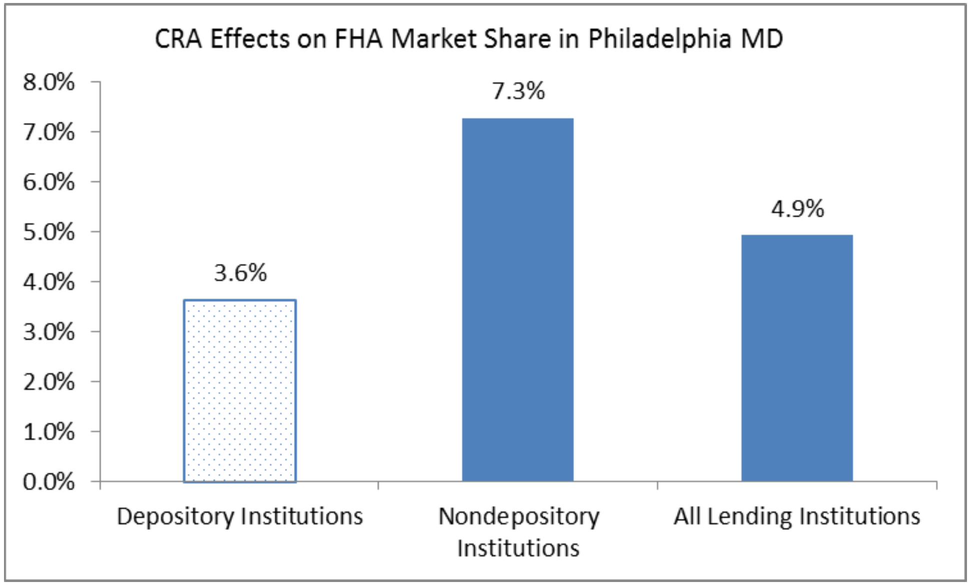


Note: Based on CRA effects identified in tract-level regressions; CRA effects for nondepository institutions and all lending institutions are statically insignificant

Does CRA expand access to credit in LMI tracts?

- Losing LMI status in Philadelphia MD leads to about 10 percent or more decrease in purchase mortgage lending by CRA-regulated lenders.
- About half, but not all, of the decrease in purchase originations by CRA lenders can be substituted by nondepository institutions (in the short run)

Finding



Note: Based on CRA effects identified in tract-level regressions; CRA effect for depository institutions is statically insignificant

Does CRA impact the quality and cost of mortgage lending?

- Nondepository institutions are more specialized in FHA lending
- Losing CRA eligibility status leads to a greater involvement in FHA lending, primarily driven by nondepository institutions

Finding

Does CRA impact minorities and lower-income borrowers more significantly?

- More significantly among minority borrowers than non-Hispanic white (minority accounting for 68% of the decline in Philadelphia MD)
- More significantly among borrowers no longer targeted by CRA, (e.g. borrowers with income above the 2014 LMI threshold in previously CRA eligible neighborhoods)

Implications

Ongoing discussion on how CRA could be improved

Treasury expects to comprehensively assess how the CRA could be improved, which will include soliciting input from individual consumer advocates and other stakeholders. Aligning the regulatory oversight of CRA activities with a heightened focus on community investments will be a high priority for the Secretary. Treasury plans to review several aspects of the CRA framework, including assessing the need for: improvement in how banks' CRA investments are measured to improve their benefit to communities; additional harmonization of CRA supervision given the oversight by multiple regulators; changes in the way CRA geographic assessment areas are defined because of the changing nature of technology and other factors; and improvement in the regulatory review and rating assessment process, which would consider the frequency of examinations, the ability of institutions to remediate ratings, and the transparency of how the overall CRA assessment rating is determined.

Treasury believes that it is important that banks' CRA investments better align with the needs of the communities that they serve, are made in a manner that is consistent with a firm's safety and soundness, and that such investments be subject to efficient and effective supervision.

Source: U.S. Department of the Treasury. June 2017. A Financial System That Creates Economic Opportunities: Banks and Credit Unions.

Implications

CRA-covered lenders are quite responsive to the incentive of CRA, especially when a lower-income neighborhood loses its CRA eligibility status

- possibly because CRA lending needs significant efforts and time
- generally consistent with the hypotheses that CRA leads to *altered sources of credit* and likely *increased volume* (Avery, et al. 2015)

Lending by nondepository institutions

- helps offset the declined lending by depository institutions
- concerns about the costs and quality of their mortgage products, signaled by their greater involvement in FHA lending

Implications

The 2013 MSA/MD revisions have ***unintended consequences on the flow of capital*** to lower-income areas in the Philadelphia MD, which create

- greater incentive for lending and investment in wealthier suburban counties (and possibly in lowest income neighborhoods in the city)
- less incentive for lending activities to many lower-income inner-city neighborhoods and populations that became CRA ineligible

Thanks!

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