Small Business Lending and the Community Reinvestment Act

September 2018
SUMMARY

This research brief provides background information on the Community Reinvestment Act (CRA) of 1977 and a summary of its relationship to low-income geographic regions of Los Angeles between 2007 and 2016. By looking at Small Business lending trends in relation to poverty rates at the census tract-level between 2007 and 2016, we find that small business lending has decreased significantly since 2007, and that a highly significant negative correlation between poverty rates and small business lending exists in Los Angeles City. Through the use of a count-outcome regression model, we found that a percentage point increase in poverty per census tract is highly correlated with (roughly) one less percentage instance of small business lending. In other words, there is an almost one-for-one relationship between poverty percentages and instances in small business lending.

BACKGROUND

The Community Reinvestment Act (CRA) is a 1977 Act of Congress designed to “encourage depository institutions to help meet the needs of the communities in which they operate, including low- and moderate-income neighborhoods” (FFIEC, 2018). It was adopted to prevent banks from denying services, such as providing access to capital, to entire communities for highly-discriminatory reasons (e.g., criteria based on race or ethnicity). Prior to the implementation of the CRA, it was common for banks in the United States to deem certain communities and geographic areas as “too risky” and exclude them entirely from their financial portfolios. This meant that low-income communities of color did not have access to important financial products, such as home and business loans, which play a significant role in promoting economic prosperity.

“As the impact of redlining cannot be overstated. Redlined communities struggled to receive federally backed home loans, making property ownership much more difficult for residents. Moreover, it made getting loans for home improvements – maintenance, upkeep and renovation – though not impossible, very unlikely. Neighborhoods fell into a vicious circle of decline: the inability to access capital lead to disrepair and the physical decline of a community’s housing stock, which in turn reinforced the redline designation” (Reft, 2017)

Thus, the CRA was a policy tool for improving access to financial services in highly disenfranchised communities throughout the United States.
Literature on the practical implications of the CRA is mixed. Reporting on the 25th anniversary of the Act, Apgar and Duda (2003) find that although the CRA is responsible for major changes in the financial industry that resulted in significant “expanded access to mortgage capital” (p. 170), the CRA has not adapted well to structural changes in financial services. Other research suggests that the CRA has increased instances of high-risk lending, resulting in pools of loans that default “15 percent more often” (Agarwal, Benmelech, Bergman and Seru, 2012, p.i) than loans not driven by CRA policy. Although it is possible that CRA policy has increased instances of high-risk lending, the size and effect of risk appears to be marginal and not significant when examined in the context of major financial failures (Park, 2008). Overall, most of the research that pertains to the CRA is specific to mortgage lending and conveys that although access to capital for low-income communities did increase as a result of the CRA, around 2007 (as a result of the financial crash) that completely changed and low-income communities of color have obtained less capital in more recent years. An assessment of mortgage lending by the Pew Research Center finds that although lending did decrease for everyone after the mid-2000s, “black and Hispanic households today are still less likely than white households to own their own homes (41.3% and 47%, respectively, versus 71.9% for whites)” (Pew Research Center, 2017). Research specific to California mortgage lending echoes similar information and finds that communities of color have less access to home loans, even though home purchases in low-income neighborhoods exceeded home purchases in higher income neighborhoods in 2015 (Vidika and Richardson, 2017). This indicates that race and poverty are more significant, in terms of accessing mortgage loans, than geographic location.

Research on small business lending, in relation to the CRA, indicates that business lending trends have followed a similar pattern to those of mortgage lending. Lending to small businesses increased between the inception of the CRA through 2007, and as a result of the financial crash, decreased significantly. Although similar in trends, research on small business lending is somewhat limited. Reporting by KQED sheds light on some of the barriers that exist for small businesses owned by individuals of color and located in low-income neighborhoods (Romero, 2017a; Romero, 2017b) in terms of accessing capital for their businesses. A report on small business lending trends in Los Angeles, Chicago and San Diego, by the Woodstock Institute, provides a comprehensive longitudinal analysis on small business lending at and below the $100,000 (Cowan, 2017) level. This report finds that instances of small business loans below $100,000 were fewer than those in higher income neighborhoods between 2002 and 2014. These disparities, Cowan asserts, are more pronounced after 2007.
LOS ANGELES CITY SMALL BUSINESS LENDING

To further explore the small business lending trends identified by previous research, but with a stronger focus on Los Angeles, we collected and organized CRA small business lending data for all Los Angeles census tracts between 2007 and 2016. The CRA data we collected are aggregate data, which denote the total number of loans provided within each census tract, per year. Furthermore, these data are not limited by loan sizes – they are all loans dispersed to small businesses, as reported by institutions required to do so by the CRA. These data are collected, stored, and administrated by the Federal Financial Examination Council (FFIEC).

To start, charting these data according to number of loans per year, for all census tracts (Chart 1), confirms that the lending trends that define mortgage lending and small business lending under $100,000 also match all small business lending in Los Angeles. We see that, much like other research indicates, lending for all small businesses dropped significantly after 2007.

Although it is useful to understand how much lending has decreased over time from a macro-level, we also collected and organized data on poverty to match to our lending data. We collected poverty percentage data (total percentage of people in poverty, as defined by the U.S. Census Bureau [Census, 2018]) for all census tracts in Los Angeles City between 2007 and 2016. Once these data were matched, we divided all data into two groups: census tracts in which 30% or more of the population live in poverty and census tracts below that threshold (Chart 2).

As we see in Chart 2, the differences in small business lending according to our poverty thresholds are drastic. We see that fewer loans went to census tracts with higher percentages of poverty, consistently, between 2007 and 2014. In some years, census tracts below the 30% mark received four times as many loans as did census tracts above our 30% mark.

To better understand the possible relationship between poverty and small business lending, we also ran our data through a negative binomial regression model. This we found to be an appropriate model due to the fact...
that our dependent variable (Total Number of Small Business Loans) were highly, positively skewed (this is common with count data). Additionally, although other regression models also adjust for skewed data (Gardner, Mulvey and Shaw, 1995), this particular model was the best fit for our data set.

As we see in Table 1, our poverty variable ("Percentage in Poverty") correlates significantly with our dependent variable ("Number of Loans"). Furthermore, our exponentiated coefficient, "IRR", indicates that for every percentage increase in the number of people in poverty within a census tract, there is a multiplicative effect of .97 in respect to lending. As the additive log coefficient was negative, so is the relationship between these two variables. In other words, for every percentage increase in poverty within a census tract, we can expect about one less small business loan in that census tract.

**Chart 1**
**Total Number of Small Business Loans per Census Tract (Los Angeles City) 2007 - 2016**

**Chart 2**
**Total Number of Small Business Loans per Census Tract (Los Angeles City) 2007 - 2016**

30% of Population Above Poverty vs. 30% of Population Below Poverty
### Table 1
Negative Binomial Regression

<table>
<thead>
<tr>
<th>Negative binomial regression</th>
<th>Number of obs = 8,212</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LR chi2(1) = 1532.01</td>
</tr>
<tr>
<td>Dispersion</td>
<td>= mean</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>= -4720.057</td>
</tr>
<tr>
<td></td>
<td>Prob &gt; chi2 = 0</td>
</tr>
<tr>
<td></td>
<td>Pseudo R2 = 0.016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Loans</th>
<th>IRR</th>
<th>Std. Err.</th>
<th>z</th>
<th>P &gt;</th>
<th>z</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage in Poverty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>_cons</td>
<td>0.9700657</td>
<td>0.0006738</td>
<td>-43.76</td>
<td>0.000</td>
<td>.968746</td>
<td>.9713872</td>
</tr>
<tr>
<td>221.8162</td>
<td>4.021966</td>
<td>297.92</td>
<td>0.000</td>
<td>214.0717</td>
<td>229.8409</td>
<td></td>
</tr>
<tr>
<td>/lnalpha</td>
<td>-0.1334608</td>
<td>0.0141544</td>
<td>-0.1612028</td>
<td>-0.1057187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>alpha</td>
<td>0.8750618</td>
<td>0.012386</td>
<td>.8511194</td>
<td>.8996777</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LR test of alpha=0: chibar2(01) = 9.4e+05 Prob >= chibar2 = 0.000

## CONCLUSION

It is important to note that more research is needed to understand why poverty and small business lending are so highly, negatively correlated. This assessment is by no means an attempt to convey that reduced lending is a direct cause of poverty. All we found is that these two variables appear to be closely tied together. Causes in explaining the trends within each variable are numerous. For example, lower instances of lending in high-poverty census tracts may have to do more with the number of businesses that exist or do not exist in these tracts. It may also be that small businesses in these tracts are not prepared enough to interface with lending institutions. In our experience in working with entrepreneurs in the informal economy and many undocumented business owners, businesses in low-income communities often do not qualify for traditional forms of capital and are excluded entirely from formal financial products due to their immigration status and lack of credit histories (Gutierrez, 2018).

Yet, because the variables we assessed are so highly correlated, we believe that is also fair to question how much effort lending institutions are putting into engaging and interfacing with small businesses in neighborhoods with high instances of poverty. In our experience, from working with low-income entrepreneurs and with traditional lending institutions, there is definitely room for improvement. As other research shows, poverty is not the only variable that appears to correlate with fewer instances of lending – race also appears to be a significant determinant in predicting lending trends. Therefore, we believe that more research needs to exist with respect to poverty and lending, but also more options for capital that actually serve disadvantaged communities need to exist. Especially in Los Angeles, in which a large percentage of its population is undocumented, financial institutions need to determine how to create finance tools that meet the needs of residents most in need.
REFERENCES


