A Capital Infusion Program for Community Development: the Case of Community Development Capital Initiative

Breck L. Robinson

https://elischolar.library.yale.edu/ypfs-documents/8875
Abstract

This study investigates the Community Development Capital Initiative (CDCI) program, the characteristics of the participants, and their subsequent small business lending behavior. Results show that participating banks are larger, older, and hold relatively less loan loss reserves when compared to a control sample of non-participating banks. While participating banks experience stronger growth in small business lending in comparison to a control group of non-participating peers, the results do not indicate that the CDCI program led to an increase in small business lending. Overall, participation in the CDCI program did not lead to the desired result: an increase in small business lending by participating banks.

Keywords: banks, government policy and regulation

JEL Classification: G21, G28
1. Introduction

1.1 Background

During the 2007–09 financial crisis, many financial institutions accessed capital through programs initiated by the U.S. Treasury to provide financial stability by recapitalizing the financial sector. Programs like Troubled Asset Relief Program (TARP) or the Community Development Capital Initiative (CDCI) did not explicitly state how capital should be invested, but program participation constituted an implicit agreement that these institutions would increase lending.\(^1\)

After the passage of TARP, concerns arose that small community banks and banks with a community development mission would find it difficult to gain access to capital. Given the impact of the financial crisis on small community banks and the communities they serve, it became increasingly important for policymakers to initiate a program similar to TARP that would give banks with a community development focus the ability to raise capital.\(^2\)

In February 2010, the Community Development Capital Initiative (CDCI) program was formed using $570.1 million in TARP funding to provide low-cost capital for small business lending for those communities that were most affected by the 2007–09 financial crisis. The Obama Administration noted that the CDCI and the Small Business Lending Fund (SBLF) were new programs that would help small businesses access credit and create jobs. While both programs were created to encourage participants to direct capital to small businesses, only certified community development financial institutions (CDFIs) could apply for participation in the CDCI. Limiting the focus of the CDCI program to certified CDFIs severely restricted the number of institutions that could participate in the program and the communities that could be served. In addition, 81 percent of the funds disbursed ($363.3 million) went to banks that had originally received funds under the Capital Purchase Program (CPP). One reason why banks that originally received funding under the CPP were willing to switch programs was that the cost of capital under the CDCI was cheaper (2 percent vs. 5 percent) and remained at the original cost for a longer period of time.

1.2 Objective

The objective of this study is to determine the factors influencing participation in the CDCI program and to identify those characteristics that explain small business lending.

First, this study uses a logistic model to determine factors influencing participation in the CDCI program. This model includes several state macroeconomic variables to capture the effect of regional economic conditions where the banks operate. Because SBLF and CDCI are similar programs administered by the U.S. Treasury, the results found in a study by Balla, Carpenter and Robinson (2017) that examined the characteristics of SBLF participants may provide insight into CDCI.

Second, I use a cross-sectional model to identify those characteristics that explain small business lending behavior. More importantly, the model attempts to determine if participants in the CDCI

---


\(^2\)In May 2009, the Treasury reopened the application process for six months for banks with less than $500 million in assets.
program experience stronger growth in small business lending relative to the control sample of minority-owned banks.

1.3 Results

As indicated by the results, participants in the CDCI program are more likely to be larger, older, and holding fewer loan loss reserves relative to asset size when compared to non-participating peers. With regard to lending behavior, the results show that the growth in small business lending increases as a bank holds more capital, liquidity, and small business loans relative to assets. The results also show that the growth in small business lending declines as banks experience a decline in asset quality and an increase in profitability. Surprisingly, the growth in small business lending is strongest among CDCI participants, but participation in the CDCI does not ensure stronger growth in small business lending for any year after participation in the CDCI.

2. The Community Development Capital Initiative

In February 2010, the U.S. Treasury diverted $570.1 million in TARP funding for the CDCI program. In order to be eligible to participate in the CDCI, an institution must be a certified community development financial institution (CDFI). According to the U.S. Treasury, a certified CDFI must have a primary mission of promoting economic development by providing financing and/or development services, principally serving one or more eligible target markets. Similar to the CPP, participating institutions in the CDCI program receive capital from the U.S. Treasury with no commitment to distribute these funds in the form of direct lending into the communities they serve. Consistent with the SBLF, the goal of the CDCI is to promote small business lending and to create jobs. In addition, the CDCI has a mandate encouraging participating CDFIs to focus their capital towards the hardest-hit rural and urban communities in their service area.3

Institutions that receive capital under the CPP or the SBLF are eligible to participate in the CDCI as long as they repay in full any funds received from the other program. Similar to the CPP, the CDCI does not directly incentivize participants to increase lending. This is not the case with the SBLF, which makes a connection between the cost of capital paid on funds received and the participants’ growth rate in small business lending.

In the end, 36 CDFI banks and 48 CDFI credit unions received funding under the CDCI program, including 28 former TARP banks that were able to exchange funding received under CPP. In total, the U.S. Treasury distributed $570.1 million to CDCI participants, with $363.3 million allocated to banks that previously accepted funding under the CPP. Why would a certified CDFI swap out of the CPP and into the CDCI? First, the cost of capital under the CDCI

---

3 An institution with an asset size of $1 billion or less can apply for funding between 1 percent and 5 percent of risk-weighted assets. However, a larger institution with an asset size between $1 billion and $10 billion in assets could apply for capital ranging between 1 percent and 3 percent of the institution’s risk-weighted assets.
was cheaper. The initial cost of capital under the CPP was 5 percent versus 2 percent under the CDCI. In addition, the initial cost of capital from the CDCI would be held fixed for eight years versus five years under the CPP.

Similar to other Treasury program, participants in the CDCI can exit the program at any time without prepayment penalty, subject to the approval of their regulator. The only restriction on exiting the program is that partial repayment of funds must be the lesser of 5 percent of the amount originally invested in the institution under the CDCI program or $100,000.

3. Data

In order to explore the performance of the CDCI and the type of institutions that participate in the program, I compare minority-owned CDCI banks against two groups – non-minority-owned CDCI banks and minority-owned CDCI banks.

The sample of participating banks includes 36 certified CDFI banks that participated in the CDCI program. Of the 36 participating banks, 10 are identified as minority-owned. The control sample consists of 206 minority-owned banks, excluding minority-owned banks that are participating in the CDCI program. The Call Reports were used to extract balance sheet, income statement, and regulatory data on a quarterly basis for the periods 2009–15. In addition to the Call Report data, state-level macroeconomic factors were obtained from the Bureau of Labor Statistics to capture the effects of regional economic variation between states. Summary statistics are presented in Table 1 for the following samples: minority-owned non-CDCI banks, minority-owned CDCI banks, and non-minority-owned CDCI banks. Differences in means are provided where the sample of minority-owned CDCI banks are used as the baseline group for comparison.

Key differences in these descriptive statistics may provide insight into potential differences between minority-owned banks that are participants in the CDCI program and the two comparison groups: non-minority-owned CDCI banks and minority-owned banks that are not participants in the CDCI program. In Table 1, a comparison of financial variables show that minority-owned banks that are not participants in the CDCI program are significantly larger, less profitable, and have weaker asset quality measures when compared to the sample of minority-owned CDCI banks. In other words, minority-owned banks that are participants in the CDCI program look similar to minority-owned banks overall, but CDCI participants are healthier financially.

---

4 Participants in the CDCI could pay a cost of capital of 1 percent if they switched to the SBLF, but the lower cost of funds required participants to grow their small business loan portfolio by 10 percent or more.

5 Ideally, the most appropriate control group would contain banks that were eligible to participate in the CDCI, but did not apply or were denied participation. For example, this sample would contain banks that were eligible to become certified CDFIs, including those banks that were certified CDFIs that did not participate in the CDCI program. Using a sample of minority-owned banks is a good proxy because many of the minority-owned banks would be eligible to be classified as a certified CDFI if they so desired. Also, minority-owned banks typically reside in minority and lower-income communities, so their behavior is likely to be similar to a CDFI.
When the financial data for both samples of CDCI banks are compared to each other, the data shows that they are very similar, except for a significant difference in past-due loans relative to asset size. The data also shows that minority-owned banks that are CDCI participants are located in states that are experiencing lower growth in unemployment and a stronger decline in private-sector bankruptcies.

Overall, the summary statistics indicate that minority-owned banks that participate in the CDCI program are similar to both control groups, but are financially most similar to the sample of CDCI participants that are non-minority-owned.

4. Literature

There have been a number of studies written on the impact of financial shocks on the banking industry and their spillover into the real economy. For example, Peek and Rosengren (2000) show that a reduction in bank credit has a negative impact on the broader economy. In another study by Calomiris and Mason (2003), they find that reduced credit stemming from bank failures can lead to a reduction in household income. One possible explanation for the reduction in bank credit during economic downturns may be attributed to capital shortfalls. Bernanke and Lown (1991), Peek and Rosengren (1994, 1995), Hancock and Wilcox (1994), and Berger and Udell (1994) all find evidence supporting a relationship between bank capital and the allocation of credit.

During the 2007–09 financial crisis, the federal government initiated a number of programs to help stabilize financial markets and the banking system. A good portion of the academic literature on the financial crisis has been written about Troubled Asset Relief Program (TARP). For example, Veronessi and Zingales (2010) show that the Capital Purchase Program (CPP) primarily benefited creditors by reducing the probability of default for participating institutions. However, Bayazitova and Shivdasani (2012) find that equity holders of participating institutions benefited from receiving CPP and that the size of the market reaction is positively related to bank size and negatively related to the bank’s capital position.

If the CPP provided a financial benefit to bank stakeholders, why did so few banks participate in the program? One possibility is that the U.S. Treasury’s selection criteria excluded banks that were most in need of a capital infusion. Both Bayazitova and Shivdasani (2012) and Ng, Vasvari and Moerman (2010) find that CPP participants were stronger financially when compared to non-participants. Capital infusion programs like the CPP had a dual mandate, stabilize the banking system and provide access to credit. While the CPP was successful in meeting the program’s first mandate, there are concerns that the CPP had mixed success in meeting the second mandate. For example, Taliaferro (2009) finds that the CPP helped strengthen bank capital ratios without a corresponding increase in loan growth.
One government capital infusion program that has been successful in increasing loan growth while increasing bank capital ratios is the Small Business Lending Fund (SBLF). Similar to the CDCI, the SBLF encourages participating banks to increase small business lending by tying the cost of government supplied capital to the bank’s growth rate in small business lending. There have been a couple of studies that have attempted to evaluate the SBLF. One study (Choi 2012) finds a positive relationship between SBLF funding and asset size, but no relationship with small business lending. In a different study (Amel and Mach 2014), the authors find that participating banks experience relatively large year-over-year growth in small business lending when compared to non-participating banks. However, after further analysis, the authors contend that the SBLF program did not lead to a change in the lending behavior of participating banks. However, a study by Balla, Carpenter and Robinson (2017) finds a different result. They find that participating banks are healthier financially, larger, and reside in states with faster private-sector job growth. In addition, participating banks experience stronger growth in small-business lending when compared to non-participants, after controlling for financial and state-level macroeconomic factors. Overall, the authors contend that the SBLF was successful in encouraging participating banks to grow their small-business loan portfolios.

5. Methodology

5.1 CDCI Selection Model

The first stage of the estimation employs a cross-sectional logit model to identify differences between banks that participated in CDCI and those that did not. Specifically, this model distinguishes between participants in the CDCI and those minority-owned banks that did not participate in the CDCI, but may have been eligible if they had been a certified CDFI. Included in the model are bank-level controls for financial health, concentration in small business lending, and state-level macroeconomic factors. The data is for the 1st quarter of 2010, which is the quarter prior to the CDCI application deadline (April 30, 2010). By selecting this time period, it is possible to observe the inputs that both banks and regulators use to determine whether a bank should or should not be allowed to participate in the CDCI program.

\[
\text{CDCI} = \lambda_0 + \lambda_1 \text{CAP\_RATIO} + \lambda_2 \text{ASSETS} + \lambda_3 \text{BAD\_LOANS} + \lambda_4 \text{ROA} + \lambda_5 \text{LIQUIDTY} + \lambda_6 \text{SB\_LEND} + \lambda_7 \text{JOBS} + \lambda_8 \text{UNEMP} + \lambda_9 \text{BANKRUPTCIES} + \lambda_{10} \text{INCOME} + \mu
\]  

(1)

where

\text{CDCI} = 1 \text{ if the bank participated in CDCI; else CDCI} = 0; \\
\text{CAP\_RATIO} = \text{ Total Equity Capital or Tier 1 Capital/Total Assets; } \\
\text{ASSETS} = \text{ Natural Log of Total Assets; } \\
\text{BAD\_LOANS} = \text{ Non-performing Loans (NPL), Allowance for Loan Losses (ALL), Loans 90+ Days Past Due (90+) or Charge-offs (CHARGEOFF)/Total Assets; }
ROA = Return on Assets;  
LIQUIDITY = U.S. Treasury and U.S. Agency Debt/Total Assets;  
SB_LEND = Small Business Lending/Total Assets;  
JOBS = Percent Change in Private Sector Jobs;  
UNEMP = Percent Change in Unemployment;  
BANKRUPTCIES = Percent Change in Private Sector Bankruptcies;  
INCOME = Percent Change in Personal Income.  

Included in the model are control variables that proxy for the bank’s financial health. As discussed above, the U.S. Treasury restricted participation in TARP programs to those institutions that were financially stable and adequately capitalized. Based on the conclusions drawn by Ng, Vasvari and Moerman (2010), it is expected that participants in the CDCI program are more profitable (ROA), hold more capital (CAP_RATIO), and hold higher quality assets (BAD_LOANS). Based on the findings of Balla, Carpenter and Robinson (2017), it is expected that CDCI participants that have more experience doing small business lending will participate in CDCI. However, the role that liquidity (LIQUIDITY) plays in this model is less certain. While liquidity can signal that a bank is in good health, excess liquidity may signal that the institution has limited lending opportunities.  

In addition to bank-level financial variables, the model includes regional macroeconomic variables to control for the broader effects of job growth, unemployment, bankruptcies, and personal income on small business lending. It is expected that banks located in states where economic conditions are improving will be more likely to participate in CDCI, leading to an increase in demand for small business lending.  

5.2 CDCI Lending Model  

In equation 2, a cross-sectional model is used to determine if participants in the CDCI program experienced an increase in their allocation of small-business credit relative to minority-owned banks that did not participate in CDCI. A priori, there is no reason to expect that CDCI participants experience stronger growth in small business lending that is different from non-participants that are minority-owned banks. To capture changes in small business lending behavior associated with participation in CDCI, I calculate the growth rate in small business lending for each quarter for the time period 2009–15. The independent variables in this model control for a bank’s financial condition, concentration in small business lending, and regional

---

6 The aggregate amount of small business lending is represented by the sum of the following components: commercial and industrial; owner-occupied non-farm; non-residential real estate; loans to finance agricultural production and other loans to farmers; and loans secured by farmland.
macroeconomic environment. In addition, the model includes quarter and year fixed effects to identify changes in lending behavior by quarter and year.

\[
\text{SB\_BASEGWTH} = \lambda_0 + \lambda_1 \text{CDCI} + \lambda_2 \text{CAP\_RATIO} + \lambda_3 \text{ASSETS} + \lambda_4 \text{BAD\_LOANS} + \lambda_5 \text{ROA} + \\
\lambda_6 \text{LIQUIDITY} + \lambda_7 \text{QUARTER} + \lambda_8 \text{SB\_LEND} + \lambda_9 \text{JOBS} + \lambda_{10} \text{UNEMP} + \lambda_{11} \text{BANKRUPTCIES} + \\
\lambda_{12} \text{INCOME} + \lambda_{13} \text{YEAR} + \mu
\]  

where,

\[
\text{SB\_BASEGWTH} = \text{Percentage change in small business from 2009 – 2015 (quarterly)};
\]

\[
\text{CDCI} = 1 \text{ if the bank participated in CDCI}; \text{ else CDCI} = 0;
\]

\[
\text{CAP\_RATIO} = \text{Total Equity Capital/Total Assets};
\]

\[
\text{ASSETS} = \text{Natural Log of Total Assets};
\]

\[
\text{BAD\_LOANS} = \text{Non-performing Loans (NPL), Allowance for Loan Losses (ALL), Loans 90+ Days Past Due (90+) or Charge-offs (CHARGEOFF)/Total Assets};
\]

\[
\text{ROA} = \text{Return on Assets};
\]

\[
\text{LIQUIDITY} = \text{U.S. Treasury and U.S. Agency Debt/Total Assets};
\]

\[
\text{QUARTER} = 1 \text{ for each quarter in the year of the sample}; \text{ else QUARTER} = 0;
\]

\[
\text{SB\_LEND} = \text{Qualified Small Business Lending/Total Assets};
\]

\[
\text{JOBS} = \text{Percent Change in Private Sector Jobs};
\]

\[
\text{UNEMP} = \text{Percent Change in Unemployment};
\]

\[
\text{BANKRUPTCIES} = \text{Percent Change in Private Sector Bankruptcies};
\]

\[
\text{INCOME} = \text{Percent Change in Personal Income};
\]

\[
\text{YEAR} = 1 \text{ for each year of the sample}; \text{ else YEAR} = 0.
\]

In this model, it is assumed that banks experience more growth in small business lending if they are stronger financially; therefore, more capital (CAP\_RATIO) and stronger earnings (ROA) quality are positively associated with growth in small business lending. In addition, banks that have stronger asset quality (BAD\_LOANS) will experience stronger growth in small business lending; therefore, the coefficient on the BAD\_LOANS variable will have a negative sign.

Also, I expect to see a positive relationship between the growth small business lending and experience originating small-business loans. As a proxy for experience lending in the small-business space, I calculate the percentage of a bank’s asset that are concentrated in small
business lending (SB_LEND). Banks that have a higher concentration in small business lending are expected to experience stronger small-business loan growth.

The model also includes four macroeconomic variables that proxy for the economic health in the states where the banks in the sample operate. Consistent with the findings of Balla, Carpenter and Robison (2017), I expect improving macroeconomic conditions will lead to stronger growth in small business lending. Specifically, the growth rate in small business lending will be positively correlated with the growth rate in personal income (INCOME) and private sector jobs (JOBS) and negatively correlated with the growth rate in unemployment (UNEMP) and bankruptcies in the private sector (BANKRUPTCIES).

The model also includes a dichotomous variable to control for differences in lending behavior between participants and non-participants in the CDCI. It is possible that participants in the CDCI program are more likely to experience stronger growth in small business lending when compared to the control group. However, there is no reason to expect that the lending behavior of the two samples would differ. Lastly, the model includes year and quarter fixed effects. Year fixed effects control for changes in lending behavior that may occur between years and after the introduction of the CDCI. By interacting the dichotomous variables CDCI and YEAR, it is possible to observe if CDCI participants experienced faster growth in small business lending during the sample time period and after participation in the CDCI. Given that the CDCI did not provide incentives to participants to use capital to originate small-business loans (like the SBLF), it is expected that there will be no difference in the growth rate in small business lending between the two groups. As a result, it is uncertain what will be the expected sign for the coefficients on the interaction terms, but the coefficients will not be statistically significant at the 10 percent level.

6. Results

6.1 CDCI Selection Model

Table 2 shows estimation results using four specifications of the CDCI selection model (Equation 1), each of which includes a different measure of asset quality. The results show that CDCI banks are larger, older, and hold a smaller dollar amount of past due loans relative to asset size when compared to minority-owned banks that are not participants in the CDCI. Surprisingly, none of the other financial variables in the model are statistically significant, including the other asset quality variables. Given that one of the motivations why a certified CDFI would be interested in participating in the CDCI is the need for additional capital associated with uncertainty regarding future asset quality, it is contrary to expectations that only one of the asset quality measures are statistically significant. It is also surprising that the coefficient on the SB_LEND variable does not have a positive sign and is not statistically significant at the 10 percent level. I hypothesized that banks would be more likely to participate
in CDCI if they held a higher concentration of small-business loans, given that the CDCI’s stated goal was for participating institutions to use the capital received from the Treasury to direct towards small business lending. One possible explanation for the lack of statistical significance for the SB_LEND variable is that prior experience originating small-business loans was not a factor in determining which banks participated in CDCI. This result is contrary to the findings of Balla, Carpenter and Robinson (2017), who find a result that is consistent with expectations. A possible explanation for the divergent results is that the SBLF tied the cost of capital to the growth rate in small business lending. Therefore, participating institutions with prior small business lending experience may be more successful originating small-business loans and receiving a lower cost on capital. Overall, the results indicate that financially there is not a statistically significant difference between the two samples. Which begs the question, why did not more minority-owned banks seek certification as a CDFI in order to receive access to capital under the CDCI?

Earlier, I hypothesized that banks may be more willing and potentially more successful originating small-business loans if they reside in a state where economic conditions are improving, allowing participating banks to use the new capital to originate small-business loans. As a result, it was expected that the coefficients on the macroeconomic variables would be statistically significant with a positive sign on the coefficients for the variables JOBS and INCOME, but a negative sign on the coefficients corresponding to the variables UNEMP and BANKRUPTCIES. Surprisingly, none of the coefficients on the macroeconomic variables are statistically significant at the 10 percent level. In other words, participants and non-participants reside in states that look very similar to each other. Therefore, the economic environment within the bank’s home state does not appear to be a contributing factor in determining which banks participate in the CDCI. One possible explanation for this result is that participating institutions were not planning to use the additional capital to originate new small-business loans. This explanation is plausible given that the CDCI program did not incorporate incentives that encouraged participants to use the additional funding to originate small-business loans. Again, these results indicate that the sample of minority-owned banks that are used as a control group are very similar to the sample of CDCI participants. In other words, the control sample of minority-owned banks could have participated in the CDCI if they applied or if they were eligible to become a certified CDFI.

6.2 CDCI Lending Model

Table 3 presents the results from cross-sectional regressions where the dependent variable is the quarterly growth rate in small business lending (SB_GROWTH) for the time period 2009–15. This model explores if participants in the CDCI experience faster growth in small business lending when compared to the control group of minority-owned banks that did not participate in the CDCI program. In addition, this model will help identify if the growth rate in small-business lending for CDCI participants changed after receiving capital from the CDCI program. For the results presented in table 3, coefficient estimates for the financial variables show that healthier
banks experience stronger growth in small-business credit. Specifically, banks that hold more capital (CAP_RATIO) and liquidity (LIQUID) relative to asset size experience faster growth in small business lending, regardless of program participation status. Consistent with this theme, all of the asset quality measures are statistically significant at the 10 percent level with the expected sign. In other words, banks that hold more capital and liquidity, while having stronger asset quality, experience faster growth in small business lending. Surprisingly, the coefficient on the ROA variable is statistically significant, but the incorrect sign.

In equation 2, I hypothesized that institutions that hold a higher concentration of small-business loans will have more experience originating and growing their small-business loan portfolio. As a result, it was expected that the coefficient on the SB_LEND variable would have a positive sign. Consistent with expectations, the coefficient on the SB_LEND variable is positive and statistically significant at the 10 percent level.

Surprisingly, the estimated coefficients for the macroeconomic variables are not statistically significant. This result is unexpected and contrary to the results presented in Balla, Carpenter and Robinson (2017), who find that improving macroeconomics conditions in a bank’s home state is a contributing factor in increasing small business lending under SBLF. The results in table 3 indicate that the growth in small business lending for the banks in the sample (participants and non-participants) are not related to the economic health in the states where the banks reside.

In addition to the results presented above, table 3 addresses the question do CDCI participants experience faster growth in small business lending in comparison to the control group of minority-owned banks. The positive sign on the coefficient for the CDCI variable confirms that participants in the CDCI program experience faster growth in small business lending relative to the control sample of non-participants. Included in equation 2 are categorical variables for each year and quarter for the sample period. Surprisingly, only the coefficient on the 2nd Quarter variable has a positive sign and is statistically significant at the 10 percent. In other words, banks in the sample experience faster growth in small business lending in the 2nd quarter only. It is interesting to note that none of the year variables are statistically significant. In other words, small business lending for the banks in the sample did not experience an increase in small business lending after the passage of CDCI.7

7. Conclusion

---

7 Year and CDCI interaction variables were included in equation 2 in a separate set of regressions. None of the Year/CDCI interaction terms were significant at the acceptable statistical threshold. In other words, CDCI participants did not experience stronger growth in small business lending for any year or any year after the passage of the CDCI. This result is further evidence that participation in the CDCI did not change the lending behavior of participating banks. Overall, the results are qualitatively similar to the results discussed in the text.
This study investigates the Community Development Capital Initiative (CDCI), the characteristics of program participants, and subsequent lending behavior. The results show that participants in the CDCI were more likely to be larger, older, and hold less loan loss reserves relative to asset size when compared to non-participants. With regard to lending behavior, I find that the growth in small business lending is strongest among banks that participate in the CDCI program. Also, the results show that the growth in small business lending is strongest among banks that hold relatively more capital, liquidity, and small-business loans. Surprisingly, CDCI participants did not experience stronger growth in small business lending for any year after participation in the CDCI.

Other capital infusion programs administrated by the U.S. Treasury have had mixed success in achieving the programs’ stated goals. The primary goal of the CDCI—to encourage certified community development financial institutions to originate more small-business loans in the “hardest hit rural and urban communities”—was not successful. While the program looks very similar to the SBLF, a contributing factor to the possible failure of the CDCI may be that the CDCI lacked financial incentives to encourage participants to originate more small-business loans.
References


Table 1 – Difference in means as of 1st quarter 2010

Mean values for the following variables are displayed for minority banks that are not participants in the CDCI program, minority banks that are participants in the CDCI program and non-minority banks that are participants in the CDCI program: natural log of total assets (ASSETS), total equity ratio (CAP_RATIO), return on assets (ROA), cash as a percentage of total assets (LIQUIDITY), small business lending as a percentage of total assets (SB_LEND), non-performing loans as a percentage of total assets (NPL), charge-offs as a percentage of assets (CHARGEOFF), past-dues as a percentage of total assets (90+) and loan losses as a percentage of total assets (ALL). The following macroeconomic variables are presented at the state level based on where the bank is headquartered: percentage change in private sector jobs (JOBS), percentage change in unemployment (UNEMPLOYMENT), percentage change in bankruptcies (BANKRUPTCIES) and the percentage change in personal income (INCOME).

<table>
<thead>
<tr>
<th></th>
<th>Minority non-CDCI Banks</th>
<th>Minority CDCI Banks</th>
<th>Non-Minority CDCI Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Ratio</td>
<td>0.100</td>
<td>0.100</td>
<td>0.106</td>
</tr>
<tr>
<td>Tier 1 Capital</td>
<td>0.139</td>
<td>0.142</td>
<td>0.141</td>
</tr>
<tr>
<td>Past Due</td>
<td>0.002</td>
<td>0.003</td>
<td>0.001</td>
</tr>
<tr>
<td>NPL</td>
<td>0.038</td>
<td>0.033</td>
<td>0.020*</td>
</tr>
<tr>
<td>ALL</td>
<td>0.017***</td>
<td>0.012</td>
<td>0.012</td>
</tr>
<tr>
<td>CHARGEOFF</td>
<td>0.002***</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.001**</td>
<td>0.001</td>
<td>0.001</td>
</tr>
<tr>
<td>ASSETS</td>
<td>1,114,983.70***</td>
<td>314,899.10</td>
<td>397,417.61</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>0.064</td>
<td>0.067</td>
<td>0.062</td>
</tr>
<tr>
<td>Bank Age</td>
<td>36.51</td>
<td>48.40</td>
<td>64.00</td>
</tr>
<tr>
<td>UNEMPLOYMENT</td>
<td>0.050</td>
<td>0.010</td>
<td>0.148*</td>
</tr>
<tr>
<td>JOBS</td>
<td>-0.110</td>
<td>-0.150</td>
<td>-0.191</td>
</tr>
<tr>
<td>INCOME</td>
<td>0.951</td>
<td>0.210</td>
<td>0.548</td>
</tr>
<tr>
<td>BANKRUPTCIES</td>
<td>-3.443</td>
<td>-7.650</td>
<td>-0.556*</td>
</tr>
</tbody>
</table>

*, **, *** denotes significance at the .10, .05, and .01 levels respectively
The model examines those factors that influence participation in the Community Development Capital Initiative (CDCI). The dependent variable is CDCI participation. The variables in the model are as follows: natural log of total assets (ASSETS), total equity ratio (CAP_RATIO), return on assets (ROA), cash as a percentage of total assets (LIQUIDITY), number of years bank has been established (AGE), small business lending as a percentage of total assets (SB_LEND), non-performing loans as a percentage of total assets (NPL), charge-offs as a percentage of assets (CHARGEOFFS), past-due loans as a percentage of total assets (90+), and loan losses as a percentage of total assets (ALL). The following macroeconomic variables are presented at the state level based on where the bank is headquartered: percentage change in private sector jobs (JOBS), percentage change in unemployment (UNEMP), percentage change in bankruptcies (BANKRUPTCIES), and the percentage change in personal income (INCOME). Standard errors are reported in parentheses.

<table>
<thead>
<tr>
<th>SBLF Selection Model</th>
<th>NP Loans</th>
<th>Past Due</th>
<th>Charge-offs</th>
<th>Loan Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSETS</td>
<td>0.502**</td>
<td>0.457**</td>
<td>0.624**</td>
<td>0.614**</td>
</tr>
<tr>
<td></td>
<td>(0.231)</td>
<td>(0.225)</td>
<td>(0.252)</td>
<td>(0.272)</td>
</tr>
<tr>
<td>CAP_RATIO</td>
<td>2.519</td>
<td>30742</td>
<td>3.226</td>
<td>1.442</td>
</tr>
<tr>
<td></td>
<td>(5.788)</td>
<td>(5.439)</td>
<td>(5.136)</td>
<td>(5.543)</td>
</tr>
<tr>
<td>ROA</td>
<td>22.985</td>
<td>40.580</td>
<td>-32.553</td>
<td>-19.276</td>
</tr>
<tr>
<td></td>
<td>(54.482)</td>
<td>(52.303)</td>
<td>(67.063)</td>
<td>(60.809)</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>-0.455</td>
<td>-0.179</td>
<td>-0.339</td>
<td>-0.848</td>
</tr>
<tr>
<td></td>
<td>(2.817)</td>
<td>(2.764)</td>
<td>(2.806)</td>
<td>(2.869)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.016***</td>
<td>0.017***</td>
<td>0.018***</td>
<td>0.014**</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>SB_LEND</td>
<td>-1.892</td>
<td>-1.931</td>
<td>-1.211</td>
<td>-0.914</td>
</tr>
<tr>
<td></td>
<td>(1.936)</td>
<td>(1.921)</td>
<td>(1.995)</td>
<td>(1.996)</td>
</tr>
<tr>
<td>JOBS</td>
<td>-1.722</td>
<td>-1.598</td>
<td>-1.617</td>
<td>-2.018</td>
</tr>
<tr>
<td></td>
<td>(1.244)</td>
<td>(1.231)</td>
<td>(1.216)</td>
<td>(1.257)</td>
</tr>
<tr>
<td>UNEMP</td>
<td>0.749</td>
<td>0.826</td>
<td>0.897</td>
<td>0.838</td>
</tr>
<tr>
<td></td>
<td>(1.427)</td>
<td>(1.445)</td>
<td>(1.422)</td>
<td>(1.402)</td>
</tr>
<tr>
<td>BANKRUPTCIES</td>
<td>-0.002</td>
<td>-0.001</td>
<td>-0.003</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.021)</td>
<td>(0.020)</td>
<td>(0.022)</td>
</tr>
<tr>
<td>INCOME</td>
<td>-0.303</td>
<td>-0.310</td>
<td>-0.292</td>
<td>-0.310</td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.021)</td>
<td>(0.248)</td>
<td>(0.236)</td>
</tr>
<tr>
<td>NPL</td>
<td>-7.489</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(12.498)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHARGEOFF</td>
<td>90+</td>
<td>ALL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>--------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-24.437 (62.774)</td>
<td>-223.100 (151.000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-7.885*** (3.050)</td>
<td>-7.644** (3.077)</td>
<td>-9.573*** (3.312)</td>
<td>-8.557*** (3.204)</td>
</tr>
<tr>
<td>N</td>
<td>155</td>
<td>155</td>
<td>155</td>
<td>155</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>24.27**</td>
<td>23.77**</td>
<td>26.60***</td>
<td>27.06***</td>
</tr>
<tr>
<td>% concordant</td>
<td>77.2</td>
<td>77.7</td>
<td>78.6</td>
<td>78.4</td>
</tr>
</tbody>
</table>

*, **, *** denotes significance at the .10, .05, and .01 levels respectively
This model examines those factors that influence small business lending performance using a sample of CDCI and non-CDCI minority-owned banks. The dependent variable is the percentage change in small business lending. The variables in the model are: a categorical variable that equals 1 if the bank received capital from the Community Development Capital Initiative (CDCI), natural log of total assets (ASSETS), total equity ratio (CAP_RATIO), return on assets (ROA), cash as a percentage of total assets (LIQUIDITY), small business lending as a percentage of total assets (SB_LEND), non-performing loans as a percentage of total assets (NPL), charge-offs as a percentage of assets (CHARGEOFFS), past-dues as a percentage of total assets (90+) and loan losses as a percentage of total assets (ALL). The following macroeconomic variables are presented at the state level based on where the bank is headquartered: percentage change in private sector jobs (JOBS), percentage change in unemployment (UNEMPLOYMENT), percentage change in bankruptcies (BANKRUPTCIES) and the percentage change in personal income (INCOME). Standard errors are reported in parentheses.

<table>
<thead>
<tr>
<th>SBLF Lending Model</th>
<th>NP Loans</th>
<th>Charge-offs</th>
<th>Past Due</th>
<th>Loan Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDCI</td>
<td>2.028**</td>
<td>2.084**</td>
<td>2.202*</td>
<td>1.924**</td>
</tr>
<tr>
<td></td>
<td>(0.951)</td>
<td>(0.949)</td>
<td>(0.951)</td>
<td>(0.950)</td>
</tr>
<tr>
<td>ASSETS</td>
<td>-0.050</td>
<td>-0.153</td>
<td>-0.181</td>
<td>-0.006</td>
</tr>
<tr>
<td></td>
<td>(0.365)</td>
<td>(0.374)</td>
<td>(0.363)</td>
<td>(0.364)</td>
</tr>
<tr>
<td>CAP_RATIO</td>
<td>89.549***</td>
<td>94.325***</td>
<td>96.950****</td>
<td>93.322***</td>
</tr>
<tr>
<td></td>
<td>(9.260)</td>
<td>(8.955)</td>
<td>(8.954)</td>
<td>(8.950)</td>
</tr>
<tr>
<td>NPL</td>
<td>-44.853***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(13.542)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHARGEOFF</td>
<td></td>
<td>-276.860***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(73.939)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90+</td>
<td></td>
<td></td>
<td>-74.332</td>
<td>-201.953***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(60.567)</td>
<td>(43.668)</td>
</tr>
<tr>
<td>ALL</td>
<td></td>
<td></td>
<td></td>
<td>-87.916**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(37.425)</td>
</tr>
<tr>
<td>ROA</td>
<td>-66.417*</td>
<td>-110.352**</td>
<td>-10.454</td>
<td>-87.916**</td>
</tr>
<tr>
<td></td>
<td>(37.604)</td>
<td>(42.975)</td>
<td>(33.387)</td>
<td>(37.425)</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>7.972*</td>
<td>8.023*</td>
<td>8.826*</td>
<td>7.085</td>
</tr>
<tr>
<td></td>
<td>(4.548)</td>
<td>(4.546)</td>
<td>(4.588)</td>
<td>(4.547)</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.002</td>
<td>-0.011</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>SB_LEND</td>
<td>5.438*</td>
<td>6.598**</td>
<td>4.480</td>
<td>7.714**</td>
</tr>
<tr>
<td></td>
<td>(3.005)</td>
<td>(3.044)</td>
<td>(2.993)</td>
<td>(3.069)</td>
</tr>
<tr>
<td>JOBS</td>
<td>-1.565</td>
<td>-1.348</td>
<td>-1.298</td>
<td>-1.487</td>
</tr>
<tr>
<td></td>
<td>(1.098)</td>
<td>(1.093)</td>
<td>(1.097)</td>
<td>(1.093)</td>
</tr>
<tr>
<td></td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>----------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>UNEMPLOYMENT</td>
<td>-0.905</td>
<td>-2.250</td>
<td>-2.281</td>
<td>-1.556</td>
</tr>
<tr>
<td></td>
<td>(2.139)</td>
<td>(2.249)</td>
<td>(2.413)</td>
<td>(2.360)</td>
</tr>
<tr>
<td></td>
<td>-0.490</td>
<td>-2.560</td>
<td>-2.730</td>
<td>-2.063</td>
</tr>
<tr>
<td></td>
<td>(1.915)</td>
<td>(2.239)</td>
<td>(2.402)</td>
<td>(2.352)</td>
</tr>
<tr>
<td></td>
<td>-0.363</td>
<td>-2.960</td>
<td>-2.924</td>
<td>-2.040</td>
</tr>
<tr>
<td></td>
<td>(1.918)</td>
<td>(2.240)</td>
<td>(2.406)</td>
<td>(2.358)</td>
</tr>
<tr>
<td></td>
<td>-0.843</td>
<td>-1.893</td>
<td>-1.891</td>
<td>-1.169</td>
</tr>
<tr>
<td></td>
<td>(1.916)</td>
<td>(2.247)</td>
<td>(2.411)</td>
<td>(2.359)</td>
</tr>
<tr>
<td>BANKRUPTCIES</td>
<td>0.022</td>
<td>0.022</td>
<td>0.024</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td>(0.024)</td>
<td>(0.024)</td>
<td>(0.024)</td>
<td>(0.024)</td>
</tr>
<tr>
<td>INCOME</td>
<td>0.434</td>
<td>0.064</td>
<td>0.075</td>
<td>0.074</td>
</tr>
<tr>
<td></td>
<td>(0.344)</td>
<td>(0.344)</td>
<td>(0.344)</td>
<td>(0.343)</td>
</tr>
<tr>
<td></td>
<td>-0.688</td>
<td>-1.139</td>
<td>-1.502</td>
<td>-0.682</td>
</tr>
<tr>
<td></td>
<td>(2.135)</td>
<td>(2.133)</td>
<td>(2.133)</td>
<td>(2.135)</td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>0.184</td>
<td>0.168</td>
<td>0.186</td>
<td>0.186</td>
</tr>
<tr>
<td></td>
<td>(2.459)</td>
<td>(2.272)</td>
<td>(2.272)</td>
<td>(2.272)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd Quarter</td>
<td>2.514**</td>
<td>2.937***</td>
<td>2.436**</td>
<td>2.541**</td>
</tr>
<tr>
<td></td>
<td>(1.082)</td>
<td>(1.090)</td>
<td>(1.084)</td>
<td>(1.081)</td>
</tr>
<tr>
<td>3rd Quarter</td>
<td>0.670</td>
<td>1.562</td>
<td>0.583</td>
<td>0.731</td>
</tr>
<tr>
<td></td>
<td>(1.093)</td>
<td>(1.123)</td>
<td>(1.094)</td>
<td>(1.091)</td>
</tr>
<tr>
<td>4th Quarter</td>
<td>0.135</td>
<td>1.586</td>
<td>0.023</td>
<td>0.201</td>
</tr>
<tr>
<td></td>
<td>(1.116)</td>
<td>(1.191)</td>
<td>(1.116)</td>
<td>(1.114)</td>
</tr>
<tr>
<td>Contant</td>
<td>-6.708</td>
<td>-10.444**</td>
<td>-6.369</td>
<td>-6.331</td>
</tr>
<tr>
<td></td>
<td>(5.210)</td>
<td>(5.313)</td>
<td>(5.217)</td>
<td>(5.203)</td>
</tr>
</tbody>
</table>

* *, **, *** denotes significance at the .10, .05, and .01 levels respectively