Capital-Raising Among Depository Minority-Owned CDFIs Before the Covid-19 Pandemic

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apitalization is a fundamental aspect of bank viability, at all periods, but especially so for smaller banks during periods of financial crisis (Berger & Bouwman, 2013). Minority banks, including those that are certified as Community Development Financial Institutions (CDFIs) were hit particularly hard during the 2008 financial crisis. Even as the economy recovered, analysis of data up to 2013 suggested that Minority Depository Institutions (MDIs) tended to lag behind various measures of performance compared to other community bank peers, even after controlling for primary markets served (Toussaint-Comeau & Newberger, 2017).

In this paper, we focus on the capital-raising experiences of MDIs that are also CDFIs. These institutions have a CDFI certification, which is a designation conferred by the U.S. Treasury CDFI Fund for non-government financial institutions whose primary mission is community development. CDFIs may take the form of banks or thrifts, credit unions, loan funds, and venture funds. What distinguishes CDFI banks from other federally-insured and regulated institutions is that they must direct at least 60 percent of their financing to low- and moderate-income or underserved communities. Hence, a sizeable portion of mission-driven MDIs tend to be CDFIs.

With the creation of the CDFI Fund in 1994, policymakers sought to provide a source of community development financing and technical assistance to help financial institutions promote economic revitalization and community development. Even as the CDFI sector expands, however, minority CDFIs have continued to shrink and show somewhat more volatility in terms of entries and exits. The analysis in this paper attempts to investigate the trends and components of equity capital change for MDI CDFIs, as well as identify differences in capital among these banks compared to their peers.

This study includes only depository bank and thrift CDFIs, also known as community development banks (CD banks), for which financial data is publicly and more easily available. CD banks are an important segment of the CDFI industry landscape, holding almost 60 percent of the assets within the CDFI sector, with average institutional assets more than 14 times of those at CDFI loan funds. The relative size of CD banks in terms of assets suggest that they represent a vehicle for significant opportunity to increase impact investment

¹ See 2019 CDFI data available at https://www.cdfifund.gov/research-data/Pages/default.aspx.

through formal financial intermediation in lower-income markets. Further, mission-oriented banks play a strong intermediation role in the communities they serve, which are often areas that typically have had less access to services at mainstream banking institutions. According to research, credit to small businesses does not adjust automatically subsequent to the closing of such banks as in other markets, even with new larger acquiring banks in place (Toussaint-Comeau, Wang, & Newberger, 2019).

In addition, CDFI banks offer an excellent case to analyze the issues connected with disparity in access to capital for small firms, and the implications for the sustainability of minority-owned institutions that promote community development. The depository structure enables CD banks (and community development credit unions) to leverage far more debt from an initial investment than other CDFIs, thus providing them with more capital with which to conduct development financing (Benjamin, Rubin, & Zielenbach, 2004). Most regulated CDFIs have an equity or net asset base of five percent or less of their total assets; for every dollar of equity, they can take on nearly \$20 of deposits or other liabilities (NCIF, 2002). In contrast, most non-regulated CDFIs maintain equity/net asset ratios of at least 15 percent. Furthermore, deposits represent one of the cheapest forms of capital available to CDFIs. Interest rates on savings and checking accounts are typically much lower than rates on borrowed funds, which tend to be the primary source of financing for non-regulated CDFIs (NCIF, 2002).

In the analysis that follows, we document trends in the MDI-CDFI sector compared to non-MDI CDFIs and community banks.² We examine the data to understand the sources of capital growth for the three groups of banks. We see that all the banks tended to increase capital primarily by accumulating retained earnings. This was particularly true for minority CDFIs in the most recent years of this analysis. We examine further the components of bank income, to understand methods for adding to retained earnings. We find, consistent with previous research, that profitability and efficiency increased for CDFIs (both minority and non-minority) enabling greater capital growth through income (FDIC, 2019). Finally, we examine asset growth and lending growth. We find results that point to the potential benefit of strong balance sheet and equity capital particularly for MDI CDFIs as banks expand on their loans or grow their various other assets.

Evolution in the Number of Minority CDFIs

We construct our dataset from banks and thrifts listed as certified CDFIs by the CDFI Fund, as well as institutions listed as MDIs by the FDIC. Since the CDFI Fund does not offer a historical list of CDFIs, we construct the list of CDFI banks and thrifts using data assembled by the National Community Investment Fund. The FDIC publishes historical lists of MDI banks. The CDFI-certified banking sector has added substantial numbers to its ranks

² Community banks are defined based on FDIC criteria outlined in the FDIC Community Banking Study available at https://www.fdic.gov/regulations/resources/cbi/study.html. The study defines community banks primarily in terms of their traditional relationship banking and limited geographic scope of operations, and includes banks whose assets are indexed to equal \$1 billion as of 2010.

in the years since the financial crisis (Figure 1, since 2006). The 142 CDFI-certified banks entering the sector between 2006 and 2018 far outnumbered the 64 CDFI-certified banks leaving the sector. In particular, we see notable jumps in the year-to-year count between 2009 and 2010, and again between 2013 and 2014 when the number of CDFI banks increases from 75 to 109 banks (45 percent). The same cannot be said of minority CDFI banks, however. The relatively flat trend of MDI banks that are CDFI-certified (number ranging from 36 to 44) belies the fact that the MDI/CDFI sector has been in fact relatively volatile in terms of entry and exit rates. Between 2006 and 2018, about the same number of MDI CDFI banks left the dataset (34 banks) as entered the dataset (33 banks).

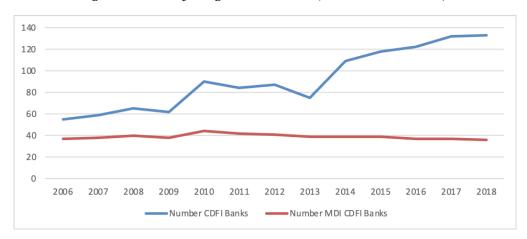


Figure 1. Number of Designated Institutions (CDFIs and MI CDFIs)

Sources: FDIC, NCIF, and CDFI Fund

Consequently, the share of banks that are both CDFI-certified and MDI-designated has fallen during the 2000s (Figure 2). In 2006, two-thirds of CDFI banks were MDIs. In 2010, 49 percent of CDFI banks were MDIs. The ratio fell to 36 percent in 2014, and by 2018, less than a third of CDFI banks were also MDIs. Over the 2006-2018 period, about 22 percent of the banks that entered into the CDFI bank sector had a minority designation. In contrast, about 52 percent of the banks that exited the CDFI sector were also MDIs.

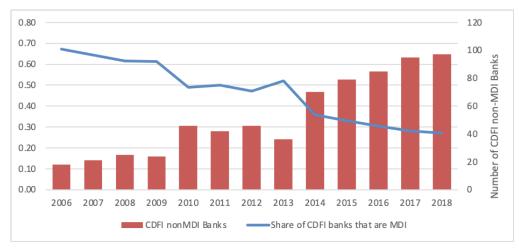


Figure 2. Change in the Composition of Minority Ownership Status of CDFIs

It is worth noting that Black banks are the largest contingent of MDI CDFIs (Figure 3), although this percentage has declined over time. About 56 percent of MDI CDFIs were African American banks in 2018. The share of MDI CDFI that are Asian American banks has risen over the decade to about 28 percent of all MDI CDFIs as of 2018 (Figure 4).

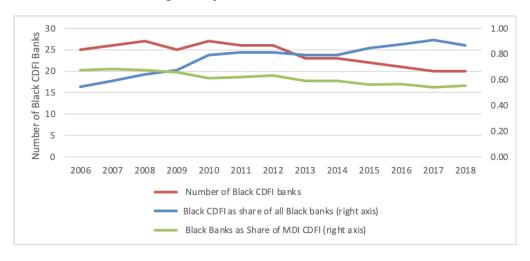


Figure 3. African American CDFI MDIs

Sources: FDIC, NCIF and CDFI Fund

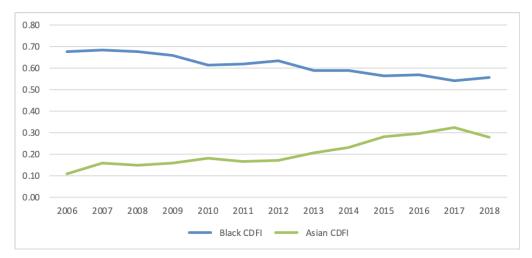


Figure 4. Share of MDI CDFI by Ethnicity of Bank Ownership

Bank Equity Capital

One of the main functions of equity capital is to act as a cushion to absorb unanticipated losses that could otherwise cause a bank to fail.³ Indeed, the rules of Prompt Corrective Action which guide the regulators' approach to troubled banks focus on the level of bank capital—i.e. the dollar amount by which assets exceed liabilities or the net worth of the bank (Walter, 2004). Indeed all (surviving) insured institutions meet or exceed the requirements for the highest regulatory capital category, including banks that are non-MDI CDFIs and MDI CDFIs, according to the FDIC's Q3 2019 quarterly report. Even so, previous studies have shown that differences in the distribution of equity capital ratios (i.e., equity capital to assets) between banks within the different subgroups are large. This suggests that the determinants and variations in equity capital between banks are deserving of attention (Berger et al., 2008; Gropp & Heider, 2009; Cohen & Scatigna, 2014; Andrle, Tomsik, & Vlcek, 2017; Toussaint-Comeau, Newberger, & Augustine, 2020).

This analysis focuses on bank equity capital which is comprised of several accounts, including common and (perpetual) preferred stock, retained earnings, surplus, accumulated other comprehensive income and other equity capital components.⁴ These are also known as core capital elements included in Tier-1 capital.⁵ Common equity Tier-1 capital is widely recognized as the most loss-absorbing form of capital.

Table 1 displays the annual time-series of total bank equity capital, the average, and equity capital ratios. These measures are given for institutions in our analysis, from 2006 to 2019 (prior to the COVID pandemic). CDFI depositories had equity capital totaling more than \$6.9 billion as of 2019, based on the most recent data available. The minority CDFIs were much smaller, with combined equity capital of just over \$2 billion in 2019. CDFI banks, like community banks as a sector, have experienced increases in their equity capital

and their equity capital ratios during the period of analysis. These results are consistent with previous research that has examined the capital structure of banks (large and small banks, U.S and globally) and has noted the rising tendency for increased equity capital and equity capital ratios since the Great Recession.⁶

MDI CDFI NON-MDI-CDFI COMMUNITY BANKS TOTAL CAP TOTAL TOTAL CAP CAP EOUITY EOUITY EQUITY (wgt (wgt (wgt CAPITAL avg) CAP/ CAP/ CAPITAL avg) CAP/ CAP/ CAPITAL avg) CAP/ CAP/ RWA (000)(000)asset RWA (000)(000)asset (000)(000)assets **RWA** 586,788 27,336 0.08 477,872 0.07 0.14 0.11 82,632 0.11 184,000,000 94,661 0.10 2006 619,847 29,536 0.08 0.11 563,441 85,913 0.07 0.11 193,000,000 96,030 0.10 0.14 2007 2008 430,661 28,821 0.08 0.10 926,642 89,591 0.07 0.11 191,000,000 97,926 0.10 0.13 726,596 33,369 0.09 0.12 849,897 122,402 0.10 0.17 194,000,000 107,075 0.10 0.14 2009 0.08 117,271 0.12 193,000,000 752,002 27,847 0.11 1,988,329 0.18 108,638 0.10 0.15 2010 44,612 0.10 120,708 0.12 207,000,000 125,157 925,341 0.18 2,039,374 0.20 0.11 0.17 2011 932,875 44,587 0.10 0.19 2,251,510 120,521 0.12 0.20 216,000,000 148,143 0.11 0.17 2012 88,757 2013 866,719 40,817 0.09 0.16 1,396,925 0.10 0.15 214,000,000 161,152 0.11 0.16 2014 984,849 41,442 0.10 0.16 2,389,684 74,437 0.10 0.16 238,000,000 185,152 0.11 0.16 2015 1,020,399 47,839 0.10 0.15 2,523,061 77,537 0.10 0.14232,000,000 231,431 0.11 0.15 1,237,495 68,031 0.11 0.15 3,187,506 79,743 0.10 0.14 236,000,000 272,359 0.11 0.14 2016 2017 1,462,040 83,428 0.12 0.16 3,681,062 83,257 0.11 0.14 241,000,000 293,517 0.11 0.14 0.20 0.12 0.17 2,001,548 164,864 0.15 4,951,134 136,167 184,000,000 287,838 0.12 0.16 2019 925,341 41,130 0.09 0.15 2,039,374 87,335 0.10 0.15 207,000,000 136,650 0.11 0.14 median

Table 1. Bank Equity Capital and Capital Ratios

Note: The table shows the total dollar amount of equity capital (as defined in the text), and the average equity capital (weighted average) for each year. The table also shows bank equity capital expressed in terms of a ratio: the equity to assets ratio, and the equity to risk-weighted asset ratio (RWA). The latter is known as the Tier-1 capital ratio. It is the bank shareholders' equity capital plus retained earnings relative to its total risk-weighted assets (RWA).

Sources: FDIC, NCIF, and CDFI Fund

Components of Equity Capital Change

We investigate some of the ways CDFIs increase capital, by examining the aggregate annual changes in equity capital and its components from 2005 to 2019. Our approach builds on the literature that has investigated the many strategies in which banks increase equity capital, although few previous studies have focused on very small banks and CDFIs in particular (Cohen, 2013; Cohen & Scatigna, 2014; Newberger, 2018). Banks raise equity capital several ways: (1) First, through its strategy to target retained earnings. This can be done by boosting profits through increasing the spread between the interest rate charged for loans and those paid to its fund. The bank might also try to increase net income (and thereby retained earnings) by increasing profit margins on various lines of businesses, such as advisory services, or reducing operating expenses. (2) Another strategy for raising capital might involve the issuance of new equity. Finally, (3) the bank might engage in strategies

that involve changes on the asset side of the balance sheet, such as selling assets or replacing higher-weighted riskier loans with safer ones or government securities.⁷

To examine the sources of change in bank capital, we use the accounting identity that states that bank capital in time 1 (end of a period), is equal to bank capital in beginning of the period, time 0, adjusted by new capital and retained earnings. We state this as follows:

$$CAP1_{1} = CAP_{0} + CAP_{1}^{n} + NI_{1} - DIV_{1}$$
 (1)

Where CAP_1 stands for (book value) equity capital, CAP_1^n is newly-issued equity or other capital sources between time 0 and 1 (these include the value of shares issued from purchasing another bank or business; transfers from or to the parent company; and other income (residuals or revaluations) related to securities holdings and other financial instruments). NI_1 is net income (income – expenses); and DIV_1 is dividend payments at time 1. These are the sale or redemption of (preferred or common) stocks of that bank. NI_1 – DIV_1 is retained earnings.

Table 2 shows the annual change in equity capital (ΔCAP) for all banks and by different types of banks. Because the Great Recession distorts the sample, we focus on the medians reported in the bottom row of the table. The results show when it comes to the aggregate changes in equity capital, retained earnings accounted for roughly 50 percent for community banks, around 40 percent for CDFIs, and somewhat less (around 30 percent) for minority CDFIs.

For minority CDFIs, newly issued equity and other capital sources thus accounted for roughly two-thirds of aggregate equity change. This trend was highlighted in Newberger (2018) who investigated the components of new equity injection for minority CDFIs, before, during and after the Great Recession. That study noted that for CDFI MDIs, one of the sources of new equity capital came from transfers from parent companies during the 2008-2011 period. These reflected, in part, TARP sales that were downstreamed from parent companies to bank subsidiaries. There was some increase in these sorts of transfers for non-minority CDFIs as well. As the number of CDFI-certified banks jumped between 2009 and 2010, this allowed more non-MDI CDFIs to become eligible for TARP (CDCI) funds. As income decreased for minority CDFIs, sales of stocks also represented a higher share of change in equity capital for the group during that period. These trends can be seen in Figure 5.

⁷ Each of these methods for raising capital represents a tradeoff. As a bank retains more of its profit, it has less to pay it out as dividends or spend on share buybacks. As a bank sells more shares, it dilutes the stakes of existing shareholders. Enlarging risk-weighted capital ratios does not increase the actual level of capital.

⁸ CDCI was the Community Development Capital Initiative program under the Troubled Assets Relief Program (TARP) for banks and credit unions certified as Community Development Financial Institutions.

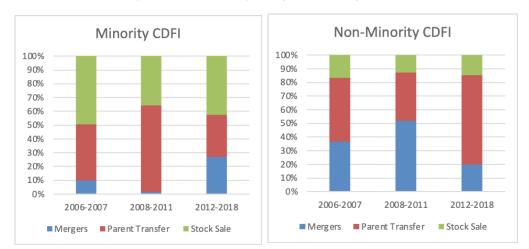


Figure 5. Components of Newly Issued Equity Capital

Source: Authors' analysis based on Schedule RI-A in the Consolidated Report of Conditions and Income (Call Reports)

Table 2. Decomposition of Change in Equity Capital

			CDFI				COMN	MUNITY	BANKS	
	ΔCAP (000)	NI _t / ΔCAP	DIV _t / ΔCAP	(NI _t - DIV _t)/ ΔCAP	CAP _t ⁿ / ΔCAP	ΔCAP (000)	NI t/ ΔCAP	(DIVt/ ΔCAP	(NIt- DIVt)/ ΔCAP	CAP _t ⁿ / ΔCAP
2006	116,880	0.88	-0.62	0.26	0.74	20,000,000	0.94	-0.52	0.42	0.58
2007	83,805	1.22	-0.68	0.54	0.46	18,000,000	0.87	-0.58	0.29	0.71
2008	55,557	-0.03	-0.83	-0.85	1.85	8,000,000	0.44	-0.97	-0.53	1.53
2009	250,307	-0.68	-0.16	-0.84	1.84	6,000,000	-0.44	-0.95	-1.39	2.39
2010	81,863	-0.16	-0.57	-0.72	1.72	6,000,000	0.68	-0.92	-0.25	1.25
2011	189,035	0.30	-0.30	0.00	1.00	15,000,000	0.70	-0.42	0.28	0.72
2012	108,837	1.30	-0.84	0.46	0.54	14,000,000	1.16	-0.63	0.52	0.48
2013	8,675	11.48	-9.40	2.08	-1.08	5,000,000	3.52	-1.73	1.79	-0.79
2014	255,928	0.78	-0.50	0.28	0.72	201,273	1.06	-0.60	0.47	0.53
2015	168,927	1.18	-0.76	0.43	0.57	17,000,000	1.07	-0.52	0.55	0.45
2016	107,275	2.86	-2.34	0.52	0.48	15,000,000	1.37	-0.66	0.70	0.30
2017	390,766	1.10	-0.58	0.52	0.48	18,000,000	1.12	-0.54	0.58	0.42
2019	768,121	0.84	-0.50	0.34	0.66	10,000,000	2.53	-1.30	1.23	-0.23
average	231,745	1.57	-1.32	0.25	0.75	11,707,790	1.15	-0.80	0.36	0.64
median	142,903	0.87	-0.60	0.39	0.61	14,000,000	1.06	-0.63	0.47	0.53

		N	MDI CDF	[NO	N MDI C	CDFI	
	ΔCAP (000)	NI _t / ΔCAP	DIVt/ ΔCAP	(NIt- DIVt)/ ΔCAP	CAP _t ⁿ / ΔCAP	ΔCAP (000)	NI _t / ΔCAP	DIVt/ ΔCAP	(NIt- DIVt)/ ΔCAP	CAP _t ⁿ / ΔCAP
2006	59,415	0.56	-0.28	0.28	0.72	57,465	1.20	-0.96	0.24	0.76
2007	40,347	1.00	-0.66	0.34	0.66	43,458	1.43	-0.71	0.72	0.28
2008	226	-109.14	-52.73	-161.87	162.87	55,331	0.42	-0.61	-0.19	1.19
2009	52,993	-0.93	-0.22	-1.14	2.14	197,314	-0.62	-0.14	-0.76	1.76
2010	-58,039	1.31	0.10	1.41	-0.41	139,902	0.45	-0.29	0.16	0.84
2011	34,686	-1.71	-0.12	-1.83	2.83	154,349	0.76	-0.35	0.41	0.59
2012	20,296	0.01	-0.75	-0.75	1.75	88,541	1.60	-0.86	0.74	0.26
2013	-56,600	0.18	0.19	0.38	0.62	65,275	1.68	-1.08	0.60	0.40
2014	54,655	-0.25	-0.14	-0.39	1.39	201,273	1.06	-0.60	0.47	0.53
2015	74,572	-0.14	-0.10	-0.24	1.24	94,355	2.23	-1.27	0.96	0.04
2016	-46,727	-0.20	0.75	0.55	0.45	154,002	1.93	-1.40	0.53	0.47
2017	112,587	0.81	-0.23	0.58	0.42	278,179	1.22	-0.73	0.49	0.51
2018	392,064	0.38	-0.05	0.34	0.66	266,390	1.57	-0.86	0.70	0.30
2019	149,696	0.91	-0.29	0.62	0.38	618,425	0.83	-0.55	0.28	0.72
average	59,298	-7.66	-3.89	-11.55	12.55	172,447	1.13	-0.74	0.38	0.62
median	46,670	0.10	-0.18	0.31	0.69	146,952	1.21	-0.72	0.48	0.52

Sources: Authors' analysis based on data from FDIC, NCIF, and CDFI Fund

Changes in the Components of Bank Income

Looking into the sources of retained earnings can provide us with further insights into the ways in which growth in equity capital is achieved through profitability. Again, we go to the accounting identity for net income as follows:

$$NI_{\cdot} = NII_{\cdot} + NOI_{\cdot} - OE_{\cdot} + OI_{\cdot}$$
 (2)

Where NI is net income, NII stands for net interest income, NOI is net operating income (net non-interest income), OI is other net income (which we compute as residuals). OE is total operating expenses (which include salary, expenses of premises, etc.).

Table 3 reports the results of the components of income, as a percent of total assets. Based on this analysis, the increase over time in equity capital, which we noted in the analysis, appears to reflect a sector that has improved in profitability and efficiency.

As Table 3 indicates, in spite of the fact that the variations across time is large, the spread between interest income and funding costs has tended to increase over time for all banks. Comparing 2008 and 2019, the spread has risen by 7 basis points for community banks, and by 10 basis points and 14 basis points for non-minority and minority CDFIs, respectively. In addition, all the banks also somewhat increased their income from non-interest paying sources.

As can be noted further in Table 4, at the same time, banks have been able to reduce their operating expenses. We note this to be particularly true for the minority CDFIs, which tended to have higher expenses per assets, relative to income per assets generally over the period of analysis. Even so, from its highest number in 2013, expenses per assets for minority CDFIs went from 4.77 to 3.08 in 2019, a 169 basis-point decrease. For non-minority CDFIs, we see a 30 basis-point decrease in expenses, from a high of 3.38 in 2013 to 3.08 in 2019. Figure 6 illustrates the trends in the components of net income, by tracing the percent change year over year for those values.

Table 3. Components of Bank Income-in Percent of Total Assets

	mmuni	Community Banks	S		CDFI	FI		Nor	-Mino	Non-Minority CDFI	FI		Minority (y CDFI	
	NIIt	OI t	0E	NIt	NIIt	OI t	OE	NIt	NIIt	OI t	OE	NIt	NIIt	OI t	OE
	3.51	0.30	2.73	0.93	3.70	0.58	3.35	1.37	3.58	0.39	2.59	09.0	3.80	0.72	3.93
	3.51	0.31	2.76	0.82	3.49	0.44	3.12	1.22	3.35	0.38	2.51	0.48	3.61	0.48	3.61
	3.38	0.26	2.78	0.74	3.50	0.40	3.17	0.95	3.44	0.15	2.64	0.55	3.56	0.63	3.64
	3.20	-0.16	2.86	-0.01	3.41	-0.23	3.19	0.31	3.34	-0.35	2.68	-0.31	-0.31 3.47	-0.11	3.67
	3.19	-0.34	2.99	-0.99	3.25	-0.95	3.29	-1.40	2.99	-1.41	2.98	-0.57	3.51	-0.48	3.60
	3.36	-0.16	2.99	-0.05	3.50	-0.11	3.44	0.34	3.43	0.09	3.18	-0.83	3.65	-0.52	3.96
	3.36	0.11	2.93	0.20	3.55	0.14	3.49	0.64	3.44	0.35	3.15	-0.59	3.74	-0.24	4.09
	3.28	0.46	26.7	0.48	3.53	0.53	3.58	0.70	3.42	0.48	3.20	0.00	3.75	0.63	4.38
	3.24	0.56	26.7	0.43	3.50	0.88	3.95	0.80	3.38	0.80	3.38	-0.11	3.67	0.99	4.77
	3.22	0.50	2.82	0.63	3.61	92.0	3.74	96.0	3.49	0.78	3.30	-0.14	3.88	0.74	4.76
	3.19	0.55	2.78	92.0	3.50	0.91	3.66	1.03	3.47	0.94	3.38	0.07	3.60	0.84	4.36
	3.20	0.49	2.73	0.74	3.51	0.67	3.45	1.00	3.50	0.79	3.30	0.08	3.53	0.37	3.82
	3.26	0.35	2.67	0.91	3.58	0.58	3.25	0.99	3.58	0.66	3.25	0.68	3.56	0.37	3.24
1.16	3.35	0.46	2.65	1.09	3.56	0.68	3.16	1.14	3.62	0.77	3.24	96.0	3.44	0.50	2.97
1.16	3.29	0.53	0.53 2.66	1.12	3.54	99.0	3.08	1.21	3.52	0.77	3.08	0.87	0.87 3.61	0.34	3.08



Figure 6. Growth in Net Interest Income, Non-Interest Income, and Expenses

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2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

——Community Banks ——CDFI ——non-minority CDFI ——minority CDFI

Asset and Loan Growth

While net interest income and noninterest income flow into changes to bank equity capital, decisions taken on the asset side of the balance sheet also reflect changes to equity. In the main, bank assets are comprised of loans (gross or net) (L), cash and interbank holdings (CIH), trading securities (TS), and other assets (OA). Table 4 traces the growth in each subcategory as a percent of assets, for the three groups of banks.

$$Assets = L + CIH + TS + OA$$
 (3)

For the period of analysis between 2006 and 2019, banks across all three groups grew their assets. The weighted average asset growth varied from year to year, but at the median, community banks and CDFIs grew their assets by 9 percent. Minority CDFIs' assets grew somewhat slower by 5 percent, at the median.

The growth in lending (measured here as gross loans as a percent of assets) either slightly outpaced or was generally on par with asset growth. For the median community bank and median CDFI, lending grew by 11 percent. For the median minority CDFI, lending as a percent of assets grew by 6 percent. Other assets as percent of total assets grew by roughly 12 percent for all banks in the group. 10

Cash and interbank holdings as a percent of assets grew for all banks, at a rate that outpaced the overall growth of assets.¹¹ At the median, cash and interbank trading as a percent of assets grew by more than 25 percent for all banks in the three groups. Securities holdings grew for community banks quite aggressively, by 26 percent at the median. The growth of securities as a percent of assets at CDFI banks trailed behind their growth at community banks.¹² Across bank sectors, the growth of lower-risk assets (cash and interbank) outpaced the growth of higher-risk assets (gross loans).

⁹ The result is consistent even for net loans reserves for impaired and non-performing loans.

¹⁰ Other assets may include bank premises, equipment other real estate owned, etc.

¹¹ Cash and due from banks consists of vault cash, deposits held at Federal Reserve Banks (Fed), deposits held at other financial institutions, and checks in the process of collection. These accounts generally facilitate check clearing and customers' currency withdrawals and serve to meet legal reserve requirements. Their distinguishing feature is that they do not earn interest, although balances at the Fed and other depository institutions can be used to obtain correspondent banking services.

¹² Regulatory rules "such as the Volker Rule" require more capital against securities, which might curb trading activities for banks with less capital.

Table 4. Growth of Assets and Growth in Categories as a percent of assets (weighted averages, reported by year)

		Com	munity	Bank					CDFI		
		cash and	gross	other				cash and	gross	other	
	asset	interbank	loans	assets	securities		asset	interbank	loans	assets	securities
2006	0.14	0.24	0.98	0.22	0.18	2006	0.16	0.20	0.16	0.23	0.06
2007	0.12	0.16	0.31	0.18	0.15	2007	0.08	0.12	0.12	0.20	0.05
2008	0.13	0.80	0.23	0.22	0.34	2008	0.11	0.48	0.16	0.21	0.06
2009	0.19	1.32	0.13	1.90	0.56	2009	0.18	1.11	0.15	0.36	0.29
2010	0.05	0.57	0.02	0.04	0.38	2010	0.06	0.48	0.02	0.09	0.16
2011	0.06	0.56	0.05	0.07	0.88	2011	0.04	0.46	-0.01	0.09	0.20
2012	0.07	0.41	0.08	0.06	0.27	2012	0.02	0.26	0.00	-0.07	0.18
2013	0.06	0.00	0.08	1.29	0.64	2013	0.08	0.14	0.14	0.19	0.03
2014	0.09	0.18	0.12	0.07	0.13	2014	0.04	0.22	0.07	0.06	-0.01
2015	0.10	0.23	0.12	0.14	0.25	2015	0.07	0.05	0.10	0.27	0.10
2016	0.09	0.25	0.11	0.17	0.13	2016	0.07	0.29	0.11	0.08	0.03
2017	0.09	0.29	0.11	0.08	3.87	2017	0.08	0.13	0.10	0.07	0.06
2018	0.08	0.19	0.10	0.11	0.08	2018	0.15	0.32	0.17	0.16	0.07
2019	0.09	0.43	0.09	0.11	0.11	2019	0.08	0.34	0.06	0.06	0.10
median	0.09	0.27	0.11	0.12	0.26	median	0.08	0.27	0.11	0.13	0.06
		non	MDI C	DFI					1DI CD		
		cash and	gross	other				cash and	gross	other	
	asset	interbank	loans	assets	securities	2006	asset	interbank	loans	assets	securities
2006	0.20	0.18	0.20	0.27	0.07	2006	0.13	0.21	0.13	0.19	0.05
2007	0.09	0.12	0.15	0.23	-0.01	2007	0.07	0.13	0.09	0.16	0.12
2008	0.13	0.46	0.19	0.18	0.19	2008	0.09	0.50	0.13	0.24	-0.07
2009	0.31										
		1.74	0.27	0.54	0.43	2009	0.05	0.47	0.03	0.18	0.15
2010	0.08	0.40	0.27 0.04	0.54 0.07	0.43 0.23	2019	0.00	0.47 0.64	0.03 -0.02	0.18 0.14	0.15 0.00
2010 2011						2010	0.00	0.64	-0.02	0.14	0.00
	0.08	0.40	0.04	0.07	0.23	2010 2011	0.00 - 0.01	0.64	-0.02 -0.04	0.14 0.04	0.00
2011	$0.08 \\ 0.07$	0.40 0.48	0.04 0.00	0.07 0.12	0.23 0.20	2010 2011 2012	0.00 - 0.01 0.00	0.64 0.43 0.26	-0.02 -0.04 -0.01	0.14 0.04 -0.05	0.00 0.20 0.24
2011 2012	0.08 0.07 0.03	0.40 0.48 0.25	0.04 0.00 0.01	0.07 0.12 -0.08	0.23 0.20 0.15	2010 2011 2012 2013	0.00 - 0.01 0.00 0.01	0.64 0.43 0.26 0.03	-0.02 -0.04 -0.01 0.04	0.14 0.04 -0.05 0.11	0.00 0.20 0.24 -0.04
2011 2012 2013	0.08 0.07 0.03 0.14	0.40 0.48 0.25 0.21	0.04 0.00 0.01 0.20	0.07 0.12 -0.08 0.25	0.23 0.20 0.15 0.08	2010 2011 2012 2013 2014	0.00 - 0.01 0.00 0.01 0.01	0.64 0.43 0.26 0.03 0.38	-0.02 -0.04 -0.01 0.04 0.04	0.14 0.04 -0.05 0.11 -0.06	0.00 0.20 0.24 -0.04 -0.06
2011 2012 2013 2014	0.08 0.07 0.03 0.14 0.05	0.40 0.48 0.25 0.21 0.15	0.04 0.00 0.01 0.20 0.08	0.07 0.12 -0.08 0.25 0.11	0.23 0.20 0.15 0.08 0.01	2010 2011 2012 2013 2014 2015	0.00 - 0.01 0.00 0.01 0.01 0.12	0.64 0.43 0.26 0.03 0.38 0.25	-0.02 -0.04 -0.01 0.04 0.04 0.13	0.14 0.04 -0.05 0.11 -0.06 0.35	0.00 0.20 0.24 -0.04 -0.06 -0.11
2011 2012 2013 2014 2015 2016 2017	0.08 0.07 0.03 0.14 0.05 0.05 0.07 0.08	0.40 0.48 0.25 0.21 0.15 -0.03 0.34 0.10	0.04 0.00 0.01 0.20 0.08 0.10 0.10	0.07 0.12 -0.08 0.25 0.11 0.23 0.12 0.07	0.23 0.20 0.15 0.08 0.01 0.19 -0.01 0.05	2010 2011 2012 2013 2014 2015 2016	0.00 - 0.01 0.00 0.01 0.01 0.12 0.08	0.64 0.43 0.26 0.03 0.38 0.25 0.19	-0.02 -0.04 -0.01 0.04 0.04 0.13 0.12	0.14 0.04 -0.05 0.11 -0.06 0.35 0.00	0.00 0.20 0.24 -0.04 -0.06 -0.11 0.14
2011 2012 2013 2014 2015 2016	0.08 0.07 0.03 0.14 0.05 0.05 0.07	0.40 0.48 0.25 0.21 0.15 -0.03 0.34	0.04 0.00 0.01 0.20 0.08 0.10 0.10	0.07 0.12 -0.08 0.25 0.11 0.23 0.12	0.23 0.20 0.15 0.08 0.01 0.19 -0.01	2010 2011 2012 2013 2014 2015 2016 2017	0.00 - 0.01 0.00 0.01 0.01 0.12 0.08 0.06	0.64 0.43 0.26 0.03 0.38 0.25 0.19 0.23	-0.02 -0.04 -0.01 0.04 0.13 0.12 0.08	0.14 0.04 -0.05 0.11 -0.06 0.35 0.00 0.07	0.00 0.20 0.24 -0.04 -0.06 -0.11 0.14 0.08
2011 2012 2013 2014 2015 2016 2017	0.08 0.07 0.03 0.14 0.05 0.05 0.07 0.08	0.40 0.48 0.25 0.21 0.15 -0.03 0.34 0.10	0.04 0.00 0.01 0.20 0.08 0.10 0.10	0.07 0.12 -0.08 0.25 0.11 0.23 0.12 0.07	0.23 0.20 0.15 0.08 0.01 0.19 -0.01 0.05	2010 2011 2012 2013 2014 2015 2016	0.00 - 0.01 0.00 0.01 0.01 0.12 0.08	0.64 0.43 0.26 0.03 0.38 0.25 0.19	-0.02 -0.04 -0.01 0.04 0.04 0.13 0.12	0.14 0.04 -0.05 0.11 -0.06 0.35 0.00	0.00 0.20 0.24 -0.04 -0.06 -0.11 0.14

Implications and Conclusions

This paper explores the trends and components of equity capitalization for minority depository institutions that are also Community Development Financial Institutions. We began by examining the data to understand the sources of equity capital growth. Various measures of capital increased for all CDFIs, including minority and non-minority CDFIS, after the financial crisis. We did a simple exercise to examine the sources of change in bank capital. Banks tended to increase capital by accumulating retained earnings in addition to new equity sources. This was also true for minority CDFIs for the later years of this analysis.

The data suggests that CDFIs, including minority CDFIs, were becoming more cost efficient, consistent with the FDIC 2019 report of minority banks. CDFI and community banks alike have also increased the share of lower-risk assets as a share of total assets.

This study did not break down the data in terms of the ethnic or racial categories of minority CDFIs. A handful of studies explain some of the niche capital sources for specific groups of minority banks. For instance, a study by Chiong, Dymski & Hernandez (2018) examined Asian banks in California and noted the benefit of the EB-5 program for many of these institutions.¹³ The economic structure of Chinese American banks in Los Angeles has the advantage of the large influx of transnational capital flowing from Asia in the hunt to identify safe havens for capital deposits. The banking infrastructure for Latinos also realizes some benefits from a transnational customer base. Hispanic banks have benefited from fee generation from the movement of remittances to Central America as unstable economies in many home countries add to the urgency of moving currency to and from the U.S. banking system.

African American banks in historically marginalized and economically depressed areas do not appear to have similar resources, however. This helps explain some of the differences in the size and financial health of these institutions. The wealth gap among African-American banks reflect the disparate economic conditions in African American communities, and those gaps deepen as individuals and communities' wealth gaps deepen.

To be sure, various government programs have been developed to increase the flow of funds through CDFIs and MDIs in order to reach underserved communities. The CDFI Fund has provided financing and technical assistance to the sector since the mid-1990s. Most recently, the Paycheck Protection Program set aside \$30 billion of its \$310 billion (second round) authorization for CDFIs, other community financial institutions, and banks with less than \$10 billion in assets. He by offering PPP loans to existing customers, CDFI lenders may have helped mitigate shocks to their loan portfolios during the early phases of the pandemic, generated noninterest income that potentially flowed to profits and capital, and brought in new customers to their banks. The Small Business Mentorship Program is another government program that may work to build the revenues (and capital) of MDIs and CDFIs. Through this initiative, existing (large bank) Financial Agents for the Treasury train smaller banks, including minority and CDFI institutions, to become qualified to perform financial services on behalf of the Treasury and its financial management arm, the Bureau of the Fiscal Service. This designation allows smaller banks to bid on federal contracts to process billions of dollars of deposits.

¹³ The EB-5 Immigration Investor visa program is a federal program in which foreign nationals are granted permanent residency when they invest \$1 million dollars in a development project that provides new jobs to American workers (or \$500,000 if the project is in an economically depressed area). Since 2010, at least \$9.5 billion in funds have entered the U.S. via the EB-5 Immigrant Investor Program (Rosen et al., 2017).

¹⁴ Regulatory Capital Rule: Paycheck Protection Program Lending Facility and Paycheck Protection Program Loans.

¹⁵ See https://home.treasury.gov/policy-issues/small-business-programs/small-and-disadvantaged-business-utilization/treasurys-mentor-protege-program-3

¹⁶ See Citi Blog at https://blog.citigroup.com/2019/09/effecting-change-in-the-minority-banking-sector/

In addition, private-sector efforts have recently come together to support Black banks in the wake of the Covid-19 pandemic. These efforts include decisions by major corporations to shift deposits to Black-owned banks;¹⁷ the development of a digital financial services platform for use at Black banks to help close technology gaps with larger competitors;¹⁸ and the formation of a new entity called the National Black Bank Foundation, whose purpose is to buy stock in Black-owned banks through its Black Bank Fund.¹⁹ These initiatives may signal a new wave of interventions that recognize, and attempt to solve for, some of the longstanding factors that challenge capital growth among MDI CDFIs.

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