# Section 4: Financial Performance of MDIs

#### Overview

MDI institutions tend to outperform non-MDI community banks in revenue generation, including net interest income and noninterest income. Generally higher loan-to-asset ratios and higher yields on earning assets at MDIs relative to non-MDI community banks more than offset the higher interest expenses at MDIs, leading to better net interest income performance. In recent years, the noninterest income of MDIs has outpaced that of non-MDI community banks owing to greater servicing fees on securitized loans and gains on loan sales.

Despite comparatively better revenue generation, MDIs have much higher noninterest expenses, especially among smaller MDIs, which tend to be predominantly African American and Native American MDIs. As a result, MDIs have long underperformed other community and noncommunity banks when measured by efficiency ratios. However, that disadvantage has narrowed in recent years.

Finally, credit quality and earnings at MDIs were especially hard-hit during the last recession and housing crisis. MDIs tend to have greater exposures to CRE lending than non-MDI financial institutions, and CRE was the hardest hit among major lending categories. However, credit quality has continued to improve in the past five years, and MDI noncurrent loans and net charge-offs are now at new lows.

## **Financial Performance of MDIs**

As described in earlier sections, the MDI segment remains small. Only 149 out of 5,406 FDIC-insured institutions were designated as MDIs at year-end 2018. Over the past five years, the number of MDI charters has continued to decline, reflecting trends in the overall banking industry. The size and volatility of the MDI segment makes long-term analysis of MDI performance difficult. Still, it is instructive to compare the financial performance of MDIs with similar financial institutions.

MDI financial performance has significantly improved over the past five years, particularly in terms of loan performance. While MDIs tend to outperform non-MDI community banks in revenue generation, MDIs, particularly small MDIs, have much higher expenses.

The divergence between MDI and non-MDI financial performance may be attributed to several factors, including differences in institutional age and geography. MDIs are on average younger and more often headquartered in urban areas than non-MDI financial institutions. The 2012 FDIC Community Banking Study showed that young institutions typically underperform relative to mature community banks. However, at year-end 2018, the MDI segment had no institutions that opened since 2013 and no young institutions (operating for seven years or less).21 In addition, the geographic concentration of MDI headquarters in metropolitan areas exposed the MDI segment to more extreme financial stress during the recession than non-MDI community banks located outside of metropolitan areas.

## **Loan Concentration and Geography**

As discussed in Section 3, significant differences exist in the geography of MDI and non-MDI banks. These different geographic concentrations translate into significant differences in loan concentrations, particularly for agricultural loans. Table 4.1 breaks down MDIs, non-MDI noncommunity banks, and non-MDI community banks by headquarters location and farm bank status as of fourth guarter 2018.22

<sup>&</sup>lt;sup>21</sup>Eight banks designated as MDI banks in 2018 were in operation in 2013 but were not designated as MDI banks at that time.

<sup>&</sup>lt;sup>22</sup>The FDIC defines farm banks as insured institutions that have 25 percent or more of their total loans concentrated in agricultural lending.

Eighty-five percent of MDIs and 87 percent of non-MDI noncommunity banks are headquartered in metropolitan areas, compared with just 50 percent of non-MDI community banks. Table 4.1 shows that predominantly urban MDI and non-MDI noncommunity bank segments are far less invested in agriculture than non-MDI community banks. While less than 3 percent of MDIs and non-MDI noncommunity banks are considered farm banks, more than one-quarter of non-MDI community banks are farm banks.

Section 4 disaggregates community nonfarm banks headquartered in metropolitan areas (metro nonfarm) from other community banks to compare the financial performance of MDIs with the financial institutions they most closely resemble.

Table 4.1 Number and Share of Insured Institutions by Geographic Designation and Farm Bank Designation

		MDI Banks		Non-MDI Noncommunity Banks		Non-MDI Community Banks	
Description of Bank Headquarters Location		Metro	Nonmetro	Metro	Nonmetro	Metro	Nonmetro
Farm Bank Designation	Nonfarm Bank	123	21	351	48	2,109	1,408
	Farm Bank	3	2	5	3	294	1,039
	Nonfarm Bank	83%	14%	86%	12%	43%	29%
	Farm Bank	2%	1%	1%	1%	6%	21%
	Total	85%	15%	87%	13%	50%	50%

Source: FDIC fourth-quarter 2018 data

Note: Metro-nonmetro designation is based on whether the county in which the bank's headquarters is located exists within a metropolitan statistical area (MSA). The FDIC defines farm bank as an insured institution that has 25 percent or more of total loans concentrated in agricultural loans. Sum totals do not total due to rounding.

## WHY DISAGGREGATE COMMUNITY BANKS FOR COMPARISONS OF FINANCIAL PERFORMANCE?

**Earlier sections of this report showed that** MDI balance sheets resemble those of most community banks. However, certain subgroups of community banks do not resemble MDIs and are therefore not suitable for comparative analysis.

Chart 4.1 on pages 38-39 shows that both MDIs and community nonfarm banks headquartered in metropolitan areas (metro nonfarm) held assets that were heavily concentrated in CRE and C&D lending in 2007, at the cusp of the housing and financial crisis. The heavy concentration of both MDI and metro nonfarm community bank assets in CRE suggests that the performance of these bank groups was driven largely by commercial real estate market fundamentals.

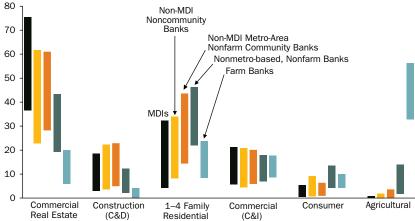
Conversely, in 2007, agriculture was in the midst of its most prosperous period in more than half a century. As a result, institutions invested in agriculture, especially community farm banks, were much more insulated from the credit problems caused by the housing crisis. Delinquencies, loan chargeoffs, and loan loss provision expenses among community farm banks increased little, in stark contrast to CRE-focused, metro-based community banks and MDIs. For this reason, community farm bank profitability suffered much less.

Given the strong divergence in financial performance between agriculture-focused community banks and MDIs, Section 4 limits financial comparison to only those community banks that most resemble MDIs: metro nonfarm community banks.

Chart 4.1 Institutions with High CRE Concentrations Fared Much Worse During the Last Recession Than Other Institutions

#### Chart 4.1- a: Loan Mix by Bank Designation - 2007

Share of Total Loans, Percent (Interquartile Range) 80 Non-MDI

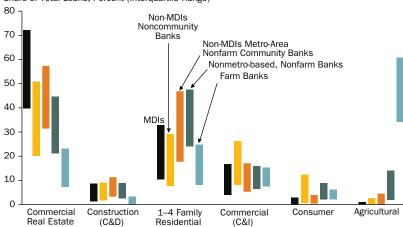


Source: FDIC, fourth quarter 2007 data

Note: The interquartile range shows the range of loan mix for the middle 50 percent of banks in each bank group (25th–75th). Construction (C&D) is a subset of commercial real estate (CRE).

#### Chart 4.1-b: Loan Mix by Bank Designation - 2018

Share of Total Loans, Percent (Interquartile Range)

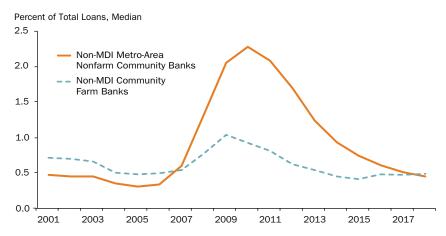


Source: FDIC, fourth quarter 2018 data

Note: The interquartile range shows the range of loan mix for the middle 50 percent of banks in each bank group (25th–75th). Construction (C&D) is a subset of commercial real estate (CRE).

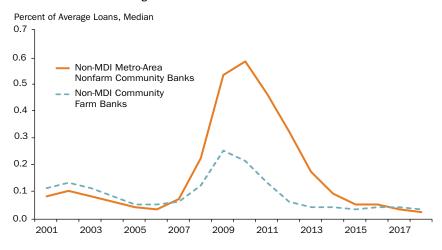
## Chart 4.1 (continued) Institutions with High CRE Concentrations Fared Much Worse During the Last Recession Than Other Institutions

Chart 4.1-c: Noncurrent Loans



Source: FDIC

Chart 4.1-d: Net Loan Charge-Offs



## **Profitability and Credit Quality**

The 2008 to 2009 recession followed a collapse in home prices that quickly halted new housing development construction. As the construction halted, newly developed strip shopping centers built to accommodate these new housing developments saw significant vacancies. As

a result, the credit quality of insured institutions with heavy loan exposure in these largely urban markets was adversely affected, including MDIs, noncommunity banks, and metro nonfarm community banks (see Chart 4.2 below). MDIs saw higher delinquencies and charge-offs than non-MDI metro nonfarm community banks.

Chart 4.2 **Credit Quality Indicators** 

#### Chart 4.2- a: Noncurrent Loans

Percent of Total Loans, Median 9.0 8.0 MDIs Non-MDI Metro-Area Nonfarm 7.0 Community Banks Non-MDI Noncommunity Banks 6.0 5.0 4.0 3.0 2.0 1.0 0 2001 2003 2005 2011 2013 2015 2009 2017

Source: FDIC

Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Chart 4.2-b: Net Loan Charge-Offs

Percent of Total Loans, Median 2.5 2.0 Non-MDI Metro-Area Nonfarm Community Banks 1.5 Non-MDI Noncommunity Banks 1.0 0.5 0 -0.5 2001 2003 2005 2007 2009 2011 2013 2015 2017

Source: FDIC

Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

As a result, MDIs required substantially more loan loss provision expenses to maintain sufficient reserves than non-MDI metro nonfarm community banks, pushing pretax return on assets (pretax ROA) for MDIs into negative territory (see Charts 4.3-a and b below).23 In 2009, more than half of MDIs were unprofitable, and the bottom quarter of MDIs had pretax ROA ratios worse than negative 2.5 percent.

Since the recession, credit quality has improved greatly across the banking industry. At year-end 2018, the median noncurrent loan ratio for MDIs fell to a studyperiod low of 0.56 percent, as did the net charge-off rate (0.02 percent). As a result, loan performance has increased sharply, providing the most significant boost to post-recession MDI earnings.

Chart 4.3 Total Revenue, Loan Loss Provisions, and Net Income

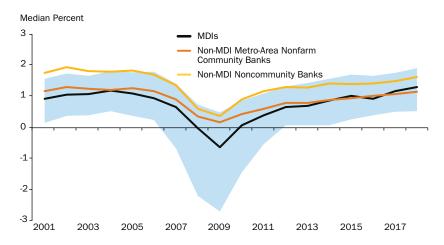
#### Chart 4.3-a: Loan Loss Provision Expense

Annual Percent of Average Assets, Median 3.0 2.5 Non-MDI Metro-Area Nonfarm Community Banks Non-MDI Noncommunity Banks 2.0 1.5 1.0 0.5 0.0 2001 2003 2005 2007 2009 2011 2013 2015 2017

Source: FDIC

Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

## Chart 4.3-b: Pretax Return of Assets

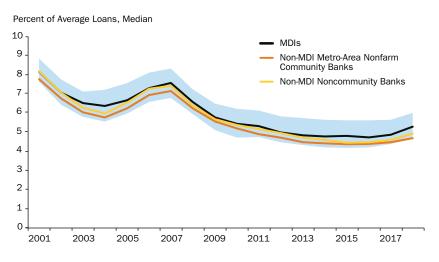


Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

<sup>&</sup>lt;sup>23</sup>Pretax return on assets is one of the most widely-used measures of financial institution earnings performance. The measure shows pretax net income as a percent of average assets and includes extraordinary items and other adjustments, net of taxes.

#### Chart 4.3 (continued) Total Revenue, Loan Loss Provisions, and Net Income

Chart 4.3-c: Total Revenue



Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Moreover, revenue (net interest income plus noninterest income) has rebounded slightly in recent years, also boosting median pretax ROA (see Chart 4.3-c above). Revenue performance was generally stronger at MDIs than it was at non-MDI noncommunity banks and non-MDI metro nonfarm community banks throughout the study period, particularly during the last four years.

MDIs posted year-over-year increases in median pretax ROA in eight of the past nine years. After lagging non-MDI metro nonfarm community banks in measures of pretax ROA during the first 14 years of the study period, MDIs outpaced that group three of the past four years. In addition, although MDI pretax ROA has consistently lagged non-MDI noncommunity bank pretax ROA, the spread has narrowed since 2013 to a study-period low.

#### Revenue

MDIs consistently generate greater net interest income than their non-MDI counterparts (see Chart 4.4-a, page 43).<sup>24</sup> Before the recession, the higher net interest income of MDIs was due to a combination of generally higher interest income and generally lower interest expense than other bank groups. Since 2013, MDI interest income has rebounded more quickly than at most non-MDI financial institutions (see Chart 4.4-b, page 43). While MDI interest expenses have also risen more quickly than those of other financial institutions, the difference has not been as significant as that reported in interest income (see Chart 4.4-c, page 44). Since 2008, higher loan-to-asset ratios have also boosted interest income at MDIs relative to the other bank groups (see Chart 4.4-d, page 44).<sup>25</sup> Because of these combined factors, MDIs exhibit a widening advantage in net interest income.

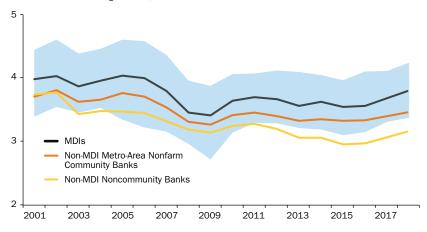
<sup>&</sup>lt;sup>24</sup>Net interest income is calculated as interest income less interest expense.

<sup>25</sup>MDIs may price their loans higher to mitigate risk; however, loan pricing information is not reported by banks on Call Reports, and granularity of reported loan income is insufficient to infer pricing differences between the groups based on differences in loan yields.

Chart 4.4 Interest Income, Interest Expense, and Loans-to-Assets Ratios

## Chart 4.4-a: Net Interest Income

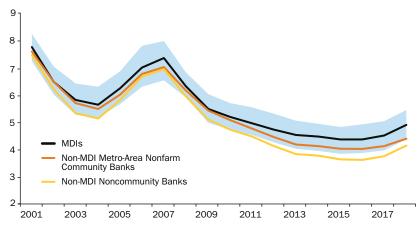
Annual Percent of Average Assets, Median



Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Chart 4.4-b: Interest Income

Annual Percent of Average Earning Assets, Median

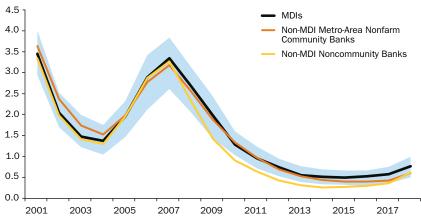


Source: FDIC Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

## Chart 4.4 (continued) Interest Income, Interest Expense, and Loans-to-Assets Ratios

#### Chart 4.4-c: Interest Expense

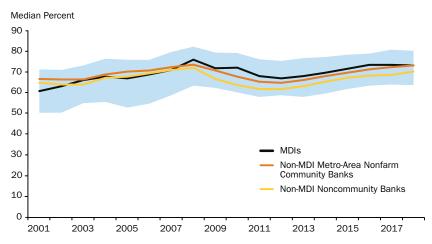




Source: FDIC

Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Chart 4.4-d: Loans to Assets Ratio



Source: FDIC Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

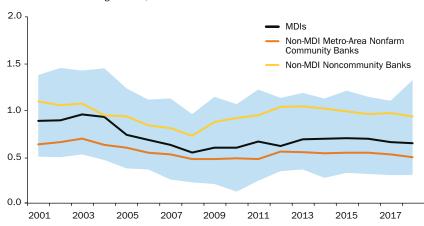
Despite steady improvement over the past several years, MDI interest income as a share of average assets still lags its pre-recession levels, largely because of the low-interest rate environment.

MDIs lag non-MDI noncommunity banks considerably in terms of noninterest income, but they have generally outpaced non-MDI metro nonfarm community banks (see Chart 4.5-a below). In 2001, MDIs had greater income related to service charges on deposits than non-MDI metro nonfarm banks, but that advantage had dissipated by 2006. MDIs also reported greater other noninterest income, which includes income from sources including ATM fees, check printing fees, and safe deposit box fees (see Chart 4.5-b, page 46).<sup>26</sup> That advantage disappeared during the recession and never rematerialized. However, since 2009, MDIs have benefitted from higher loan servicing fee growth and net gains on loan sales, pushing overall performance of the MDIs above that of the non-MDI metro nonfarm banks (see Charts 4.5-c and d, page 46-47).

Chart 4.5 **Noninterest Income Details** 

#### Chart 4.5-a: Noninterest Income

Annual Percent of Average Assets, Median



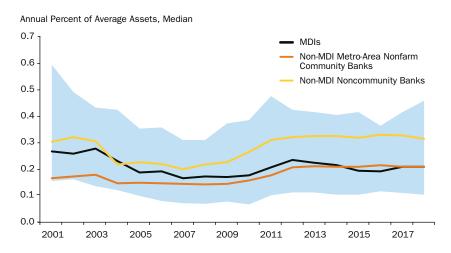
Source: FDIC

Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

<sup>28</sup> n most time periods, for all bank groups, median net loan servicing fee income and net gains on loan sales are zero, indicating that, in general, only a minority of institutions report this activity. However, income has grown for those institutions that do report these income items, as shown in Chart 4.5-c and d, pages 46-47.

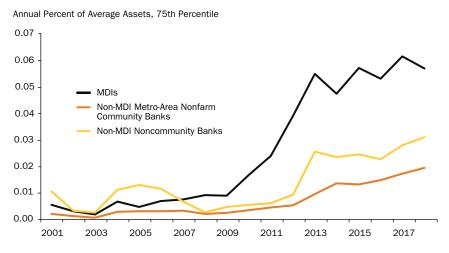
## Chart 4.5 (continued) **Noninterest Income Details**

#### Chart 4.5-b: Other Noninterest Income



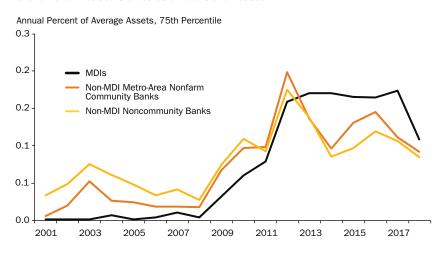
Source: FDIC Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Chart 4.5 - c: Net Servicing Fees



#### Chart 4.5 (continued) **Noninterest Income Details**

Chart 4.5-d: Net Gains on Sales of Loans and Leases



Source: FDIC

The consistent advantage in noninterest income generation by non-MDI noncommunity banks over MDIs and non-MDI metro nonfarm community banks is attributable, at least in part, to greater other noninterest income.

#### **Overhead Costs**

Since 2013, the overhead expense ratios for MDIs — salaries, premises and fixed assets, and other noninterest expenses, such as technology costs as a percentage of average assets — have improved overall (see Chart 4.6, page 48). Between 2013 and 2018, the median MDI noninterest expense ratio declined 29 basis points, the upperbound of the interquartile range declined 19 points, and the lower-bound of the interquartile range declined 11 basis points. Some of this improvement reflects the exit and entry of banks into the MDI group during the period, but improvements were seen in the median and upper- and lower-bounds even when considering only those MDI banks present throughout the entire five-year span.<sup>27</sup>

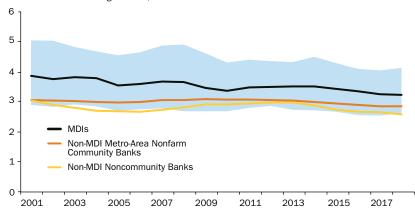
Despite these improvements, MDI overhead expenses are still well above those of other institutions. Four of every 10 non-MDI banks have lower overhead expense ratios than the best 25 percent of MDIs.

<sup>27</sup>There were 174 MDI institutions at year-end 2013 and 149 at year-end 2018. The exit of 33 institutions present in 2013 and the post-2013 entrance of eight institutions account for the change in number of MDIs. Of the 33 institutions that exited, 12 had noninterest expense ratios among the highest quartile in 2013 compared with six among the lowest quartile. Of the eight institutions added since 2013, three had noninterest expense ratios among the highest quartile in 2018 compared to one among the lowest quartile.

Chart 4.6 Noninterest Expense by Peer Group, MDI Size Group, and MDI **Ethnicity Group** 

## Chart 4.6-a: Noninterest Expense

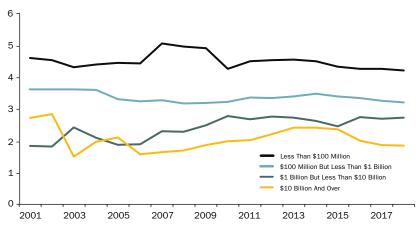
Annual Percent of Average Assets, Median



Source: FDIC Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

## Chart 4.6-b: Noninterest Expense By MDI Size Group

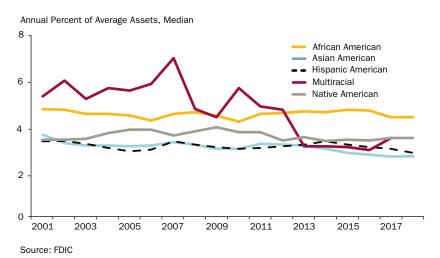
Annual Percent of Average Assets, Median



Note: The number of banks in the \$10 billion-plus size group ranges between 1 and 7 banks. The number of banks in the \$1-\$10 billion size group ranges between 9 and 26 banks.

Chart 4.6 (continued) Noninterest Expense by Peer Group, MDI Size Group, and MDI **Ethnicity Group** 

Chart 4.6-c: Noninterest Expense



Smaller MDIs report especially high overhead costs relative to asset size (see Chart 4.6-b, page 48). Across the study period, the median noninterest expense ratio for MDIs under \$100 million ranged from 4.2 percent to 5.1 percent, compared with 1.8 percent to 2.8 percent for MDIs with assets of \$1 billion or more. Moving from the largest asset-size group to the smallest asset-size group, the three primary overhead costs — personnel, premises, and other noninterest expenses — all increased. Differences are most pronounced in personnel costs and premises expenses.

African American MDIs and Native American MDIs tend to be much smaller than Asian American and Hispanic American MDIs, and this size difference likely explains why African American MDIs and Native American MDIs have higher costs relative to average assets than the other groups (see Chart 4.6-c above). At year-end 2018, African American MDIs averaged \$228 million in size and Native American MDIs averaged \$166 million in size — far smaller than the \$1.7 billion for Asian American MDIs and the \$3.0 billion for Hispanic American MDIs.

African American MDI personnel costs are fairly similar to those of Native American MDIs, but African American MDIs have much higher costs for premises and other noninterest expense costs. A likely explanation for this difference is the concentration of African American MDIs in higher-cost metropolitan areas relative to Native American MDIs concentrated in lower-cost rural areas.

## **Efficiency Ratios**

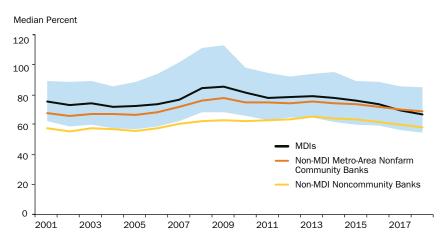
The efficiency ratio measures the ability of banks to generate revenue in relation to the expenses they incur in doing so. The efficiency ratio is the ratio of noninterest expense to net operating revenue, where a higher efficiency ratio indicates an institution that is less efficient at generating revenue per dollar of noninterest expense.<sup>28</sup> The FDIC Community Banking Study identified the emergence of a sizable "efficiency gap" between community and noncommunity banks beginning in the late 1990s that has narrowed only slightly since then.

<sup>&</sup>lt;sup>28</sup>Formally, the efficiency ratio is expressed as Efficiency ratio = Noninterest Expense / (Net Interest income + Noninterest Income).

MDIs have long reported higher efficiency ratios than their non-MDI counterparts (see Chart 4.7 below). The significant variation in overhead expenses of MDIs based on their size is also clearly seen in variations in efficiency ratios among MDIs (see Chart 4.8 below). Smaller MDIs tend to have much higher (worse) efficiency ratios, and larger MDIs tend to have much lower (better) efficiency ratios.

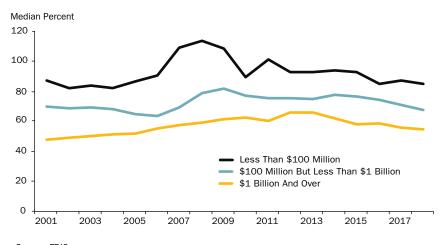
However, in the past five years, MDIs have closed the gap relative to non-MDI community banks. This improvement may be attributed to a combination of better revenue performance (greater interest and noninterest income) and greater reductions of noninterest expenses relative to reductions by non-MDI financial institutions.

Chart 4.7 **Efficiency Ratio** 



Source: FDIC Note: Light-blue shading represents the 25th percentile to 75th percentile range for MDIs.

Chart 4.8 **Efficiency Ratio By MDI Size Group** 

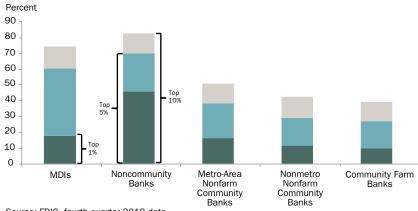


The assets of MDI and non-MDI noncommunity financial institutions are dominated by a small number of institutions. Because large institutions can skew measures of aggregate financial performance, this study examines median as opposed to weighted

average financial performance measures, as used in the original 2014 MDI study. The chart below shows the effects of large banks on the performance metrics of MDIs by contrasting weighted averages and medians.

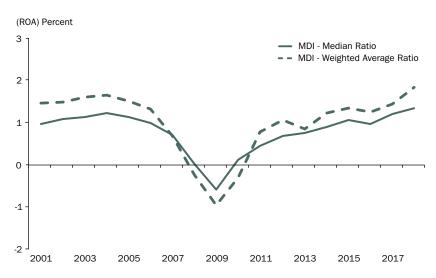
Chart 4.9 Medians Versus Weighted Averages in Measures of Financial Performance

Chart 4.9-a: Cumulative Share of Bank Groups' Aggregate Assets



Source: FDIC, fourth quarter 2018 data

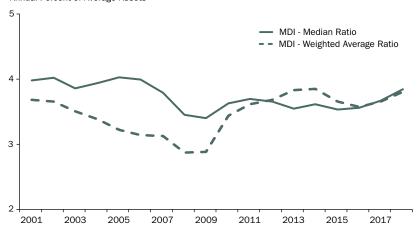
Chart 4.9-b: Pretax Return on Assets



## Chart 4.9 (continued) Medians Versus Weighted Averages in Measures of Financial Performance

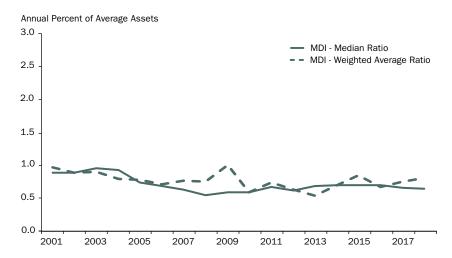
Chart 4.9-c: Net Interest Income

Annual Percent of Average Assets



Source: FDIC

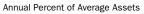
Chart 4.9-d: NonInterest Income

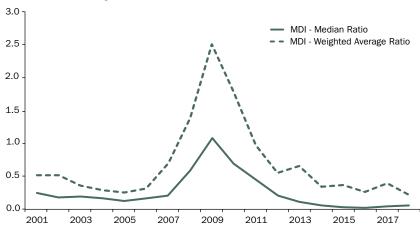


## Chart 4.9 (continued)

## Medians Versus Weighted Averages in Measures of Financial Performance

#### Chart 4.9-e: Loan Loss Provision Expense





Source: FDIC

Chart 4.9-f: Noninterest Expense

