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**Financial Supervision: Basic Principles**

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*The views expressed are those of the author and not necessarily those of the FDIC.*

## **Introduction**

Following a well-worn path, the recent financial crisis has led to passage of a host of new laws with the expectation that they will achieve greater financial stability. Hundreds of rules are being written to serve this goal. While this necessarily increases regulatory burden, we also need to be certain that the supervisory processes around these rules actually fix the problem. If history is our guide, too often this is not the case.

Commercial banking firms, because of their role in the payments system and intermediation of deposits, are subsidized through access to deposit insurance, the discount window, and sovereign support. This safety net creates opportunities to avoid market disciplines and creates incentives to take on excess risk in lending, investing, and the use of leverage. To control for these effects, regulatory boundaries are established, which supervisors are expected to patrol. Failure to do so inevitably leads again to mispriced and excessive risk and, eventually, the recurrence of crisis.

These challenges have only increased with time as the largest banking firms have become not just larger, but also more complex. Through successful lobbying, laws were changed permitting them to engage in a host of expanded activities, which include underwriting, trading, speculating in derivatives, and conducting other hedge fund-like activities all within the protection of the safety net. These activities cross state and national borders, affect more sectors of the economy; and, a mistake by even one of them carries outsized consequences to the economy.

Complaints notwithstanding, the choice of these banking firms to expand into ever more complex activities, with their explicit and implied protections, invites more complex oversight. Supervisors are responsible for effective supervision -- not less supervision.

With this background, I want to focus my comments today on a set of supervisory principles that when used effectively have historically proven most useful in assuring the presence of an industry deserving of our confidence. These principles are not complicated or hard to understand, but they can appear painful to the industry. First, all commercial banking firms, not just small and mid-sized ones, should be subject to full-scope examinations. Second, because these largest banks are subsidized and affect the economy so significantly, they should be subject to greater disclosures regarding their financial condition. Third, the Volcker Rule should be implemented. Proprietary trading should be conducted outside the safety net, subject to market forces instead of government protection. Finally, even the largest banking firms should fund and capitalize themselves at levels the market would demand if there was no public safety net.

These steps do not require new rules and regulations; they require use of authorities already in place.

## **Systematic Examinations**

I begin with observing from experience that the best way to judge a firm's risk profile is through a strong supervisory program and examination process. Effective supervision has many facets, but it first requires that authorities systematically examine a bank to assess its asset quality,

liquidity, operations, and controls necessary to judge its risk profile, balance-sheet strength, and management. To declare confidence in a system without systematically examining the firms that compose it is disingenuous and sometimes dangerous.

It is unfortunate that for the largest banking firms, annual full-scope examinations have been de-emphasized in favor of targeted reviews, model validations, and the use of stress tests, which rely importantly on self-reporting. These activities are useful, but they are limited in scope. They have been adopted because the largest insured banks are thought to be too large and complex for full-scope examinations. However, full exams are doable. Statisticians have long been designing sampling methodologies for auditing a firm's assets, providing reliable estimates of their condition and at an affordable cost.

An example that suggests the possibilities of such an approach is the Shared National Credit (SNC) program. While not part of a full exam, it is one of the more extensive reviews currently conducted for large banks. Under it, examiners pull a series of significant credits held among the largest banks operating in the United States. They analyze and rate these credits based on performance, quality of the underwriting, and risk profile of the borrower. The exams provide important insight into the quality of the asset portfolio, the overall credit culture of the bank, and the quality of its management. Both supervisors and management gain useful perspective on where future problems for this category of assets might arise in a downturn. In instances where underwriting is weak, remedial actions are required to strengthen the portfolio and perhaps avoid future losses.

The year 2014 saw significant issuances in leveraged loans, ending the year with approximately \$800 billion in commitments. While leveraged loans represented only 22 percent of the total loan commitments covered in the SNC review, they accounted for 75 percent of total criticized assets and more than 33 percent of the leveraged loans were criticized compared with 3 percent of the non-leveraged portfolio. Reasons for the criticism included weak underwriting and deficiencies in risk management. Examiners noted excessive leverage against gaps in borrower repayment capacity, questionable evaluations, and over reliance on sponsors' earning projections. This portfolio has systemic implications, whether held in the originating bank, or originated to distribute.<sup>1</sup>

The SNC program is an example of the potential usefulness of systematic reviews of the largest banks' balance sheets. Through statistical sampling, examiners could conduct a full scope review of a cross section of banking assets, providing a deeper view of the firm's condition. To this, the Comprehensive Capital Analysis and Review (CCAR) and other complementary analyses could be incorporated, providing a unique insight into the risk profile of these systemically important firms.

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<sup>1</sup> <http://www.federalreserve.gov/newsevents/press/bcreg/20141107a.htm>

## **Disclosure and Transparency**

Because the largest banking firms have such a disproportional effect on the economy and receive public support, it is appropriate that they be highly transparent. There are a number of reporting enhancements that would serve this purpose. This might include more timely self-disclosure of supervisory findings. If, for example, there are significant differences in asset quality findings by management versus examiner, this should be disclosed.<sup>2</sup> There also should be greater disclosures around Title I resolution plans, commonly referred to as Living Wills. This currently is a critical supervisory process with major implications for the stability of the industry. Too little of these plans is publicly available, and it would serve investors and the public well to understand better what they might imply for financial stability.

## **Derivatives and the Volcker Rule**

The banking industry has evolved into a highly concentrated and profitable industry, especially in boom periods. However, parts of its structure create conflicts of interests and have proven to be highly unstable under economic stress. The Volcker Rule addresses some of these shortcomings.

In recent years commercial banking firms in the United States have been allowed to simultaneously own commodities, trade commodities and their derivatives, and own and control transportation and warehousing of these commodities. These firms, with their access to lower-cost insured funding and the ability to both trade and own assets, have a significant advantage over non-bank competitors. Within the past year, for example, there have been noted instances of apparent conflicts of interest involving these activities among the largest banking firms. It is for these reasons that the U.S. has insisted historically that banking remain separate from commerce.

The precursor to this conflict was the repeal of the Glass-Steagall Act<sup>3</sup> in the late 1990s, which permitted commercial banks to significantly expand their presence in trading derivatives and related contracts. Within the safety net the largest commercial banks have come to dominate this activity across the globe. For example, the notional value of derivative contracts at the five U.S. banking organizations with the largest exposure is nearly \$300 trillion. This would translate onto their balance sheet as an additional \$4 trillion of assets, using international accounting rules. Using U.S. accounting rules, it translates to only \$300 billion. Also, among these derivative

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<sup>2</sup> See Hoenig remarks May 2003 delivered to the Federal Reserve Bank of Chicago's 39<sup>th</sup> Annual Conference on Bank Structure and Competition: <http://www.kc.frb.org/speechbio/hoenigpdf/HoenigDiscloseSpeech5-8-03-2.pdf>

<sup>3</sup> The Glass-Steagall Act was enacted in 1933 to confine the moral hazard created by the establishment of deposit insurance and the Federal Reserve's discount window. It made FDIC insurance available only to commercial banks and their retail customers, and higher-risk investment banking and broker-dealer activities were forced out of commercial banks and away from the safety net. The Gramm-Leach-Bliley Act of 1999 repealed Glass-Steagall, extending the safety net and its subsidy to an ever-greater number and range of activities and financial firms. The result has been levels of leverage and reach for ever-higher return on equity that are difficult to achieve and unsustainable without access to the public backstop.

contracts are more than \$25 trillion of notional amounts of cleared and uncleared credit default swaps, equity derivatives, and commodity derivatives, which hold the highest risks to these banks and by extension to the taxpayer. Derivatives activities conducted in the insured bank at lower costs have proven to be quite profitable, which explains why bank managers are so adamant that they stay there.

Subsidizing such derivative activity with its unbridled leverage should end. At a minimum derivatives contracts, as with any asset, should be reported on the balance sheet at fair value and capital held against this risk.

The Volcker Rule represents a first, modest step to address this exposure to the safety net. The Volcker Rule limits an insured bank's trading in derivatives for its own account, moderating the incentives for speculation using insured deposits and ready access to central bank liquidity.

Just to be clear, a host of exceptions to the Volcker Rule permit banks to engage in market making, trading government obligations, and fiduciary transactions, continuing banks' role in these markets. Also, the trading activities that commercial banks were formerly allowed to conduct for their own account will not disappear from the marketplace when the Volcker Rule takes effect, as some suggest. The activity most certainly will continue and be readily available to end-users, but outside the safety net, capitalized by private funds, and priced within a non-subsidized and more disciplined market system.

The industry continues to seek delays in the transition and compliance with the Volcker Rule, originally mandated for 2014. As Paul Volcker himself observed, these banking firms employ teams of experts that prepare acquisition and restructuring plans for clients, corporations, and financial companies across the globe. The multi-year low interest rate environment has been an optimal time for the transition without loss of capital. It is unlikely that waiting will improve performance outcomes.<sup>4</sup>

## **Capital adequacy**

Finally, a discussion of effective supervision would not be complete without emphasizing the importance of a firm's capital account. To state the obvious, capital is ownership's contribution to a company's funding. It is the inverse of borrowed or, as we say, leveraged funding, and it reflects the amount of loss a firm can absorb before failure. Simply put, the greater the capital, the greater the staying power. The largest banking firms insist that they are well capitalized; the evidence shows otherwise. The largest firms are the least well capitalized of any group of banks operating in the United States today, and they continue to pose a systemic risk.

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<sup>4</sup> If the safety net is to be expanded to underwrite a broader class of risk assets, then the FDIC should appropriately price this risk in its insurance premiums. These premiums currently price for on-balance sheet asset and liquidity risks, but not for off-balance sheet risks associated with derivatives, for example. So long as FDIC and the public backstop proprietary trading and derivatives activities conducted within the insured commercial banks, then banks should pay a premium commensurate with that risk.

The best measure of capital is the tangible leverage ratio.<sup>5</sup> This ratio measures funds available to absorb loss against total balance sheet and some off-balance sheet assets. It does not presume to predict or assign relative risk weights among asset classes. It is more difficult to game, and it provides the most clear and complete picture of a banking firm's ability to absorb loss regardless of source.

Although it should be, this ratio is not the principal regulatory means to judge the capital strength of commercial banking firms. These firms and their regulators rely on a risk-weighted capital measure, which is too often unreliable. It gives the impression of greater owner funding, greater loss absorbing capacity, and less public exposure to loss than actually exists, should a banking firm fail. This is best illustrated in the accompanying table, entitled the Global Capital Index (GCI). Column 3 of the GCI, labeled Tier 1 Capital Ratio, shows a banking firm's capital as a percent of risk weighted assets, the value of which is adjusted based on a regulator's judgment of their risk. Some of the largest banking firms report as little as a quarter of their balance sheet as having risk. The industry's average risk weighted assets is only 40 percent of total risk weighted assets. Thus, by reducing the denominator, the reported Basel Risk Weighted Capital ratios for these banks average well above 10 percent.

In contrast, as shown in column 8 of the GCI, these largest banking firms' tangible capital ratios average a much lower 5 percent. Should the United States encounter a financial shock like that of 2008, there again would be too little capital to absorb losses and yet assure the public that these banks remain safe.<sup>6</sup>

It has been suggested that using the more strict leverage ratio as the principal measure of capital adequacy would cause loan and economic growth to slow, or worse would cause bankers to take on greater risks to boost returns. Research on these topics, however, suggests otherwise.<sup>7</sup> Additionally, charts 1 and 2, entitled Lending Through the Cycle, show, for example, that going into the crisis of 2008 banks holding an average 12 percent capital saw more modest declines in loans and a quicker recovery. In contrast, banks with capital below 8 percent, including the largest banks, experienced more dramatic declines in lending. Strong capital levels that support growth over the business cycle is good for the economy.

Regarding the concern that relying on a tangible leverage ratio would encourage banks to increase the risks on their balance sheets, there is no evidence that I am aware of that supports this concern. Moreover, I might suggest, that if the tangible leverage measure enabled the largest

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<sup>5</sup> Tangible capital is calculated by comparing equity capital to total assets, deducting goodwill, other intangibles, and deferred tax assets from both equity and total assets. The tangible leverage ratio makes no attempt to predict or assign relative risk weights among asset classes. See GCI chart for additional information on how the index is calculated.

<sup>6</sup> See Figure 1.9 Realized and Expected Writedowns or Loss Provisions for Banks by Region. Page 12 of the IMF Global Financial Stability Report, October 2009. <https://www.imf.org/external/pubs/ft/gfsr/2009/02/>

<sup>7</sup> Carlson, Mark; Hui, Shan; Warusawitharana, Missaka, "Capital Ratios and Bank Lending: A Matched Bank Approach," Finance and Economic Discussion Series, Division of Research and Statistics and Monetary Affairs, Board of Governors of the Federal Reserve.

banking firms to take on greater risk for greater return, the industry would support - not oppose - it.

## **Conclusion**

I will wrap up by simply emphasizing that with each financial crisis new regulations are added to an already long list of rules, all intended to assure greater financial stability and strong economic growth. Even so, the industry repeatedly finds itself tangled in financial crisis, struggling to avoid collapse and economic ruin. This happens despite assurances that the industry and its supervisors have become more sophisticated in their analyses and smarter in their decisions.

However, there is compelling evidence that keeping with simple but well-tested principles can serve the industry, supervisors, and the public best. Underwriting standards and asset quality should be systematically reviewed and tested, first by the firms and then checked by the supervisor. Better disclosure of results will improve performance; it almost always does. Separating commercial banking and its inherent safety net from broker-dealer and proprietary trading activities will diminish conflicts of interest and abuse of the safety net. Finally, better capitalized is not the same as well capitalized, and it's important to acknowledge the difference. Insisting that bank ownership provide funding -- capital -- commensurate with the bank's risk appetite is the most fundamental step for assuring that the banking system is a contributor to economic growth.

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## Global Capital Index

Capitalization Ratios for Global Systemically Important Banks (GSIBs)  
Data as of June 30, 2014

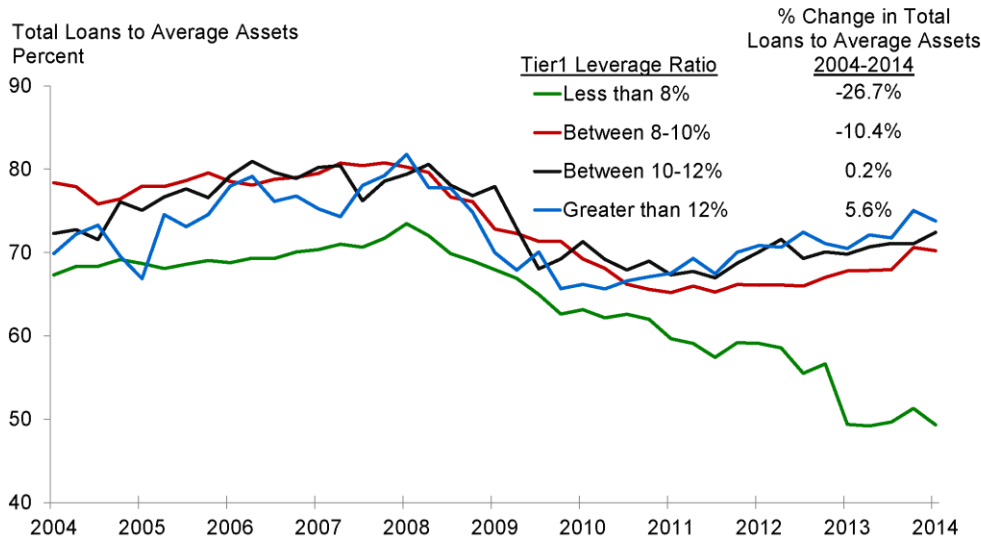
Institution <sup>1</sup>	Basel Risk-Based Capital			Self-Reported Basel III Leverage Ratio <sup>2</sup> (Percent)	Tangible Capital				Components of Tangible Capital			Price-to-Book	
	Tier 1 Capital <sup>3</sup> (\$Billions)	Risk- Weighted Assets (\$Billions)	Tier 1 Capital Ratio <sup>3</sup> (Percent)		GAAP		IFRS ESTIMATE <sup>4</sup>		Total Equity <sup>7</sup> (\$Billions)	Goodwill and Other Intangibles (\$Billions)	Deferred Tax Assets <sup>11</sup> (\$Billions)	Price-to- Book Ratio <sup>8</sup> (Percent)	Price- Adjusted Tangible Book Ratio <sup>9</sup> (Percent)
					Total Assets (\$Billions)	Leverage Ratio <sup>5</sup> (Percent)	Total Assets (\$Billions)	Leverage Ratio <sup>6</sup> (Percent)					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
<b>U.S. G-SIBs</b>													
Bank of America	161	1,285	12.51	5.00	2,172	6.21	2,930	4.54	237	79	30	0.76	1.49
Bank of New York Mellon	21	133	15.54	...	401	4.17	416	4.01	38	23	0	1.20	3.10
Citigroup	154	1,124	14.62	5.70	1,910	7.02	2,549	5.20	211	32	51	0.77	1.31
Goldman Sachs	75	456	16.36	4.50	950	8.55	1,530	4.45	62	4	4	1.06	1.23
JPMorgan Chase	180	1,459	12.33	5.40	2,520	6.80	3,558	4.78	227	58	2	1.07	1.49
Morgan Stanley	65	403	16.02	4.60	827	6.82	1,397	4.01	71	10	6	1.02	1.33
State Street	16	89	17.73	6.10	282	4.81	299	4.70	22	8	0	1.49	2.55
Wells Fargo	152	1,193	12.72	...	1,599	8.69	1,650	6.42	181	46	0	1.66	2.31
<b>U.S. G-SIBs (# Total, % Average)</b>	<b>834</b>	<b>6,151</b>	<b>13.55</b>		<b>10,571</b>	<b>7.00</b>	<b>14,421</b>	<b>5.05</b>	<b>1,059</b>	<b>250</b>	<b>94</b>	<b>1.07</b>	<b>1.49</b>
<b>Foreign G-SIBs</b>													
Banco Santander (Spain)	83	764	10.92	4.50	...	...	1,624	3.04	117	40	30	1.19	3.72
Bank of China Limited (China)	155	1,531	10.13	...	...	...	2,512	6.29	163	2	3	0.81	0.84
Barclays (UK)	66	692	9.92	3.40	...	...	2,213	3.36	94	13	7	0.63	0.80
BBVA (Spain)	53	460	11.88	5.80	...	...	819	5.30	64	9	13	1.21	1.87
BNP Paribas (France)	96	854	11.17	3.50	...	...	2,606	3.30	112	17	9	0.82	1.09
BPCE Group (France)	67	552	12.18	4.00	...	...	1,575	4.35	84	8	8	...	...
Credit Agricole Group (France)	84	686	12.26	4.10	...	...	2,274	3.92	117	21	8	...	...
Deutsche Bank (Germany)	85	548	15.53	3.40	...	...	2,277	2.93	94	19	8	0.52	0.75
HSCB (UK)	154	1,249	12.32	4.30	...	...	2,754	5.52	187	30	7	1.10	1.36
ING Bank (Netherlands)	48	401	11.97	...	...	...	1,119	3.87	47	2	2	...	...
Nordea bank (Sweden)	34	291	11.36	4.30	...	...	870	4.02	39	4	0	1.36	1.54
Royal Bank of Scotland (UK)	80	660	12.05	3.70	...	...	1,702	4.06	94	20	5	0.69	0.92
Société Générale (France)	60	479	12.46	3.60	...	...	1,808	2.81	64	6	8	0.66	0.84
Standard Chartered (UK)	41	352	11.77	4.80	...	...	690	6.11	49	6	1	0.66	0.78
UBS (Switzerland)	47	259	18.21	4.20	...	...	1,106	3.64	56	7	9	1.24	1.74
UniCredit (Italy)	62	545	11.26	...	...	...	1,146	3.78	71	7	7	0.71	1.25
<b>Foreign IFRS (# Total, % Average)</b>	<b>1,217</b>	<b>10,328</b>	<b>11.75</b>				<b>27,095</b>	<b>4.18</b>	<b>1,452</b>	<b>214</b>	<b>119</b>	<b>0.81</b>	<b>1.25</b>
<b>Other Foreign G-SIBs</b>													
Credit Suisse (Switzerland, CHF, U.S. GAAP)	51	321	15.98	...	1,003	3.22	...	...	47	9	6	1.01	1.52
Mitsubishi UFJ FG (Japan, JPY, Local GAAP)	123	992	12.37	...	2,540	3.67	...	...	105	12	1	0.70	0.78
Mizuho FG (Japan, JPY, Local GAAP)	69	586	11.76	...	1,780	2.86	...	...	56	5	1	0.80	0.89
Sumitomo Mitsui FG (Japan, JPY, Local GAAP)	73	531	13.80	...	1,590	3.47	...	...	64	8	2	0.82	0.95
<b>All Foreign G-SIBs (# Total, % Average)</b>	<b>1,534</b>	<b>12,759</b>	<b>12.02</b>		<b>34,008</b>	<b>4.01</b>			<b>1,726</b>	<b>248</b>	<b>128</b>	<b>0.81</b>	<b>0.94</b>
<b>U.S. BHC by Size Group<sup>10</sup></b>													
U.S. G-SIBs	834	6,151	13.55		10,571	7.00	14,421	5.05	1,059	250	94	1.07	1.49
Ten Largest Non-G-SIBs	194	1,600	12.12		1,987	8.98	1,996	8.94	248	70	6	1.18	1.90
Ten Largest Less Than \$50 Billion <sup>10</sup>	27	218	12.53		322	7.69	322	7.69	35	9	2	1.38	2.16
Ten Largest Less Than \$1 Billion <sup>10</sup>	7	7	13.86		10	8.57	10	8.57	1	0	0	...	...

Source: BankScope (Data updated as of August 28, 2014), Bloomberg LP, Federal Reserve Y-9C Reports, International Monetary Fund, and 10-K reports.

**Chart 1**

### Lending Through the Cycle

Quarterly Median for Noncommunity Banks



Source: FDIC.

Note: Excludes insured institutions reporting zero loans.

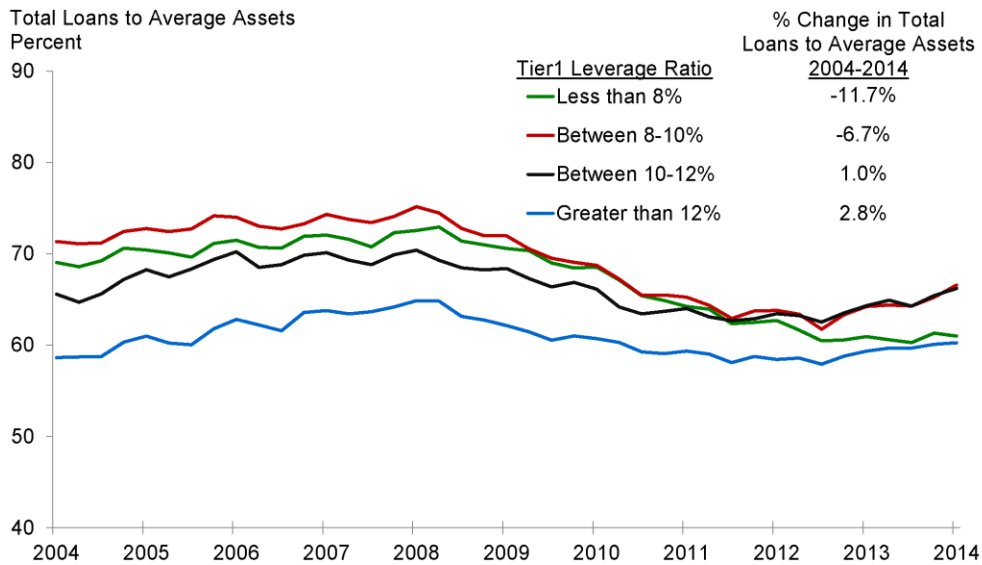
See FDIC Community Banking Study for definition of noncommunity bank.

<https://www.fdic.gov/regulations/resources/cbi/report/CBSI-1.pdf>



**Chart 2**

**Lending Through the Cycle**  
Quarterly Median for Community Banks



Source: FDIC.

Note: Excludes insured institutions reporting zero loans.

See FDIC Community Banking Study for definition of community bank.

<https://www.fdic.gov/regulations/resources/cbi/report/CBSI-1.pdf>