
MUTUAL INSTITUTIONS: OWNED BY THE COMMUNITIES THEY SERVE

Introduction

Mutual savings banks and mutual savings and loan associations (S&Ls) form a unique part of the banking industry, in that they are owned by their depositors rather than by shareholders.¹ An institution can be mutually owned at the level of the banking charter or at the level of the holding company, in structures known as mutual holding companies (MHCs). In the latter case, depositors own the holding company, which in turn owns a majority of the stock issued by a subsidiary bank.²

Unlike stock institutions that may increase equity capital by issuing new shares, mutual institutions generally augment their net worth through retained earnings. While reliance on retained earnings provides for a steady source of capital for profitable institutions, it also fosters conservative lending, as a mutual cannot raise equity capital externally through stock issuance to finance its growth or to offset larger-than-expected loan losses. Adopting a mutual holding company structure gives some flexibility in raising capital, as the subsidiary of a mutual holding company may issue some of its stock to the public.

U.S. mutual savings institutions have their origins in two main forms: mutual savings banks and mutual savings and loan associations. Although these institutional types began somewhat distinct from one another in the early 19th century, they became structurally and functionally similar in the 20th century.³ Consequently, this paper follows the convention of referring to both types of institutions simply as mutuals.⁴

Three features of mutuals distinguish them from the broader banking industry. First, nearly all mutuals are community banks. During each of the past 30 years, 98 percent or more of mutuals fit the FDIC's research definition of a community bank.⁵ Second, mutuals are geographically concentrated in the Northeast and Mid-Atlantic states, but also retain a strong presence in the Midwest and a few Southern states. These geographic concentrations continued to reflect the importance of this institutional form as the economies of these regions were developing in the 19th and early 20th centuries. Third, the vast majority of mutuals—78 percent in 2015—specialize in mortgage lending.

The mutual universe has shrunk somewhat over time, both in absolute terms and as a percentage of the banking industry (see Charts 1 and 2). There were 398 mutuals at year-end 2015, representing 6.4 percent of the 6,182 FDIC-insured banks and thrifts. These mutuals held \$142 billion in total assets, equal to 0.9 percent of industry assets. Including stock subsidiaries of MHCs, there were 537 mutuals, representing 8.7 percent of all banks and thrifts. Adding the assets of MHC subsidiaries brings the total assets of mutuals at year-end 2015 to \$251 billion, or 1.6 percent of industry assets.

Although mutuals made up a smaller portion of the banking industry in 2015 than they did in 1984, they continue to play an important role of providing mortgage credit in their communities. They use a business model that has proved to be successful over time. As this paper will demonstrate, the mutual business model turned out to be highly resilient to the hardships posed by the recent financial crisis, which was triggered in large part by credit problems in mortgage lending.

¹ Credit unions are also mutual; however, this article focuses on mutual savings banks and S&Ls.

² Public regulatory data can be used to identify institutions that are owned by their depositors outright going back to 1984. However, depositor ownership of a mutual holding company is difficult to trace through time. Thus, the analysis presented in this paper focuses on mutual charters.

³ See Teck (1968) on the unique origins of mutual savings banks and mutual S&Ls, and their evolution into structurally and functionally similar institutions.

⁴ When necessary to clarify historical distinctions, explicit reference will be made to savings banks or S&Ls.

⁵ See Chapter 1 of FDIC (2012).

Chart 1

The Number of Mutual Charters and Total Assets Have Fallen Substantially

Number of Mutual Charters and Total Assets, Year-End 1984 to 2015

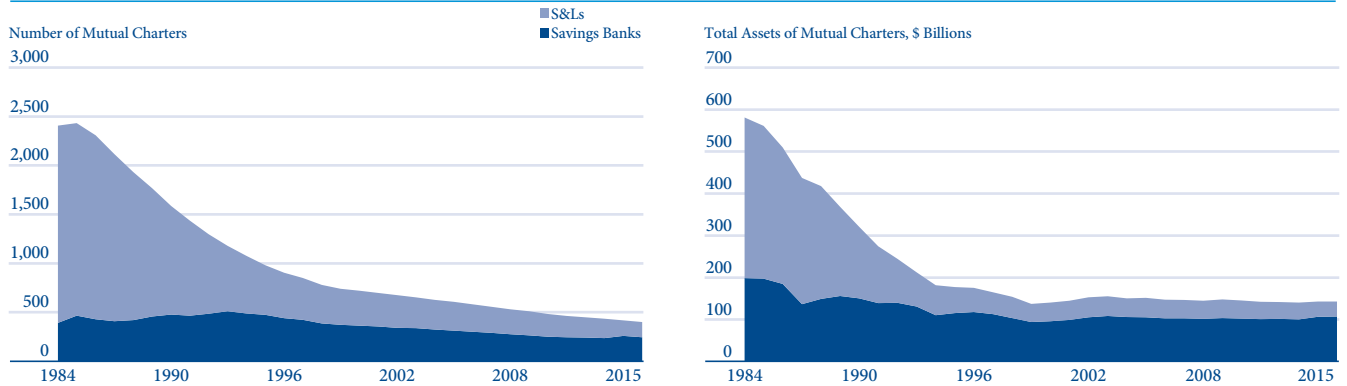
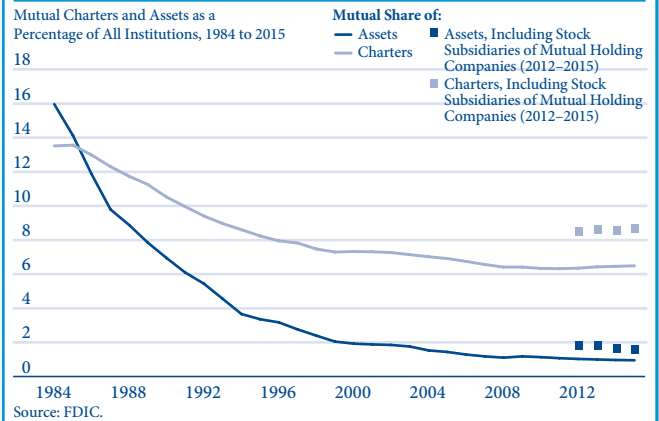


Chart 2

The Mutual Shares of Industry Assets and Charters Have Fallen Over Time



Regional Concentration of Mutuals

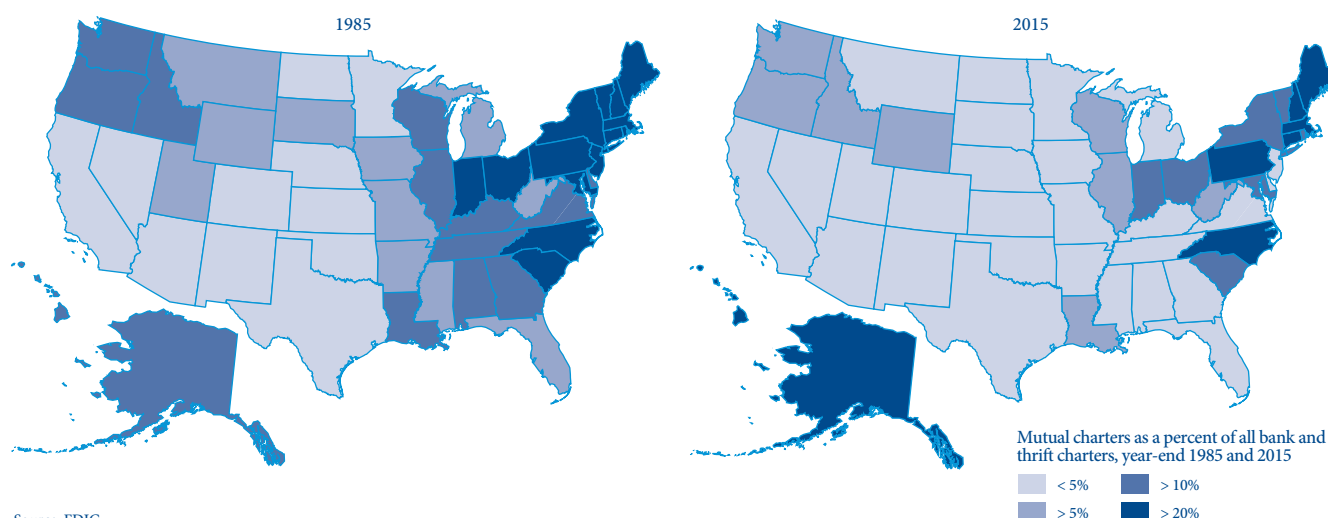
Although mutuals eventually spread to every state, they trace their origins to the Northeastern and Mid-Atlantic parts of the country, where they are still concentrated (see Map). There are two reasons mutuals are concentrated in these areas. One reason is that in the early 19th century these regions saw the rise of an urban working class looking for a safe way to save. Commercial banks of the time primarily financed business activity; they did not offer savings accounts into which wage earners could make small, regular deposits.⁶ Mutuals formed, in part, to meet the demand for small-denomination savings accounts—indeed, mutuals were sometimes named after coins, such as the dime, signaling they would take deposits as small as one dime.

The second reason is that many mutuals formed to pool funds in order to finance loans for home purchase or construction, and the trends underlying increasing demand for home loans first appeared in cities located in Northeastern and Mid-Atlantic states. Demand for home loans was driven by rising population, and also by the rise of an urban working class. A growing population of wage earners willing to pool savings to finance homeownership

⁶ See Welfling (1968), 3–15, and Teck (1968), 9–11 and 18–22.

Map

Mutuals Are Concentrated in the Northeast and Mid-Atlantic



provided an opportunity for financial intermediaries to serve the local community. Demand for home loans followed migration as people moved west, and there were mutuals in every state by the late 19th century.

The concentration of mutuals in the Northeast and Mid-Atlantic has declined since 1985, as the number of mutual charters in these states has declined at faster rates than those of other federally insured charters (see Map).

The Primacy of Home Financing to the Mutual Business Model

As mentioned above, mutuals have a long history of financing homeownership. In fact, early mutuals formed solely for this purpose were more like clubs than banks: Members might meet regularly at a local bar or general store to conduct business, and would pay regular dues until enough funds had been collected to disburse a loan. Members would then bid to receive the loan. In addition, the organization would review the property value and assess the repayment likelihood of the winning bidder. The first loan disbursed by the first S&L—the Oxford Provident Building Association—was in the amount of \$375 to a man named Comly Rich, to buy a house in 1832. Unfortunately, he fell behind on the loan, forcing the institution to seize his property and auction it off.⁷

Given their history, it should be no surprise that 78 percent of mutuals were mortgage-lending specialists at year-end 2015, as defined in Chapter 5 of the *FDIC Community Banking Study* (see Chart 3).⁸ For comparison, only 16 percent of all banks and thrifts were mortgage-lending specialists.

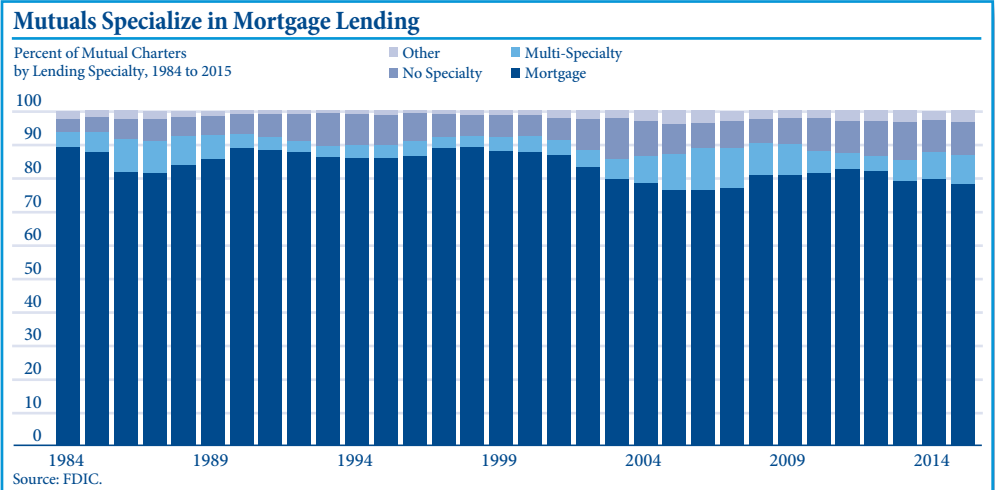


Comly Rich House, Philadelphia (1977)

⁷Teck (1968), 24, and Kendall (1962), 4. The house Mr. Rich purchased still stands at 4276 Orchard Street, Philadelphia. Photograph by the National Park Service Historic American Buildings Survey.

⁸Mortgage-lending specialists have at least one-third of their assets devoted to loans, and have more than 30 percent of their assets made up of loans secured by 1-to-4 family residential property. For more detail, see Chapter 5 of FDIC (2012).

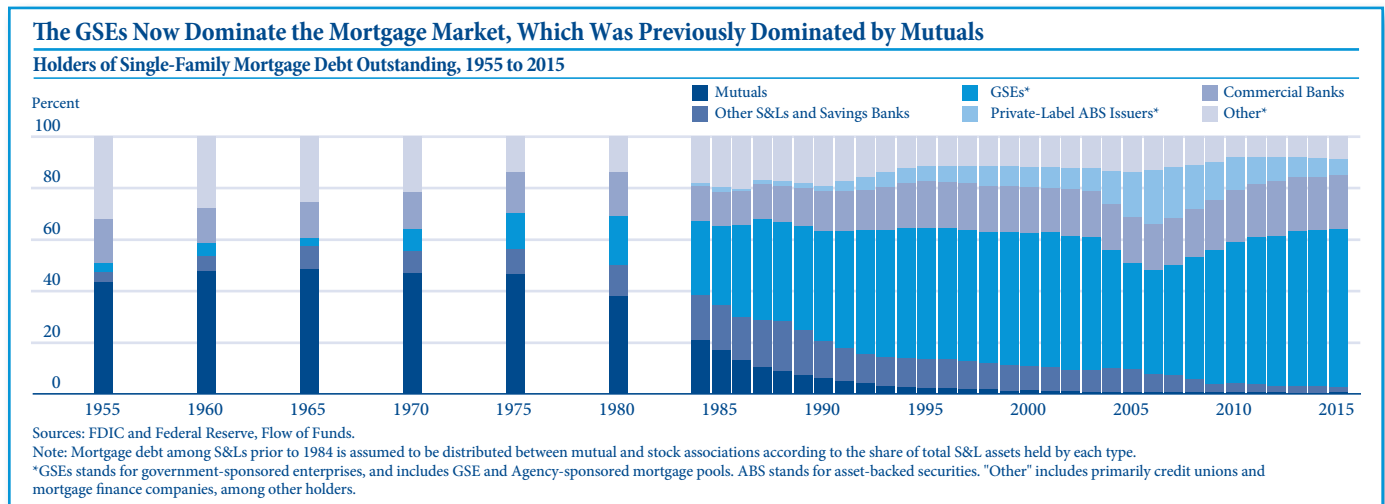
Chart 3



Not only are mutuals strongly devoted to mortgage lending today, they were the backbone of U.S. mortgage finance throughout much of the 20th century. In their heyday, mutuals financed roughly half of all single-family mortgages and, in many years, were the largest single source of financing in the mortgage market (see Chart 4). Among the reasons for the long-term prevalence of mutuals in the U.S. mortgage market was the preferential tax treatment that mutuals enjoyed compared to other mortgage lenders, such as commercial banks.⁹ However, the importance of mutuals to the broader mortgage market declined precipitously after 1980, even as the vast majority of mutuals remained mortgage-lending specialists. Mutuals held less than 1 percent of total U.S. mortgage debt outstanding as of year-end 2015.

As the importance of mutuals to the mortgage market declined, their numbers and total assets fell (see Chart 1). Moreover, the share of mutuals among all institutions in terms of assets fell drastically in the 1980s and early 1990s (see Chart 2). About 16 percent of banking industry assets were at mutual institutions at year-end 1984, compared with just under 4 percent at year-end 1994. Assets at mutuals fell from \$581 billion to \$181 billion, and the number of mutual charters fell from more than 2,400 to 1,076 over the same time period.

Chart 4



⁹FDIC (1997), 219–220. The value of this preferential tax treatment declined over time, and the preference was ended in 1996. However, an additional incentive for mutuals to hold residential mortgages is provided by the Qualified Thrift Lender test, introduced in 1987. Institutions that meet the test—generally, by holding a certain percentage of their assets in single-family mortgages and related investments—are exempt from certain restrictions on activities, branching, and dividend payments.

This decline represented a fall from 13 percent of all banking charters to 9 percent. Two factors played large roles in the fall in the number and total assets of mutuals, and in their declining importance in the mortgage market: the S&L and mutual savings bank crises, and the rise of securitization.

Mutuals Rocked by Crises

The business of home mortgage lending was fairly stable from the introduction of federal deposit insurance and supervision in the 1930s, through the early 1970s. The conservative underwriting practices that prevailed at that time helped to limit the credit risk borne by mutual mortgage lenders. However, the maturity mismatch between the long-term mortgages they carried and the shorter-term deposits used to fund them exposed most mutuals to interest-rate risk. Moreover, the income that mutuals received from payments on fixed-rate mortgages declined in real terms as inflation rose in the late 1970s. Annual inflation increased from 4.9 percent in 1976 to 14.8 percent in 1980.¹⁰ In October 1979, the Federal Reserve changed its monetary policy to arrest inflation, which led to large and immediate increases in short-term interest rates. The three-month T-bill rate rose from 4.34 percent in 1976 to 14.24 percent in 1980.

As short-term interest rates rose, mutuals experienced disintermediation amid competition from nonbank financial institutions that were not bound by the interest-rate ceilings imposed by Regulation Q.¹¹ Depositors withdrew their money from mutuals and placed it in newly emergent money market mutual funds, or in other accounts offering higher returns.¹² Net worth built over decades of prudent lending and deposit gathering quickly eroded. On a market-value basis, many mutuals were soon insolvent. Insolvency led to mergers, failures, and conversions of mutuals to stock form. Moreover, insolvent mutuals—driven by the need to recapitalize—were more likely than solvent institutions to convert to stock form.¹³

The events mentioned above marked the beginnings of what would become the S&L crisis of the 1980s and 1990s. There was also a smaller crisis among mutual savings banks.¹⁴ A combination of factors served to greatly magnify the damage to S&Ls, and more than 1,000 S&Ls, with total assets of \$519 billion, failed between 1986 and 1995.¹⁵ By comparison, 58 FDIC-insured savings banks, with total assets of \$61 billion, failed between 1986 and 1994.¹⁶ At the time, the S&L crisis was the greatest U.S. financial crisis since the Great Depression.

Securitization Rises in Importance

Another factor that served to diminish the role of mutuals in housing finance was the increasing importance of securitization, backed by the rise of government-sponsored enterprises (GSEs), which supplanted mutuals as the primary source of home mortgage credit (see Chart 4).¹⁷ Financial institutions used the GSEs to securitize the mortgages that they originated, thereby enhancing the liquidity of their portfolio and reducing their interest-rate risk.¹⁸ In addition, mortgage-backed securities had lower regulatory capital charges than residential mortgages held on the balance sheet, which further encouraged financial institutions to securitize their mortgages.¹⁹

¹⁰ Inflation as measured by the Consumer Price Index.

¹¹ The Banking Act of 1933 (the Glass-Steagall Act) authorized the Federal Reserve to set interest-rate ceilings on savings deposits at commercial banks, which it created in Regulation Q: Title 12, part 217 of the U.S. Code of Federal Regulations. These ceilings were extended to S&Ls and savings banks in 1966.

¹² FDIC (2005), 4–6, and FDIC (1997), 220–222.

¹³ Kroszner and Strahan (1996), 1294–1295.

¹⁴ For detailed accounts of the S&L and mutual savings bank crises, see White (1991), and Chapters 4 and 6 of FDIC (1997). For a summary of factors that contributed to the S&L crisis, see Curry and Shibut (2000), 27, and works cited therein.

¹⁵ Curry and Shibut (2000), 27.

¹⁶ FDIC (1997), 234.

¹⁷ Barth, et al. (2009), 350, Table A.12.

¹⁸ FDIC (2010).

¹⁹ Ibid.

Most mortgage securitization was initially carried out by the GSEs, particularly the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac).²⁰ By the mid-1990s, most residential mortgage debt was financed by the GSEs.²¹ Private issuers of mortgage-backed securities then took substantial market share away from the GSEs. Private issuers grew from less than \$50 billion in volume in 1995, 15 percent of the total, to more than \$1 trillion annually in 2005 and 2006, greater than 55 percent of the total each year. But with the unprecedented losses on these securities during the financial crisis of 2007 to 2009, private-label securitization precipitously declined.²²

As the S&L crisis crested and then subsided, and as securitization became more important to housing finance, the mutuals that stayed in operation kept their focus on their core business of portfolio mortgage lending. Following the S&L crisis, earnings, asset quality, and capital ratios improved. The fundamentals of the mutual industry were strong, and mutuals earned steady, if not spectacular, returns on assets (ROA) from careful lending.

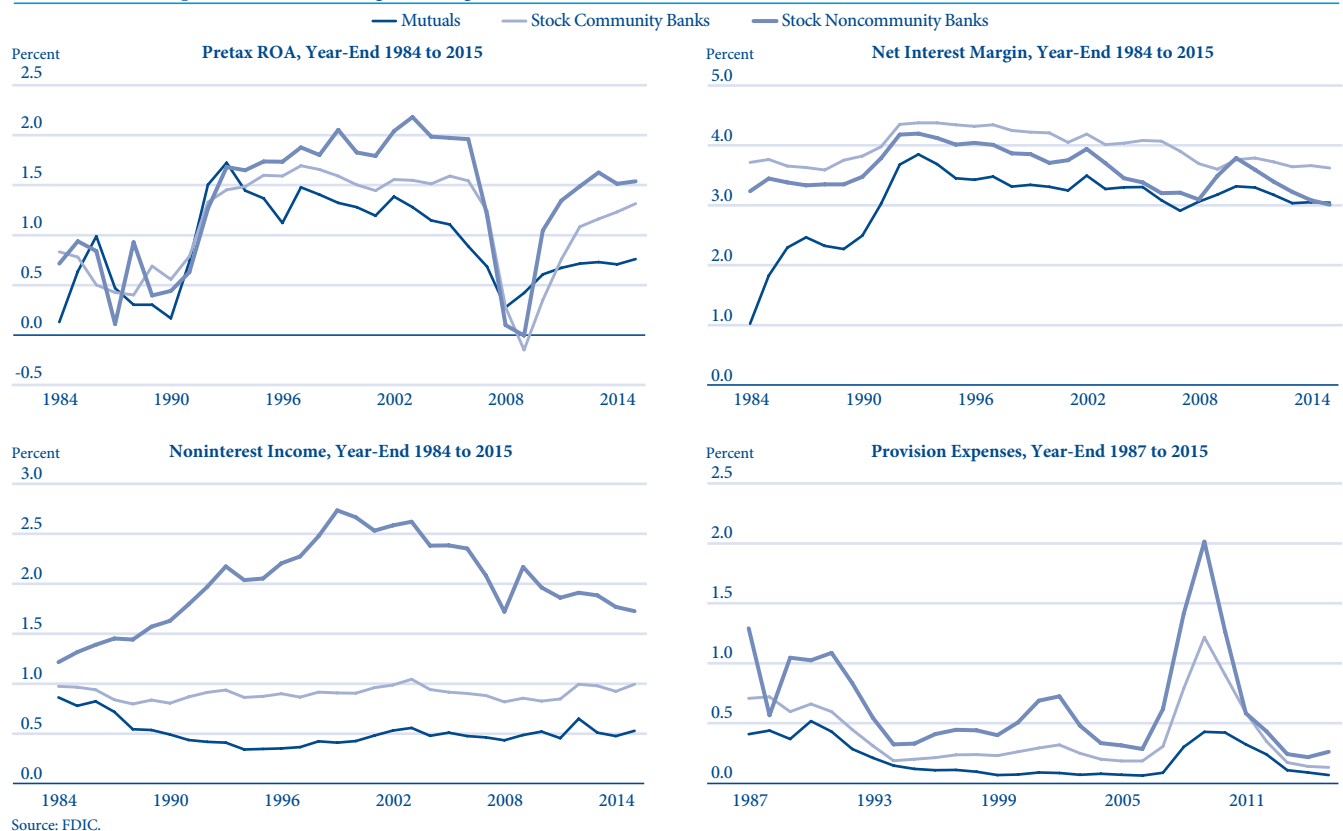
Comparative Financial Performance of Mutuals

Over the long term, mutuals tend to earn lower pretax ROA and lower noninterest income than stock institutions. They also typically report lower net interest margins, which are offset to an extent by lower expenses for loan-loss provisions and overhead (see Chart 5). Between 1984 and 2015, federally insured mutuals earned an average annual pretax ROA

Chart 5

Mutuals Report Lower Profitability and Lower Loan Losses Than Stock Community Banks

Annual Income or Expense Item as a Percentage of Average Assets



²⁰ Inside Mortgage Finance (2006), 11.

²¹ Federal Reserve Board (2015), Table L, 218.

²² Inside Mortgage Finance (2013), 4.

of 0.89 percent, compared with 1.09 percent at stock community banks and 1.32 percent at stock noncommunity banks. As the upper-left quadrant in Chart 5 shows, all three types of institutions performed poorly in the 1980s but recovered in the 1990s. But even as the 1990s and most of the 2000s turned out to generally be a period of strong ROA, the performance of mutuals started to fall behind the other institutional types in the early 2000s.

Although mutuals do not generally report an ROA as high as that of other institutions, they consistently report lower provision expenses, reflecting a different risk-return trade-off. Mutuals had average annual provision expenses of 0.20 percent between 1987 and 2015, which was nearly one-half the average at stock community banks and less than one-third the average at stock noncommunity banks.

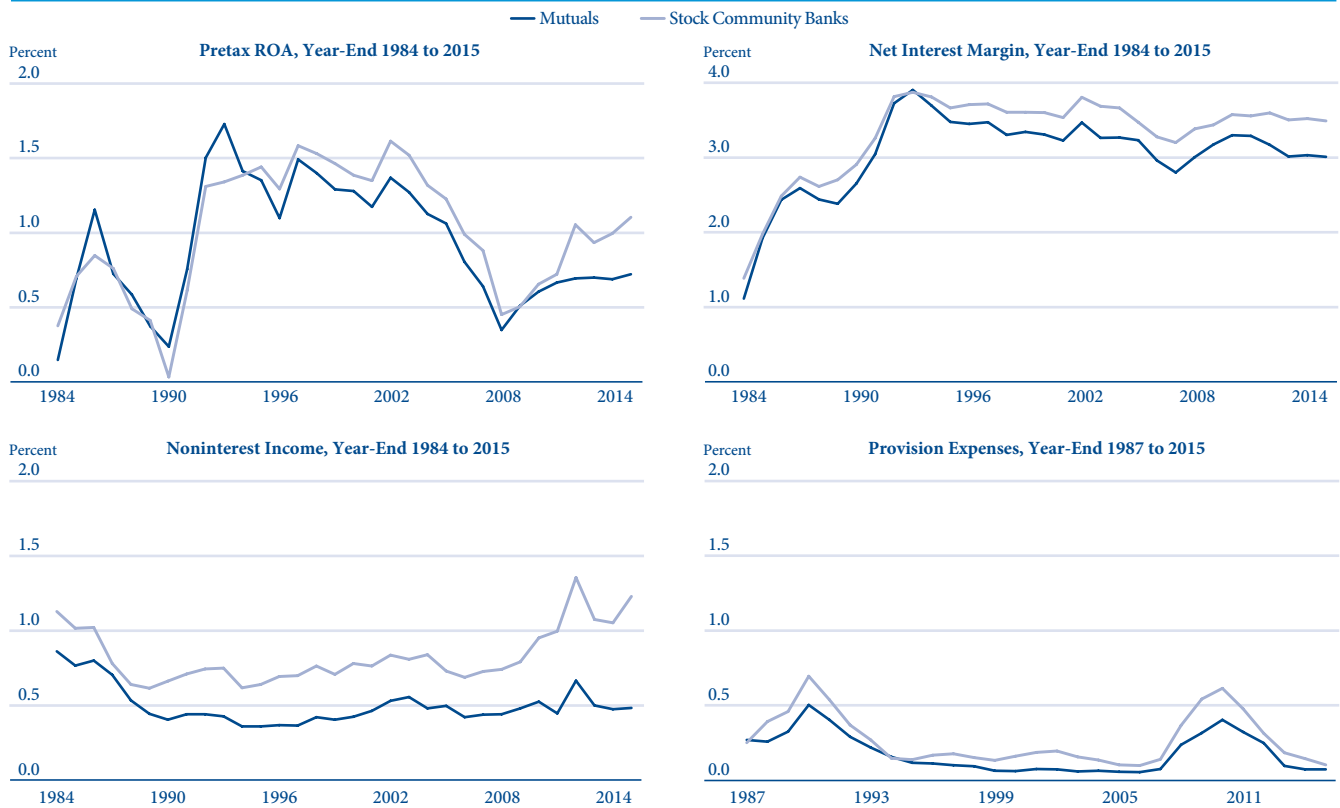
Performance differences between mutuals and other institutions can be explained in large part by three factors: their geographic concentration, which largely ties them to the economic fortunes of a particular region (see Map); their more conservative business model, reflecting a choice to forgo high returns in purchase of greater stability; and their focus on mortgage lending.

When we compare mutual mortgage-lending specialists with stock community bank mortgage-lending specialists, we find they report generally similar financial results, with a few differences. Mutual mortgage-lending specialists report lower overhead costs, slightly lower provision expenses, and only slightly lower pretax ROA (primarily because of lower margins and lower noninterest income, as shown in Chart 6). When we compare

Chart 6

Mutual Mortgage Specialists Report Financial Performance Measures Broadly Similar to Stock Community Banks

Annual Income or Expense Item as a Percentage of Average Assets, Mortgage-Lending Specialists Only



Mutual Holding Company Subsidiaries

Stock institutions owned by mutual holding companies (MHCs) make up another segment of the mutual industry. In 1987, Congress passed the Competitive Equality Banking Act, which gave mutuals flexibility to raise capital and keep their mutuality by forming an MHC.^a The MHC is owned by depositors, and in turn owns the majority of the capital stock outstanding of its subsidiary stock institution.^b

Identifying a particular MHC, along with its relationships to other holding companies and underlying charters, is a complex process that cannot be extended far back in time. Thus, we identified stock subsidiaries of MHCs only between 2012 and 2015. We found that MHC subsidiaries have more in common with mutual charters than with other charter types.

For example, both mutual charters and MHC subsidiaries are more likely to be community banks than are all other financial institutions. Both are concentrated in the North-

east and Mid-Atlantic states. Both are predominantly mortgage lenders, and their financial performance is similar.

There are three key differences between mutual charters and subsidiaries of MHCs. First, MHC subsidiaries are typically much larger than mutual charters, and, second, they devote more of their assets to loans—in particular, commercial real estate loans (see Table A2). Third, MHC subsidiaries have somewhat greater noninterest income and expenses than mutual charters.

In summary, MHCs are a different way of expressing mutuality in a savings bank or S&L, and the ability to distinguish MHC subsidiaries adds to our understanding of the mutual industry. At least since 2012, and along several important dimensions—location, business line, likelihood of being a community bank, and financial performance—MHC subsidiaries bear a closer resemblance to mutual charters than to other stock institutions. See Tables A1 and A2, and Chart A1, in the Appendix for greater detail.

^a Competitive Equality Banking Act of 1987, Pub. L. No. 100–86, 101 Stat. 552 (1987), <https://www.gpo.gov/fdsys/pkg/STATUTE-101/pdf/STATUTE-101-Pg552.pdf>.

^b Some insurance companies are mutual because they are owned by their policyholders. For this study, banking subsidiaries owned by mutual insurance companies are not grouped with other MHC subsidiaries.

the performance of mortgage-lending specialists headquartered in a Northeastern or Mid-Atlantic state, we find that mutuals report results similar to stock community bank mortgage-lending specialists. Average annual pretax ROA at mutual mortgage-lending specialists headquartered in a Northeastern or Mid-Atlantic state was 1.01 percent between 1984 and 2015, while it was 1.02 percent for stock community banks headquartered in the same region and in the same business line.

That mutuals report lower profitability, and lower loan-loss provisions, suggests that mutuals have chosen a more conservative business model. This choice would prove beneficial in the mid-2000s as the banking industry approached its worst crisis period since the Great Depression.

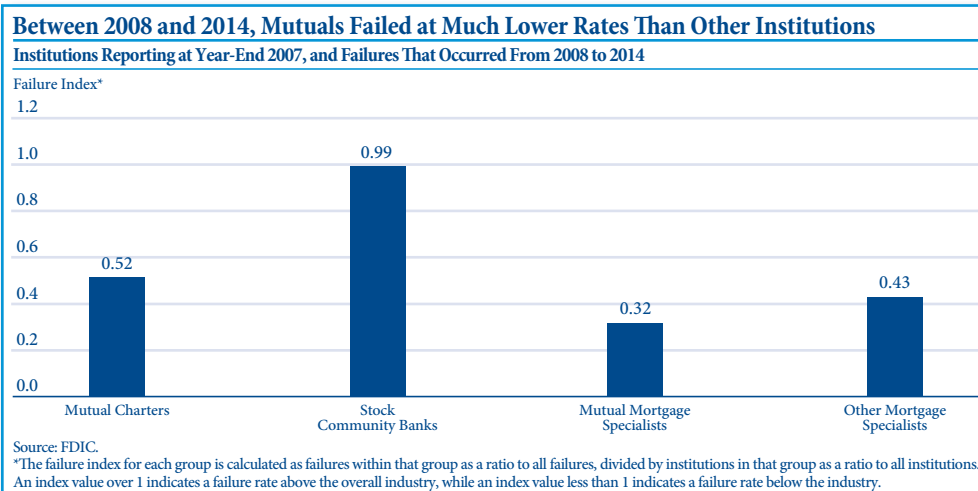
How Mutuals Fared During the Global Financial Crisis

The global financial crisis of 2007 to 2009 had its origins in subprime and other nontraditional mortgage loans that were funded by issuers of private-label asset-backed securities, some large financial firms, and, to a lesser extent, the GSEs.²³ By comparison, mutuals originated loans and kept them in their own portfolios, maintaining the focus on making high-quality loans in their communities. Thus, mutuals as a whole and mutuals that were mortgage-lending specialists failed far less often than did other institutions during the crisis (see Chart 7).

Mutuals did not seem to join in risky mortgage lending that occurred in the run-up to the housing bust. The returns of mutuals fell in the years before the financial crisis, and the amount of their 1-to-4 family mortgage loans outstanding stayed relatively flat. Between year-end 2003 and year-end 2007, mortgage loans outstanding at mutuals expanded 3.6 percent. In the same period, however, total U.S. mortgage debt outstanding grew by 54.9 percent. Among mortgage-lending specialists, pretax ROA for both stock community banks and mutuals declined markedly during the housing bubble years. This disparity in

²³ Financial Crisis Inquiry Commission (2011), 102–125.

Chart 7



growth rates between mutuals and other mortgage lenders reflected, in part, a more conservative approach to underwriting on the part of mutual institutions.

After home prices fell and the economy entered recession, it was clear that mutuals had made higher-quality loans. Mutuals failed far less often than other institutions and reported better asset quality throughout the crisis. One way to express the relative prevalence of failures among mutuals is by constructing a *failure index* for mutuals, based on the number of mutuals at year-end 2007 and the number that failed between 2008 and 2014. A failure index for mutuals is calculated by dividing the share of mutual failures occurring between 2008 and 2014 by their share among all institutions at year-end 2007. Failure index values lower than 1 indicate that mutuals failed less often relative to other institutions. The failure index for all mutuals was 0.52, and the failure index for mutual mortgage-lending specialists was 0.32, indicating that they failed at far lower rates than other institutions between 2008 and 2014 (see Chart 7).²⁴ Mutuals were an unexpected source of stability within the banking system, considering the global financial crisis began, in part, with credit problems in the U.S. mortgage market.

One reason that mutuals fared comparatively well was that they had built up their capital by retaining more of their earnings. Going into the crisis, they were much better capitalized than other institutions. Mutuals did not receive assistance from the U.S. Treasury's Troubled Asset Relief Program (TARP)—although they were eligible—and only one mutual institution received capital from the Small Business Lending Fund that came after TARP.²⁵

The Relevance of Mutuals Today

Today, mutuals make up a small fraction of FDIC-insured institutions and hold a thin slice of total banking industry assets. However, they stay focused on their core business of single-family mortgage lending. At year-end 2015, mutuals devoted 44 percent of their assets to mortgage loans, compared with 19 percent of assets at stock community banks and 14 percent of assets at stock noncommunity banks. Amid a housing market weakened by defaults and foreclosures, mutuals stand strong: They fail rarely, they continue a tradition as

²⁴ A failure index measures the frequency of failures in a group of institutions relative to that group's prevalence among all institutions. The failure index is expressed as:

$$\text{Failure Index} = \frac{\frac{\text{Failures in group}}{\text{All failures}}}{\frac{\text{Banks in group}}{\text{All banks}}}$$

²⁵ Some mutuals participated in the FDIC's Temporary Liquidity Guarantee Program.

mortgage-lending specialists, and they have higher-quality assets. Mutuals have chosen to assume less risk, in return for enhanced stability and lower returns.

However, mutuals continue to decline in number, and their share of the mortgage market is small. These trends are unlikely to change, for two reasons. First, nonbanks play an increasingly important role in the origination of mortgages.²⁶ Among the top 50 mortgage lenders, nonbanks accounted for more than half of originations in third quarter 2016, the first time that threshold has been crossed.²⁷ Second, the mortgage business has become one of scale: in 1989, the top five mortgage originators made 10.3 percent of all new mortgage loans by volume. However, in 2015, the top five originators made up 29.4 percent of the market.²⁸

Surely, a desire to promote thrift and homeownership is still alive in our communities. One traditional attraction of mutuals is that they return profits to their customers and communities that would otherwise be returned to shareholders. Mutuals today continue the tradition of operating for the benefit of their depositors, borrowers, and surrounding communities. Although many commercial institutions—particularly those under the community bank umbrella—also support their communities, organizing as a mutual is a powerful business model for serving local customers. Lending to borrowers about whom the lenders knew very little was one factor in the recent financial crisis. The mutual business model, based on prudent mortgage lending to members of the community, proved to be more durable.

Authors:

Eric C. Breitenstein

Economic Analyst

Division of Insurance and Research

Clayton W. Boyce

Senior Technical Writer-Editor

Division of Insurance and Research

²⁶ Nonbanks typically sell the mortgages they originate. Since the crisis, the share of all mortgages outstanding held at federally insured banks and thrifts has held steady, while the share held by nonbanks has substantially decreased.

²⁷ Inside Mortgage Finance Publications, Inside Mortgage Finance 2016, no. 41 (October 27, 2016), 1.

²⁸ Inside Mortgage Finance (1997), 72, and (2016), 9.

Appendix

Table A1

Mutual Charters Report Lower Noninterest Income and Expenses Compared With Stock Subsidiaries of Mutual Holding Companies (MHC)

Measure	Charter	Percentage of Average Assets, by Year			
		2012	2013	2014	2015
Pretax ROA	Mutual Charter	0.71	0.72	0.70	0.75
	Subsidiary of MHC	0.70	0.82	0.77	0.82
Net Interest Margin	Mutual Charter	3.16	3.02	3.04	3.03
	Subsidiary of MHC	3.17	3.08	3.05	3.07
Noninterest Income	Mutual Charter	0.64	0.50	0.47	0.52
	Subsidiary of MHC	0.70	0.73	0.74	0.75
Noninterest Expenses	Mutual Charter	2.69	2.58	2.59	2.60
	Subsidiary of MHC	2.66	2.67	2.75	2.78
Provision Expenses	Mutual Charter	0.23	0.10	0.08	0.06
	Subsidiary of MHC	0.35	0.18	0.10	0.05

Source: FDIC.

Table A2

Stock Subsidiaries of Mutual Holding Companies Devote a Greater Share of Assets to Commercial Real Estate Loans Than Mutual Charters

Loan or Asset Category	Mutual Charters		Subsidiaries of Mutual Holding Companies	
	\$ Billions	Percentage of Assets	\$ Billions	Percentage of Assets
Mortgage Loans ^a	63	44	47	44
Consumer Loans	3	2	2	2
Commercial Real Estate Loans ^b	25	18	25	23
Construction and Development Loans	4	3	3	3
Commercial and Industrial Loans	4	3	6	5
Agricultural Loans ^c	1	0.4	0	0.4
Other Loans and Leases	0	0.3	1	1
Less: Loan Loss Reserve and Unearned Income	1	0.6	1	1
Net Loans and Leases	95	67	82	75
Securities	31	22	16	15
Other Assets	17	12	11	10
Total Assets	142	100	108	100

Source: FDIC.

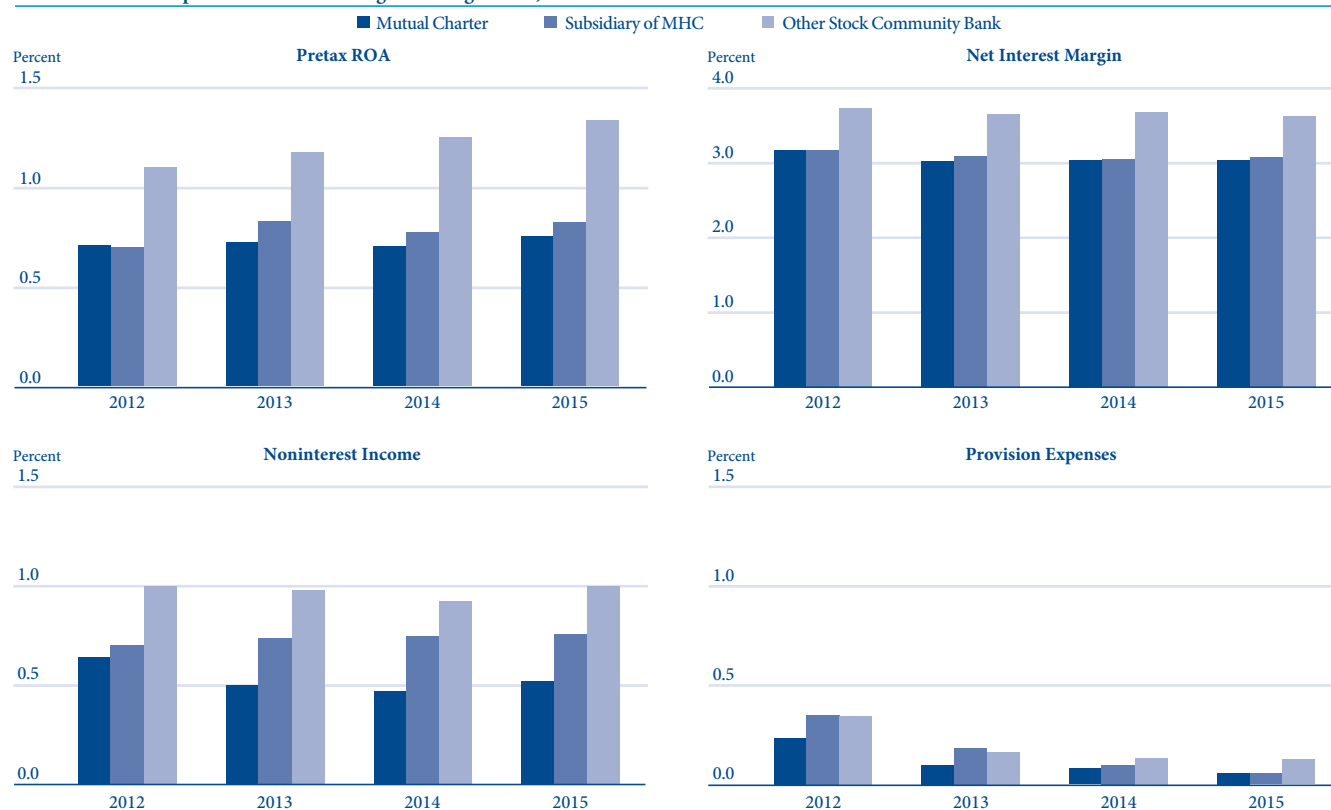
Notes: All figures are as of December 31, 2015. Amounts and percentages may not total due to rounding.

^a Mortgage loans include home equity lines of credit, junior liens, and other loans secured by residential real estate.^b Commercial real estate loans include construction and development loans, loans secured by multifamily properties, and loans secured by nonfarm nonresidential real estate.^c Agricultural loans include production loans and loans secured by farm real estate.

Chart A1

The Recent Financial Performance of Mutual Charters Has Closely Resembled That of Stock Subsidiaries of Mutual Holding Companies

Annual Income or Expense Item as a Percentage of Average Assets, Year-End 2012 to 2015



Source: FDIC.

References

- Bair, Sheila C. 2010. "The Causes and Current State of the Financial Crisis." Statement before the Financial Crisis Inquiry Commission, Washington, D.C. January 14. FDIC. <https://www.fdic.gov/news/news/speeches/archives/2010/spjan1410.html>.
- Barth, James R., Tong Li, Wenling Lu, Triphon Phumiwasana, and Glenn Yago. 2009. *The Rise and Fall of the U.S. Mortgage and Credit Markets: A Comprehensive Analysis of the Market Meltdown*. Milken Institute.
- Curry, Timothy, and Lynn Shibut. 2000. "The Cost of the Savings and Loan Crisis: Truth and Consequences." December. *FDIC Banking Review* 13: 26-35. https://www.fdic.gov/bank/analytical/banking/2000dec/bv13n2_2.pdf.
- Federal Deposit Insurance Corporation (FDIC). 1997. *History of the Eighties—Lessons for the Future, Volume 1: An Examination of the Banking Crises of the 1980s and Early 1990s*. FDIC. <https://www.fdic.gov/bank/historical/history/vol1.html>.
- FDIC. Fall 2005. "Stroke-of-the-Pen Risk: An Historical Perspective." *FDIC Outlook*. 3–10. FDIC. <https://www.fdic.gov/bank/analytical/regional/ro20053q/na/t3q2005.pdf>.
- FDIC. 2012. *FDIC Community Banking Study*. FDIC. <https://www.fdic.gov/regulations/resources/cbi/study.html>.
- Federal Reserve Board (FRB). 2015. Financial Accounts of the United States. FRB. <http://www.federalreserve.gov/releases/z1/>.
- Financial Crisis Inquiry Commission (FCIC). 2012. *The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States*. FCIC. <http://fcic.law.stanford.edu/report>.
- Inside Mortgage Finance Publications (IMFP). 1997. *The 1997 Mortgage Market Statistical Annual*. IMFP.
- IMFP. 2006. *The 2006 Mortgage Market Statistical Annual, Volume II: The Secondary Market*. IMFP.
- IMFP. 2013. *The 2013 Mortgage Market Statistical Annual, Volume II: The Secondary Market*. IMFP.
- IMFP. 2016. *The 2016 Mortgage Market Statistical Annual*. IMFP.
- IMFP. 2016. "Mortgage Originations Hit Estimated \$580 Billion in 3Q16; Nonbanks Claim Over Half the Market." *Inside Mortgage Finance* 2016: 41.
- Kendall, Leon T. 1962. *The Savings and Loan Business: Its Purposes, Functions, and Economic Justification*. Prentice-Hall.
- Kroszner, Randall S., and Philip E. Strahan. September 1996. "Regulatory Incentives and the Thrift Crisis: Dividends, Mutual-To-Stock Conversions, and Financial Distress." *Journal of Finance* 51: 4.
- Teck, Alan. 1968. *Mutual Savings Banks and Savings and Loan Associations: Aspects of Growth*. Columbia University Press.
- Welfling, Weldon. 1968. *Mutual Savings Banks: The Evolution of a Financial Intermediary*. Case Western Reserve University Press.
- White, Lawrence J. 1991. *The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulation*. Oxford University Press.