Banking Trends

Why Banks Finance Their Nonbank Competitors

The explosive growth in nonbank financial institutions seems to have come at the expense of banks, but a closer look reveals otherwise.

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The views expressed in this article are not necessarily those of the Federal Reserve.

In the past quarter century, nonbank financial institutions (NBFIs) have seen explosive growth, and today the NBFI sector is in some ways larger than the banking sector.[1] Globally, assets under management at NBFIs grew from about $50 trillion in 2002 to over $200 trillion in 2020,[2] and their share of global financial assets increased from around 40 percent to about 48 percent. Meanwhile, banks' share of global assets dropped from about 46 percent to around 38 percent. In the U.S., banks' market share of home mortgage originations was cut nearly in half from 2000 to 2022, while NBFIs' share nearly tripled.[3] And NBFIs are making inroads into other types of lending as well, such as business lending to middle-market firms.[4]

It may look like NBFIs are simply taking business away from banks, but recent data document a symbiotic relationship: Banks are now in the business of providing liquidity to NBFIs in the form of lines of credit, rather than just originating and holding term loans.

This paper will attempt to answer four questions about banks' relationship with NBFIs. First, how much has bank lending to NBFIs increased?

Second, what kinds of NBFIs are banks lending to? Third, what kinds of credit are they extending? And last, why do banks specialize in providing lines of credit to NBFIs?

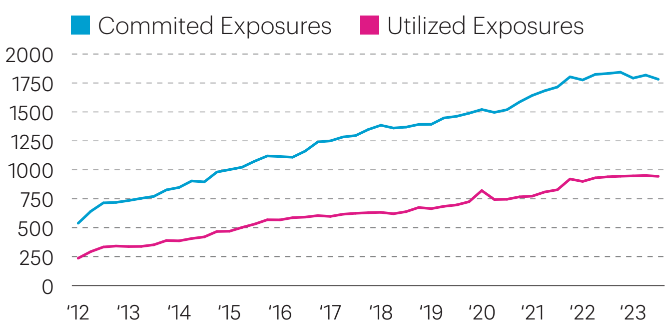
A Surge in Bank Lending to NBFIs

Since 2012, bank lending to NBFIs has more than quadrupled in real terms, from just over $237 billion to over $944 billion. Loan commitments—that is, bank commitments to lend when the borrowing firm needs funds—have increased even more (Figure 1).[5] At the same time, assets at banks, bank holding companies, and financial holding companies grew just 13.2 percent, from $23.1 trillion to $26.1 trillion, and their total loans grew just 17.1 percent, from $9.5 trillion to $11.2 trillion. In other words, the growth in lending to NBFIs far exceeded the growth in banks' assets and overall lending. Also, nearly all the lending to NBFIs is done by the largest banks, which account for nearly 90 percent of all loans to NBFIs by bank holding companies and financial holding companies.[6]

FIGURE 1

Bank Lending to NBFIs Has More than Quadrupled in Real Terms

Total term loans and credit lines to NBFIs by large organizations, 2012–2023, in constant 1q2023 dollars, billions



Data Source: Federal Reserve FR Y-14Q, Schedule H.1

Note: Nearly all the lending to NBFIs is done by large banks.

Banks make two types of loans: credit lines and term loans. Credit lines (sometimes called loan commitments) are like credit cards. The borrower pays a fee for the ability to draw funds and are subject to an overall limit on total borrowings. For credit lines with a maturity greater than one year, the interest rate typically floats with market interest rates—that is, the bank guarantees the spread above some reference rate, not the rate itself.

Term loans, on the other hand, are like car loans or mortgages. Typically, a borrower receives the full amount of the term loan, which the borrower must repay on a fixed schedule. The rate can be fixed or variable.

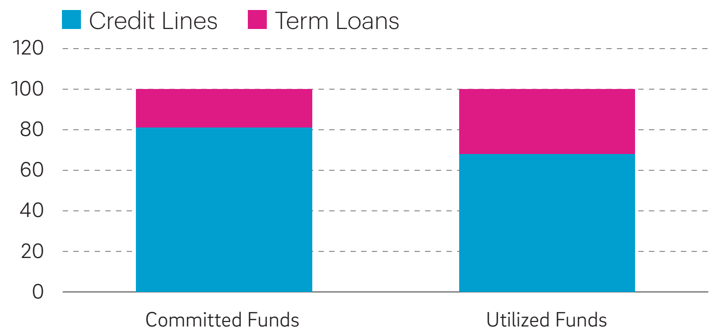
*See **FR Y-14 Data Explained.***

Over 81 percent of the funds committed to and nearly 68 percent of funds used by NBFIs are credit lines (Figure 2). Credit lines to NBFIs are also growing much more rapidly than term loans. Credit lines have more than tripled, from over $390 billion in 2012 to nearly $1.5 trillion in 2023 (Figure 3), whereas term loan commitments have only doubled, from about $148 billion to $306 billion. However, on average, NBFIs use just over 40 percent of funds available in credit lines.[7] With such a low utilization rate for credit lines, they must serve some purpose in addition to supplying operating funds to NBFIs. That purpose: supplying liquidity to various financial institutions and markets.

FIGURE 2

Credit Lines Dominate Loans to NBFIs

Credit lines and term loans committed to NBFIs, as shares of total committed loans, average for 2012–2023

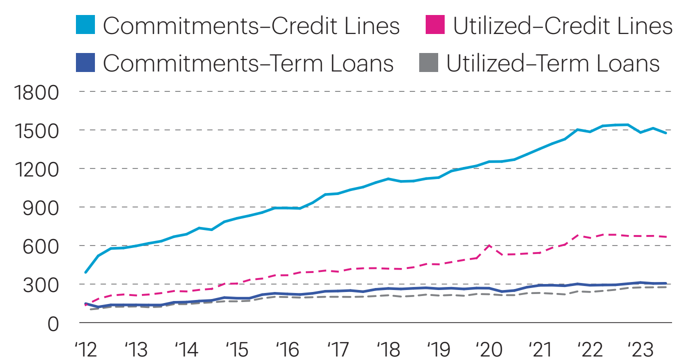


Data Source: Federal Reserve FR Y-14Q, Schedule H.1

FIGURE 3

Credit Lines Represent the Bulk of the Increase in Lending to NBFIs

Term loans and credit lines to NBFIs by large organizations, 2012–2023, in constant 1q2023 dollars, billions



Data Source: Federal Reserve FR Y-14Q, Schedule H.1

Note: Nearly all the lending to NBFIs is done by large banks.

The NBFIs That Banks Lend To

Not all NBFIs are the same. Many types of NBFIs engage in a wide variety of activities. We can categorize NBFIs by the types of intermediary services they provide. The relative growth rates of the different types of intermediaries provide insight into the changing role of banks in the intermediation process. (See Table 1 for the specific types of firms in each category.)

Providing Liquidity to Securities Markets

This category includes broker-dealers, financial processing houses and clearinghouses, and open-end investment funds. It also includes payment processing firms such as Venmo and PayPal.

Underlying some of the growth of NBFIs, especially in this category, is the trend whereby many nonfinancial corporations secure financing by selling bonds to investors rather than borrowing from banks.[8] One attractive feature of bonds is that they are marketable—that is, they can be bought and sold on demand. But in practice, bonds are liquid only because these NBFIs serve as specialized intermediaries. For example, broker-dealers provide liquidity by matching buyers and sellers in securities markets. And open-end investment funds such as bond mutual funds provide liquidity by assembling a portfolio of securities and then selling investors shares—redeemable on demand—of the portfolio.

Transforming Loans into Securities

Many NBFIs create marketable securities from a portfolio of bank loans. Here's how it works: Banks originate loans; an NBFI purchases these loans; the NBFI securitizes its portfolio of bank loans; and the NBFI sells the resulting securities to investors. The two most notable examples of these securities are asset-backed securities (ABS), which receive their cash flow from a portfolio of nonmortgage loans such as credit cards or automobile loans, and mortgage-backed securities (MBS), which receive their cash flow from a portfolio of mortgages.[9] Investors value being able to buy and sell these securities so that they can adjust their own portfolios as conditions change. In both cases, the issuer of the securities uses short-term funding from the bank under a credit line, often referred to as a *warehouse line of credit*. Borrowings under the line of credit are collateralized by the mortgage or credit card receivables. The issuer uses the proceeds from the issued securities to repay its bank loans.[10]

Some of these NBFIs directly make loans that are subsequently transformed into securities. For example, nonbank mortgage lenders originate mortgage loans, which they sell to Fannie Mae, Freddie Mac, or Ginnie Mae to be packaged into MBS. In this case, the funding process is similar to the case of bank-originated loans. The mortgage lender funds its loan using a warehouse line of credit and the bank loans are repaid from the funds received from Fannie Mae, Freddie Mac, or Ginnie Mae.

These securities are designed to appeal to investors with different risk preferences. For example, MBS and their derivatives, such as collateralized mortgage obligations (CMOs), are designed to provide investors with a cash flow protected from prepayment risk, as when lots of households refinance their mortgages at lower rates.[11] In addition, securities are designed to provide tax advantages to investors. For example, real estate investment trusts (REITs) are not taxed so long as they pass through all cash flows to investors.

Directly Financing Borrowers

This category includes business development corporations, private debt funds, venture capital firms, and hedge funds, each of which manages a portfolio of high-risk investments. Investors are promised a high return on the portfolio in exchange for committing funds for up to 10 years. Although these NBFI intermediaries do not primarily provide liquid liabilities to investors, they need ready access to liquid funds to finance their portfolios. For example, a hedge fund makes financial bets that fluctuate in value. Even a temporary decline in the value of the bet typically requires the hedge fund to transfer funds to the counterparty on the opposite side of the bet. Without access to a line of credit, the hedge fund would be forced to liquidate the position or ask its investors for additional funds.

Investing a Predictable Stream, Paying Out a Predictable Stream

This category includes insurance, financial planning, and pension funds. These NBFIs invest income so that they can regularly pay out income. Insurance companies, for example, invest their premiums so they can reimburse customers for their losses, and pensions invest their contributions so they can mail pension checks to retirees. These NBFIs require liquidity when their investment returns become unstable in times of uncertainty. The growth of these intermediaries is driven by demographics, such as aging and retirement trends, rather than changes in the economics of intermediation.

The Kinds of Credit That Banks Are Extending

In terms of money borrowed, the biggest users of credit lines—for actual funds and as a warehouse for credit—are NBFIs that transform loans (originated by banks or the NBFIs themselves) into securities. This is also the fastest-growing category of NBFIs, in both dollar terms and market share.

Credit line commitments to these NBFIs grew nearly 700 percent, from about $89 billion in 2012 to nearly $660 billion in 2023 (Figure 4). Utilized funds at these firms also grew substantially, from $36 billion to $351 billion. As of 2023, credit lines to these NBFIs represented nearly 45 percent of all funds committed to NBFIs and 53 percent of all funds utilized by NBFIs. Additionally, these NBFIs utilized their credit lines at a higher rate than most other categories of NBFIs.

Lending to other categories of NBFIs is growing rapidly, too. Among NBFIs that provide liquidity in securities markets, commitments more than tripled, from about $85 billion in 2012 to $270 billion in 2023. Among NBFIs that make investments but do not themselves generate liquid liabilities, credit lines nearly tripled, from $118 billion to $321 billion. And even among NBFIs that pay out a predictable income stream, commitments more than doubled, from $98 billion to $227 billion. However, NBFIs that transform loans into securities dominate the overall growth in lending to NBFIs.

Why Banks Provide Credit to NBFIs

Passage of the Dodd-Frank Act, adoption of the Basel III accords, and the ensuing regulations associated with them have substantially increased the cost for banks of making and holding certain types of loans. NBFIs don't face these costs because they are not subject to bank regulation.[12]

As NBFIs increase their market share of loans, they increas-

TABLE 1

Categories of NBFIs

Category	Includes	NAICS Codes	What They Do
Liquidity providers to securities markets.	Broker/Dealers Financial Processing + Clearinghouses Open-End Funds	522320	Financial transactions processing, reserve, and clearinghouse activities
		523110	Investment banking and securities dealing
		523120	Securities brokerage
		523130	Commodity contracts dealing
		523140	Commodity contracts brokerage
		523210	Securities and commodities exchanges
		523910	Miscellaneous intermediation
		523920	Portfolio management
		523999	Miscellaneous financial investment activities
		525910	Open-end investment funds
		523940	Portfolio management and investment advice [2022 code]
Firms that transform loans into securities.	SPVs, ABS, and CLOs Real Estate Lenders Real Estate Lessors Consumer Lenders Leasing + Non-Real Estate Lessors	525990	Other financial vehicles—where flagged as a special-purpose entity
		522292	Real estate credit
		522294	Secondary market financing
		522310	Mortgage and nonmortgage loan brokers
		5311	Lessors of real estate
		531110	Lessors of residential buildings and dwellings
		531120	Lessors of nonresidential buildings (except miniwarehouses)
		531130	Lessors of miniwarehouses and storage units
		531190	Lessors of other real estate property
		522210	Credit card issuing
		522220	Sales financing
		522291	Consumer lending
		532210	Consumer electronics and appliances rental
		532283	Home health equipment rental
		532289	All other consumer goods rental
		532291	Home health equipment rental [2012 code]
		532299	All other consumer goods rental [2012 code]
		532310	General rental centers
		532411	Commercial air, rail, and water transportation equipment rental and leasing
		532412	Construction, mining, and forestry machinery and equipment rental and leasing
		532420	Office machinery and equipment rental and leasing
		532490	Other commercial and industrial machinery equipment rental and leasing
		533110	Lessors of nonfinancial intangible assets (except copyrighted works)
Nonsecuritizers. Includes other financial vehicles.	Other Financial Vehicles	525990	Other financial vehicles—where not flagged as a special-purpose entity
Income/payout streams.	Insurance Financial Planning + Pension Funds Other Lenders	524113	Direct life insurance carriers
		524114	Direct health and medical insurance carriers
		524126	Direct property and casualty insurance carriers
		524127	Direct title insurance carriers
		524128	Other direct insurance carriers
		524130	Reinsurance carriers
		524210	Insurance agencies and brokerages
		524291	Claims adjusting
		524292	Pharmacy benefit management and other third-party administration of insurance and pension funds [2022 code]
		524298	All other insurance-related activities
		523930	Investment advice
		523991	Trust, fiduciary, and custody advice
		525110	Pension funds
		525120	Health and welfare funds
		525190	Other insurance funds
		525920	Trusts, estates, and agency accounts
		522293	International trade financing
		522298	All other nondepository credit intermediation
		522390	Other activities related to credit intermediation
		522299	International, secondary market, and all other credit intermediation [2022 code]

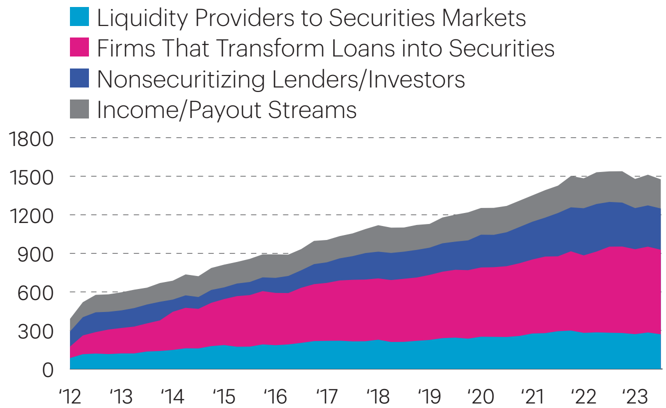
Data Sources: Categories courtesy of author and Pablo D'Erasmo of the Philadelphia Fed; 2017 NAICS codes (unless otherwise noted) sourced from the U.S. Census Bureau

Note: "NAICS Code" stands for North American Industrial Classification System Code. These 2- to 6-digit codes describe what industry a firm operates in. This article uses the codes supplied for the borrowers in the Y-14 data.

FIGURE 4

NBFIs That Transform Loans into Securities Have Seen the Biggest Increase in Committed Credit Lines

Credit lines committed, by borrower type, 2012–2023, in constant 1q2023 dollars, billions



Data Source: Federal Reserve FR Y-14Q, Schedule H.1

ingly turn to banks for their funding. Banks are specialists in providing this liquidity because they are unique in their ability to gather deposits. Deposit services and lines of credit are complementary goods—that is, both deposit services and lines of credit can be provided at lower cost if they are provided by the same firm.[13] In order to provide borrowing firms with funds on demand (that is, to provide a line of credit), a bank needs a stockpile of liquid funds—that is, a steady amount of deposits.

For a bank to jointly provide deposits and lines of credit, deposit withdrawals must not be too highly correlated with line-of-credit borrowings. Otherwise, the bank could not honor its commitments to lend while providing borrowers with access to their savings on demand. However, deposit withdrawals are not highly correlated with line-of-credit borrowings.[14] Indeed, in economically stressed conditions the two are *negatively* correlated. Whenever there is market uncertainty due to an external or internal economic shock, investors move funds out of other assets, which usually have higher returns, and into bank deposits, which they see as safer because they are insured. This inflow of deposits ensures that banks can accommodate even a large usage of lines of credit.

These deposits provide a stable and low-cost source of funding unavailable to NBFIs because deposits are the lowest-cost funds, and because core deposits—that is, transaction and savings accounts—are particularly sticky, meaning they generally don't move in response to variations in interest rates.[15]

Because core deposits are sticky, they allow banks to provide credit lines that insulate borrowers from economic shocks.[16] For example, at the outset of the COVID-19 pandemic, many firms increased their borrowing on their credit lines to secure access to funds in the face of significant uncertainty.[17] And thanks to their deposits, banks were the only financial institutions capable of meeting the demand for funds.

Conclusion

Bank lending to NBFIs has increased dramatically. Although NBFIs compete with banks in certain loan markets—most notably, home mortgage markets—NBFIs rely on bank funding to finance their own lending. The substitution of marketable securities for loans, and the transformation of portfolios of loans into marketable securities, are key trends in the growth of NBFIs and, in turn, bank lending to NBFIs. The bulk of this bank lending takes the form of lines of credit. Banks play this role because deposit services and lines of credit are complementary goods. Thus, banks provide the liquidity that makes the entire arrangement possible. Metaphorically speaking, banks provide the grease that keeps the machine going. EI

FR Y-14 Data Explained

Much of the data presented in this article are from Form FR Y-14Q, which collects data used in the Dodd–Frank Act Stress Tests (DFAST). (The Dodd–Frank Act mandates these stress tests so bank regulators can find out how the largest financial institutions would react to shocks to the financial system.)

Any financial institution that had $100 billion in total consolidated assets as of its last financial statement, or that had an average of $100 billion in total consolidated assets over the previous four calendar quarters, is subject to the Supervisory Stress Tests. All data and analyses involved are tightly restricted and can only be presented in a highly aggregated form.[18]

The data presented here consist of approximately 1.8 million loans and lines of credit extended between January 1, 2012, and September 30, 2023. The data are from Schedule H.1, which collects data on exposures and potential exposures to individual corporate borrowers. The data include loans extended, used and unused loan commitments, standby letters of credit, commitments to commit, other real estate owned, and other repossessed assets for loans of $1 million or more. This article examines only bank lending, so the data presented here do not include those last two classes because they are not loans.

Notes

1 The various types of NBFIs are defined below—see the section **The NBFIs That Banks Lend To** and Table 1.

2 See Acharya et al. (2024). The term "assets under management" is a catch-all accounting term for the assets an institution controls or is responsible for but may or may not own. Examples include fiduciary accounts, the individual securities underlying mutual funds, and loans that have been sold to a third party but the lender still services.

3 See DiSalvo (2023).

4 See Chernenko et al. (2022) and Jang (2024).

5 Unless otherwise noted, all data presented here are from FR Y-14 reports, Schedule H.1. Y-14 data provide details on many of the loans at the 30 to 40 largest banks in the United States beginning in 2012. See the sidebar, **FR Y-14 Data Explained**, for a full description of the FR Y-14 data. All dollar figures are in real terms—specifically, first quarter 2023 dollars.

6 Source: Federal Reserve FR Y-9C reports.

7 For nonfinancial corporations over the same period, 79 percent of funds committed and 57 percent of funds used were credit lines. These firms used only 29 percent of their available credit. Greenwald et al. (forthcoming) found that for all firms, including nonfinancial corporations, 78 percent of all funds committed and 53 percent of all funds utilized were credit lines from 2012 to 2019. Borrowers on average used about 22 percent of their available credit lines. Chodorow-Reich et al. (2022) found that the COVID-19 pandemic caused borrowers to substantially increase their utilization of existing credit lines.

8 See Berg et al. (2021) and Crouzet (2021).

9 Most privately issued (called private label) MBS are actually backed by commercial mortgages and are referred to as commercial mortgage-backed securities (CMBS). Residential MBS are mostly issued by Fannie Mae (the Federal National Mortgage Association) and Freddie Mac (the Federal Home Loan Mortgage Corporation), which purchase mortgages from private lenders, securitize the cash flows, and sell the securities. Fannie Mae and Freddie Mac are generally referred to as government-sponsored enterprises (GSEs). Ginnie Mae (the Government National Mortgage Association) is a government-owned corporation that does much the same thing with mortgages and loans secured by multifamily properties guaranteed by the federal government via Federal Housing Administration and Veterans Administration loans.

10 See Strahan (2008).

11 More specifically, GSEs issue "passthrough" pools, where all investors receive a proportionate share of the cash flows. These pools are sometimes resecuritized into CMOs, which are tranched, like nonagency MBS and ABS. This is done to reallocate interest rate risk and prepayment risk.

12 Technology has also given some NBFIs an advantage in terms of cost and quality of service. For example, there is evidence that NBFIs have captured market share in the mortgage market by providing loans more quickly and conveniently than banks. See Corbae et al. (2023) and DiSalvo (2023).

13 See Kashyap et al. (2002).

14 See Gatev and Strahan (2023).

15 See Berlin and Mester (1999) and Drechsler et al. (2016). The stickiness or rate-inelasticity of deposits is to a significant extent due to their being federally insured. Only banks have deposit insurance.

16 See Berlin and Mester (1999).

17 This is shown in Figures 1 and 3, in which there is a spike in utilized credit lines in 2020.

18 The Federal Reserve Bank of Philadelphia provides a public version of this data: the Large Bank Credit Card and Mortgage Data (https://www.philadelphiafed.org/surveys-and-data/large-bank-credit-card-and-mortgage-data).

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