



## Survey of Finance Companies, 2015

*Lisa Chen, Gregory Elliehausen, and Mark Wicks*

### Introduction and Summary

Finance companies are nondepository financial firms whose primary business is providing debt and lease financing to consumers and businesses. At the end of 2015, finance companies held nearly \$747 billion of consumer credit and lease receivables, \$160 billion of real estate debt, and \$405 billion of business credit and lease receivables.<sup>1</sup> Of note, finance companies are the third-largest institutional supplier of consumer credit, behind banks and the federal government, holding nearly one-third of consumer motor vehicle debt and providing a substantial amount of lease financing of motor vehicles. By contrast, while finance companies continue to account for a substantial share of residential mortgage originations, they hold only a modest share of such credit. In addition, finance companies' business portfolios include short- and medium-term credit and leases to finance inventory, accounts receivable, and acquisition of motor vehicles and equipment. Finance companies hold a small amount of commercial real estate debt as well.

The Federal Reserve produces comprehensive data on the volume and composition of credit and lease financing provided by the finance company industry and reports these data in its G.19, "Consumer Credit"; G.20, "Finance Companies"; and Z.1, "Financial Accounts of the United States" statistical releases. To maintain the quality of its statistics, the Federal Reserve conducts a Survey of Finance Companies every five years to benchmark its finance company estimates.<sup>2</sup> This article reports developments in the finance company industry using data from its latest survey in 2015. In addition to the balance sheet data used to benchmark its statistical releases, the Federal Reserve for the first time requested respondents to the 2015 survey to provide income statement data. The last section of this article presents the new 2015 income statement data, the first time such data have been collected since the late 1980s.

The following list highlights several prominent findings from our analysis:

- The finance company industry is highly concentrated. Small firms are numerous but accounted for a very small share of aggregate industry assets in 2015. In contrast, firms

<sup>1</sup> Consumer credit is reported in the Board of Governors of the Federal Reserve's Statistical Release G.19, "Consumer Credit," available at <https://www.federalreserve.gov/releases/g19/current/default.htm>. Consumer credit consists of all types of credit that are used by individuals and that are not collateralized by real estate or by specific financial assets (such as stocks and bonds) or used for business purposes. Finance company receivables are reported in the Board of Governors of the Federal Reserve's Statistical Release G.20, "Finance Companies," available at <https://www.federalreserve.gov/releases/g20/current/g20.htm>.

<sup>2</sup> The Federal Reserve collects monthly data on loans and leases and benchmarks these data using the universe estimates derived from a quinquennial census of the industry and the Survey of Finance Companies. Benchmarking aligns the monthly sample estimates with the higher-quality population estimates produced every five years. This procedure ensures coherence and consistency between the two time-series data while minimizing revisions of the observed movements in the benchmarked series.

with assets of \$20 billion or more accounted for less than 0.5 percent of firms but provided 71 percent of the industry's assets in 2015.

- Finance companies provide many types of financing to households and businesses, but their primary business is consumer credit and consumer lease financing. Consumer loans and leases accounted for over one-half of receivables of finance companies in 2015.
- Overall, total assets of the finance company industry was 10 percent lower in 2015 than in 2010. Declines in credit and lease financing were broadly distributed, with the exceptions of consumer motor vehicle, business motor vehicle wholesale, and business equipment financing.
- While the finance company industry provides a wide variety of credit and lease products, firms in the industry are highly specialized. Nearly all finance companies hold a majority of their assets in one type of credit—consumer, real estate, or business credit.
- In 2015, about one-half of consumer lenders' assets consisted of motor vehicle loans and leases, but consumer lenders also held a considerable share of assets in other (nonvehicle) closed-end consumer credit. By far, most real estate lenders' assets were mortgages on one- to four-family homes, with multifamily or other commercial mortgages constituting the small remaining share. More than one-half of business lenders' assets consisted of equipment loans and leases. Business lenders also provided business motor vehicle-related financing, but that financing accounted for only a relatively small share of assets.
- Finance charges among the consumer, real estate, and business lenders varied significantly in 2015, in large part reflecting differences in operating costs. Despite large differences in revenue and expenses, operating return on assets (a measure of the efficiency of generating income from assets) was about the same for the three types of lenders.
- Among consumer lenders, auto lenders had relatively low operating expenses. Low operating costs can be attributed at least in part to the prevalence of sales finance in auto lending, in which auto dealers incur much of the expense of originating loans and leases. Personal loan companies have higher revenue per \$100 of outstanding credit and higher operating costs than auto lenders. Personal loan companies' relatively high finance charges and operating expenses can largely be attributed to their loans' high risk and small dollar amount.
- Comparing revenues and costs of personal loan companies in 2015 with available historical data from selected earlier years, we find that revenues and operating costs in 2015 were higher than in 1987, one of the last years in which such industry data were collected. However, operating income in 2015 was somewhat lower than in 1987. Greater risk may at least in part explain greater finance charges and losses and additions to loss reserves for personal loans in 2015.
- The cost of borrowed funds did not account for much of gross revenue in the recent low-rate environment. The cost of borrowed funds was just 8 percent of gross revenue in 2015, a considerably lower percentage than in 1959, 1983, and 1987.

The remainder of this article is divided into six sections:

- [A Brief History of the Federal Reserve's Survey of Finance Companies](#)
- [Recent Finance Company Industry Developments](#)
- [Financial Characteristics of Different Specialized Types of Finance Companies](#)
- [Major Types of Consumer Lenders: Auto Lenders and Personal Loan Companies](#)
- [Trends in Revenue, Cost, and Performance at Personal Finance Companies](#)
- [Appendix: Historical Survey Practices, Recent Innovations, and Current Procedures](#)

## A Brief History of the Federal Reserve's Survey of Finance Companies

The Federal Reserve's statistics on finance companies date back to 1919.<sup>3</sup> At that time, two distinct types of finance companies focusing on consumer lending had emerged. Sales finance companies primarily purchased from retailers installment paper arising from sales of automobiles and other consumer goods. Consumer finance companies (also known as small-loan companies or licensed lenders) primarily provided direct personal loans authorized by state small-loan laws, which created exemptions from rate ceilings in state usury laws for firms that obtained a license.<sup>4</sup> Consumer credit outstanding at sales finance companies and at consumer finance companies were reported in separate categories in the Federal Reserve's statistical system between 1919 and 1964.<sup>5</sup>

The Federal Reserve obtained estimates of finance company lending before 1939 from data collected by the Russell Sage Foundation, the National Bureau of Economic Research (NBER), and the Department of Commerce. Between 1939 and 1954, estimates of sales finance and consumer finance lending were derived from monthly surveys and were benchmarked by available Census Bureau surveys, Federal Reserve surveys, or regulatory reports. In February 1945, the Census Bureau's survey of sales finance companies was transferred to the Federal Reserve, which earlier had begun to collect consumer credit data to implement wartime credit restrictions. The transfer centralized the collection of statistics for consumer installment credit at finance companies in one agency, the Federal Reserve.

By the 1950s, many sales finance companies had established subsidiaries that lent directly to consumers. Some of the larger companies also financed or factored business accounts receivable or financed sales of commercial, industrial, and farm equipment. Similarly, consumer finance companies purchased some sales finance contracts and originated business credit.<sup>6</sup> Beginning in 1955, the Federal Reserve began conducting regular benchmark surveys covering the finance company industry on a regular five-year interval.<sup>7</sup> The 1955 benchmark survey covered nondepository financial institutions that were primarily engaged in installment lending to consumers. The Federal Reserve expanded the 1960 benchmark survey to include finance companies specializing in financing sales of business and farm equipment and financing or factoring business receivables. Assets and liabilities of the specialist business finance companies were first reported in an October 1961 *Federal Reserve Bulletin* article discussing changes in finances of sales finance and consumer finance companies from 1955 to 1960.<sup>8</sup>

<sup>3</sup> For a detailed discussion of the history of the Federal Reserve's statistics on finance companies, see section 16 in Board of Governors of the Federal Reserve System (1976), *Banking and Monetary Statistics, 1941–1970* (Washington: Board of Governors), pp. 1049–81, <https://fraser.stlouisfed.org/title/41>.

<sup>4</sup> The distinction between sales and consumer finance companies is in large part a consequence of state regulation of interest rates. See Thomas A. Durkin, Gregory Elliehausen, Michael E. Staten, and Todd J. Zywicki (2014), "State Regulation of Consumer Credit," chapter 11 in *Consumer Credit and the American Economy* (New York: Oxford University Press), pp. 482–541.

<sup>5</sup> See Board of Governors, *Banking and Monetary Statistics, 1941–1970*, in note 3. Until 1950, the Federal Reserve's consumer finance category contained consumer credit held by other types of financial institutions, which included consumer credit held by mutual savings banks and savings and loan companies.

<sup>6</sup> See Paul F. Smith and Francis R. Pawley (1957), "Survey of Finance Companies, Mid-1955," *Federal Reserve Bulletin*, vol. 43 (April), pp. 392–408, [https://fraser.stlouisfed.org/files/docs/publications/FRB/1950s/frb\\_041957.pdf](https://fraser.stlouisfed.org/files/docs/publications/FRB/1950s/frb_041957.pdf).

<sup>7</sup> For a description of the 1955 survey, see Smith and Pawley, "Survey of Finance Companies, Mid-1955," in note 6.

<sup>8</sup> Francis R. Pawley (1961), "Survey of Finance Companies, Mid-1960," *Federal Reserve Bulletin*, vol. 47 (October), pp. 1140–60, [https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb\\_101961.pdf](https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb_101961.pdf). For the 1965 benchmark survey, a separate article focusing solely on business finance companies was written; see Evelyn M. Hurley (1968), "Business Financing by Business Finance Companies," *Federal Reserve Bulletin*, vol. 54 (October), pp. 815–27, [https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb\\_101968.pdf](https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb_101968.pdf). An article reporting changes in financing for each of the different types of finance companies between the 1960

Reflecting a trend toward multiproduct credit offerings in the finance company industry, the Federal Reserve in 1965 combined the sales finance and consumer finance categories in its consumer credit releases. In its finance company releases, however, the Federal Reserve continued to report sales finance and consumer finance company lending separately until September 1970. At that time, a new, consolidated G.20 “Finance Companies” release replaced the previous G.20 “Sales Finance Companies” and G.22 “Consumer Credit at Consumer Finance Companies” releases. The new G.20 “Finance Companies” release also reflected the expansion of the finance company industry to include lending by business finance companies.<sup>9</sup>

### Recent Additions in Finance Company Industry Coverage

The Federal Reserve continues to update its coverage of the finance company industry to reflect developments in the industry. Finance companies historically have not been a large supplier of mortgage credit. However, finance companies participated in the growth in home equity lending in the mid-1990s.<sup>10</sup> In addition, nondepository mortgage lenders specializing in originating residential mortgages using their own or borrowed funds had an increasing market presence in the late 1990s and 2000s. These nondepository mortgage lenders typically did not hold the mortgages in their own asset portfolios but instead sold them to investors. The expansion of mortgage originations by nondepository mortgage lenders prompted the Federal Reserve in 2005 to expand its coverage of the finance company industry to include nondepository mortgage lenders.

For the 2015 survey, the prominence of high-rate, single-payment lenders led the Federal Reserve to further expand its coverage of the finance company industry to include pawn shops, payday lenders, and vehicle title lenders. Each of these single-payment lenders’ primary product is a distinct small, short-term (commonly one month or less), single-payment cash loan. Another consideration in including these lenders is that some of these firms also offer small installment cash loans, which is the main product of traditional consumer finance companies.

### Income Statement Data

The collection of income statement data is a further innovation of the 2015 Survey of Finance Companies. Previously, the survey did not collect income statement data. Past efforts to collect income statement data include Ernst Dauer for the NBER in the 1930s and 1940s, Paul Smith for the NBER in the 1940s and 1950s, and the American Financial Services Association (AFSA) in the 1960s, 1970s, and 1980s. The most recent income statement data available are from the 1989 AFSA survey, which were analyzed by Durkin and Eliehausen (1998).<sup>11</sup>

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and 1965 benchmark surveys was also written; see Evelyn M. Hurley (1967), “Survey of Finance Companies, Mid-1965,” *Federal Reserve Bulletin*, vol. 53 (April), pp. 534–59, [https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb\\_041967.pdf](https://fraser.stlouisfed.org/files/docs/publications/FRB/1960s/frb_041967.pdf).

<sup>9</sup> Board of Governors of the Federal Reserve System (1970), Statistical Release G.20, “Finance Companies” (November 12), [https://fraser.stlouisfed.org/files/docs/releases/g20/g20\\_19701112.pdf](https://fraser.stlouisfed.org/files/docs/releases/g20/g20_19701112.pdf).

<sup>10</sup> See Glenn B. Canner, Thomas A. Durkin, and Charles A. Lueckert (1998), “Recent Developments in Home Equity Lending,” *Federal Reserve Bulletin*, vol. 84 (April), pp. 241–51, <https://www.federalreserve.gov/pubs/bulletin/1998/199804lead.pdf>.

<sup>11</sup> See Ernst A. Dauer (1944), *Comparative Operating Experience of Consumer Instalment Financing Agencies and Commercial Banks, 1929–41*, National Bureau of Economic Research, Studies in Consumer Instalment Financing No. 10 (New York: NBER); Paul F. Smith (1964), *Consumer Credit Costs, 1949–59*, National Bureau of Economic Research, Studies in Consumer Instalment Financing No. 11 (Princeton, N.J.: Princeton University Press); Thomas A. Durkin and Gregory Eliehausen (1998), “The Cost Structure of the Consumer Finance Industry,” *Journal of Financial Services Research*, vol. 13 (February), pp. 71–86.

Income statement data are useful to understand the relationships between operational scale and costs, competition and the level of finance charges, and rate ceilings and credit availability. Furthermore, income statement data also speak to the effects of deregulation and financial innovation. However, the most recent evidence on the cost structure (for example, economies of scale at firm and office levels as well as economies of average loan size) is based on the last four AFSA surveys in the late 1980s. Advances in credit reporting and credit evaluation as well as changes in consumer protection regulation have significantly influenced credit underwriting, monitoring, and collection. Research based on more recent data is needed to inform policy and is long overdue.

## Recent Finance Company Industry Developments

We look first at the balance sheet data that the Federal Reserve uses to benchmark the finance company industry. The finance company industry has a large percentage of small firms. Just over one-half of finance companies had assets of less than \$1 million in 2015, and 82 percent had assets of less than \$10 million (table 1). These small firms provided an insignificant share of aggregate assets in 2015, however. In contrast, the largest finance companies (less than 0.5 percent of all companies) provided 71 percent of the industry's assets in 2015.

The percentage of firms in the two smallest asset groups increased between 2010 and 2015, and the percentage of firms in the third asset group declined. These results largely reflect changes in the size distribution of real estate lenders (not shown in tables). The percentages of firms in larger asset-size groups were little changed between 2010 and 2015. In both years, firms in the largest two asset categories accounted for nearly all of aggregate assets.

The finance company industry provides many types of financing, but consumer financing predominates. In dollar volume, the largest type is consumer motor vehicle financing (consisting of both credit and leases). In 2015, finance companies held \$479 billion of consumer motor vehicle credit and leases, of which \$303 billion (63 percent) was credit financing and \$176 billion (37 percent) was lease financing (table 2). Motor vehicle financing includes not only dealer-originated credit and leases held by the large captive

**Table 1. Percentage distribution of finance companies by number of firms and asset size, 2005, 2010, and 2015**

Asset size (dollars)	Number of firms (percent)			Aggregate assets (percent)		
	2005	2010	2015	2005	2010	2015
Less than 1 million	25	44	52	<0.5	1	<0.5
1–10 million	38	25	30	<0.5	<0.5	1
10–100 million	23	24	12	1	3	2
100 million–1 billion	9	5	5	2	4	5
1–20 billion	4	2	1	17	18	21
20 billion or greater	1	<0.5	<0.5	81	74	71
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2005, 2010, and 2015), Census of Finance Companies (Washington: Board of Governors).

**Table 2. Loan and lease receivables by asset category, 2005, 2010, and 2015**

Asset category	Level (\$billion)			Percent change		Share of total assets (percent)		
	2005	2010	2015	2005-2010	2010-2015	2005	2010	2015
<b>Consumer</b>								
Motor vehicle loans	278	277	303	0	9	13	15	18
Motor vehicle leases	85	112	176	32	57	4	6	11
Revolving	66	85	26	29	-69	3	5	2
Other	175	346	233	98	-33	8	19	14
Subtotal	604	820	738	36	-10	28	44	44
<b>Real estate</b>								
1-4 family	466	170	123	-64	-28	22	9	7
Other	48	74	36	54	-51	2	4	2
Subtotal	513	244	159	-52	-35	24	13	10
<b>Business</b>								
Motor vehicles	106	117	104	10	-11	5	6	6
Retail loans	15	18	15	20	-17	1	1	1
Wholesale loans	61	69	80	13	16	3	4	5
Leases	29	30	9	3	-70	1	2	1
Equipment	286	204	219	-29	7	13	11	13
Loans	98	118	122	20	3	5	6	7
Leases	188	86	97	-54	13	9	5	6
Other	92	86	82	-7	-5	4	5	5
Subtotal	484	408	405	-16	-1	23	22	24
Total loans and leases	1,601	1,472	1,302	-8	-12	75	79	78
Memo: Total assets	2,142	1,875	1,680	-12	-10	100	100	100

Note: Components may not sum to totals because of rounding.  
Source: Board of Governors of the Federal Reserve System (2005, 2010, and 2015), Survey of Finance Companies (Washington: Board of Governors).

finance companies of motor vehicle manufacturers, but also credit held by independent finance companies, especially in the used vehicle market segment.<sup>12</sup>

Other consumer credit is the second-largest type of financing provided by finance companies. This category consists mainly of closed-end sales credit for other (nonvehicle) consumer goods, cash loans, and student loans. Finance companies held \$233 billion of such credit, which accounted for 14 percent of industry assets. The industry also held about \$26 billion of revolving consumer credit, which was just 2 percent of industry assets.

At \$219 billion, business equipment financing was the third-largest type of financing. It accounted for 13 percent of industry assets in 2015 and a little more than one-half of the industry's nonmortgage business assets. Business equipment financing includes loans and leases for diverse equipment such as construction equipment, aircraft, farm equipment, railway cars, computers, and office equipment. Loans accounted for \$122 billion (56 percent) of business equipment financing, and leases accounted for \$97 billion (44 percent) of business equipment financing. Leases can be classified as either capital leases or operating leases. Capital leases extend over most of the economic life of the asset and are not cancelable by the lessee without penalty. Operating leases are short term and

<sup>12</sup> See Melinda Zabritski (2018) "State of the Automotive Finance Market: A Look at Loans and Leases in Q4 2017," Experian, presentation slides, <http://www.experian.com/automotive/automotive-credit-webinar.html>.

are cancelable at the option of the lessee. In 2015, 42 percent of business equipment leases were capital leases, and 58 percent were operating leases (numbers not shown in tables).

Finance companies also provide motor vehicle financing to businesses. Wholesale loans finance dealer inventories of commercial and light motor vehicles for sale (\$80 billion in 2015). Business retail loans and leases finance vehicle acquisitions by businesses (\$15 billion and \$9 billion, respectively, in 2015).

Finance companies held \$159 billion of real estate debt on their balance sheets in 2015 (10 percent of total assets). Of this amount, \$123 billion was mortgages on one- to four-family homes, and \$36 billion was mortgages on multifamily housing or commercial real estate.

In total, loans and leases were \$1,302 billion in 2015, which was 78 percent of total assets. Non-loan, non-lease assets consist of cash, deposits, securities, and any other assets.

Overall, the finance company industry shrank between 2010 and 2015. In percentage terms, the greatest declines were in business motor vehicle lease financing, revolving consumer credit, other real estate financing, and other consumer credit, all of which are among the generally riskier areas of finance company lending. Finance companies originated many near-prime and subprime loans and closed-end second mortgages before the most recent recession. Licensed small-loan companies provide small high-risk cash loans in many states.<sup>13</sup> Most revolving consumer credit consists of unsecured credit card lending. The financial crisis in 2008 and 2009 and the subsequent recession apparently prompted many lenders to reduce their exposure to riskier forms of credit.<sup>14</sup>

Consumer motor vehicle and business equipment financing were among the types of financing that did not decline. Consumer motor vehicle financing increased \$90 billion from 2010 to 2015. Leases contributed strongly to this increase, with 57 percent growth in leases compared to 9 percent growth in motor vehicle loans. Consumer motor vehicle and business equipment financing generally involves secured lending, which tends to reduce risk. Collateral makes defaults costly for borrowers because they lose the asset, and it reduces lenders' losses when borrowers default.<sup>15</sup> Thus, these forms of financing tend to be less risky for the lender than many other types of credit. Finance companies may have increased their reliance on secured lending as a result of a recession that prompted lenders to reduce exposure to riskier types of credit.

The loan and lease share of total assets was just 1 percentage point lower in 2015 compared with 2010.

Regarding their financing, finance companies relied heavily on nonrecourse debt associated with structured financing activities (\$648 billion) and notes, bonds, and debentures (\$242 billion) to fund their lending activities in 2015 (table 3).<sup>16</sup> Together these sources

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<sup>13</sup> See Durkin and others, "State Regulation of Consumer Credit," in note 4.

<sup>14</sup> For evidence on credit card and small consumer finance lending between the second quarter of 2007 and the second quarter of 2012, see Gregory Elliehausen and Simona M. Hannon (2018), "The Credit Card Act and Consumer Finance Company Lending," *Journal of Financial Intermediation*, vol. 34 (April), pp. 109–19.

<sup>15</sup> See Robert J. Barro (1976) "The Loan Market, Collateral, and Rates of Interest," *Journal of Money, Credit and Banking*, vol. 8 (November), pp. 439–56; and Daniel K. Benjamin (1978), "The Use of Collateral to Enforce Debt Contracts," *Economic Inquiry*, vol. 16 (July), pp. 333–59.

<sup>16</sup> Nonrecourse debt associated with structured financing activities is debt that is repaid solely from cash flows on underlying loans or securities. This type of debt arises from asset securitization, loan participation, and other structured financing activities, including liabilities that were brought on balance sheet as a result of Financial Accounting Standard 166 or Financial Accounting Standard 167.

**Table 3. Liabilities and net worth of finance companies, 2005, 2010, and 2015**

Liability category or net worth	Level (\$billion)			Percent change		Share of total assets (percent)		
	2005	2010	2015	2005–2010	2010–2015	2005	2010	2015
Commercial paper	182	99	67	–46	–32	8	5	4
Bank loans	71	92	156	30	70	3	5	9
Nonrecourse debt	n.a.	471	648	n.a.	38	n.a.	25	39
Notes, bonds, and debentures	n.a.	608	242	n.a.	–60	n.a.	32	14
<i>Combined total of nonrecourse debt and notes, bonds, and debentures</i>	<i>892</i>	<i>1,078</i>	<i>890</i>	<i>21</i>	<i>–17</i>	<i>42</i>	<i>57</i>	<i>53</i>
Debt due to parent company	221	181	157	–18	–13	10	10	9
Other liabilities	512	192	190	–63	–1	24	10	11
Total liabilities	1,878	1,642	1,460	–13	–11	88	88	87
Net worth	264	233	220	–12	–6	12	12	13
Total liabilities and net worth	2,142	1,875	1,680	–12	–10	100	100	100

Note: Components may not sum to totals because of rounding.  
n.a. Not available.  
Source: Board of Governors of the Federal Reserve System (2005, 2010, and 2015), Survey of Finance Companies (Washington: Board of Governors).

accounted for more than one-half of total liabilities and net worth. Equity (net worth) was \$220 billion, which was 13 percent of total liabilities and net worth in 2015.

Nonrecourse debt increased 38 percent between 2010 and 2015. The increase reflects recovery in capital markets from steep declines following the financial crisis and recession. Bank loans also increased, up 70 percent from 2010. The equity share of liabilities and net worth in 2015 was not much different from its share in 2010 or 2005.

Although still an important large source of funds, traditional sorts of borrowing through notes, bonds, and debentures (14 percent of total liabilities and net equity in 2015) declined 60 percent between 2010 and 2015. Short-term commercial paper, a relatively small source of funds following the financial crisis and recession (4 percent of total liabilities and net worth in 2015), fell 32 percent between 2010 and 2015.

### Financial Characteristics of Different Specialized Types of Finance Companies

The finance company industry provides a wide variety of credit and lease products, which tend to be offered by specialized firms: Nearly all finance companies hold most of their assets in one specific type of credit.<sup>17</sup> Consumer lenders were the most numerous specialist finance company. In 2015, 68 percent of finance companies were consumer lending specialists, 17 percent were real estate lending specialists, and 13 percent were business lending specialists (numbers not shown in tables). Only a very small percentage (2 percent) of finance companies can be characterized as diversified broadly across different types of financing. In the tables that follow, diversified firms are not included because statistics derived from such a small sample are not reliable.

<sup>17</sup> Respondents self-defined their specialization in the 2005 Census of Finance Companies. The 2010 and 2015 censuses defined specialization as having 50 percent or more of assets in consumer, real estate, or business loans and leases. All three censuses also provided respondents with a “no specialization” choice.

**Table 4. Asset shares by type of financing and specialization of lender, 2005, 2010, and 2015**

Type of financing	Share of total assets (percent)		
	2005	2010	2015
<b>Consumer lender</b>			
Consumer	84	79	79
Real estate	1	4	1
Business	5	8	10
Total loans and leases	90	90	90
<b>Real estate lender</b>			
Consumer	1	16	2
Real estate	71	59	74
Business	2	7	2
Total loans and leases	73	82	78
<b>Business lender</b>			
Consumer	2	8	2
Real estate	<0.5	9	1
Business	73	49	84
Total loans and leases	75	66	86

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2005, 2010, and 2015), Survey of Finance Companies (Washington: Board of Governors).

Overall, specialist finance companies held far more than one-half of their assets in their specialty type of financing. Consumer lenders held 79 percent of assets in consumer loans and leases in 2015 (table 4). Their share of consumer loans and leases is unchanged from 2010 and only a bit smaller than in 2005. Consumer lenders' real estate lending share in 2015 was small and not much different from previous years. Their business loans and leases share was 10 percent of assets in 2015, up from 5 percent of assets in 2005.

Real estate lenders held 74 percent of their assets in real estate loans in 2015. This share is higher than the share of real estate lending in 2010, but not much different from the share of real estate lending in 2005. The lower real estate share in 2010 may be a reflection of the slow

recovery of real estate lending following the 2007–09 recession. Consumer lending accounted for a much larger share of assets in 2010 (16 percent of assets) than in 2005 (1 percent) and 2015 (2 percent).

Business loans and leases made up 84 percent of business lenders' assets in 2015, which accounted for nearly all of business lenders' loans and leases. Consumer loans and leases and real estate loans were a negligible share of business lenders' assets.

The remainder of this section discusses financial characteristics (firm size, balance sheets, and income statements) of consumer, real estate, and business lenders in 2015.

## Distribution of Firms

For each type of specialization, most lenders had less than \$10 million of assets. Consumer lenders had the largest share of small firms: 61 percent of consumer lenders had less than \$1 million of assets, and another 32 percent had between \$1 million and \$10 million of assets (table 5). By contrast, 27 percent of business lenders had less than \$1 million of assets, and 33 percent had between \$1 million and \$10 million of assets. For real estate lenders, a little more than one-half had \$10 million or less of assets (37 percent had less than \$1 million of assets, and 17 percent had

**Table 5. Percentage distribution of finance companies by asset size and specialization of lender, 2015**

Asset size (dollars)	Type of finance company		
	Consumer	Real estate	Business
Less than 1 million	61	37	27
1–10 million	32	17	33
10–100 million	5	36	18
100 million–1 billion	1	8	17
1–20 billion	<0.5	2	4
20 billion or greater	<0.5	<0.5	1
Total	100	100	100

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2015), Census of Finance Companies (Washington: Board of Governors).

**Table 6. Asset shares by type of finance company, 2015**  
(Percent of total assets)

Asset category	Type of finance company		
	Consumer	Real estate	Business
<b>Consumer</b>			
Motor vehicle loans	31	2	<0.5
Motor vehicle leases	20	<0.5	<0.5
Revolving	3	<0.5	1
Other	26	<0.5	1
Subtotal	79	2	2
<b>Real estate</b>			
1–4 family	1	63	<0.5
Other	1	12	<0.5
Subtotal	1	74	1
<b>Business</b>			
Motor vehicles	9	<0.5	6
Retail loans	1	<0.5	2
Wholesale loans	8	<0.5	3
Leases	<0.5	<0.5	2
Equipment	<0.5	<0.5	58
Loans	<0.5	<0.5	34
Leases	<0.5	<0.5	24
Other	1	1	19
Subtotal	10	2	84
<b>Total loans and leases</b>	<b>90</b>	<b>78</b>	<b>86</b>

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2015), Survey of Finance Companies (Washington: Board of Governors).

lenders). Consumer lenders' nonconsumer lending consists largely of business wholesale loans (8 percent of assets) financing dealers' inventories of motor vehicles. Consumer finance companies did not provide much revolving credit. Revolving consumer credit amounted to just 3 percent of assets. All other types of business financing and mortgage loans collectively were only a very small percentage of assets.

Real estate lenders held mostly household real estate loans on their balance sheets (63 percent of assets). Commercial real estate holdings accounted for a small percentage of assets of real estate lenders (12 percent of assets). Asset shares of consumer loans and business loans at real estate lenders were inconsiderable.

Business lenders' financing activities consisted mostly of business equipment loans and leases (58 percent of assets). Their other business offerings—wholesale loans and retail motor vehicle loans and leases—were a small share of assets (6 percent).<sup>18</sup> Shares of consumer loans and leases and real estate loans were inconsiderable.

Table 7 shows that finance companies' funding of lending activities varies by specialization. Consumer lenders rely heavily on debt capital markets. Nonrecourse loans associated with structured financing activities provided nearly one-half of their funding (44 percent of total

between \$1 million and \$10 million of assets).

Regardless of type, relatively few finance companies were large. Among the types of specialist companies, business lenders had the greatest percentage of large firms, with 5 percent of firms having assets of \$1 billion or more.

### Balance Sheets for Specialized Lenders

As previously mentioned, almost all finance companies are specialized lenders. Table 6 provides more detailed information on the extent of specialization in 2015. The most common forms of financing provided by consumer lenders were motor vehicle loans and leases (31 percent and 20 percent of assets, respectively). Other consumer credit accounted for 26 percent of assets and consists of various types of closed-end credit. This category includes installment cash loans, some nonvehicle sales credit, and small, single-payment loans (principally pawn, payday, and auto title

<sup>18</sup> This percentage does not include wholesale loans or retail business vehicle loans and leases of most vehicle manufacturers' captive finance companies. Vehicle manufacturers' captive finance companies are typically classified as consumer finance companies, as the majority of their assets are consumer loans and leases.

liabilities and net worth) in 2015. Notes, bonds, and debentures—the second-largest source of funds—accounted for 21 percent of total liabilities and net worth. Banks were a small source of funds for consumer lenders (7 percent). Equity was 10 percent of total liabilities and net worth.

Real estate lenders also relied on debt markets for financing but obtained substantial funding from banks as well. Twenty percent of their funds was from nonrecourse loans, and 19 percent was from notes, bonds, and debentures. The bank loan share was 20 percent. Owners' equity was 19 percent of total liabilities and net worth.

Business lenders relied less on debt markets than consumer or real estate lenders. They obtained 20 percent of their funds from nonrecourse debt and 7 percent from notes, bonds, and debentures. Loans from banks and from parent companies accounted for large shares of their funding (17 percent and 18 percent, respectively). Owners' equity accounted for 15 percent of total liabilities and net worth.

## Income Statements for Specialized Lenders

### Finance Charges and Operating Expenses

Finance charges differ widely across the different specialized finance companies. Finance charges of mortgage lenders, at \$20 per \$100 of outstanding credit, were nearly 60 percent larger than those of consumer lenders and just under 2¼ times greater than those of business lenders (table 8). The large variation in finance charges among consumer, real estate, and business lenders in large part reflects their differences in operating costs.<sup>19</sup> For example, real estate lenders' operating costs were 83 percent of gross revenue compared with about 50 percent of revenue for consumer and business lenders. Salary and wages (\$8.65 per \$100 of outstanding credit) accounted for 43 percent of gross revenue. The relatively high salary and wage share of real estate lenders' finance charges may be attributed at least in part to a labor-intensive, comprehensive underwriting process and extensive documentation requirements for mortgage loans.<sup>20</sup>

<sup>19</sup> As this article is concerned with coverage of costs by revenue, the term "finance charge" as used here includes charges for ancillary products such as credit insurance sold in conjunction with the credit. This treatment of ancillary products differs from that in disclosure regulation, which is concerned with the price of credit and includes in the finance charge only those costs associated with the credit.

<sup>20</sup> Comparisons of finance companies with banks are difficult because banks are multiproduct firms and do not account for costs separately for each product. Cost accounting data for consumer lending at banks are available from the Federal Reserve System's Functional Cost Analysis Program through 1999, when it was discontinued. Data for 1999 indicate that gross revenue per \$100 of outstanding credit for consumer lending at banks was about one-half that of finance companies. The difference can be attributed largely to differences in risk. Operating expenses for consumer lending at banks were 45 percent of gross revenue. For further discussion, see Thomas A. Durkin, Gregory Elliehausen, Michael E. Staten, and Todd J. Zywicki (2014), "The Supply of Consumer Credit," chapter 5 in *Consumer Credit and the American Economy* (New York: Oxford University Press), pp. 173–240.

**Table 7. Liability and net worth shares by type of finance company, 2015**

(Percent of total assets)

Liability category or net worth	Type of finance company		
	Consumer	Real estate	Business
Commercial paper	5	1	6
Bank loans	7	20	17
Nonrecourse debt	44	20	20
Notes, bonds, and debentures	21	19	7
Debt due to parent company	7	13	18
Other liabilities	6	9	18
Total liabilities	90	81	85
Net worth	10	19	15
Total liabilities and net worth	100	100	100

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2015), Survey of Finance Companies (Washington: Board of Governors).

Strict credit standards and comprehensive underwriting produced relatively low loan losses and additions to loss reserves for real estate lenders, at \$0.82 per \$100 of outstanding credit (4 percent of finance charges). Business lenders specialize in business equipment loans and leases, which are generally secured by the equipment being financed. Thus, their loan losses and additions to loss reserves were relatively small.

Consumer lenders provide both secured and unsecured financing. Motor vehicle loans generally are secured by assets that have effective markets for used vehicles. Personal finance and other nonvehicle closed-end installment loans may be unsecured or secured by collateral that does not have a well-developed secondary market. Lenders that provide single-payment loans (pawn, payday, and auto title loans) provide short-term credit to consumers who otherwise might not be able to obtain additional credit. Because of the presence of risky personal loan companies and single-payment lenders, loan losses and additions to loss reserves of consumer lenders were relatively high. The next section provides further evidence of operating costs and risks in consumer lending, focusing on two types of consumer lenders—lenders that specialize in motor vehicle loans and leases, and lenders that specialize in personal loans.

### Funding Costs

Among the specialized finance companies, real estate lenders had the highest funding costs, \$2.69 per \$100 of outstanding credit, compared with \$2.26 for consumer lenders and \$1.58 for business lenders. However, because they had relatively high gross revenue and operating costs, real estate lenders' funding costs were a smaller percentage of gross revenue (13 percent) than those of consumer lenders (18 percent) or business lenders (18 percent).

### Profitability

Despite considerable differences in gross revenue, operating return on assets, an indicator of the efficiency in generating income from assets, did not differ much across the three types of lenders. Before-tax return on assets did not vary either.

## Major Types of Consumer Lenders: Auto Lenders and Personal Loan Companies

This section compares income statements of two different types of consumer lenders—auto lenders and personal loan companies—that historically have been and continue to be major

**Table 8. Revenue, costs, and profitability by type of finance company, 2015**

Item	Type of finance company		
	Consumer	Real estate	Business
<b>Dollars per \$100 of outstanding credit</b>			
Gross revenue (finance charges)	12.56	20.00	8.92
Total operating costs	6.54	16.60	4.42
Salaries and wages	1.62	8.65	1.16
Losses/additions to loss reserves	1.60	0.82	0.42
Other operating costs	3.33	7.14	2.85
Operating income	6.01	3.40	4.49
Cost of borrowed funds	2.26	2.69	1.58
Before-tax income	3.76	0.71	2.92
<b>Percent of gross revenue</b>			
Gross revenue (finance charges)	100	100	100
Total operating costs	52	83	50
Salaries and wages	13	43	13
Losses/additions to loss reserves	13	4	5
Other operating costs	27	36	32
Operating income	48	17	50
Cost of borrowed funds	18	13	18
Before-tax income	30	4	33
<b>Rate of return</b>			
Operating return on assets	5	3	4
Before-tax return on assets	3	1	3

Note: Components may not sum to totals because of rounding.  
Source: Board of Governors of the Federal Reserve System (2015), Survey of Finance Companies (Washington: Board of Governors).

participants in the finance company industry. The revenue and costs of these two types of consumer lenders reflect the product differences in auto and personal lending.

Auto lenders, defined here as consumer lenders having more than 50 percent of assets in consumer motor vehicle loans and leases, include not only the captive finance companies of vehicle manufacturers, but also many independent finance companies. The captive finance companies primarily purchase paper originated by dealers and account for about one-half of new vehicle financings. Independent finance companies finance a large share of used vehicle acquisitions.<sup>21</sup> As mentioned earlier, vehicle loans typically are secured by the vehicle being acquired.

Personal loans are closed-end installment cash loans, which are often extended by companies that operate under state small-loan laws. Personal loan companies are defined here as consumer lenders that have more than 50 percent of assets in other (nonvehicle) consumer credit and do not make pawn, payday, or auto title loans.<sup>22</sup> Personal loan companies ordinarily do not offer single-payment loans. Lenders specializing in student loans or mobile-home loans also are not included. Some firms in the personal loan company category may have significant nonvehicle sales finance shares. Such firms have for a long time also made direct cash loans, however. Their presence has declined as revolving credit has increasingly substituted for closed-end credit for financing consumers' nonvehicle durables acquisitions.<sup>23</sup> Personal loans are often unsecured.

Finance charges for auto lenders, \$14.65 per \$100 of outstanding credit, were about one-half of the finance charges for personal loan companies, \$29.20 (table 9). Low operating costs at auto lenders can be attributed at least in part to the prevalence of sales finance in auto lending. Some auto lenders—notably the large captive finance companies of vehicle manufacturers but also many independent finance companies—purchase loans originated by auto dealers. The dealers handle many of the activities neces-

**Table 9. Revenue, costs, and profitability of auto lenders and personal loan companies, 2015**

Item	Type of consumer installment lender	
	Auto lender	Personal loan company
<b>Dollars per \$100 of outstanding credit</b>		
Gross revenue (finance charges)	14.65	29.20
Total operating costs	6.96	20.82
Salaries and wages	1.47	8.81
Losses/additions to loss reserves	1.49	5.88
Other operating costs	4.00	6.13
Operating income	7.69	8.38
Cost of borrowed funds	2.79	2.28
Before-tax income	4.90	6.10
<b>Percent of gross revenue</b>		
Gross revenue (finance charges)	100	100
Total operating costs	47	71
Salaries and wages	10	30
Losses/additions to loss reserves	10	20
Other operating costs	27	21
Operating income	53	29
Cost of borrowed funds	19	8
Before-tax income	33	21
<b>Rate of return</b>		
Operating return on assets	7	8
Before-tax return on assets	4	6

Note: Components may not sum to totals because of rounding.

Source: Board of Governors of the Federal Reserve System (2015), Survey of Finance Companies (Washington: Board of Governors).

<sup>21</sup> See Zabritski, "State of the Automotive Finance Market," in note 12.

<sup>22</sup> Payday lenders in several states are required to offer installment loans under specified circumstances (usually after a specified number of loans or renewals), and in the face of regulatory pressure some payday lenders have begun to offer installment loans. A few auto-title lenders offer fully amortizing auto-title loans as well as typical single-payment loans.

<sup>23</sup> See Thomas A. Durkin, Gregory Elliehausen, Michael E. Staten, and Todd J. Zywicki (2014), "Introduction and Overview of Consumer Credit: Development, Uses, Kinds, and Policy Issues," chapter 1 in *Consumer Credit and the American Economy* (New York: Oxford University Press), pp. 1–33.

sary to originate loans or leases.<sup>24</sup> Dealers' employees respond to questions about financing, take applications, and prepare loan documents. Low salary and wage expenses (\$1.47 per \$100 of outstanding credit, or 10 percent of revenue) are consistent with auto finance companies avoiding much of the origination cost on purchased auto contracts. Finance companies operating in this manner also do not incur the expense of maintaining large numbers of retail branches to acquire loans and leases. In addition, taking security interest may also contribute to auto finance companies' willingness to accept relatively low finance charges. Auto loans are typically secured by liens on financed vehicles. Lenders' security interest offsets losses on defaulted loans, and the prospect of losing the vehicle in the event of default reinforces borrowers' incentive to repay as promised.<sup>25</sup> These considerations help explain relatively low losses and additions to loss reserves for these companies (\$1.49 per \$100 of outstanding credit, or 10 percent of finance charges).

Personal loan companies' relatively high finance charges can largely be attributed to their loans' high risk and small dollar amount. Many loans made by these lenders are unsecured (small cash loans, for example). Others are secured by household durables being financed that have little resale value and therefore do little to offset losses (sales finance). Borrowers from firms that make small cash loans often have had previous credit problems. Instead of relying on collateral, these companies work with borrowers to arrange loans with relatively low monthly payments, which borrowers can afford to pay with ease. Yet despite such arrangements, delinquencies are common in this market segment.<sup>26</sup> Origination and collections are labor intensive, giving rise to relatively high salary and wage expenses (30 percent of finance charges). Losses and additions to loss reserves, \$5.88 per \$100 of credit outstanding (20 percent of finance charges), are markedly higher for personal loan companies than for auto lenders, suggesting the higher risk in this segment. Finally, many of the activities performed to originate loans, process payments, and collect delinquent accounts occur because an application is taken or credit is granted and do not vary much by loan size. Consequently, finance charges must be large relative to loan size to cover lenders' costs and provide a return on investors' funds.

### Trends in Revenue, Cost, and Performance at Personal Finance Companies

Statistics in the previous sections indicated that revenues and costs differ by the type of finance company. In this section, we examine revenues and costs for finance companies that specialize in personal loans (that is, non-auto closed-end consumer installment lending). This type of finance company likely is similar to consumer finance companies examined in earlier studies. In both categories, cash loans are the primary type of loan, but these firms also held some sales finance contracts.

As previously mentioned, historical income statement data are available from studies by Paul Smith and the AFSA. Smith examined costs at nine large, nationwide consumer finance companies in the 1940s and 1950s. These companies held about 70 percent of the Federal Reserve's estimate of the loans outstanding at consumer finance companies at the end of 1959. The companies operated primarily under state small-loan laws, but most also purchased sales finance contracts or made loans under other state laws.

<sup>24</sup> To compensate dealers for these activities, dealers receive a share of finance charges. Dealers' share of finance charges is not included in finance companies' gross revenue in [table 8](#).

<sup>25</sup> See Barro, "The Loan Market, Collateral, and Rates of Interest," in note 15 or Benjamin, "The Use of Collateral to Enforce Debt Contracts," in note 15.

<sup>26</sup> For further discussion of personal loan companies' operations, see Durkin and others, "The Supply of Consumer Credit," in note 20.

The AFSA surveyed member companies in the 1960s, 1970s, and 1980s. Member companies included both sales finance and consumer finance companies. At the end of the 1980s, the AFSA survey accounted for about 90 percent of the Federal Reserve's estimate of outstanding credit at finance companies. Because asset diversification had increasingly blurred distinctions between sales finance and consumer finance, by the 1980s the AFSA no longer distinguished between the two types of finance companies in its reports. However, the reports did produce separate statistics for firms with 50 percent or more of receivables in personal loans. As previously noted, personal loans at finance companies typically are cash loans made under state small-loan laws. In selecting data for firms that have 50 percent or more of receivables in personal loans, we have a category that is roughly comparable with Smith's consumer finance and our non-auto closed-end consumer installment categories. Nevertheless, the possibility that AFSA members in the sample are not representative of the population of finance companies cannot be ruled out.

Revenue in 2015, \$29.20 per \$100 of outstanding credit, was noticeably higher than in previous years (table 10). Operating cost in 2015, \$20.82 per \$100 of outstanding credit, was also higher than in previous years. However, operating income in 2015, \$8.38 per \$100 of outstanding credit, was lower than in previous years. Operating return on assets, a measure of profitability relating operating income to a firm's assets, was about the same as in previous years.

Salaries and wages as well as losses and additions to loss reserves contributed to the higher operating costs in 2015. Losses and additions to loss reserves in 2015, \$5.88 per \$100 of outstanding credit, were several times the \$1 or \$2 per \$100 for losses and additions to loss reserves in previous years. Salaries and wages in 2015 were a little more than one-third higher than in 1959 but nearly three times higher than in 1983 and 1987.

Greater risk may at least in part explain greater finance charges and losses and additions to loss reserves in 2015. Rapid inflation in the late 1970s and 1980s pushed interest rates to rate ceilings and severely restricted the supply of credit, especially for higher-risk consumers.<sup>27</sup>

**Table 10. Trends in revenue, costs, and profitability of personal loan companies, 1959, 1983, 1987, and 2015**

Item	Year			
	1959	1983	1987	2015
<b>Dollars per \$100 of outstanding credit</b>				
Gross revenue (finance charges)	23.87	23.31	18.88	29.20
Total operating costs	14.25	11.40	8.69	20.82
Salaries and wages	6.45	3.35	2.97	8.81
Losses/additions to loss reserves	1.98	1.37	2.12	5.88
Other operating costs	5.82	6.67	3.61	6.13
Operating income	9.62	11.92	10.18	8.38
Cost of borrowed funds	3.97	7.65	6.90	2.28
Before-tax income	5.65	4.27	3.28	6.10
<b>Percent of gross revenue</b>				
Gross revenue (finance charges)	100	100	100	100
Total operating costs	60	49	46	71
Salaries and wages	27	14	16	30
Losses/additions to loss reserves	8	6	11	20
Other operating costs	24	29	19	21
Operating income	40	51	54	29
Cost of borrowed funds	17	33	37	8
Before-tax income	24	18	17	21
<b>Rate of return</b>				
Operating return on assets	9	9	10	8
Before-tax return on assets	5	3	3	6

Note: Components may not sum to totals because of rounding.

Source: For 1959 data, Paul F. Smith (1964), *Consumer Credit Costs, 1949–59*, National Bureau of Economic Research, Studies in Consumer Installment Financing No. 11 (Princeton, N.J.: Princeton University Press); for 1983 data, Thomas A. Durkin and Ysabel M. Burns (1984), *Finance Companies in 1983: American Financial Services Association Research Report and Second Mortgage Lending Report* (Washington: AFSA); for 1987 data, Ysabel Burns McAleer (1988), *Finance Companies in 1987: American Financial Services Association Research Report and Second Mortgage Lending Report* (Washington: AFSA); for 2015 data, Board of Governors of the Federal Reserve System (2015), *Survey of Finance Companies* (Washington: Board of Governors).

<sup>27</sup> See Donna C. Vandenbrink (1982), "The Effects of Usury Ceilings," Federal Reserve Bank of Chicago,

This development reduced risky lending in the short run, but eventually some states relaxed ceilings to make credit more broadly available. As inflation subsided and interest rates fell to lower levels, higher-rate ceilings in those states that raised ceilings would enable greater lending to risky consumers.

Regardless of year, salaries and wages were a major component of costs, accounting for about 15 percent of gross revenue per \$100 of outstanding credit in 1983 and 1987 and around 30 percent of gross revenue in 1959 and 2015. Greater risk might help explain the higher salaries and wages in 2015. The tasks of evaluating applications, arranging loan terms that fit risky applicants' budgets, collecting late payments, and negotiating refinancing of existing loans would be especially labor intensive and costly relative to the size of the loan.

High rates of inflation had a sizable effect on funding costs in the 1980s. The cost of borrowed funds was 17 percent of gross revenue in 1959, 33 percent of gross revenue in 1983, and 37 percent of gross revenue in 1987. In contrast, funding costs did not account for much of gross revenue in the recent low-rate environment. The cost of borrowed funds was just 8 percent of gross revenue in 2015.

Operating return on assets did not differ much in these years. Reflecting higher cost of funds in the 1980s, before-tax income to assets was lower in 1983 and 1987 than in 1959 or 2015.

### **Appendix: Historical Survey Practices, Recent Innovations, and Current Procedures**

Through 1975, the known universe of finance companies was surveyed. In 1980, to reduce reporting burden, the survey was split into two parts. The first part was a brief screening census used to identify the known universe of finance companies. The second part was a longer follow-up survey used to obtain balance sheet data from companies identified in the census stage.

In 1983, the Federal Reserve created the monthly Domestic Finance Company Report of Consolidated Assets and Liabilities (DFCR). The DFCR collects data from a smaller sample of companies but does so more frequently to better follow emerging trends. As with many surveys based on a fixed sample, estimation errors tend to increase over time and require periodic calibration. These errors reflect the evolution of the financial markets as new companies enter the market and market shares change as well as the deterioration of the monthly sample panel as respondents close, merge, or otherwise leave the panel. The Federal Reserve has used the quinquennial survey data to benchmark the monthly sample data.

In 2005, the definition of a finance company was revised to encompass companies whose largest portion of assets was made up of real estate loans. This change effectively brought mortgage companies into the universe. Furthermore, the survey was revised to instruct finance companies to include the assets and liabilities of their mortgage company subsidiaries.

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*Economic Perspectives*, vol. 6 (Midyear), pp. 44–55, [https://fraser.stlouisfed.org/files/docs/historical/frbchi/economicperspectives/frbchi\\_econper\\_1982midyear.pdf](https://fraser.stlouisfed.org/files/docs/historical/frbchi/economicperspectives/frbchi_econper_1982midyear.pdf); Donna C. Vandenbrink (1985), "Usury Ceilings and DIDMCA," Federal Reserve Bank of Chicago, *Economic Perspectives*, vol. 9 (September/October), pp. 25–30, <https://www.chicagofed.org/publications/economic-perspectives/1985/september-october-vandenbrink>.

## Survey Methodology Modernization in 2010

In 2010, the quinquennial survey underwent a major revision. The survey sampling procedures and instruments were redesigned to improve coverage of the population, increase survey participation, develop systematic means of addressing nonresponse, and reduce reporting errors.<sup>28</sup>

For the purposes of this survey, the target population is the set of domestically operated finance companies, defined as entities that have at least 50 percent of total assets in loans or leases to consumers or businesses. However, entities cannot be a government agency, a nonprofit organization, a cooperative, a bank, a bank holding company, a credit union, part of the farm credit system, or a real estate investment trust. Structurally, they can be a subsidiary of a bank holding company but not a subsidiary of a bank or a finance company.

In the past, the absence of a comprehensive list of finance companies was a key challenge to the survey. The regulation of finance companies is fragmented at the federal and state levels, and no administrative or comprehensive data are publicly available to serve as a sample frame for finance companies. Therefore, the Federal Reserve developed a procedure for identifying eligible finance companies within a list frame obtained primarily from commercial vendors and, to a lesser degree, from other internally available sources. The list was broad and comprehensive, with the intention of including all nondepository companies that provided credit to households or businesses.

The survey instruments were redesigned in 2010 following modern form design principles.<sup>29</sup> The intention of the redesign was to provide more visual appeal via the use of color and an attractive font. Embedded instructions and the grouping of related questions were added to make the survey easier to follow.

The titles of the two stages of the quinquennial survey were changed to “Census of Finance Companies” and “Survey of Finance Companies” to clearly define the nature of each stage. To mirror the flow of identifying a finance company, several questions on the census were restructured as a decision tree rather than asking respondents to self-identify. Revisions to the second stage of the survey were composed of the following: reordering assets and liability data items from most liquid to least liquid; asking for additional detail on assets and liabilities; and creating a clearer distinction among the broad balance sheet data items, detailed loan and lease data items, and off-balance-sheet securitization data items. In an attempt to improve participation, an online response option was offered in addition to the traditional choice of mailing the paper form.

Responses to the first stage of the survey revealed that the sample frame contained a complex tangle of often interrelated companies. As a result, a new statistical methodology was developed for the nonresponse follow-up study to better characterize and account for the patterns observed as well as the substantial nonresponse that did not appear to be missing at random. Results of the study showed that the size of the universe of finance companies was smaller than what would have been estimated from the original respondents if it was assumed that missing observations were distributed in the same way as the initial respondents.

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<sup>28</sup> Arthur Kennickell was instrumental in the work of modernizing the survey methodology.

<sup>29</sup> See Don A. Dillman, Arina Gertseva, and Taj Mahon-Haft (2005), “Achieving Usability in Establishment Surveys through the Application of Visual Design Principles,” *Journal of Official Statistics*, vol. 21 (June), pp. 183–214.

## Updates in 2015

The 2015 quinquennial survey is the most recent of the five-year benchmark surveys. We introduced new questions in the Census of Finance Companies for finding detailed types of credit offered by finance companies. Questions about the income statement, scale of company operations, and small business credit were added to the Survey of Finance Companies. Postcard reminders were sent after each of the two paper form mailings. In contrast to historical practices, to further encourage participation, preliminary results from the Census of Finance Companies were mailed along with the Survey of Finance Companies to survey recipients.

Assembling a sample frame that best suits the complex definition of a finance company remains challenging. Following the method for constructing the sample frame adopted in 2010, we included five Standard Industrial Classification (SIC) codes to capture companies with at least some financing operation as follows: 5932, 6099, 6141, 6153, and 6159. This approach reflected the further expansion of the sample frame to incorporate pawnbrokers and check-cashing services for the 2015 quinquennial survey. Data collected under the Home Mortgage Disclosure Act were used to supplement the list of mortgage lenders. Overall, the Census of Finance Companies was mailed to approximately 37,000 companies in June 2015 to capture basic financial information as of March 31, 2015. The Survey of Finance Companies was sent to more than 2,300 eligible finance companies in March 2016 to obtain detailed balance sheet and income statement data as of December 31, 2015. About 41 percent of these finance companies responded, and attempts were made to contact and collect data from all nonrespondents.

Similar to survey activities in previous years, the 2015 quinquennial survey faced multiple challenges. These challenges were partly due to the unique nature of this survey, partly due to the imperfect sample frame, and partly due to the reluctance of many companies surveyed. The quinquennial survey aimed to collect data from business entities, but its voluntary nature further compounded the difficulty of improving survey participation. Maintaining and improving the existing participation rate remains a high priority for future surveys.

Taking into account the complex and interrelated nature of the finance company universe, we continued to utilize the statistical methodology developed in 2010 for the nonresponse follow-up to the Census of Finance Companies. We split the follow-up sample of approximately 4,000 observations into two major parts: one part focused on a sample of observations in candidate cluster arrangements primarily based on very similar or identical company names, and the other part focused on the remaining unclustered cases. Outreach and contacts were attempted by Federal Reserve Bank staff members to collect enough information to determine whether any of these observations were in-scope finance companies.

Analysis weights were created for companies included in the nonresponse follow-up sample to represent the nonrespondents. We started with a base weight that is the inverse of a company's inclusion probability in the sample. We then adjusted the base weight in a multi-stage process to account for the following: the probability that some of the nonrespondents to the follow-up were still in business; the probability that the company had at least 50 percent of its assets in loans or leases, given that it was in business; and, finally, the probability that it was an independent finance company, not a subsidiary or a branch of a related finance company. Each follow-up respondent's weight not only constitutes its directly estimated share in the population, but also the share of the nonrespondents to the follow-up that were most similar to the follow-up respondent.

We thoroughly reviewed the data that were collected in both the Census of Finance Companies and the Survey of Finance Companies. More data editing was needed for the latter survey, which included a greater number of, and more complex, questions. Many respondents reported responses in dollars instead of in thousands of dollars as requested. Less than one-half of the responses (42 percent) did not report balanced balance sheet or income statements, and some required follow-up to clarify and correct reporting errors.

One last step before estimating the universe of finance companies was addressing the issue of missing items. We used a type of randomized hot deck multiple imputation. This method involves creating classes of respondents based on data that are available for all respondents and randomly matching a “donor” respondent who has complete information with a “recipient” respondent. The process was repeated five times to enable estimation of the uncertainty surrounding this imputation.<sup>30</sup>

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<sup>30</sup> See Donald B. Rubin (1987), *Multiple Imputation for Nonresponse in Surveys* (New York: Wiley).