June 5, 2020

II. Extent and Growth of Consumer Credit
1. Development of Modern Consumer Credit
2. Consumer Credit Growth
3. Consumer Credit Growth and Means of Repayment
4. Distribution of Consumer Credit within the Population
Consumer Credit Use According to Income and Age
Shares of Credit Outstanding

II. EXTENT AND GROWTH OF CONSUMER CREDIT

Credit use by individuals is certainly not a twenty-first century phenomenon; it actually is as old as recorded human history and probably much older. Credit use is known from the Bible, ancient India and Babylon, the Greek City states, the Roman Republic, and medieval Europe. It may well have originated in Neolithic times when individuals down on their luck needed help with necessities. Biblical prohibitions on taking advantage of brothers in need by charging them for credit argued for centuries the influential religious view that the absence of charity in such situations was sinful.[1] Civil restrictions of various kinds are also ancient.

Development of Modern Consumer Credit

But before the twentieth century, absence also of what today are common consumer goods and services like automobiles, appliances, recreational durable goods, commercial home-improvement services, and widespread higher education precluded the need or desire for much of today's phenomenon of consumer credit. In the more distant past, credit use by individuals for noncommercial purposes probably most often did reflect necessitous situations where charity was another possible answer.

History shows, however, that use of credit by artisans and trades people also flourished in ancient times, and that it was subject to the same kinds of religious and civil regulatory prohibitions as necessitous credit in the middle ages. This thinking began to change in the later middle ages with the spread of trading economies. At the time, merchants often needed to acquire trade goods on credit for resale, but changes in religious views about credit use took centuries. Even then, it took more centuries for the change in view to move beyond business and trade-related credit to other credit for individuals.

Religious opposition to lending at interest gradually faded with development of more robust commerce and trade during the renaissance/reformation/enlightenment centuries and later, but it

[1]See *Exodus* 22:25, *Leviticus* 25:35-37, and *Deuteronomy* 23:19-20.

seems like widespread cultural and governmental anxiety over personal lending and borrowing has never completely gone away, even as secularization of economic and commercial affairs has advanced. At least some of modern governmental concerns over consumer credit appear to arise from society's remaining basic ambivalence about whether credit use by individuals is good for them or not, perhaps a modern vestige of the ancient and medieval view that credit use is questionable or even immoral. Modern economic analysis has shown that there are many situations where credit use is beneficial to consumers (see Chapter 3), but the issue is still not settled completely to the satisfaction of everyone. Nonetheless, it is obvious that there has been a strong, long term trend toward greater acceptability of credit use by individuals as a feature of modern life.[2]

Domestically in what became the United States, from colonial times through the 1850s there was credit use to be sure, but mostly as a substitute for circulating coin money that often was in short supply or for what we would today consider business purposes. Farmers as producers, for example, borrowed to acquire land for crops. As consumers, they also often purchased shop goods on credit while they waited for the harvest and the barter or sale of farm goods to repay the merchants. Artisans of various sorts also extended credit if they, like the shop keepers, were to sell their services and be paid at all. Promissory notes and similar documents often circulated like money. This kind of credit system lasted for many years in many places.[3]

But it was the coming of urbanization and expansion of town and city dwelling and the accompanying middle class after the Civil War, along with the invention of new consumer goods like automobiles and electrical appliances somewhat later, which led to the modern phenomenon of consumer credit that is so familiar today. Although there always have been necessitous loans in the absence of sufficient charity and other economic relief, there simply was little need before the 1920s for the auto loans, boat loans, durable goods credit, college tuition credit, and home modernization and repair loans that make up the bulk of consumer credit use today. The interwar years saw considerable growth of consumer credit, but most of the expansion came in the years after World War II. The reasons for credit growth are explored further in Chapter 3.

---

[2]For extended discussion of ancient and medieval views of credit and its regulation and the impact of the Enlightenment, see Homer and Sylla and Gelpi and Julien-Labruyere. See also Paul B. Rasor, "Biblical Roots of Modern Consumer Credit Law," *Journal of Law and Religion*, Vol. 10, No. 1, 1993.

[3]For colorful examples and extended review of credit use (and other activities) in the early nineteenth century by frontiersman and politician David Crockett, land speculator James Bowie, and lawyer William B. Travis, all of whom lost their lives and their debts at the Alamo in 1836, see William C. Davis, *Three Roads to the Alamo: The Lives and Fortunes of David Crockett, James Bowie, and William Barret Travis* (New York: HarperCollins, 1998).

Credit regulation expanded with the development of consumer credit. From ancient times to the early twentieth century, credit regulation consisted mostly of interest-rate limits. Rate ceilings reflected the historical religious prohibition against benefitting from the difficulties of others, but rate ceilings made extensions of small amounts of credit to necessitous or other consumer-borrowers unprofitable for existing commercial lending enterprises like banks. Rate ceilings at the state level persisted in the United States as the economy began to modernize after the Civil War, preventing the development small amounts of credit for individuals. This did not extinguish the need for emergency credit during these times, however. At the time, many individuals in the newly-urbanized segments of the population, now often disbursed from their extended families, obtained credit from lenders operating outside the state laws. The post-Civil War period in the United States up to about 1915 has subsequently become known as the "loan shark" period of consumer credit.[4]

Beginning about 1910, reformers and commercial enterprises took aim both at the prevalence of loan-shark providers of necessitous credit and the developing opportunities to aid in the sale of new consumer goods and services profitably. Both sorts of effort led to the spread of new kinds of consumer-lending institutions.

Reform efforts of the Russell Sage Foundation beginning after 1910 led first to supporting charitable lenders known as "remedial lenders" and "remedial pawn shops." By 1916, the reform-oriented Sage Foundation determined that this approach was insufficient to address the loan-shark problem due to inability of charitable lenders to attract sufficient capital for small loans. Consequently, it joined forces with willing lenders to sponsor legislation in the states enabling formation of state-regulated cash lenders of small amounts. These lenders would operate under legislated exceptions to each state's overarching rate-ceiling requirement specifically permitting higher but regulated rates for this purpose.

At the time, lenders based upon the Sage Foundation reforms and related state-regulation efforts were known typically as small loan companies. Today they still exist today as the traditional installment-lending industry. An important event occurred in 1932 when New York Governor Franklin D. Roosevelt requested that the legislature of the most populous state pass the reform legislation, which it did unanimously in both houses. By the 1960s, laws based upon the Russell Sage Foundation's efforts existed in almost every state. Since then, changes in or inattention to updating legal requirements as inflation and other economic changes have ensued means these lenders have become archaic and attenuated or absent in many states, although they still exist in others.

---

[4]See Homer, Gelpi, Calder, Michelman, Robinson and Nugent, Fleming, Hubachek, Simpson, Chapman and Shay.

The decades of the 1910s also witnessed formation of other kinds of consumer lenders. They included credit unions, similar in basic intent to those still operating as cooperatives today, although more primitive and smaller than the modern ones.[5] "Industrial workers' banks" that operated under a complicated lending plan to get around rate ceilings and offer installment credit to industrial workers known as the Morris Plan were another new kind of institution. A Virginian named Arthur Morris opened the first Morris Plan Bank in Norfolk in 1910.[6]

As a practical matter, the Morris Plan banks amounted to finance companies that took deposits. Their lending plan became the forerunner of consumer lending by the commercial banking industry, but commercial banks did not enter the field until the 1930s and then only tentatively. Most of the growth in bank consumer lending occurred after World War II. In 1951, the Franklin National Bank of New York became the first bank to issue bank credit cards. Morris Plan banks and commercial banks making consumer credit available eventually became subject to their own sets of state regulations, including further exceptions to state-based rate ceilings specifically put in place for them. Many of the old Morris-Plan banks later evolved into commercial banks.

The 1910-20 period also saw early finance companies formed specifically to facilitate the sales of related manufacturers. The manufacturers came to believe they could sell a lot more output if they also financed the sale. For example, the General Motors Company formed the General Motors Acceptance Corporation in 1919 to aid the sales of the parent. Over time, GMAC became the largest finance company in the world. (Today, a remnant survives as Ally Bank, no longer a subsidiary of General Motors.) Other manufacturers also formed sales finance subsidiaries, often known then and now as "captives." Today there also are independent companies that finance sales, including new and used cars, motorcycles, recreational vehicles, mobile homes, boats, and aircraft. There also are business-lending finance companies.

Regulation of these sales-finance firms was different from small-loan finance companies. Courts decided that financing a specific sale was not a loan for regulatory purposes. Rather, these were sales of

[5]The first US credit union was established in Maine in 1909, but credit unions die not spread beyond a few eastern states until the 1920s.

[6]The Morris plan allowed banks to make small loans profitably under existing laws. The Morris plan loan charged a legal rate of interest that collected interest at origination out of the loan principal. The bank obtained additional revenue by requiring the borrower to make purchase non-interest-bearing certificates. The borrower's payments were credited to purchase of the certificates, not to reducing the loan principal. When the required certificate purchases were completed, the certificate was cancelled, with the proceeds from the cancellation being used to repay the loan.

goods "on time" and not loans of money that triggered lending laws. Under this conception, the difference between the price of a sale for cash today and the total price over time (called the "time-price differential") was not interest and subject to state interest-rate ceilings. The same thinking applied to consumer financing by retail stores and dealers. Eventually, most states also regulated time-price differentials.

Consequently, all these institutions came under a range of different state laws and regulations. Small-loan companies were regulated under versions of the Uniform Small Loan Law sponsored by the reform-minded Russel Sage Foundation and in some states also by other laws specifically legislated for larger loans. Morris Plan lenders, many of which later became banks, were regulated under laws specifically for such lenders and banks. Credit unions had their own laws. So did the sales finance companies and retail outlets regulated by sales finance codes often known as "all goods" acts. In 1972, the NCCF complained about the range and sometimes Byzantine interaction of all these laws regulating types of credit, loan sizes, and institutions differently as barriers to effective competition in markets for consumer credit.

Referring to Barbara A. Curran's 1965 compilation of state laws, the Commission wrote in 1972 (p. 94):

> A compilation of consumer credit legislation reveals the present hodgepodge of legislation characteristic of most states. As one example, New York has separate statutes regulating instalment loans by commercial banks, loans by industrial banks, bank check-credit plans, revolving charge accounts, motor vehicle instalment sales financing, instalment financing of other goods and services, insurance premium financing, loans by consumer finance companies, and loans by credit unions. The general usury rate is 6 percent (currently 7 1/2 percent under special rule of the Banking Board), and criminal penalties apply if interest is over 25 percent [footnote omitted]. But the decreed maximum rates to obtain $500 of credit, repayable monthly over 12 months, range widely: bank personal and improvement loans, 11.6 percent; industrial banks, 14.5 percent; used cars up to 2 years old, 17.7 percent; used cars over 2 years old, 23.2 percent; small loan companies, 24.8 percent; other goods, 18.0 percent; retail revolving credit 1 1/2 percent on monthly balances up to $500 and 1 percent monthly on balances in excess of $500.
>
> The variety of rate ceilings that has developed on an *ad hoc* basis creates barriers to competition among segments of the consumer credit industry. Given a maximum rate of 11.6 percent in New York, commercial banks will not enter the $500-loan market served by consumer finance companies at 24.8 percent. [Note: Bank credit cards were a lot less common at that time than more recently.]

The regulatory trend since the NCCF's time has generally been in the direction of homogenization of laws and regulatory regimes affecting consumer credit. On balance, states have tended to adjust their credit laws in the direction of greater consistency of regulation across the classes of lenders and lending within their boundaries. There is still diversity within states and considerable diversity among states, however.

Eventual Federal legislation is a bit more focused within its spheres of activity: Beginning with the Truth in Lending Act in 1968 and the Equal Credit Opportunity Act in 1974 and 1976, Federal rules for the most part apply to all consumer creditors in the same way. Later in 2010, the Dodd-Frank Act established the Consumer Financial Protection Bureau to be a consistent Federal voice in consumer credit with ongoing responsibilities.

Neither partial homogenization nor Federal regulatory entry means that there are not remaining regulatory overlaps and difficulties, however. There still are differences in regulation among states and sometimes within them. Now there is also an ongoing Federal presence that raises further questions of overlapping jurisdictions, including questions of the desirability, or not, of Federal preemptions of state laws. These jurisdiction issues are discussed further later in this report, especially in Chapters 6 and 13.

Consumer Credit Growth

Consumer credit certainly *seems* important today. As indicated in Chapter 1, domestic consumer credit outstanding rose from about $6.8 billion at the end of 1945 and wartime restrictions to $4.2 trillion at the end of 2019. This section of this chapter outlines the types of consumer credit in widespread use today and reviews aspects of their growth over the decades. Chapter 3 then discusses further the meaning of "types of credit" and why certain types of credit account for much of the consumer credit extended.

In 1972, in its Chapter 2 the National Commission on Consumer Finance provided a review of consumer credit outstanding at the time and its growth since World War II. The Commission was able to employ statistics on consumer credit continuously collected by the Federal Reserve since 1943, the same ongoing statistical series used here. The Federal Reserve's data collection effort began when Federal wartime restrictions on both consumer goods production and consumer credit use on account of inflationary concerns made consumer credit a Federal policy matter for the first time (Regulation W, see footnote in Chapter 1 of this report).

As consumer credit grew in the postwar years, the Federal Reserve Board has maintained this data collection, updating and revising it as credit types and markets changed over time (see monthly statistical release "Consumer Credit - G19" and the historical series underlying it). After the war, the Federal Reserve also began its program of collecting information about the distributions of assets and debt among the public through the Surveys of Consumer Finances program that also extends to the present. The Surveys of Consumer Finances were begun by the Survey Research Center of the University of Michigan in 1946 with the support of the Federal Reserve and others in later years. Since 1992, the National Opinion Research Corporation of the University of Chicago has undertaken the survey field work.

Modern consumer credit is diverse enough that it can be classified in many ways. In recent years, the Federal Reserve has divided the totals in three ways: The first is by the means that credit is generated and repaid (nonrevolving versus revolving credit). The second is by institutional source of the funds (eight kinds of institutions, to be reduced to seven through a combination of certain statistics after mid 2020). Since 2013, the Federal Reserve has also released statistics a third way, according to two *uses* of consumer loans: automobile credit (including consumer trucks and motorcycles but not consumer leases) and student loans. The separate figures by purpose extend back to 1943 for auto credit and to 2006 for student loans. The following paragraphs highlight some of the Federal Reserve's statistical information on consumer credit.[7]

The first grouping of consumer credit amounts outstanding is by method of credit advance and repayment (upper part of Table 2-1). As indicated, there are two methods widespread today. The first is nonrevolving credit where the amount of the credit advance and the size and timing of repayments are determined in advance by contract (for instance, automobile credit). In terminology used by Truth in Lending, this kind of credit is also known as "other than open-end" consumer credit, or more familiarly as "closed end" consumer credit.

[Table 2-1 goes here.]

The second is revolving credit where both the amount and timing of the advance and the amount of monthly repayment are decided upon by the consumer, subject to a maximum credit size and some minimum monthly payment amount (for example, credit card credit which is the bulk of this kind of credit). This kind of credit is also widely called "open-end" consumer credit. Before 1968, the Federal Reserve did not make the distinction in the statistical series between nonrevolving and revolving credit, but the growing innovation of the three-party credit card at around that time (consumer, merchant, and financial institution) and passage of Truth in Lending argued for this new distinction. Revolving or open end forms of consumer credit today account for about a quarter of the total. Nonrevolving or closed-end

[7]In their 2014 book, Durkin, Elliehausen, Staten, and Zywicki examine the background and changing kinds of statistics and components of consumer credit in the postwar period in considerably more detail than attempted here. They also examine credit growth itself in much more detail. See Thomas A. Durkin, Gregory Elliehausen, Michael E. Staten, and Todd J. Zywicki, *Consumer Credit and the American Economy* (New York: Oxford University *Press*, 2014), Chapters 1 and 2.

forms of consumer credit account for about three quarters of consumer credit today, about $3 trillion at present.

The second grouping is according to institutional source of the credit (lower portion of Table 2-1). The listed institutions are the ultimate lenders of the amounts (for instance, depository institutions and finance companies). They are not necessarily those where the consumer actually originates the transaction and takes on the obligation (such as finance offices of automobile dealers or colleges). Frequently, originating lenders sell the promissory notes to the ultimate lenders shortly after closing of the originating transaction, a procedure called "indirect credit."

The largest suppliers of consumer credit are depository institutions, mostly commercial banks. Much of commercial bank consumer credit in recent years is through their credit-card operations. Credit unions comprise their own group, although they also are depository institutions. The reason for making this particular distinction among depositories is to provide a bit more information about kinds of depositories but without also requiring separate groupings today for remaining other sorts of depositories that are now small in number. These others include savings banks and savings and loan associations, today lumped with commercial banks into depository institutions. Within the quarter of consumer credit that is revolving credit, depositories hold the lion's share, mostly through their credit card programs using the American Express, Discover, MasterCard, and Visa brands.

The fastest growing provider of consumer credit in recent years is the Federal Government, including its lending affiliate Sallie Mae. The growth in the Federal Government category reflects the recent expansion of a variety of Federal student loan programs that have come to dominate educational lending. The Federal Government is now the second largest institutional source of consumer credit (Table 2-1).

After depository institutions and the Federal Government, finance companies and credit unions are the remaining large institutional suppliers of consumer credit. The decline in the finance company category in recent years reflects the reclassification a few years ago of Sallie Mae from the finance company group to the new Federal Government category.

Residual suppliers include nonprofit educational institutions (mostly colleges), nonfinancial businesses (like retail stores and auto dealers), and pools of securitized assets. The latter are consumer credit assets like auto and credit card receivables (loans) that lenders form into pools supporting securities sold in worldwide financial markets. This method of obtaining the funding for consumer credit once was much larger than at present, until changes in legal and accounting requirements about a decade ago required moving the assets back onto the books of the lender and making this method of obtaining funds for lending much less attractive (see table).

Recently, the amounts in this category have become small enough that the Federal Reserve intends to eliminate this category beginning in the second half of 2020; it is included in Table 2-1 because this lending source was still very large only a few years ago.

One of the questions that sometimes arise from the statistics on amounts of consumer credit in use is whether these totals have risen "too fast" or are now "too high." This is an old area of economic inquiry and review that sometimes produces the responses "compared to what" and "what is too high." There are several ways at looking at these questions.

Durkin, Elliehausen, Staten, and Zywicki examined them at considerable length in 2014 and also looked at past reviews by others of what had been known earlier as the "debt-burden" issue (see their Chapter 2). They also reviewed many studies undertaken in this area over the decades since World War II. They concluded that recent consumer credit growth trends after taking into account inflation and the growth of other economic variable such as income and assets were much like those in earlier periods, after rapid early postwar growth in the 1950s. Updating their tables and charts as of the end of 2019 provides a largely similar assessment today.

As the National Commission on Consumer Finance suggested in 1972, one way of looking at consumer credit trends is to compare it to itself; in other words, examining its growth rate over time. Does the growth rate of consumer credit exhibit a recent trend that looks out of the ordinary or has growth changed recently in some substantial or significant way? Another is to compare consumer credit to the other important economic quantities mentioned, general inflation, income, and assets.

It turns out the consumer credit growth rate has always been cyclical, rising for some time after a recession before leveling out and then declining before the next recession approaches and occurs. The recent rapid decline in the consumer-credit growth rate associated with the COVID-19 recession in 2020 is consistent with previous recessionary declines typical in consumer-credit growth. [XXX WILL COVID MENTION NEED UPDATING LATER IN 2020?]

Growth experience in recent decades has been much like past experience on this measure (see Figure 2-1). The highest growth rates were in the late 1940s and early 1950s. The aggregate *amounts* of credit have become larger as the economy has experienced population and income growth (plus inflation) over the postwar period, but recent growth rates of consumer credit have been well within experience of the past six decades. If not for student lending, the consumer credit growth over the recent decade would actually be lower recently than often typical in the past.

Figure 2-1 (CICO growth rates) goes here. [XXX NEED FIGURE 2-1]

Consumer Credit Growth and Means of Repayment

But consumer credit is not the only economic quantity to grow in the postwar period; employment, income, savings, and assets of the household sector also have grown. Perhaps more interesting than credit growth in isolation is to look at long-term consumer credit growth relative to the means of repayment: income and assets.

Consumer credit relative to household income rose rapidly in the years following World War II, the period that encompassed the greatest percentage rises in consumer credit historically. The increases at the time reflected a variety of important factors such as renewed availability of consumer durable goods like autos and appliances after the end of wartime production restrictions, but the growth rates then seem to have established a view that consumer credit always grows relative to income.[8] Other factors included rising and more stable post-war income and prospects, as the Great Depression faded farther into the past. Higher and more-stable income allowed consumers to devote more discretionary resources to durable goods and their financing. Beginning of the sustained move to the suburbs was also important. With migration to the newly developing postwar subdivisions, demand increased for transportation assets, appliances, and furniture for the new suburban homes. [XXX DISCUSS DURABLE GOODS SALES TRENDS FURTHER?]

Figure 2-2 illustrates the long-term trend of total consumer credit relative to household disposable income (after-tax income) since World War II. The chart shows that after postwar growth from a low level, the trend in this ratio largely leveled out by 1963 followed by a slow upward trend afterward. [XXX NEED UPDATED CHART]

XXX Figure 2-2 (CICO/DPI) goes here

Although Figure 2-2 does not really show much growth in consumer credit relative to income very recently, there is, of course, no reason why this ratio of consumer credit relative to income should not continue to rise slowly. As income rises and necessities become a smaller proportion of income for many families, the goods and services like autos, home modernization, and higher education that stimulate credit use can become a larger segment of overall budgets. This change undoubtedly has been true for many families, contributing to the slow rise in this ratio (witness, for example, the increase in multiple-car families since the 1950s, along with more appliances and recreational goods). Increases in two-earner families over time also suggest the availability of more income to devote to the kinds of goods and services often purchased using credit. The important message here is

[8]A number of economic analysts studied these trends in the early postwar period, notably Enthoven, Hunter, Prell, and Luckett and August, and concluded otherwise. For extended discussion of these and other studies on this question, see Durkin, et al., Chapter 2.

that this ratio has risen over time since the end of World War II, but it does not indicate some dramatic increase recently, despite what sometimes seems like widespread belief to the contrary.

Significantly, lengthening maturities of consumer credit contracts also increase the amount of credit outstanding as repayments slow, but they have the opposite effect on the actual burden on users by reducing amount of current repayments relative to income. Beginning in 1980, the Federal Reserve has provided a statistical series of consumer-credit *repayments* compared to household income (see Figure 2-3). This series shows no trend over the years 1980-2019 and is actually lower in 2019 than in 1980. [XXX NEED UPDATED CHART]

Figure 2-3 (Repayment Burden DSR) goes here. [XXX NEED FIGURE 2-3]

Assets and particularly liquid assets represent other means of repayment. There has been considerable concern in recent years that a portion of the population remains very illiquid and often unable to deal easily with financial emergencies that might arise.[9] This potentially could make them candidates for small amounts of necessitous credit, sometimes argued as abusive kinds of credit. But the bulk of the population holds substantial amounts of financial assets of various kinds that also are part of the household-sector financial structure and can serve as needed as means of credit repayments.

Figure 2-4 shows overall consumer credit outstanding relative to household sector financial assets measured by the Federal Reserve's Financial Accounts of the United States (formerly known as the Flow-of-Funds accounting system, see Federal Reserve quarterly Statistical Release Z1). Financial assets include liquid assets like deposits and close substitutes, plus bonds, stocks, and mutual funds shares.

Figure 2-4 (CICO/FA) goes here. [XXX NEED FIGURE 2-4]

The chart shows that aggregate consumer credit has remained consistently at 4 to 5 percent of aggregate household sector financial assets since the 1950s. Consumer credit outstanding has remained about one fifth to one quarter of household-sector liquid assets (deposits and close substitutes) since the early 1960s (not shown in figure). Most recently (2019), this measure is about at the middle of its range over this time, at 22 percent.

Distribution of Consumer Credit within the Population

Of course, aggregate amounts of consumer credit gathered from lenders and reported in these charts do not say anything about the

[9]See, for instance, Board of Governors of the Federal Reserve System, *Report on the Well-Being of US Households in 2018* (Washington: Board of Governors of the Federal Reserve System, 2019) and similar reports annually in the previous five years.

distribution of the credit among the population, which is only available from surveys of consuemrs. To meet this need, the Survey Research Center of the University of Michigan began its Surveys of Consumer Finances in 1946, sponsored over the decades mostly by the Federal Reserve. The surveys were annual until 1970, periodic until 1989, and more recently settled into a three-year frequency (as indicated, since the 1992, the National Opinion Research Center of the University of Chicago has taken over the data collection). After each survey, the Federal Reserve staff undertakes substantial efforts to prepare the dataset involving data editing, studying and eliminating discrepancies, estimating missing information statistically, and producing the final dataset for analytical use. The agency staff then makes it publically available electronically. All of this means that the final dataset is not available for analysis for a year or more after the survey, unlike the lender surveys that produce the familiar monthly statistical reports by provider groups widely reported in the financial press.

The Surveys of Consumer Finances show that credit use is widespread through the domestic population and also that the portion of users has grown over time. Evidence over more than seven decades of the surveys demonstrates how the slow long-term rise in the debt-to-income ratio noted earlier is due to both greater debt dispersion (debt widening) and to greater credit use by the kinds of consumers already in debt (increased intensity or debt deepening). The finding of a combination is not especially surprising, but it is also worth keeping in mind that the aggregate consumer credit to income ratio has risen only moderately for nonmortgage consumer credit over these decades, especially after the mid-1960s, despite some debt widening and deepening.

The surveys illustrate that debt widening is actually not new; most of it took place in the years immediately after World War II until about 1963. Comparison of survey results show that in 1951 about 32 percent of American households were using consumer installment credit, a credit definition which included in those days only nonrevolving consumer credit (first line of Table 2-2). This was up from a very low, but unrecorded, proportion in 1945, reflecting wartime restrictions on both production and financing. The proportion of consumers using closed end consumer installment credit rose to about 50 percent by 1963 and has remained within the range of 41-50 percent since then (first line of Table 2-2).[10]

[10] Rather than using any data tables from other sources, the tables here were recalculated from the original source data by Durkin, Elliehausen, Staten, and Zywicki in order to ensure, as far as possible, comparability of conception and definition of variables over time and their calculations are updated here. For this reason, the data tables here may show some small differences from otherwise apparently comparable tables in other analyses using the same survey data. For example, the tables here always define credit for mobile homes as consumer credit and not mortgage credit (since mobile homes are not real property and credit to purchase them is consumer credit in the Federal Reserve Board's statistical series). But such credit may not always be considered consumer credit instead of mortgage credit by other analysts

Table 2.2 goes here

Beginning in 1970, survey changes made it possible to provide more detail on use of credit cards. Most credit cards in 1970 were issued by retail stores and gasoline companies for use only at their own outlets. Many of these issuers originally provided only charge cards where payment of the bill in full was due shortly after receipt, and the amounts of credit outstanding were counted within noninstallment credit at the time. But attaching a revolving credit feature to these cards was rapidly becoming more popular by 1970. (The first three-party "credit card" – consumer, merchant, and financial institution – was the Diners Club Card in the early 1950s. For many years it remained a charge card.)

Even more important for consumer credit markets in the long run, three-party cards like MasterCard and Visa (then known as Master Charge and BankAmericard) began to become widely available from banks in the late 1960s and could be used almost anywhere. Originally issued only by commercial banking organizations, these cards are sometimes still called bank-type credit cards, although other financial institutions including savings institutions, credit unions, and others now also issue them. Bank-type cards were in the pockets and purses of only 16 percent of households in 1970, but the proportion grew to 73 percent in 2001 before falling off slightly afterward (including 64 percent measured in 2013 after the sharp recession earlier in the decade (second line of Table 2-2). Over these decades, credit cards have taken over much of the work of routine extension of consumer credit for many household purposes. Including those consumers with outstanding balances on charge accounts and later revolving credit card accounts within the definition of consumer credit users raises the total proportion of consumer credit-using households from 46 percent in 1951 and 53 percent in 1956 to more than 60 percent since 1977 (fifth line of the table).

Consumer Credit Use According to Income and Age

The surveys also permit examination of trends in debt use within population segments. Sometimes the view is heard that that consumer credit use is a low income or lower middle income phenomenon, and that any credit expansion might well promote more woe than benefit. Actually, the surveys show that low and middle income consumers have always been users of consumer credit, but it is more nearly correct to say that consumer credit use is a middle- to upper-income phenomenon.

(since it is housing related) and other analysts may prefer to keep mobile home credit with the rest of housing related debt. There also may be other slight definitional differences between these and tables in other sources, although the statistical differences are small. The definitions of consumer credit employed here follow Federal Reserve usage, as discussed above.

To look at the use of consumer credit by income level, respondents to each of the Surveys of Consumer Finances illustrated in Table 2-2 were arrayed according to income and then placed into one of five groups of equal size (quintiles) from lowest to highest income (see Table 2-3). Looking at income quintiles this way frees the discussion from the issue how the definition of "low income" or "high income" might change over time due either to inflation or economic growth. In each year the lowest income quintile, for example, includes the fifth of the surveyed population with the lowest incomes and the other income quintiles consists of the respective other fifths of the income distribution.

Table 2-3 goes here

Table 2-3 shows the proportion of each income quintile with some kind of consumer credit outstanding at the time of the survey (including closed or open end installment credit and noninstallment credit) for each of the survey years illustrated in the previous table. The following table (Table 2-4) then measures the proportion of households with these kinds of credit outstanding among population age groups arrayed from the youngest respondents to the oldest.

Table 2-4 goes here

These tables reveal that there has been growth in consumer credit use in all income and age segments 1951-2016. Among income groups, the greatest relative growth in frequency of credit use occurred in the lowest income quintiles 1951-1963, but since then growth in the credit using population has been only moderate in all income groups (upper panel of Table 2-3).[11] Each of the three highest income groupings registered half or more of their members as consumer credit users in as long ago as 1951 (lines 3-5 of the upper panel of Table 2-3), and the proportion in the third and fourth quintiles reached two-thirds by 1963 (lines 3-4).

Over the decades, the Surveys of Consumer Finances have shown that consumer-credit use shows a life-cycle effect. The NCCF reported in 1972 (P. 12):

> The frequency of installment credit use in relation to age of the family head is, of course, intimately related to the level of income and stage in the life cycle characteristic of that age. Those in the younger age groups ... used installment credit most frequently. A significant decline in the frequency of use did not occur until after age 55.

11. There is a drop in credit use among the lowest income segment recorded by the 1970 survey. This may reflect that 1970 was the only recession year among the survey years in the table. The 2010 survey followed the end of a sharp recession by about six months. It also shows a general drop in credit use.

> The profile that emerges is that the consumer most likely to acquire goods and services is young, married, with children at home and with family income between $7500 and $15000 [Note: these were middle-class amounts in 1972.] The stage in life cycle of the family appears to be the most influential in determining frequency of use, while the level of income probably has the greatest influence on the quantity of debt and the quality of the goods and services acquired.

Within age groups, consumer credit use has always been most prevalent among younger consumers. It has long been understood that use of credit is strongly influenced by stage of life cycle and in the next chapter we will discuss this further. Households headed by younger individuals, for example, are more likely below their long term average lifetime income level. They also are bearing the costs of acquiring housing and household durable goods, rearing and educating children, etc. and so they are willing to use credit knowing their ability to repay debts that finance these activities likely will be rising. Consequently, it is not especially surprising that more than three-fifths of households with heads younger than 45 were consumer credit users in the mid-1950s, and this proportion rose to three-quarters in 1977 and has remained around that level since then (lines 1-2 of the upper panel of Table 2-4).

In contrast, households near or past retirement may not have as many such needs and they may also have accumulated more liquid savings and not need to use credit as often. This life cycle effect is also visible in Table 2-4, although the greatest growth of credit in percentage terms occurred among older consumers. The proportion of those using consumer credit in the 55-64 age bracket rose substantially over these years, to about three-fifths by 1995 (line 4 of the upper panel). Furthermore, only about one fifth of households with heads over 65 were consumer credit users in the 1950s, but this proportion has risen over time (lines 5-6). Thus, along with population growth, it seems that an aging population, combined with a higher proportion of older consumers who still use consumer credit, accounts for at least some of the increase in consumer credit outstanding in recent decades. Extremely low interest rates on such things as new car loans in recent years probably had something to do with this trend. For creditworthy older consumers, why use reserves or assets that can be made tax deferred through IRAs rather than inexpensive credit? This is an area for further research.

Shares of Credit Outstanding

Cross section surveys also permit calculation of the share of total debt held by various groups of consumers. The next two tables contain calculated shares of selected kinds of debt outstanding owed by consumers segmented first by income (Table 2-5) and then by age (Table 2-6). Results of this effort turn out to be revealing, and maybe a bit surprising, in light of ongoing discussions in recent years about the overall democratization of credit.

Table 2-5 goes here

Table 2-6 goes here

The central message from the distribution of debt shares measured by the cross section surveys is stability over time rather than dramatic change; there have been some debt increases in all income and age groups leaving the shares quite similar over time. Focusing on consumer credit, the third panel of Table 2.4 shows that the upper two income quintiles owed 58 percent of consumer credit outstanding in 1951, exactly the same proportion as in 2016. It must be kept in mind, of course, that some of this pattern is produced by keeping the sizes of the income groups the same (quintiles). If the group sizes were allowed to change over time to, say, groups representing "low income" versus "middle class" or "comfortable," the amount of debt owed by the latter would undoubtedly rise as the group becomes larger due to increasing income and wealth among the population as a whole over time.

By age, where the size of the groupings is not static, the story is a bit different. Younger families have always been larger users of credit, but there has been a gradual shift of the share owed toward older users over the decades. Households classified as headed by individuals under age 45 have been and remain the largest users of consumer credit, but these households have lost share since 1951 (lines 1-2 of the third panel of Table 2.5). Households with heads over age 45 have increased their shares of installment credit owed, presumably in part because the population has aged and there are more individuals in the upper age groups now. Some of them may also consider debt less expense now than their counterparts did years ago.

Balances owed specifically on credit cards definitely show an aging effect (second panel of the table). In 1970 when credit cards with a revolving credit feature were relatively new, the youngest households owed 44 percent of the card debt (line 1). This probably represents the ages-old phenomenon where the young are more willing to try new things. By 2016 when the older cohort surveyed that year had literally grown up using credit cards, the share of card debt owed by households in the youngest age grouping had fallen by about two thirds to 12 percent. The bulk of the offsetting increases in share were among households with heads over the age of 45.

Table 2-1. Consumer Credit Outstanding, End of Selected Years, 1945-2019, in Billions of Current Dollars

	1945	1955	1965	1975	1985	1995	2005	2010	2015	2019
By Type of Credit										
Nonrevolving	7	43	97	192	479	703	1464	1808	2504	3097
Revolving				15	132	465	857	839	907	1094
Total	7	43	97	207	611	1168	2321	2647	3411	4191
By Type of Institution										
Depository Institutions	3	19	49	116	355	542	816	1186	1428	1771
Finance companies	1	12	24	33	112	152	517	705	561	537
Credit unions	*	1	6	26	74	132	229	226	342	482
Nonfinancial business	3	11	18	33	63	85	60	44	38	40
Pools of securitized assets						213	610	50	46	14
Federal government					7	44	90	364	950	1319
Nonprofit and educational inst.								71	46	28
Total	7	43	97	207	611	1168	2321	2647	3411	4191

Source: Federal Reserve Statistical Release G19, "Consumer Credit," Historical Data. Figures shown are for December, not seasonally adjusted. Columns may not add exactly to totals because of rounding.

* Greater than zero but less than one half billion.

Table 2-2. Proportions of Households Using Credit, 1951-2016, in Percent

Type of Credit	1951	1956	1963	1970	1977	1983	1989	1995	2001	2007	2013	2016
Closed-end Installment Credit	32	45	50	49	49	41	44	45	44	41	47	50
Credit Card With Revolving Balance[a]				22	34	37	40	47	44	46	39	44
Notes: Have Any Credit Card[a]				51	63	65	70	74	76	73	68	71
Have Bank-type Credit Card				16	38	43	56	66	73	70	64	71
Any Consumer Credit[b]	46	53	59	54	61	61	62	64	63	66	62	66
Mortgage Credit[c]	20	24	32	35	40	39	38	39	42	46	41	40
Consumer Credit or Mortgage Credit	53	62	67	64	70	69	70	72	73	75	73	75

Source: Data from the Surveys of Consumer Finances.

[a]In 1995-2001 includes a few respondents with open-end retail revolving credit accounts not necessarily evidenced by a plastic credit card.

[b]Closed-end installment credit, open-end installment credit (including credit card accounts and unsecured lines of credit), and noninstallment credit (excluding credit for business or investment purposes).

[c]Includes home equity credit and home equity lines of credit with a balance outstanding.

Table 2-3. Proportions of Households Using Consumer-Related Credit by Income Group, 1951-2010, in Percent

	1951	1956	1963	1970	1977	1983	1989	1995	2001	2007	2013	2016
Consumer Credit[a]												
Income quintile												
Lowest	24	37	45	26	38	38	43	44	44	45	45	51
Second lowest	41	57	58	49	57	53	52	60	62	59	59	63
Middle	56	59	67	65	68	69	69	70	71	76	71	73
Second highest	55	61	69	70	73	75	78	78	73	80	72	76
Highest	52	52	59	57	71	72	68	70	62	68	65	66
All	46	53	59	54	61	61	62	64	63	66	62	66
Any Credit (Consumer Credit or Mortgage Credit)												
Income quintile												
Lowest	29	40	46	30	44	42	45	47	47	50	50	56
Second lowest	46	61	64	56	62	58	58	66	68	66	65	68
Middle	63	67	74	75	76	76	76	77	81	83	79	82
Second highest	64	70	78	81	84	84	85	86	84	90	86	87
Highest	63	71	75	79	85	87	86	86	86	87	84	83
All	53	62	67	64	70	69	70	72	73	75	73	75

Source: Data from the Surveys of Consumer Finances.

[a]Closed-end installment credit, open-end installment credit (including credit card accounts), and noninstallment credit (excluding credit for business or financial investment purposes).

Table 2-4. Proportions of Households Using Consumer-Related Credit by Age Group of Family Head, 1951-2010, in Percent

	1951	1956	1963	1970	1977	1983	1989	1995	2001	2007	2013	2016
Consumer Credit[a]												
Age group												
Under 35	54	71	76	70	77	74	74	78	76	76	72	76
35-44	61	60	72	67	78	78	78	78	74	72	73	77
45-54	45	54	62	60	69	70	71	72	68	72	68	74
55-64	34	42	45	42	54	55	53	59	58	66	62	61
65-74[b]	16	19	26	16	26	29	38	41	42	51	50	57
75 and over				9	13	13	17	22	23	23	31	36
All	46	53	59	54	61	61	62	64	63	66	62	66
Any Credit (Consumer Credit or Mortgage Credit)												
Age group												
Under 35	59	76	81	76	82	79	78	82	81	82	76	80
35-44	69	74	82	83	90	87	88	85	87	85	84	86
45-54	54	63	72	74	82	81	83	83	83	85	82	84
55-64	42	52	53	51	65	66	65	73	73	80	75	75
65-74[b]	23	25	33	27	34	36	47	51	54	63	64	68
75 and over				14	13	17	20	26	28	30	35	47
All	53	62	67	64	70	69	70	72	73	75	73	75

Source: Data from the Surveys of Consumer Finances.

[a]Closed-end installment credit, open-end installment credit (including credit card accounts), and noninstallment credit (excluding credit for business or investment purposes).

[b]In 1951, 1956, and 1963, 65 and over.

Table 2-5. Shares of Kinds of Consumer-Related Debt Outstanding by Income Groups, 1951-2010, in Percent

	1951	1956	1963	1970	1977	1983	1989	1995	2001	2007	2013	2016
Closed-end Consumer Installment Credit												
Income quintile												
Lowest	7	6	6	3	5	4	4	7	8	8	10	9
Second lowest	14	12	15	16	13	12	9	13	15	12	13	13
Middle	22	23	25	24	23	19	22	22	21	22	18	20
Second highest	27	30	26	31	27	27	34	28	28	30	26	28
Highest	31	29	27	27	31	37	31	30	29	29	32	30
All	100	100	100	100	100	100	100	100	100	100	100	100
Revolving Balances on Any Credit Card												
Income quintile												
Lowest				2	4	4	2	7	7	6	5	6
Second lowest				10	12	10	9	15	13	9	12	13
Middle				24	19	20	21	20	22	18	21	17
Second highest				35	35	30	30	24	26	32	27	28
Highest				30	31	36	38	34	32	34	34	35
All				100	100	100	100	100	100	100	100	100
Consumer Credit[a]												
Income quintile												
Lowest	6	10	8	3	5	7	5	7	8	9	10	9
Second lowest	14	14	14	15	13	12	10	13	15	11	14	14
Middle	23	22	25	24	22	18	22	21	21	20	19	19
Second highest	27	25	25	31	28	25	32	27	27	30	26	28
Highest	31	29	28	27	32	38	31	31	29	29	32	30
All	100	100	100	100	100	100	100	100	100	100	100	100
Mortgage Credit												
Income quintile												
Lowest	3	2	2	2	3	3	1	2	2	3	3	3
Second lowest	8	5	7	7	7	6	5	7	5	5	6	6
Middle	17	16	15	17	17	12	12	12	14	15	12	12
Second highest	28	26	31	31	28	25	26	26	24	26	24	24
Highest	44	51	45	43	44	54	56	53	54	51	55	55
All	100	100	100	100	100	100	100	100	100	100	100	100
Any Credit (Consumer or Mortgage)												
Income quintile												
Lowest	4	4	3	2	4	4	2	3	3	4	4	4
Second lowest	9	7	8	8	8	7	6	8	7	6	8	8
Middle	18	17	17	18	18	13	14	14	15	15	13	14
Second highest	28	26	30	31	28	25	27	26	25	27	24	25
Highest	42	46	42	40	42	51	51	49	50	48	51	49
All	100	100	100	100	100	100	100	100	100	100	100	100

Source: Data from the Surveys of Consumer Finances. Columns may not add exactly to totals because of rounding.

[a]Closed-end installment credit, open-end installment credit (including credit card accounts), and noninstallment credit (excluding credit for business or investment purposes).

Columns may not add to totals because of rounding.

Table 2-6. Shares of Kinds of Consumer-Related Debt Outstanding by Age Groups of Family Head, 1951-2010, in Percent

	1951	1956	1963	1970	1977	1983	1989	1995	2001	2007	2013	2016
Closed-end Consumer Installment Credit												
Age group												
Under 35	33	42	38	46	41	37	31	35	32	35	32	30
35-44	33	31	28	21	23	27	31	28	32	22	25	25
45-54	21	18	22	22	20	21	22	24	21	23	20	21
55-64	9	8	9	10	13	12	10	8	10	14	15	15
65-74[a]	4	2	5	1	2	3	4	3	3	4	5	6
75 and over				0	1	0	1	1	1	1	2	3
All	100	100	100	100	100	100	100	100	100	100	100	100
Revolving Balances on Any Credit Card												
Age group												
Under 35				44	35	29	32	27	25	16	12	14
35-44				25	23	30	29	29	28	23	20	19
45-54				21	27	20	21	26	24	27	23	27
55-64				9	11	16	11	11	12	22	25	21
65-74[a]				1	3	4	6	5	9	10	13	13
75 and over				0	0	1	1	1	2	2	7	6
All				100	100	100	100	100	100	100	100	100
Consumer Credit[b]												
Age group												
Under 35	34	36	37	45	40	35	32	33	30	30	29	28
35-44	32	28	27	21	24	26	31	28	31	22	24	24
45-54	21	20	22	22	20	20	21	25	22	24	21	22
55-64	10	10	9	10	12	14	10	9	11	17	17	15
65-74[a]	3	5	5	1	2	3	4	4	5	6	7	7
75 and over				0	1	1	2	1	1	1	3	3
All	100	100	100	100	100	100	100	100	100	100	100	100
Mortgage Credit												
Age group												
Under 35	30	31	27	29	38	29	29	20	18	19	13	12
35-44	33	39	36	36	30	34	38	34	32	27	26	25
45-54	23	18	25	24	20	20	19	29	30	28	27	28
55-64	10	8	8	7	9	12	11	12	13	18	21	21
65-74[a]	3	3	3	3	2	3	3	4	6	7	10	10
75 and over				0	0	0	1	1	1	1	3	4
All	100	100	100	100	100	100	100	100	100	100	100	100
Any Credit (Consumer or Mortgage)												
Age group												
Under 35	31	33	29	32	38	30	30	23	20	21	16	16
35-44	33	37	35	34	29	33	36	33	32	26	26	25
45-54	23	19	25	23	20	20	19	28	29	27	26	26
55-64	10	8	8	8	10	13	11	12	12	18	20	20
65-74[a]	3	4	3	3	2	3	3	4	6	7	10	9
75 and over				0	0	0	1	1	1	1	3	4
All	100	100	100	100	100	100	100	100	100	100	100	100

Source: Data from the Surveys of Consumer Finances. Columns may not add to totals because of rounding.

[a]In 1956 and 1963, 65 and over.

[b]Closed-end installment credit, open-end installment credit (including credit card accounts), and noninstallment credit (excluding credit for business or investment purposes).

XXX Remaining:

p. 9: Include more discussion of COVID relative to cyclicality?

p. 9: Update chart for CICO growth rate (Figure 2-1 here; Book Figure 2.2).

P. 10: Discuss durable goods growth trends further?

p. 10: Update chart for CICO/DPI (Figure 2-2 here; Book Figure 2.4).

P. 10: Update chart for repayment burden/DSR (Figure 2-3 here; Book Figure 2.1).

p. 11: Update chart for CICO/FA (Figure 2-4 here; Book Figure 2.3).

Updates and drawing needed for figures (from Book figures):

Figure 2-1	CICO Growth Rate	Book Figure 2.2
Figure 2-2	CICO/DPI	Book Figure 2-4
Figure 2-3	Repayment burden/DSR	Book Figure 2-1
Figure 2-4	CICO/FA	Book Figure 2-3