

December 2017

The Consumer Credit Card Market

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Executive summary

Every year, consumers use hundreds of millions of credit cards to spend trillions of dollars and revolve hundreds of billions of dollars of debt. Credit card issuers, payment card networks, and other market players spend billions of dollars annually to promote their brands and attract new customers. In 2017, *Forbes* magazine included three of the four largest American payment card networks, as well as a number of the largest credit card-issuing banks, in their list of the 100 most valuable brands in the world.¹

In 2015, we wrote that “[t]he credit card marketplace is among the largest, most diverse, and most complex markets of any consumer financial product.”² Over the last two years, that statement has become even more appropriate. The market has grown in size, in the number of its offerings and participants, and in the scope and features of its products. These trends accentuate the importance of monitoring marketplace developments, as the Bureau has been instructed by Congress to do on a biennial basis.

Below, we discuss the background for this report. We then summarize the key findings of the report. We conclude with a note about consumer satisfaction and issuer profitability.

¹ See *Forbes*, *The World’s Most Valuable Brands*, (2017 Ranking), available at <https://www.forbes.com/powerful-brands/list>.

² Consumer Fin. Prot. Bureau, *The Consumer Credit Card Market*, at 7 (Dec. 2015) (“2015 Report”), available at http://files.consumerfinance.gov/f/201512_cfpb_report-the-consumer-credit-card-market.pdf.

BACKGROUND

In 2009, Congress passed the Credit Card Accountability Responsibility and Disclosure Act (“CARD Act” or simply “Act”).³ The CARD Act superseded a number of earlier regulations that had been finalized by three large Federal financial regulators but had yet to be implemented.⁴ The Act entailed substantial changes for the credit card market. New disclosures and underwriting standards were mandated, certain fees were curbed, and interest rate increases on existing balances were restricted.

Among the CARD Act’s many provisions was a requirement that the Board of Governors of the Federal Reserve System (“Board”) report every two years on the state of the consumer credit card market. With the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act in 2010, that requirement passed to the Consumer Financial Protection Bureau (“Bureau” or “CFPB”) alongside broader responsibility for administering most of the CARD Act’s provisions. This is the third report published pursuant to that obligation, building on prior reports published by the Bureau in 2013 and 2015.⁵

Our 2013 Report focused on trends in the credit card marketplace before and after the CARD Act. Because the implementation of the Act coincided with a period of economic recovery, it was difficult to tease out the effects of the CARD Act. We did not see any evidence that the Act had negatively affected the consumer cost of credit cards. In fact, we found that all-in costs to cardholders had fallen in the wake of the Act’s passage and continued to fall through its

³ Pub. L. No. 111-24, 123 Stat. 1734.

⁴ Those rules, promulgated jointly by the Office of Thrift Supervision (“OTS”), the National Credit Union Administration (“NCUA”), and the Board of Governors of the Federal Reserve System, were announced in December of 2008 and published in the Federal Register the following month. Unfair or Deceptive Acts or Practices, 74 Fed. Reg. 5498 (Jan. 29, 2009) (to be codified at 12 C.F.R. part 226).

⁵ See Consumer Fin. Prot. Bureau, *Card Act Report*, (Oct. 1, 2013) (“2013 Report”), available at http://files.consumerfinance.gov/f/201309_cfpb_card-act-report.pdf. The Bureau also held a conference in 2011 in which numerous market stakeholders contributed information and perspective on developments in the credit card market. See Press Release, Consumer Fin. Prot. Bureau, *CFPB Launches Public Inquiry on the Impact of the Card Act* (Dec. 19, 2012), available at <https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-launches-public-inquiry-on-the-impact-of-the-card-act>.

implementation.⁶ We also noted that the CARD Act increased transparency in the consumer credit card market, principally by simplifying the cost structure of card products. With certain exceptions, we also did not find evidence that the CARD Act had reduced access to credit.⁷

Our 2015 Report had a broader scope. We continued to assess post-CARD Act trends, generally corroborating the findings of our 2013 Report and finding that most of the market trends we identified in 2013 had persisted over the two-year interval between reports. We also laid out a broader set of market indicators, establishing potential baselines against which to measure the evolution of the market in future reports. In addition, we did a number of “deep dives” into certain issuer practices in the market—namely, deferred interest promotions, rewards credit cards, and debt collection.

OUR 2017 REPORT

This report continues the approach of our 2015 Report. We revisit most of our baseline indicators to track key market developments and trends. We also revisit some of the 2015 deep-dive topics to assess how the market has developed. We do two new deep dives. The first looks at various indicators for a range of credit card products marketed to and used by consumers who lack prime credit scores. The second covers rapidly emerging “third-party comparison websites” as they implicate the credit card market.

Below we summarize the findings of each section of the report. Overall, we note the following core points:

- The cost of card credit remains largely stable since our last report. This is true in general and across credit score tiers. Cost structures—the allocation of costs to interest charges and fees—are also unchanged;

⁶ See 2013 Report, at 32-35.

⁷ See *id.* at 60-61. We did identify a number of restrictions on availability—such as card originations to students, or ability-to-pay restrictions on origination and credit line increases—that appeared to be intended results of the CARD Act. See *id.* at 43-44, 60-61.

- Most measures of credit card availability—overall and across credit score tiers—have remained stable or have increased since our last report;
- The market shows significant innovation. Rewards programs of all kinds proliferate, new digital account servicing tools help consumers manage purchases, debt, and account security, and new providers are entering this and adjacent markets with new products that compete with incumbents;
- After falling to historical lows in the years following the recession, delinquency and charge-off rates have increased over the last year. This uptick in delinquency and charge-off rates remains small, but is occurring in the absence of any concurrent deterioration in broader economic conditions;
- Total outstanding credit card debt has continued to grow since our last report and is now at pre-recession levels. Throughout the post-recession period, including the period since our last report, purchase volume has grown faster than outstandings;
- The portion of the market that serves consumers with non-prime credit scores continues to evolve. Three trends in particular stand out:
 - A long-term trend that remains evident in recent data is the increasing importance of private label credit cards to consumers with non-prime credit scores. These consumers have always found private label credit more accessible than other credit card products, but consumers with non-prime scores now hold far more of their outstanding balances on private label cards than they did before the recession;
 - A more recent trend is that issuers, consumers, and market observers have all intensified their interest in secured credit cards. Secured credit cards' market share, while still small, is growing;
 - There are indications that issuers may be putting increasing weight on credit line management as a risk control mechanism. Issuers have always used this tool, but appear to be using it now with increasing intensity and frequency;
- Overall, issuers have lowered their daily limits on debt collection phone calls for delinquent credit card accounts since our last report. The majority of issuers now supplement their internal collections strategy with email use, but their third-party collection networks typically do not send emails; and

- More and more consumers are engaging with financial products, including credit cards, through digital portals on their computers and mobile devices. Large numbers of consumers now shop for, originate, and service credit card accounts digitally.

MARKET SIZE AND FOUNDATIONAL METRICS OF CONSUMER USE

The credit card market is one of the United States' largest consumer financial markets. It continues to grow by most measures. The total amount of outstanding consumer credit card debt is now at pre-recession levels, while the total amount of credit line available and the total number of accounts are below pre-recession peaks. The total amount spent on credit cards, by contrast, has moved past previous highs and, according to industry projections, shows no sign of slowing down. The increasing gap between credit card spending and credit card indebtedness becomes even clearer if we compare changes in these indicators to changes in the nation's gross domestic product ("GDP"). Total credit card indebtedness and total available card credit have been stable relative to GDP for a number of years now, but at levels lower than we observe pre-recession. Purchase volume, however, continues to grow significantly faster than overall economic activity.

Consumers with higher credit scores continue to account for the majority of credit card debt and spending. However, in the last few years, the share of consumers with lower scores holding credit cards has been growing at a rate that exceeds that for consumers with higher scores. Cardholders with lower scores have also increased the average number of credit cards they hold. These cardholders have seen steeper increases in both aggregate and average outstandings over the last few years than cardholders with higher scores, although all credit tiers have seen some growth in these indicators over the last few years. Aggregate credit card indebtedness for consumers with lower scores, however, remains below 2008 peaks. We also look at evidence around rewards penetration and usage, as well as revolving rates and payment rates.

Rates of credit card delinquency and charge-off have declined sharply since their peak during the recession, and remain lower than they were in the years prior to the recession. However, we note slight increases recently in both indicators.

COST OF CREDIT

The cost of card credit to consumers remains stable—with one significant exception noted below. It also generally remains lower compared to the period prior to the implementation of CARD Act rules. The CARD Act's effect on the structure of card costs also persists, with interest

charges representing the bulk of all-in costs to consumers across most products and credit score tiers. For consumers with the highest credit scores, annual fees are strongly associated with the presence of a rewards program on the card. Such costs may be better understood less as the price of deferring payment for purchases and more as the price of accessing lucrative benefits and perks relating to spending activity.

The one key exception to cost stability is the increase in interest rates on variable rate accounts. Although the CARD Act generally prohibits rate increases on existing balances, it allows issuers to increase rates on many cards when an index rate, such as the WSJ prime rate, increases. For several years after the CARD Act's implementation, such index rates remained relatively stable, potentially setting a consumer expectation of stable interest rates in perpetuity. Since we highlighted this issue in our prior report, several increases in background interest rates have occurred, and issuers have generally increased interest rates on their customers' accounts accordingly.

AVAILABILITY OF CREDIT

The availability of credit in the card marketplace is more difficult to measure directly than its cost. Even so, we find substantial evidence that credit availability is significant and increasing. Both the number of accounts originated and the volume of credit originated have grown steadily in recent years, as has the share of consumers opening new accounts. Most origination metrics we observe are near pre-recession levels. This is true across credit score tiers for both general purpose and private label cards. Approval rates have climbed for all credit score tiers since post-recession lows, even as application volumes have stabilized. Credit availability is constrained, however, by ability-to-pay rules mandated by the CARD Act.

Meanwhile, there has been significant recent change in how consumers procure general purpose credit cards. Direct mail volume has stagnated. Large shares of applications for general purpose cards are now sourced through digital channels. More consumers are finding their way to application pages via digital advertisements or third-party credit card comparison sites. More consumers are also applying for credit on their mobile devices. Even among private label and retail co-brand cards, fewer accounts are applied for in-person. The use of at least some digital channels is disproportionately heavy for consumers with lower credit scores.

We also attempt to verify empirically whether issuers are now putting increased weight on line management as a risk control tool. Our findings are not dispositive, but they are consistent with

increased issuer emphasis on line management policies and practices. This may represent issuer adaptability in the face of the CARD Act's limitations on repricing and on certain fees.

ISSUER PRACTICES

Digital account servicing platforms, such as websites where consumers can view and manage account activity, continue to grow in penetration and scope. For all card types, a majority of consumers are enrolled in online servicing portals. One-third of general purpose accounts are enrolled in mobile servicing applications. Increased enrollment has been accompanied by increased consumer reliance on these portals for core account servicing activities. We observe upticks in the share of accounts opting out of receiving paper billing statements and the share of accounts making both automatic and non-automatic payments against their accounts using digital channels. Non-automatic payments are much more frequent than automatic payments. More qualitatively, we observe that these platforms continue to add functionality, and appear to be becoming a vector for competition between issuers.

In recent years, many consumer financial service providers have made credit scores and related information regularly available to their customers, and credit card issuers have been among the most prominent class of providers doing so. Issuers we surveyed report significant recent growth in the penetration of free credit score access, with nearly two-thirds of general purpose accounts providing such access. For about one-quarter of accounts, consumers are actually viewing their credit scores within a given year.

Consumers, primarily those with higher credit scores, are making increased use of balance transfer features on credit cards. These transfers are usually at promotional interest rates, allowing consumers to carry balances for extended periods of a year or more without incurring any interest charges on that balance. We also document changes to consumer "grace periods" on purchases that are sometimes—but not always—associated with balance transfers.

Measuring whether credit card products have become more or less complicated over time is difficult. We do so by quantifying the number and type of different price points in credit card acquisition disclosures over a decade-long period that extends before and after the CARD Act. We observe a significant and sustained decline in the average number of price points in solicitation disclosures. Some, but not all, of these can be attributed to changes in disclosure rules or practices distinct from whether the underlying product has become more or less complicated. The largest driver of change is the disappearance of overlimit fees from large

issuers' solicitation disclosures, but we also observe that foreign transaction fees are on the wane, a finding confirmed by external observers.

PRODUCTS MARKETED TO “NON-PRIME BORROWERS”

Many American consumers lack prime credit scores, which makes it difficult for them to access credit card products with the most favorable terms. They often have to choose from among products that generally have terms less favorable than are available to consumers with higher scores. These products offer such consumers the dual possibility of access to the credit card market as well as an avenue for building or rehabilitating credit records when timely repayments are made.

We look at four such product classes in detail: unsecured general purpose cards made available to consumers by mass market issuers; unsecured general purpose cards made available to consumers by “subprime specialist” providers; secured general purpose cards; and private label cards. We review product structure and issuer practices for each of these classes, with an emphasis on secured cards, which are a fast-growing segment of the market that we have not looked at in prior reports. Secured cards are a potential avenue to establishing “credit visibility” for some of the consumers we have identified as “credit invisibles.”⁸ We also look at a range of market indicators for a late 2014 “vintage” of card originations in each product class, which allows us to illuminate consumer experiences and outcomes in this part of the market.

THIRD-PARTY CREDIT CARD COMPARISON SITES

Digital technologies have transformed the way that consumers shop for credit cards. One of the most visible elements in that transformation is the rise of third-party credit card comparison sites. These sites are neither owned nor operated by credit card providers. They aggregate information about products on the market into dynamic digital platforms that allow consumers to compare credit card products along a number of criteria.

⁸ See Kenneth P. Brevoort & Michelle Kambara, Office of Research, Consumer Fin. Prot. Bureau, *CFPB Data Point: Becoming Credit Visible*, (June 2017), available at https://www.consumerfinance.gov/documents/4822/BecomingCreditVisible_Data_Point_Final.pdf.

In recent years these sites have ballooned in their aggregate effect on the market. We observe that in 2016 they were directly responsible for sourcing almost one-fifth of all general purpose applications submitted to mass market issuers, resulting in the origination of well over five million new credit cards. Issuers paid these sites more than \$1 billion for credit card approvals in 2016—representing both the bulk of the sites’ revenue and a significant share of *all* marketing spending for consumer credit cards.

DEBT COLLECTION

When consumers fall behind on their credit card bills, issuers use a variety of strategies to collect the delinquent debt. During the initial stages of delinquency, issuers often engage in collection activities using collectors that they employ in-house. As part of their internal collection efforts, some issuers use a combination of in-house and first-party collectors, which collect in the issuer’s name. These first-party collectors generally share responsibility with the issuer’s in-house collectors for the same accounts within a given day based on the availability of resources. Issuers additionally engage with external, third-party collection agencies to handle certain segments of accounts, such as late-stage or high-risk accounts. Over the last two years, issuers appear to have pursued more internal collection activity, either through in-house or first-party collectors, rather than through third-party collectors. Issuers also employed various contact strategies to collect pre-charge-off debt. Some issuers allow their collectors no more than three attempts per day to make contact regarding a consumer’s delinquent account, compared to four as reported in our 2015 Report, while others permit up to 15 attempts daily. Across surveyed issuers, the average number of call attempts per account per day was 2.4 in 2016. In addition, all surveyed issuers had procedures in place to accommodate the needs of some limited English proficiency consumers when contacting them via telephone regarding a debt.

In their efforts to mitigate potential losses on delinquent accounts, issuers offer a variety of programs to help consumers repay their debts. Depending on the account and the consumer’s unique circumstances, these programs offer short-term or long-term plans for repayment. Over the past two years, issuers have exhibited a shift away from short-term programs and have focused their efforts on enrolling consumers in long-term programs. The inventory of balances in loss mitigation programs, which spiked after the recession, has declined steadily as many consumers have completed or left the programs. While issuers’ own loss mitigation programs remain available to all eligible consumers, most issuers maintain policies of not working with third-party debt settlement companies.

If an account becomes 180 days past due, an issuer will charge off the account. At this point, the issuer may continue collections internally, outsource collections to a third party, sell the account to a debt buyer, pursue litigation, or “warehouse” the account (meaning that they hold the account without doing anything to collect). Issuers decreased the size of their third-party collection networks, including collection agencies and law firms, over the past two years, with a decline from 127 unique collectors across all issuers in 2015 to 105 in 2017. Many issuers, particularly for pre-charge-off accounts, reported pursuing a consumer-level collections strategy, which enables collectors to handle consumers with multiple delinquent accounts during a single contact attempt. The share of total pre-charge-off delinquent dollars belonging to consumers with multiple accounts from the same issuer ranged from 10 to 67 percent in 2016. Among issuers that pursued litigation on charged-off accounts, the average balance in 2016 was \$6,700. Issuers that tracked default judgments reported that they comprised more than two-thirds of all judgments, meaning that a substantial share of consumers who were sued did not appear in court or otherwise respond to the summons. Fewer issuers sold debt in 2015 and 2016 than in prior years. Those that continued to sell debt planned to increase their sales of charged-off debt in 2017.

PRODUCT INNOVATION

In recent years, interest and investment in consumer financial innovation has grown substantially. New entrants into consumer financial markets are introducing a variety of new products that leverage new technologies and business models. Some of these innovations and entrants are focused solely and directly on the credit card market, and many more affect credit cards as part of broader changes in how consumers make payments or compete with credit cards as a source of consumer indebtedness and point-of-sale financing.

Increased adoption of EMV “chip” cards appears to have had the intended effect of lowering the rate of counterfeit card fraud, but also may be pushing more fraud activity into “card-not-present” transactions. The number and variety of products available to consumers that allow them to store payment information and make payments via their smartphones have grown significantly. We conclude by noting an increasing trend towards consumer control over card usage, as well as trends in credit card reward innovation.

A FINAL NOTE

The quantitative and qualitative indicators outlined above generally suggest a positive picture for consumers in the credit card market. Direct surveys of consumers support that proposition.

J.D. Power reported that in 2017 consumers reported their highest levels of satisfaction with this market to date.⁹

This satisfaction coexists with high levels of profitability for providers. The Board reports that the average return on assets at credit card banks continues to exceed levels at commercial banks generally. In fact, in 2016, large credit card banks had a return on credit card assets three times that of the overall return on assets for commercial banks.¹⁰

The potential to earn such returns may explain recent growth in credit card offerings among community banks. The Federal Reserve System and the Conference of State Bank Supervisors found in a mid-2017 survey that “credit cards were offered by 60% of surveyed [community] banks. This is a sharp increase from the 51% identified in the prior year survey.”¹¹ They further found that nearly 10% of community banks that do not offer credit cards plan to offer them in the future—while only one-half of 1% of banks that currently offer credit cards intend to limit their offerings or exit the market.¹²

⁹ Press Release, J.D. Power, *Cash-Back Credit Cards Score Highest as Banks, Card Companies Wage Incentive War, J.D. Power Finds* (Aug. 17, 2017), available at <http://www.jdpower.com/press-releases/2017-jd-power-credit-card-study> (reporting that “overall customer satisfaction with credit card issuers reaches its highest level in the history of the study . . .”).

¹⁰ See Board of Governors of the Federal Reserve System, *Report to the Congress on the Profitability of Credit Card Operations of Depository Institutions*, (June 2017), available at <https://www.federalreserve.gov/publications/files/ccprofit2017.pdf>.

¹¹ Federal Reserve System and the Conference of State Bank Supervisors, *Community Banking in the 21st Century*, at 18 (Community Banking Research and Policy Conference, Oct. 4-5, 2017), available at https://www.communitybanking.org/~/.media/files/cb21pub_2017_book_web.pdf.

¹² See *id.*

1. Introduction

1.1 Review mandate

The Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”), which became law on July 21, 2010, established the Consumer Financial Protection Bureau (“Bureau” or “CFPB”).¹ One year later, pursuant to that Act, authority and responsibility for implementing and enforcing the Credit Card Accountability Responsibility and Disclosure Act (“CARD Act” or simply “Act”) were transferred from the Federal Reserve Board (“Board”) to the Bureau. The CARD Act became law on May 22, 2009. Its stated purpose was to “establish fair and transparent practices related to the extension of credit” in the credit card marketplace.²

Among those responsibilities Congress originally assigned the Board and then transferred to the Bureau was a mandate to “review, within the limits of its existing resources available for reporting purposes, [the] consumer credit card market [every two years].”³ In 2012, the Board and the Bureau agreed that responsibility for the review passed to the Bureau under the terms of the Dodd-Frank Act. The Bureau has subsequently reported on the market twice since then, first

¹ Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

² Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734. A full summary of the CARD Act rules implemented by the Board is at pages 11 through 13 of the Bureau’s 2013 Report. The Bureau subsequently reissued these rules without material changes in December 2011. *See* 12 C.F.R. part 1026. The Bureau later revised two CARD Act rules issued by the Board. On November 7, 2012, the Bureau proposed selected revisions to the ability-to-pay rules, which were intended to address a number of unintended effects of the prior rule on consumers who did not work outside the home. The final rule implementing this revision became effective on May 3, 2013, with an associated compliance deadline of November 4, 2013. *See* Truth in Lending (Regulation Z), 78 Fed. Reg. 25818 (May 3, 2013). On March 22, 2013, the Bureau finalized another revision to the CARD Act rules in response to a federal court ruling in 2012 that had granted a preliminary injunction to block a part of the Board’s 2011 rule from taking effect. 78 Fed. Reg. 18795 (Mar. 28, 2013); *see also* Press Release, Consumer Fin. Prot. Bureau, *CFPB Finalized Credit CARD Act Rule* (Mar. 22, 2013), available at <https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-finalizes-credit-card-act-rule>.

³ 15 U.S.C. § 1616(a).

in 2013, then again in 2015.⁴ The present report constitutes the Bureau’s third mandated review of the consumer credit card market.

1.2 Scope

This report fulfills Congress’ directive to review the consumer credit card market in two overlapping ways.

First, it responds to the general congressional command in section 502 of the CARD Act to review and report on the “consumer credit card market.” Second, it addresses “within the limits of [the Bureau’s] existing resources available for reporting purposes” topics explicitly enumerated by Congress for inclusion in this review, including:⁵

1. the terms of credit card agreements and the practices of credit card issuers;
2. the effectiveness of disclosure of terms, fees, and other expenses of credit card plans;
3. the adequacy of protections against unfair or deceptive acts or practices relating to credit card plans; and
4. whether or not, and to what extent, the implementation of this Act and the amendments made by this Act has affected:
 - a. the cost and availability of credit, particularly with respect to non-prime borrowers;
 - b. the use of risk-based pricing; or

⁴ See Consumer Fin. Prot. Bureau, *Card Act Report*, (Oct. 1, 2013) (“2013 Report”), available at http://files.consumerfinance.gov/f/201309_cfpb_card-act-report.pdf; Consumer Fin. Prot. Bureau, *The Consumer Credit Card Market*, (Dec. 2015) (“2015 Report”), available at http://files.consumerfinance.gov/f/201512_cfpb_report-the-consumer-credit-card-market.pdf.

⁵ 15 U.S.C. § 1616(a).

c. credit card product innovation.⁶

The CARD Act also requires the Bureau to “solicit comment from consumers, credit card issuers, and other interested parties” in connection with its review.⁷ This year, as in past years, we have done so through a Request for Information (“RFI”) published in the Federal Register.⁸ Also in keeping with past reports’ practice, we do not address or respond to all comments in a single subsection of the report, instead discussing specific evidence or arguments provided by commenters throughout the report.

1.3 Methodology

This section reviews several aspects of the Bureau’s general methodology in compiling this report. Methodological approaches used in specific sections of this report are explained in more detail in those sections.

1.3.1 Data sources

This report leverages a number of different data sources. It relies predominantly on sources already held by the Bureau, by other Federal regulators, and by industry stakeholders. All results reported in this report are drawn from data aggregated from multiple industry participants.⁹

⁶ 15 U.S.C. § 1616(a). This report does not address specific safety and soundness issues relating to credit card issuers. The prudential regulators have the primary responsibility for monitoring the safety and soundness of financial institutions.

⁷ 15 U.S.C. § 1616(b).

⁸ Request for Information Regarding Consumer Credit Card Market, 82 Fed. Reg. 13313 (Mar. 10, 2017).

⁹ No results in this report can be used to identify the outcomes or practices of individual entities. At the same time, outcomes and patterns we observe in the market as a whole may not be true for (or may only apply in a limited degree to) any particular industry player.

Sources include the following:

1. Data from the Bureau’s Consumer Credit Panel (“CCP”), which is a 1-in-48 longitudinal sample of de-identified credit records purchased from one of the national credit reporting agencies, and which is representative of the population of consumers with credit records. The Bureau has advanced substantially in its ability to leverage these data since 2015. This advancement is reflected both within this report as well as in other Bureau products, such as our Consumer Credit Trends reports.¹⁰ These data contain no personally identifiable information, such as name, address, or Social Security number. The Bureau cannot tie any of the information to any particular individual, and the CCP contains no transaction-level data;
2. De-identified information that the Board collects as part of its “Y-14M” data collection. The Board collects these data monthly from bank holding companies that have total consolidated assets exceeding \$50 billion.¹¹ The Board shares with the Bureau data from Y-14 banks. The data received by the Bureau cover the period from the middle of 2012 through the present.¹² The Y-14 data used by the Bureau currently account for over three-quarters of the consumer credit card market as measured by outstanding balances.¹³

Information in the Y-14 data received from the Board cannot be tied to any particular individual. Additionally, accounts associated with the same consumer are not linked across issuers. The data do not encompass individual transactions. In addition, the Bureau uses the

¹⁰ See Consumer Fin. Prot. Bureau, *Consumer Credit Trends*, <https://www.consumerfinance.gov/data-research/consumer-credit-trends> (last visited Nov. 28, 2017).

¹¹ More information on the Y-14M collection can be found at <https://www.federalreserve.gov/apps/reportforms/reportdetail.aspx?sOoYJ+5BzDYnbIw+U9pka3sMtCMopzoV>. (last visited Nov. 28, 2017).

¹² The Board has expanded the fields it collects from banks over time; therefore, some results reported below do not extend all the way back to 2012. Additionally, these data are periodically revised, and are therefore not fully static.

¹³ These issuers represent a large portion of the market, but are not necessarily representative of the portion of the market not covered by the data the Bureau receives. A substantial number of consumer credit cards, cumulatively representing the remainder of the market as measured by outstanding balances, are outside the scope of the Y-14 data used by the Bureau because, among other reasons, they are issued by banks with assets of less than \$50 billion, or are issued by non-banks, such as credit unions. Results reported from Y-14 data throughout this report should be interpreted accordingly.

data in the present study only to report aggregate metrics, such that none of the reporting reveals information about any specific issuer.

These data substitute for, rather than complement, previous loan-level credit card data collections to which the Bureau was a party. The Bureau no longer requires or oversees the collection of any loan-level credit card data on a standing basis;

3. Information provided in response to a series of data requests made to a number of industry participants, comprised of four distinct sets:

a. Data requested from a broad and diverse group of issuers in order to address a range of topics that neither CCP nor Y-14 data can address. These data cover a variety of subjects, including application volumes and approval rates, credit line increases, digital account servicing, and debt collection. We refer to these data as Mass Market Issuer (“MMI”) data;

b. Data requested from issuers that offer deferred interest products. These data should not be confused with the deferred interest data we reported on in our previous report. The data we collected for this report differ in two substantial ways: first, they cover a broader swathe of the deferred interest market; second, they are only aggregate performance data, not account-level data. We refer to these data as Aggregate Deferred Interest (“ADI”) data;

c. Data requested from a group of entities that specialize in offering credit cards to consumers with subprime credit scores. These data differ from the subprime specialist issuer data we reported on in our previous report in two important ways. First, rather than being aggregate “snapshot” performance data, these data cover the outcomes and experiences (in aggregate) of a “vintage” of accounts over time. Second, they include responses from both bank issuers and non-bank program managers. We refer to these data as Subprime Specialist Vintage (“SSV”) data;¹⁴

¹⁴ We provide greater detail into the structure and scope of the SSV data below in Section 6.

d. Data obtained from a group of entities that manage websites and mobile applications (“mobile apps”) that position themselves as empowering consumers to comparison shop for credit cards. We refer to these websites as “third-party comparison sites” (“TPC sites”);¹⁵

4. The CFPB’s Credit Card Agreement Database, which is an online database available to the public, was created pursuant to the CARD Act.¹⁶ It contains most credit card agreements available to consumers as of quarter’s end for each quarter from the third quarter of 2011 to the fourth quarter of 2014, and from the first quarter of 2016 to present.¹⁷ After the fourth quarter of 2014, the Bureau temporarily suspended collection of agreements for one year in order to reduce burden while the Bureau developed a more streamlined and automated electronic submission system.¹⁸ Submission and publication resumed in the first quarter of 2016;

5. Responses to the RFI that was published in the Federal Register in March 2017, which sought comment on all aspects of the review described in Section 1.2 above, as well as the following additional topics: deferred interest products, subprime specialist products, third-party comparison sites, secured credit cards, online and mobile account servicing, rewards products, variable interest rates, and debt collection.¹⁹ The RFI generated 27 comments. That total includes 13 letters from trade associations representing credit card issuers and other market participants, three letters from individual issuers, three letters from other industry-side market participants, four letters from consumer advocacy groups, and four letters from individual consumers;

¹⁵ We provide greater detail on third-party comparison sites and the structure and scope of the TPC site data below in Section 7.

¹⁶ 15 U.S.C. § 1632(d). The public online database is at <http://www.consumerfinance.gov/credit-cards/agreements>.

¹⁷ Credit card issuers are not required to submit any credit card agreements to the Bureau if the card issuer has fewer than 10,000 open credit card accounts as of the last business day of the calendar quarter. 12 C.F.R. § 1026.58(c)(5).

¹⁸ 80 Fed. Reg. 21153 (Apr. 17, 2015); 12 C.F.R. § 1026.58(g).

¹⁹ 82 Fed. Reg. 13313 (Mar. 10, 2017).

6. Credit card complaints that consumers have submitted to the Bureau’s Office of Consumer Response;²⁰
7. Commercially available data sources to which the Bureau subscribes that focus on the credit card industry, including mail volume monitoring reports, industry analyst reports, and data services and analytics from industry consultants. As an example, Mintel provides data on card solicitations and other marketing materials, via a range of channels;
8. Numerous public sources, including but not limited to Securities and Exchange Commission (“SEC”) filings, analyst reports, studies by other regulators, academic scholarship, and the trade press; and
9. Other information gathered through Bureau market monitoring activities.

1.3.2 Credit scores

Throughout this report, we refer to consumer credit scores. Lenders use these scores to predict a consumer’s relative likelihood of repaying a debt compared to other consumers. Credit scores are used by most credit card issuers to determine consumers’ eligibility for credit and to set pricing for the credit lines they offer. Data we rely on in this report utilize widely-used, commercially-available credit scores.

There are two important limitations to the way we use credit scores in this report. Different credit score models, while fundamentally similar, may include or exclude different data points or weight them differently. This means, first, that we are aggregating data on the basis of credit score even though not all consumer credit scores are computed using identical methodologies. Second, it means that, when reporting certain metrics over longer time horizons, the introduction of new models and changes in models complicates comparisons between different points in time. In some cases, one or both of those two issues could change which “credit score tier” a certain account or consumer falls in. (We explain the credit score tiers that we use in this report below.) The Bureau believes that different credit scoring methodologies, over the time

²⁰ See Consumer Fin. Prot. Bureau, *Monthly Complaint Report Vol. 25*, at 16 (July 2017), available at <https://www.consumerfinance.gov/data-research/research-reports/monthly-complaint-report-vol-25>.

periods and set of market participants we examine in this report, are sufficiently consistent that it remains informative and useful to report aggregate results and changes over time by credit score. We nevertheless proceed with caution when assigning precision, beyond a reasonable degree, to certain results.

When reporting results by credit score in this report, we group scores into five tiers. This five-tier grouping differs slightly from the four-tier grouping the Bureau used in past reports, but it aligns with the groupings used in the Bureau’s more recent Consumer Credit Trends reporting.²¹ We define the ranges encompassed by the five tiers, as well as each tier’s share of the credit-scored population and the cardholder population, in Table 1 below. The only substantive difference between these tiers and those we relied on in our past reports is that we now subdivide consumers with scores below 620, which we previously referred to as “deep subprime” scores, into two tiers. These we refer to as “deep subprime” and “subprime,” respectively. Non-substantively, the range we referred to previously as “core subprime” we now refer to as “near-prime.” The “prime” and “superprime” ranges are unchanged from our previous reports. Throughout this report, we refer to scores below 660 collectively as “lower credit scores.” We intend this change in credit score tiering to allow us to examine outcomes for consumers with lower credit scores in more detail.

²¹ See Consumer Fin. Prot. Bureau, *Credit Cards: Data Snapshot for September 2017*, (Sept. 2017), available at <https://www.consumerfinance.gov/data-research/consumer-credit-trends/credit-cards>.

TABLE 1: CREDIT SCORE RANGE SHARES AS OF Q2 2017 (CCP)

Credit score tiers	% of U.S. population with a credit score	% of U.S. scored credit cardholding population
Superprime (scores of 720 or greater)	56%	62%
Prime (scores from 660 to 719)	17%	17%
Near-prime (scores from 620 to 659)	9%	9%
Subprime (scores from 580 to 619)	7%	6%
Deep subprime (scores of 579 or less)	11%	6%

Credit scores in the CCP and Y-14 are refreshed regularly. When not otherwise specified, refreshed scores are used throughout this report to assign accounts and consumers into credit score tiers. As a result, when analyzing trends over time within a particular credit score tier, we are not analyzing a constant set of accounts or consumers, but rather accounts or consumers which fall into that tier at each point in time under analysis, unless otherwise specified. This clarification is especially important to note in light of the substantial propensity of consumers to experience changes in their credit score that are large enough to move them from one credit tier to another.²²

Just as individual consumers' scores can fluctuate over time, the distribution of consumers (including both cardholders and non-cardholders) in aggregate across these tiers is not static. We touched on this briefly in our 2015 Report, but it is worth elaborating in greater detail here.²³ The share of consumers with a credit score represented by each of the various tiers has fluctuated over the past decade by as much as four percentage points, as shown in Figures 1 and 2 below. (Figure 2 shows identical results to Figure 1, but highlights the section of the graph between 50% and 100% to better illustrate fluctuations.)

²² In Section 2.4 of our 2015 Report, we explored this phenomenon in more detail. *See* 2015 Report, at 53-55.

²³ *See* 2015 Report, at 94.

FIGURE 1: CREDIT SCORE TIER SHARE OF CONSUMERS WITH SCORES (CCP)

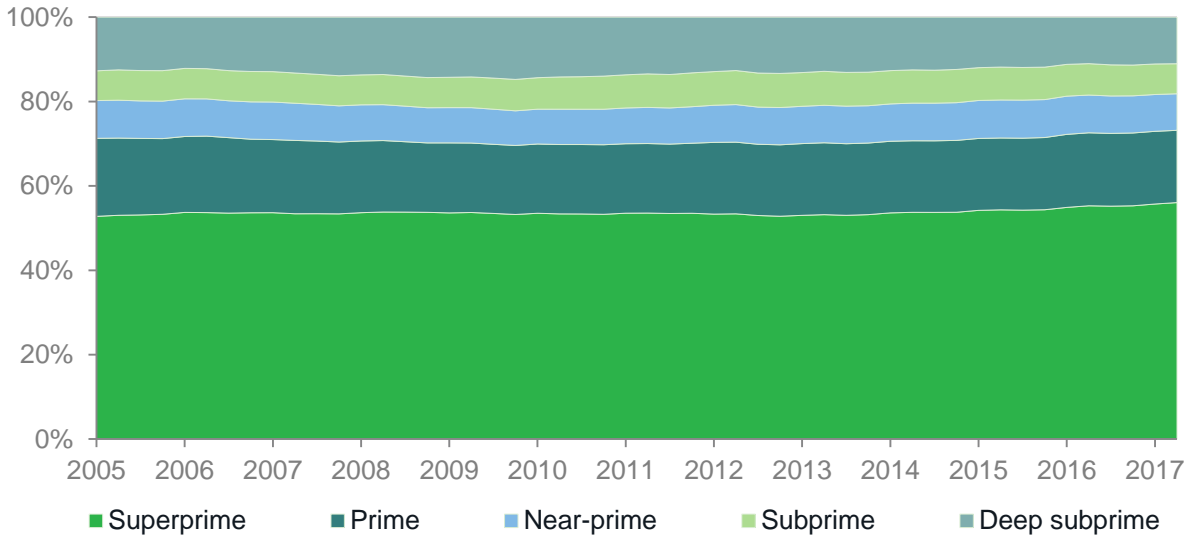
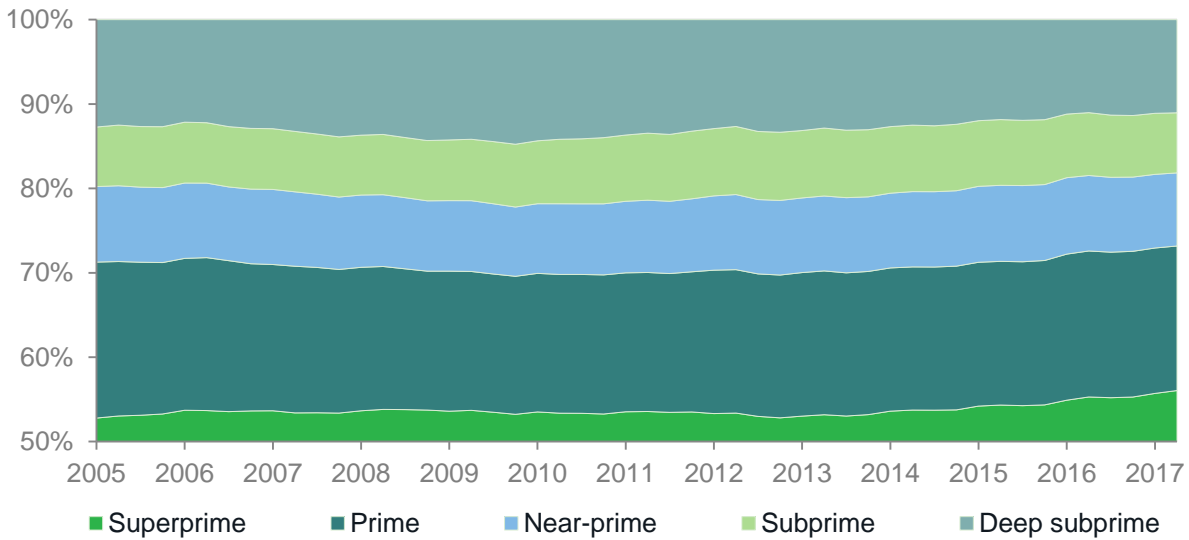
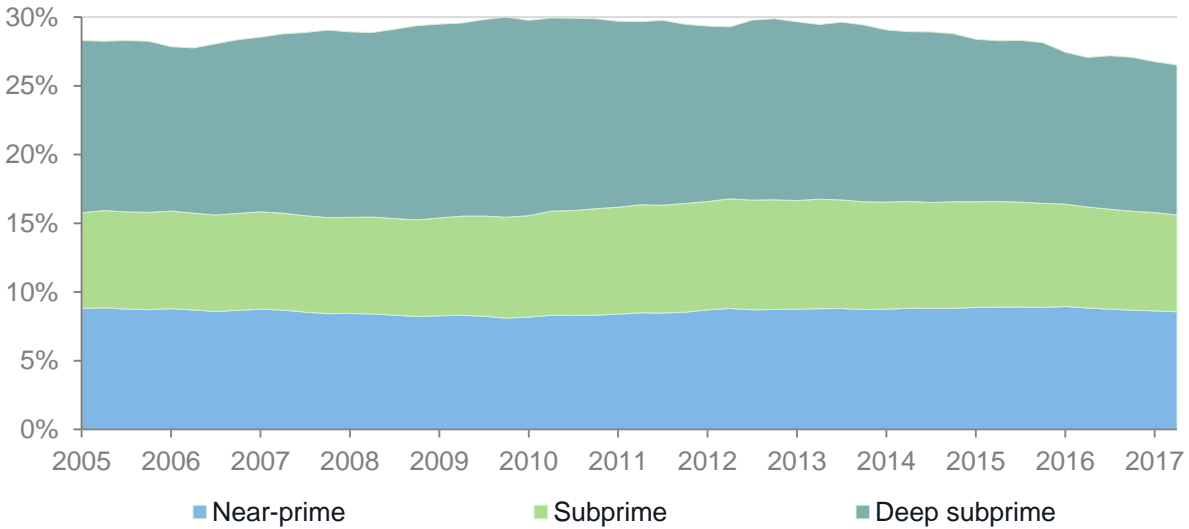


FIGURE 2: CREDIT SCORE TIER SHARE OF CONSUMERS WITH SCORES (CCP)



Recent years have seen a steady upward shift in the credit score composition of the scored population, which becomes clearer when examining only the lower credit score tiers' share of the scored population.

FIGURE 3: LOWER CREDIT SCORE TIER SHARE OF CONSUMERS WITH SCORES (CCP)



In fact, this shift has occurred even as the total scored population has been growing, making it more striking that the absolute number of consumers with lower credit scores has been declining. Since the period spanning late 2009 through late 2011, when both the absolute number and the share of consumers with lower credit scores peaked, the number of consumers with lower scores has fallen by five million, as shown in the two figures below. (We again highlight a portion of the graph in a separate figure to better illustrate the relevant fluctuations.)

FIGURE 4: CONSUMERS WITH A CREDIT SCORE (CCP)

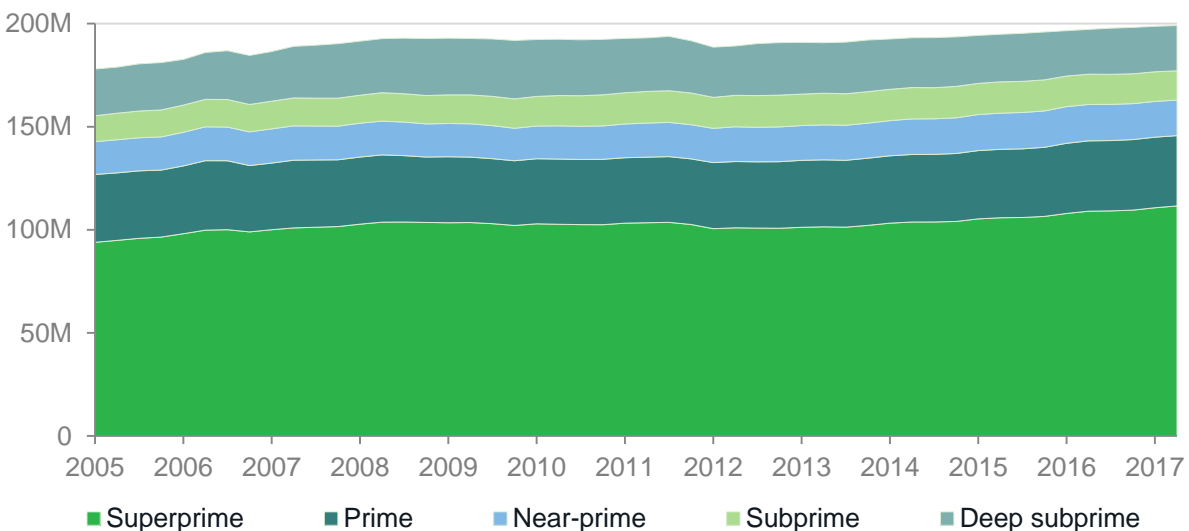
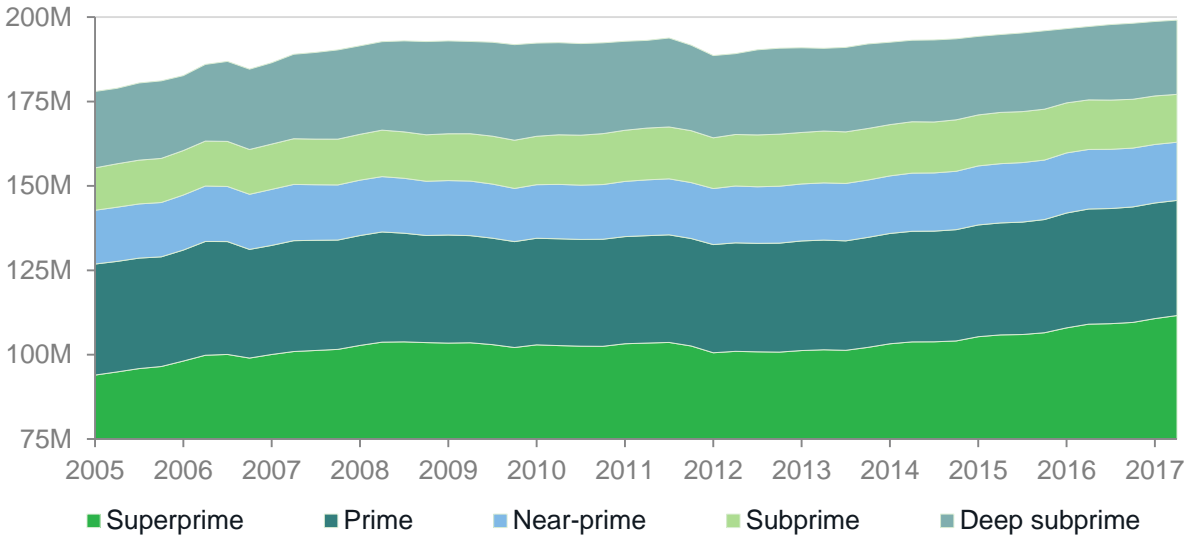


FIGURE 5: CONSUMERS WITH A CREDIT SCORE (CCP)



1.3.3 Other definitions

Throughout most of our report, the term “general purpose” refers to credit cards that can transact over a network accepted by a wide variety of merchants, including the Visa, Mastercard, American Express, and Discover networks. The term “private label” refers to cards that can only be used at one merchant or at a small group of related merchants.²⁴ In those few instances where these terms are used differently, mainly certain parts of Sections 4 and 5, we explicitly say so.

There are many ways to take a “snapshot” of consumer credit card indebtedness. We rely on two of the most prevalent. The first entails measuring the current amount owed by consumers on a

²⁴ Private label cards generally transact over a private network maintained by the issuer to which the merchant is granted access. Some cards can transact over both a private label network and a general purpose network. For example, a consumer may be issued a card that features a merchant’s brand as well as a general purpose network brand. When used at the merchant, the transaction may be routed over the issuer’s private network, but at other merchants the transaction is routed over the general purpose network. For the purposes of this report, we consider those cards to be general purpose credit cards except where explicitly noted otherwise.

specific date, regardless of where in any individual consumer’s billing cycle that date falls. We refer to debt calculated in this manner as “outstandings.” For example, if we were to report the total amount owed by consumers on credit cards as of December 31, 2016, we would refer to that as outstandings.

The second method entails measuring the amount owed by consumers at the end of their billing cycles, regardless of whether those cycles fall on a certain date. We refer to debt calculated in this manner as “balances,” and in most cases as “cycle-ending balances.” For example, if we were to report the total amount owed by consumers at the end of their billing cycles that concluded in December 2016, we would refer to that as cycle-ending balances.

We also use the term “debt” to refer to both of these amounts interchangeably. Note also that consumer debt on credit cards includes both “revolving” debt—debt not paid in full by the statement due date and thus carried over from one billing cycle to the next—and “transacting” debt—debt paid in full by the statement due date. While transacting accounts represent a large share of all credit card purchase volume, revolving accounts generally represent a large share of all credit card debt at any given point in time. We provide more detail on revolving and transacting patterns in subsequent sections of this report.

Throughout this report, we refer to the “Great Recession,” which began in the fourth quarter of 2007 and ended in the second quarter of 2009. We sometimes refer to it using the shorthand “the recession.”

1.3.4 Limitations

The limitations inherent to the Bureau’s methodology in this report are substantially similar to those inherent in the Bureau’s 2015 Report.²⁵ We restate those limitations here briefly.²⁶

²⁵ 2015 Report, at 27.

²⁶ In the interest of full disclosure, we also note that many players in the credit card industry are also entities with which the Bureau has one or more institutional relationships, such as a research partnership or membership on a Bureau-convened body.

First, while we would ideally like evidence that allows us to dispositively identify the causes of certain outcomes, the largely descriptive fact patterns we lay out generally do not allow us to do so. While many of the factual observations we make may suggest causality, we caution against interpreting them as definitively proving or disproving particular causal relationships.

Second, individual sources of data on which we rely each have particular limitations. Some sources do not provide a comprehensive view of the market; some are limited to the account level or the aggregate level; and some are purely qualitative. Not all data sources agree on definitions or delineations, or cover the same periods, products, or phenomena. To the extent possible, we mitigate these limitations. We attempt to harmonize definitions, and identify those places where we are unable to do so.

2. Market size and foundational metrics of consumer use

This section reviews a number of market metrics in order to provide a foundation for addressing other topics in the market covered in more detail in subsequent sections—such as the cost of credit cards (which we cover in Section 3) or their availability to consumers in different credit tiers (which is in Section 4).

In this section, we review three main aspects of the consumer credit card market. First, we describe the overall size of the market using a number of different measures. By some metrics, such as total credit card debt outstanding, the market has generally grown back to or even surpassed its pre-recession size.¹

Second, we look at a number of basic metrics about consumer usage, including cardholding patterns, consumer- and account-level balance and payment behavior, and rewards penetration. Some of these metrics point to potentially significant qualitative differences between the credit card debt held by consumers prior to the Great Recession and the debt held by consumers today.

Last, we report on delinquency and charge-off rates. These present a mixed picture. They remain below historic norms, but they are worsening, even as widely relied-upon indicators underlying macroeconomic conditions—like the unemployment rate—do not appear to be deteriorating.

There are two important qualifications to bear in mind when reviewing the findings set forth below. First, when we refer to consumers or accounts in a particular credit tier, we are using scores recorded at a particular point in time. For any credit tier and any point in time, the accounts grouped into that tier will include accounts that migrated into that tier subsequent to origination, as well as accounts that were originated into that tier but that have not (yet)

¹ This has caused some parties to express concern that the consumer credit card market is “overheated.” *See, e.g.,* Akin Oyedele, *Americans Hold More Credit-card Debt than Ever, and a 'Major Tipping Point' Isn't Far Off*, Business Insider (Aug. 8, 2017), available at <http://www.businessinsider.com/credit-card-debt-record-2017-8>. Others disagree. *See, e.g.,* AFSA Comment Letter, at 1-3.

migrated. Second, references to debt encompass both revolving balances and also purchases made in the preceding month or cycle that may be paid in full by the end of the next month or cycle.

2.1 Total market size

2.1.1 Credit card debt

The consumer credit card market is one of the nation’s largest consumer credit markets. The Federal Reserve Board’s G.19 “Consumer Credit” data show that “revolving credit,” which is almost entirely credit card debt, represented over a quarter of all non-mortgage consumer debt outstanding in December of 2016.² The Federal Reserve Bank of New York’s *Quarterly Report on Household Debt and Credit* shows that credit cards comprise the fourth-largest source of consumer indebtedness behind mortgages, student loans, and auto loans.³

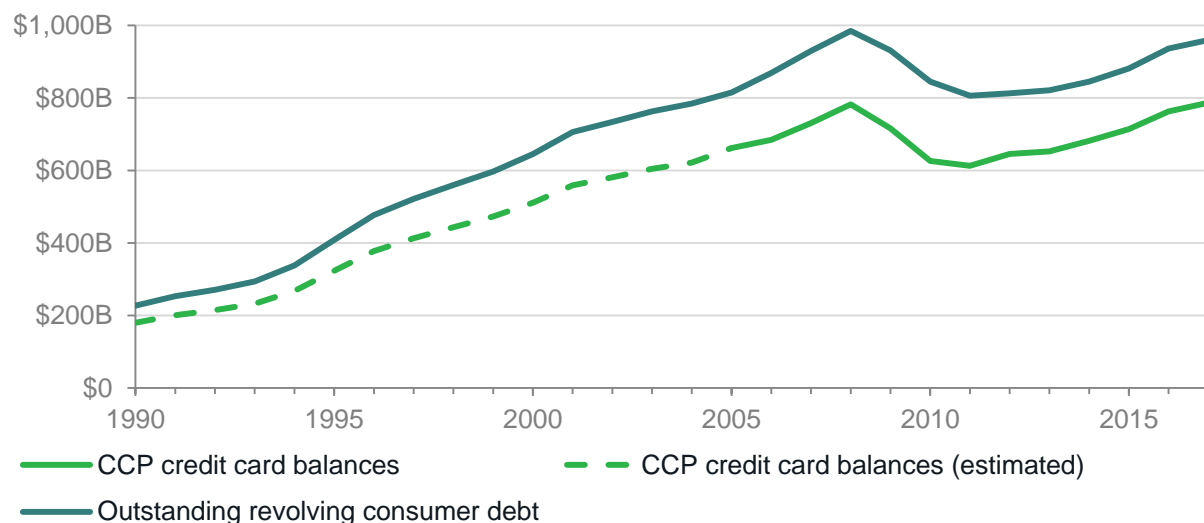
Figure 1 uses data from the G.19 to show the long-term trend in consumers’ revolving credit balances over time.⁴ These peaked at just over \$1 trillion in 2007 and 2008. During the recession, these balances fell to under \$800 billion. They have since rebounded steadily and, according to the latest such data, currently approach \$1 trillion once again.

² The G.19 report uses the term “revolving credit” to refer to debt that can be borrowed up to a prearranged limit and repaid in one or more installments. See Federal Reserve Board, *Consumer Credit Data G. 19*, (Nov. 17, 2017) (“G.19 Report”), available at <http://www.federalreserve.gov/releases/g19/current/default.htm>. All credit card outstandings, therefore, are included—not simply the amount of credit card debt revolved by consumers across one or more billing cycles. The G.19 data exclude loans secured by real estate when considering consumer credit.

³ Federal Reserve Bank of N.Y., *Quarterly Report on Household Debt and Credit (Q3 2017)*, (Nov. 2017), available at <https://www.newyorkfed.org/microeconomics/hhdc.html>.

⁴ See generally G.19 Report.

FIGURE 1: OUTSTANDING REVOLVING CONSUMER CREDIT AND TOTAL CONSUMER CREDIT CARD CYCLE-ENDING BALANCES, ANNUAL AVERAGE (CCP, FRB G.19)⁵



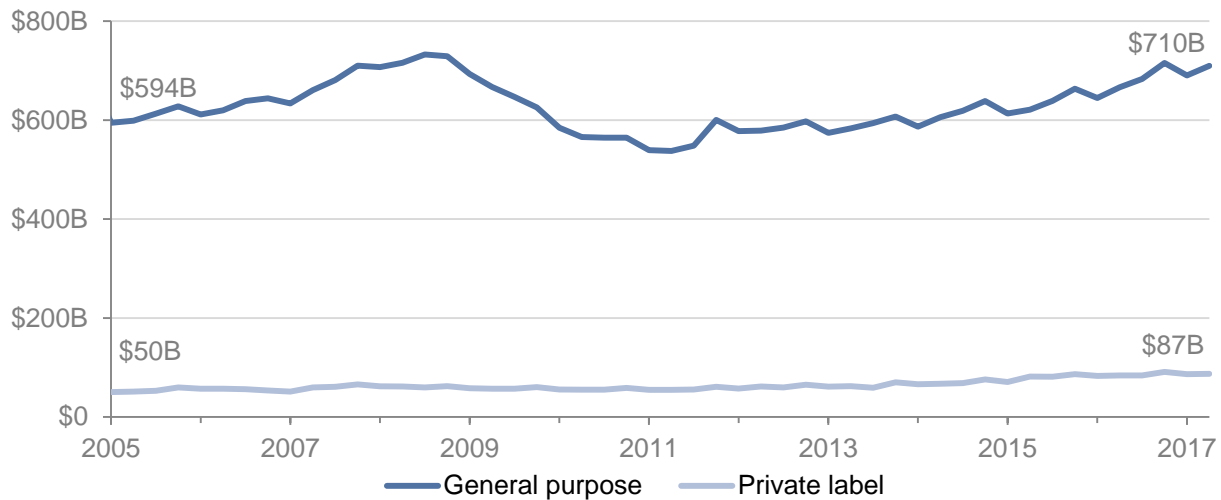
These totals include non-credit card revolving debt, such as overdraft lines of credit. Nevertheless, credit card debt comprises the overwhelming share of G.19 revolving consumer debt. To illustrate this, Figure 1 also includes a separate schedule of outstanding credit card balances drawn from the Bureau’s Consumer Credit Panel (“CCP”). Using the relationship between the CCP and G.19 data during the period for which both are available (*i.e.*, from 2005 to the present), we can offer an approximate depiction of total consumer credit card balances from 1990 to the present.

By focusing on CCP data, moreover, we can see that consumer credit card debt now exceeds its pre-recession peak. Figure 2 shows the total of all balances owed by consumers on general purpose and private label credit cards as of the end of each quarter’s last cycle since 2005. In our last report we noted that general purpose credit card balances had more-or-less steadily increased—albeit with seasonal variation—since the end of 2010, but that they had not yet returned to pre-recession levels. That was still true as of mid-2017. In the fourth quarter of 2016, total outstanding general purpose credit card debt reached \$716 billion, which remains below

⁵ This chart displays average cycle-ending balances calculated across each full year, which decreases the effect of seasonality.

the \$733 billion mark reached in the third quarter of 2008. However, private label credit card debt has also been growing rapidly in recent years, exceeding its pre-recession peak by year-end 2013. Private label credit card debt reached \$91 billion in the fourth quarter of 2016, an increase of 20% since the fourth quarter of 2014 and a 52% increase since the fourth quarter of 2005. Combined, all credit card balances exceeded \$800 billion in the fourth quarter of 2016 for the first time ever.

FIGURE 2: TOTAL CONSUMER CREDIT CARD CYCLE-ENDING BALANCES (CCP)

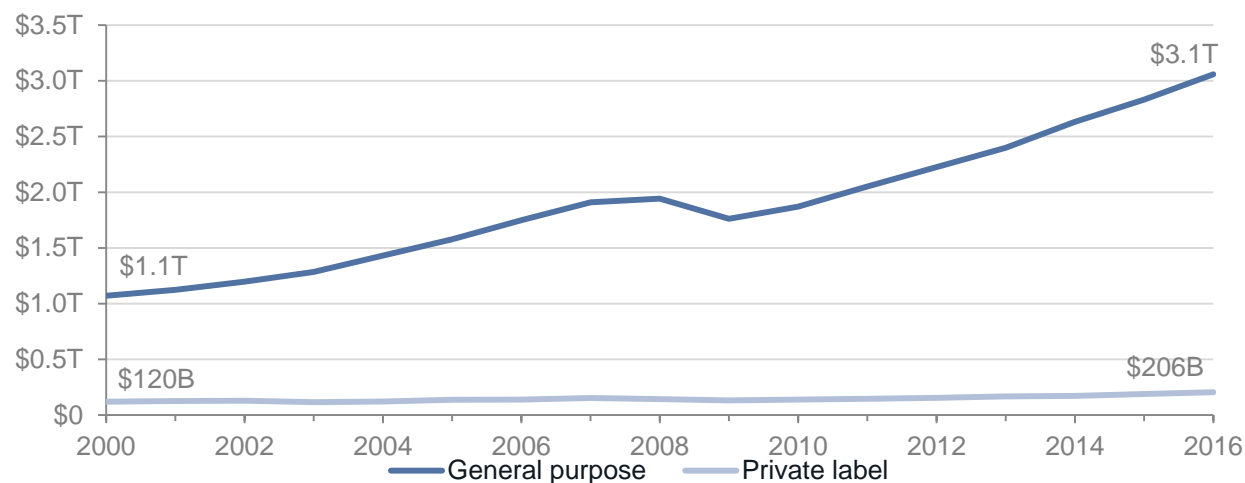


2.1.2 Purchase volume

Purchase volume has grown much faster than debt, both since the recession and over the longer term. To illustrate a longer time series on purchase volume than the Y-14 permits, we use data from *The Nilson Report*, an industry standard source of credit card data.⁶ Figure 3 shows annual purchase volume on general purpose and private label cards from 2000 onwards.

⁶ Data on purchase volume are not included in the CCP.

FIGURE 3: ANNUAL CREDIT CARD PURCHASE VOLUME (NILSON)



Apart from a brief reduction in 2009, annual spending on credit cards in the U.S. has risen steadily over the past 16 years. General purpose purchase volumes have nearly tripled since 2000 to exceed \$3 trillion. Private label purchase volume has grown nearly 72% over the same period.⁷ Growth in purchase volume has consistently exceeded growth in outstanding credit card debt. This is particularly true for the post-recession period. From 2010 to 2016, purchase volume grew nearly 64% whereas cycle-ending balances grew at only half that rate. This phenomenon is driven by general purpose cards. Growth in private label spending has actually lagged growth in outstanding private label debt since 2005.

The discrepancy between purchase volume and debt levels suggests that, especially in the wake of the recession, consumers have been increasingly making credit card purchases even as they do not intend to incur long-term debt as a result of making those purchases. That may be because consumers, especially consumers with higher credit scores, are increasingly using credit

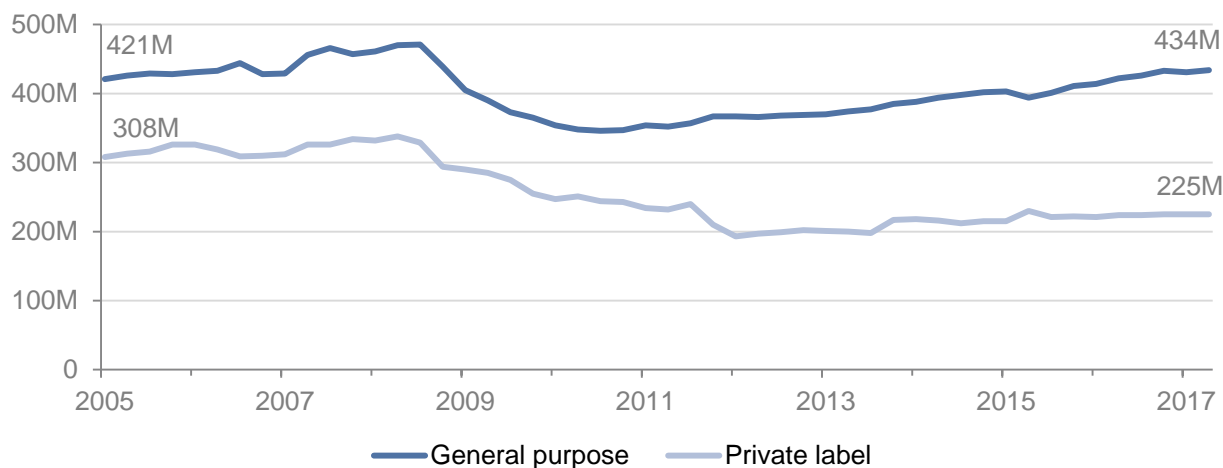
⁷ Notwithstanding some definitional differences, the Board's triennial Payments Study confirms these same general trends. This study reports 2015 purchase volume as \$2.8 trillion on general purpose cards and \$0.28 trillion in consumer transactions on private label cards. This compares to just over \$1 trillion in general purpose volume and \$0.16 trillion in private label volume in 2000. This study also notes that nearly half of all general purpose credit card volume in 2015 was "remote," a large increase from the approximately 30% figure reported in 2009. See Press Release, Federal Reserve Board, *The Federal Reserve Payments Study 2016: Recent Developments in Consumer and Business Payment Choices* (June 30, 2017), available at <https://www.federalreserve.gov/newsevents/pressreleases/files/2016-payments-study-recent-developments-20170630.pdf>.

cards for purchases that would otherwise have been made using other media, such as debit cards, cash, or checks. In addition, it may be related to the increased prevalence of both credit card rewards and online commerce, both of which we discuss in more detail later in this report. It may also, or instead, reflect a greater reluctance to incur debt relative to spending levels on credit cards, independent of any substitution of credit cards for other payment media.

2.1.3 Accounts

As of mid-2017, despite the return to pre-recession levels of debt and the significant increase in purchase volume, the total number of open accounts remains well below its pre-recession high. This is primarily driven by relatively slow growth since the recession in the number of private label cards. The private label market is much smaller than the general purpose market, both in terms of debt and purchase volume. In terms of accounts, however, the private label market is more than half the size of the general purpose market. Figure 4 shows trends in open account numbers for general purpose and private label cards.

FIGURE 4: OPEN CREDIT CARD ACCOUNTS (CCP)



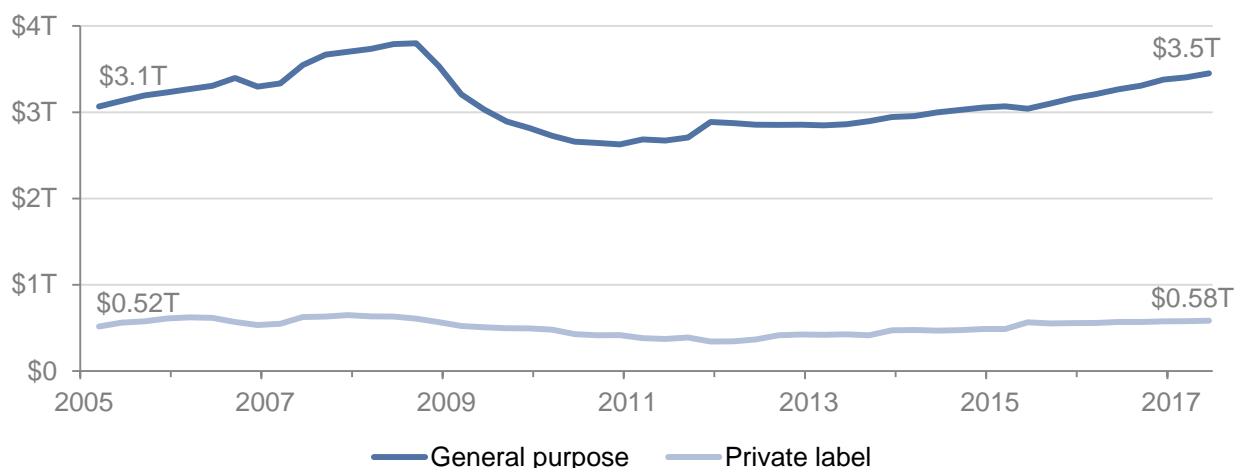
Since 2011, the number of open general purpose credit card accounts has increased steadily, although the number of open accounts has not yet returned to its previous high of 471 million

observed in the third quarter of 2008. Total open private label credit card accounts began to increase from 2012, but the increases have been less substantial, reaching 225 million by mid-2017. This is significantly below the previous high of 338 million in the second quarter of 2008, as well as below levels observed before that point in time.⁸

2.1.4 Credit line

A credit line is the total amount of debt that a consumer is permitted to incur on an account, whether or not the consumer actually does so. (A consumer’s credit line is sometimes referred to as the consumer’s “credit limit.” We generally use those terms, as well as the shorthand terms “line” or “limit,” interchangeably.) Figure 5 shows trends in total line through mid-2017.

FIGURE 5: TOTAL CREDIT LINE ON OPEN CREDIT CARD ACCOUNTS (CCP)



Aggregate general purpose credit card line has risen steadily to \$3.5 trillion from its low point of \$2.6 trillion in the fourth quarter of 2010. Despite this significant growth, total general purpose

⁸ This fall may be attributable in part to a shift in private label practices. During and after the recession, private label issuers adopted practices and policies that led to inactive accounts being closed much more readily than was previously the case. Our market monitoring suggests that there was not a parallel shift in practices among general purpose issuers. There was a one-time wave of general purpose closures associated with the recession. But there was no associated broad-based change in ongoing practices to speed the closure of inactive accounts in the future.

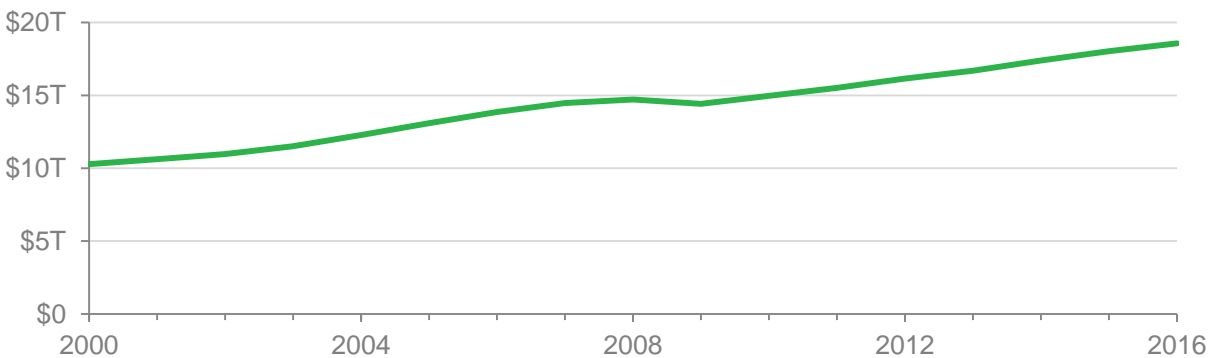
line remains below the previous high of \$3.8 trillion observed in 2008. The same is true for private label cards. After a contraction following the recession, private label credit card lines have rebounded to \$584 billion, but remain below figures observed in 2007 and 2008.

Total private label line is significantly lower than the total line on general purpose cards. This reflects both the substantially lower average credit line on these accounts compared to general purpose cards (which is discussed further in Section 4) as well as the smaller number of total open private label accounts, as shown in Figure 4.

2.1.5 Market size relative to gross domestic product

This report refers frequently to the Great Recession, which began in the final quarter of 2007 and ended in the second quarter of 2009.⁹ The recession had a substantial effect on the credit card market. Changes in the size of the market can be further framed by comparing the size metrics used above with changes in gross domestic product (“GDP”) over the same period.¹⁰ Figure 6 below shows the path of GDP since 2000.

FIGURE 6: GROSS DOMESTIC PRODUCT (BUREAU OF ECONOMIC ANALYSIS)

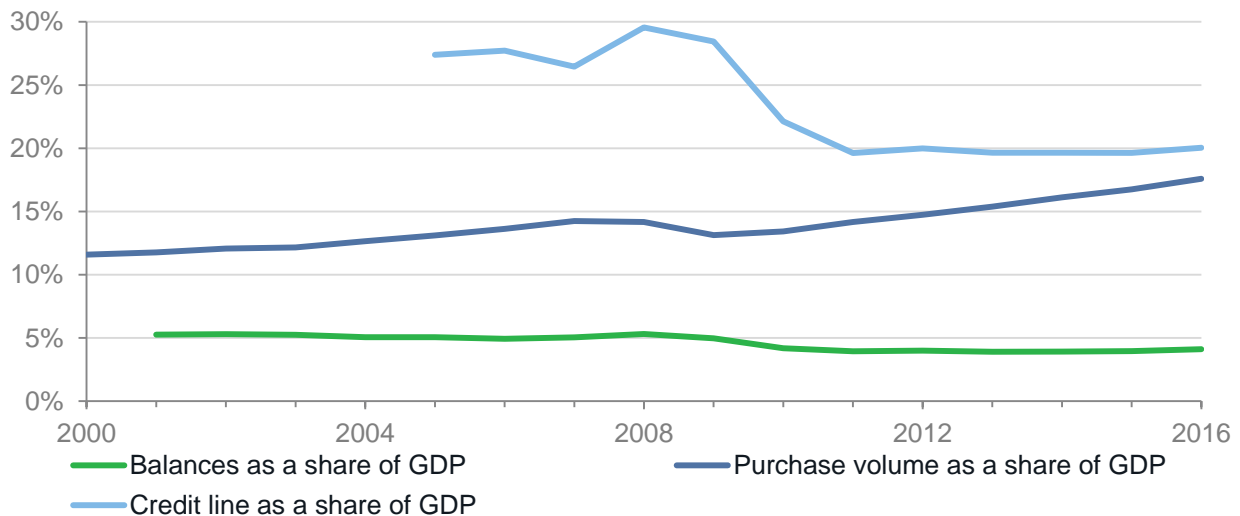


⁹ See generally Nat'l Bureau of Econ. Res., *Business Cycle Dating Committee*, (Sept. 20, 2010), available at <http://www.nber.org/cycles/sept2010.html>.

¹⁰ The Bureau of Economic Analysis defines gross domestic product as “the value of the goods and services produced by the nation’s economy less the value of the goods and services used up in production.” The metric is widely used to summarize the nation’s total economic activity.

As shown in Figure 7 below, through the recession and thereafter, the three dollar-denominated metrics outlined above—balances, purchase volume, and credit line—have not followed the same path in relation to gross domestic product.¹¹ Purchase volume fell further than GDP did during the recession, but quickly recovered. From 2000 to 2016, credit card purchase volume grew 50% faster than GDP. By contrast, while both total credit line and total balances fell relative to GDP during the recessionary period, thereafter each stabilized relative to GDP. This suggests that, relative to the overall scope of economic activity, consumers have shifted their *purchasing* behavior to credit cards in a manner that outstrips any parallel growth or shift in their *borrowing* behavior. This shift shows no sign of stopping, as the largest issuers recorded purchase volume growth in the first half of 2017 that substantially exceeded growth in debt.¹²

FIGURE 7: TOTAL CREDIT CARD PURCHASE VOLUME, BALANCES, AND LINE RELATIVE TO GROSS DOMESTIC PRODUCT (NILSON, CCP, BUREAU OF ECONOMIC ANALYSIS)



¹¹ We do not use the fourth metric above, total accounts, since it is not denominated in U.S. dollars.

¹² See The Nilson Report, *Top U.S. Credit Card Issuers at Midyear*, Issue 1116 (Sept. 2017), available at https://www.nilsonreport.com/publication_newsletter_archive_issue.php?issue=1116. Credit card purchase volume recorded similar year-over-year growth in the third quarter of 2017, though commensurate outstandings figures were not provided; see also The Nilson Report, *U.S. General Purpose Cards through 3Q 2017*, Issue 1120 (Nov. 2017), available at https://www.nilsonreport.com/publication_newsletter_archive_issue.php?issue=1120.

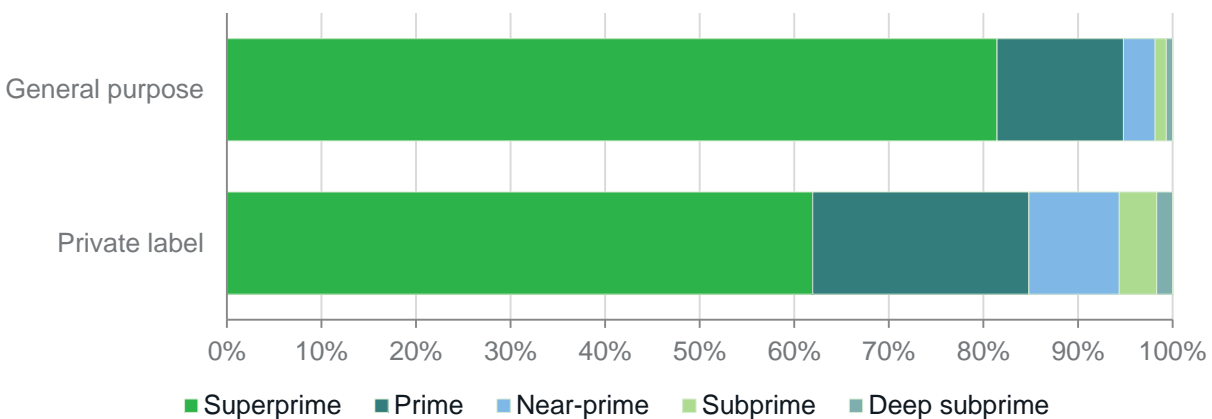
2.2 Market metrics by credit score

This section reviews certain data on the distribution of purchase volume and credit card debt across credit tiers, including comparative data on the distribution of accounts. Additional distributional data are also included in the succeeding section on consumer-level metrics, and in Section 4.

2.2.1 Purchase volume distribution

As of the fourth quarter of 2016, consumers with superprime credit scores account for a predominant 81% share of the amount spent using credit cards, which is significantly higher than their 65% share of accounts. Consumers with prime scores account for the next largest share of spend at 14%, which is smaller than their 19% share of accounts. Consumers with lower credit scores—including near-prime, subprime, and deep subprime combined—collectively account for 6% of the amount spent on cards, although these consumers hold 16% of all accounts. Figure 8 shows these purchase volume shares in more detail, broken down by card type. Consumers with lower scores make up a substantially larger share of spending on private label cards. We do not discern any marked changes in the relative shares of purchase volume accounted for by consumers in different credit tiers over the last few years.

FIGURE 8: SHARE OF 2016 PURCHASE VOLUME BY CONSUMER CREDIT SCORE (Y-14)

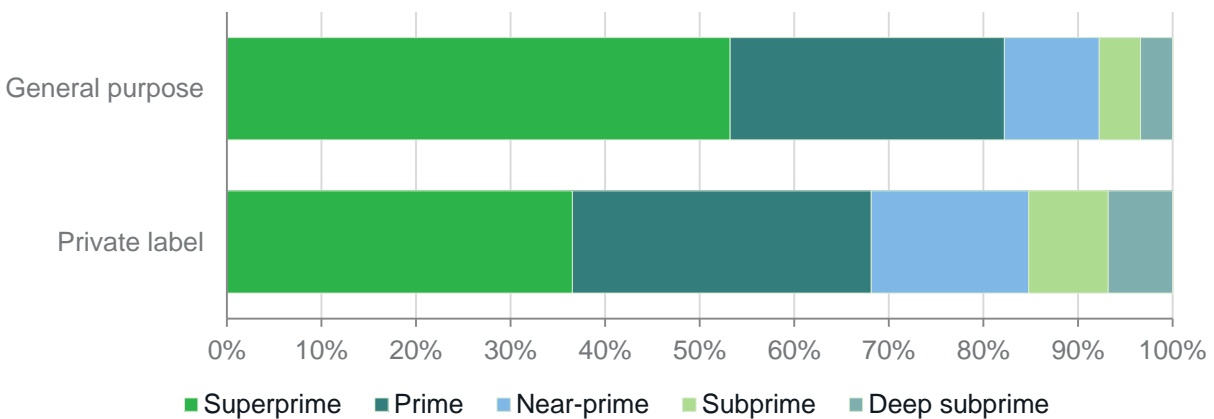


2.2.2 Debt distribution

CREDIT CARD DEBT OVERALL

Relative to purchase volume, balances are spread more proportionately across cardholders with different credit scores. Consumers with superprime and prime credit scores still represent the large majority of balances. The combined 18% share represented by consumers with lower scores as of year-end 2016, however, is significantly higher than this group's 6% share of spending and close to their 16% share of accounts.¹³ The different distributional picture for balances and purchase volume reflects the higher rate at which consumers with lower scores revolve credit card debt from one monthly billing cycle to the next, which we discuss in more detail later in this section.

FIGURE 9: SHARE OF CYCLE ENDING BALANCES BY CONSUMER CREDIT SCORE, YEAR-END 2016 (CCP)



Figures 10 and 11 provide more detail on the distribution of balances over time by credit tier. Figure 10 shows fluctuations in credit card debt over time, both overall and for each credit tier. Figure 11 shows the *share* of credit card debt represented by each credit score tier over time. These charts highlight a significant distinction between the composition of credit card balances today and the composition at the pre-recession peak. Consumers with superprime credit scores

¹³ Year-end balances may be affected by high spending volumes related to the holiday season. This may cause superprime to take an outsized importance relative to other tiers.

represent over 51% of all credit card debt today, a five- to eight-percentage point increase relative to years prior to and through the recession. However, that share has eroded somewhat over the last few years; it peaked at just over 53% in the second quarter of 2014.

Overall, total cycle-ending balances have increased 13% from the second quarter of 2015 to the second quarter of 2017. These gains have been broad based—no credit score tier experienced growth over that period of less than 10%. However, the highest growth rates have been experienced by consumers with deep subprime scores, who have seen their total balances increase 22% over those two years. Similarly, consumers with superprime scores have seen their debt increase over the same period by only just under 10%—while only slightly slower than other credit score tiers, this has nonetheless contributed to the slight erosion in their share of all credit card debt noted above.

FIGURE 10: TOTAL CYCLE-ENDING BALANCES BY CONSUMER CREDIT SCORE (CCP)

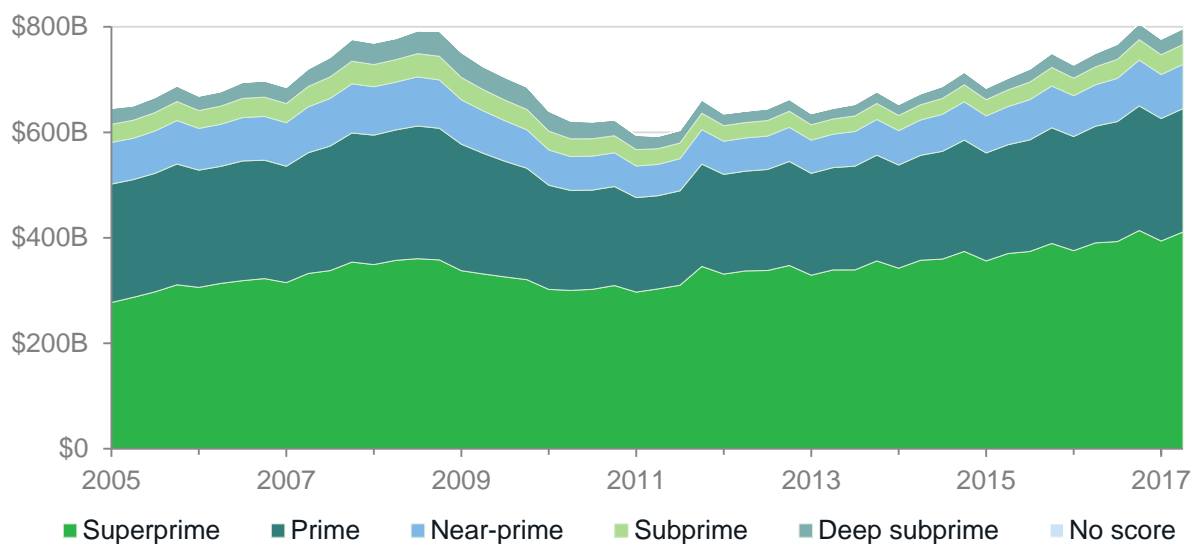
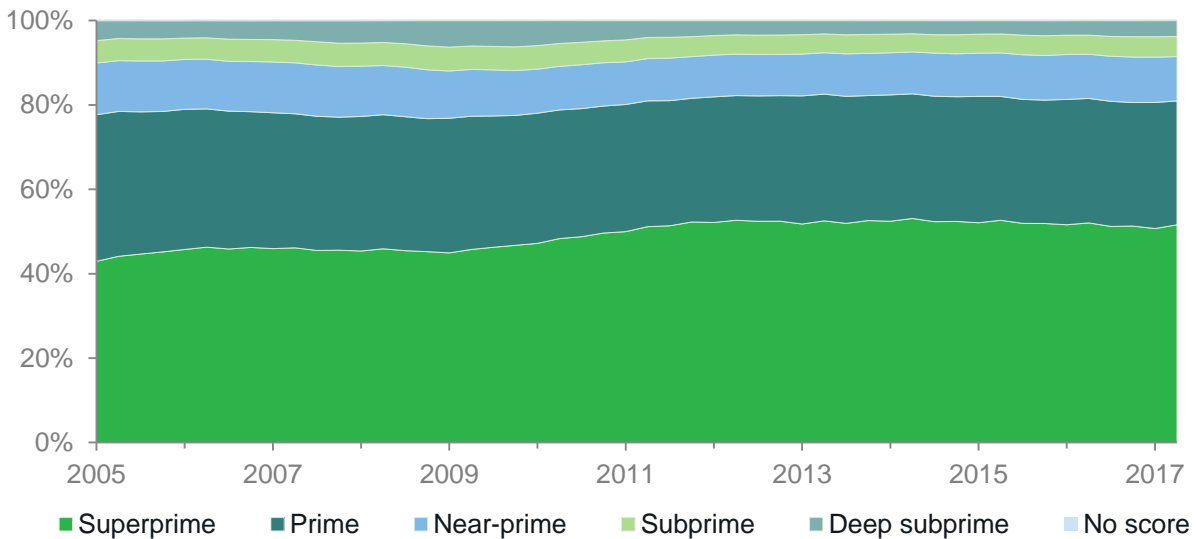


FIGURE 11: SHARE OF CYCLE ENDING BALANCES BY CONSUMER CREDIT SCORE (CCP)



GENERAL PURPOSE CREDIT CARD DEBT

In recent years, outstanding general purpose debt has been increasing at a faster rate for consumers with below-prime credit scores than it has for other consumers. For consumers with deep subprime scores, such debt has increased 38% from the second quarter of 2015 to the second quarter of 2017; the comparable figures for subprime and near-prime are 21% and 18%, respectively. For consumers with superprime scores, balances increased just 12% over the same period. Even so, total outstanding debt held by consumers with deep subprime credit scores remains at only three-fifths of the levels recorded in 2009. These trends are shown in Figure 12. The associated shares of general purpose balances are in Figure 13.

FIGURE 12: GENERAL PURPOSE CREDIT CARD BALANCES BY CONSUMER CREDIT SCORE (CCP)

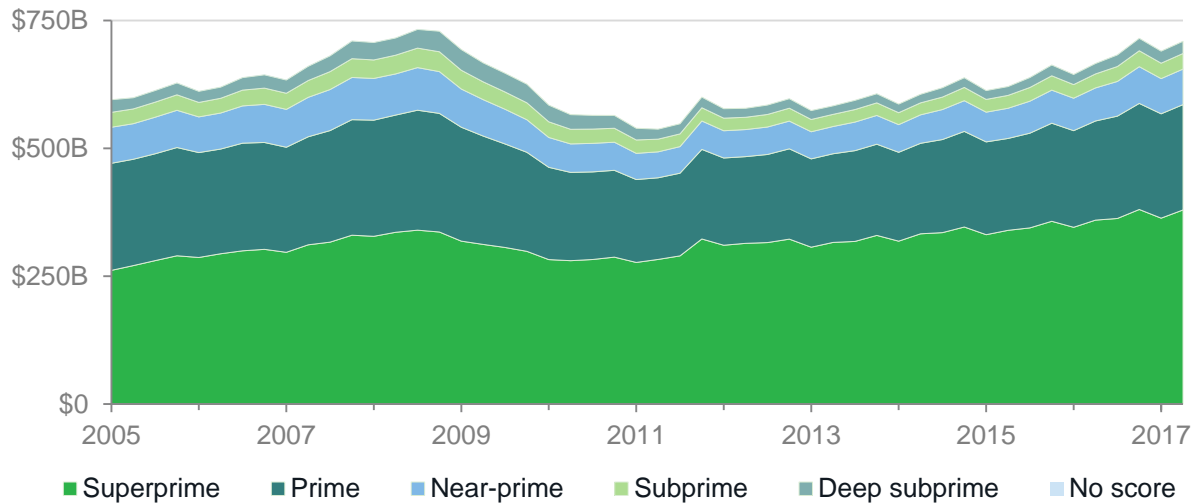
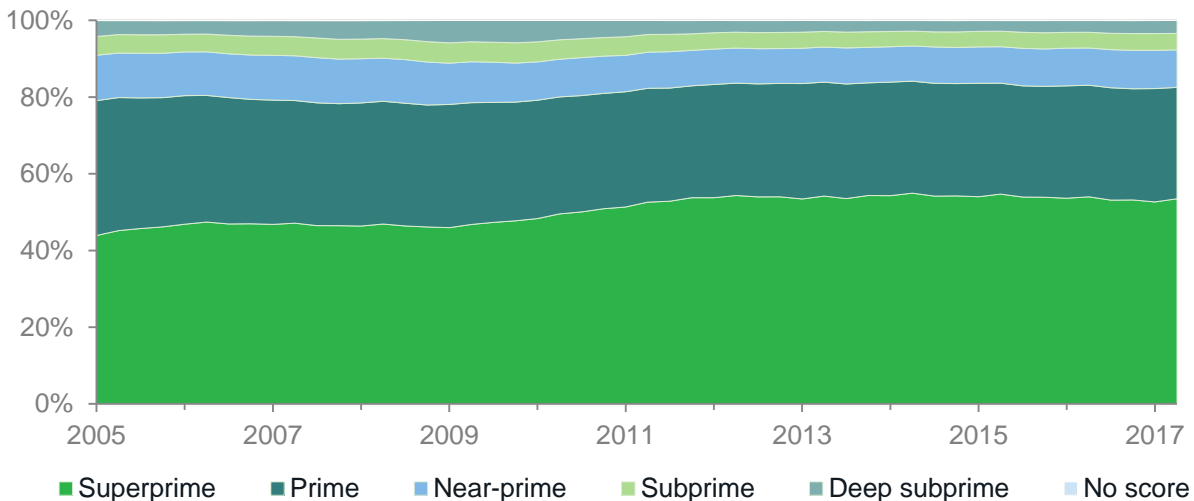


FIGURE 13: SHARE OF OUTSTANDING GENERAL PURPOSE CREDIT CARD DEBT BY CONSUMER CREDIT SCORE (CCP)



PRIVATE LABEL CREDIT CARD DEBT

Private label balances, too, have recently been increasing at a faster rate for consumers with subprime and deep subprime credit scores. From the second quarter of 2015 through the second quarter of 2017, consumers with subprime scores increased their debt by 13%. Consumers with deep subprime scores increased their debt by 28%. Balances for consumers with superprime scores increased only 4% over the same period, and prime consumers only saw 5% growth. Despite their faster growth in recent years, the share of outstanding private label credit card

debt held by consumers with lower credit scores is still lower than the comparable 2009 figure. These data are reflected in Figures 14 and 15.

FIGURE 14: OUTSTANDING PRIVATE LABEL CREDIT CARD DEBT BY CONSUMER CREDIT SCORE (CCP)

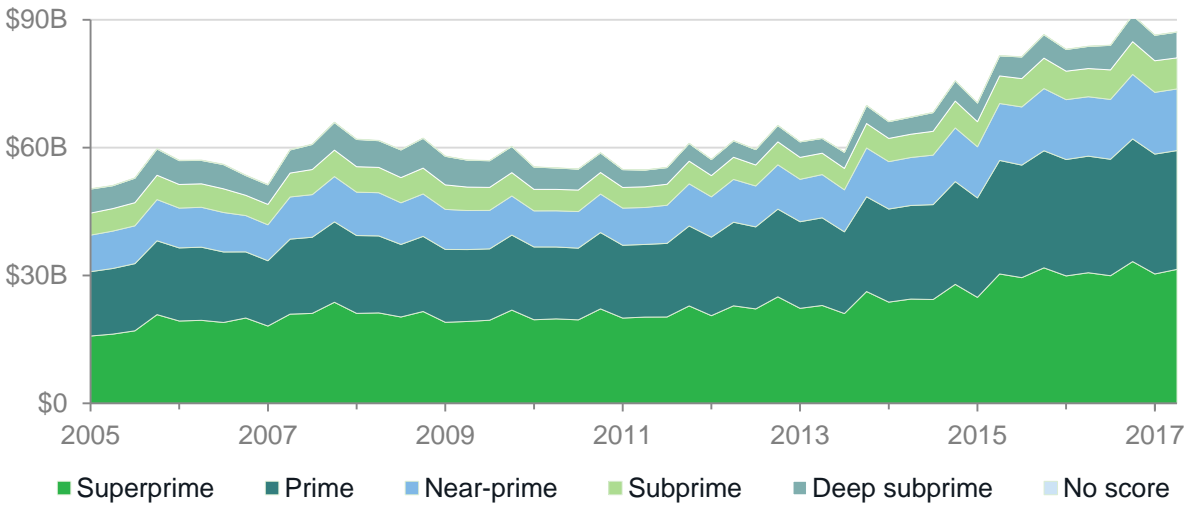
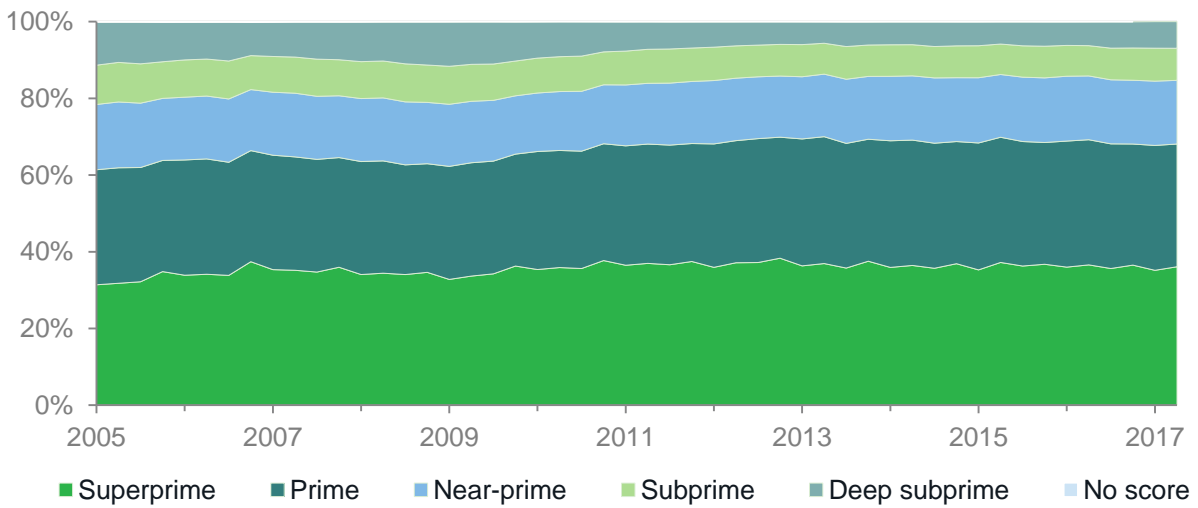


FIGURE 15: SHARE OF OUTSTANDING PRIVATE LABEL CREDIT CARD DEBT BY CONSUMER CREDIT SCORE (CCP)



2.3 Consumer-level metrics of market size

In this subsection, we examine changes in market size at the consumer level. We look, specifically, at average per-consumer credit card debt and account holdings. We also cover these averages for consumers within different credit score ranges. Despite the overall market's return to pre-recession levels, these consumer-level metrics reveal some notable differences between the pre-recession consumer credit card market and the same market today.

Examining any consumer-level metric highlights another important contrast with the pre-recession period. Comparing the total stock of credit card debt owed by consumers presently to the period ten years ago, as we do above, neglects the fact that the population of consumers has grown substantially in that time. The U.S. Census Bureau estimates that the U.S. population was over 325 million as of mid-2017, an 8% increase over the comparable 2007 figure—and given shifts in the age structure of the population, the commensurate number when looking only at those 18 years or older is over 10%.¹⁴ In addition to shifts in the credit score composition of the population over time, which we discuss in Section 1.3.2, this should temper any discussion referencing to present-day debt levels without examining consumer-level outcomes.

Note that we cannot look at average consumer-level purchase volume over this same kind of time horizon because we do not have purchase volume data in the CCP. In addition, we hold our analysis of average credit line until Section 4, which focuses on credit availability in this market.

2.3.1 Average credit card debt

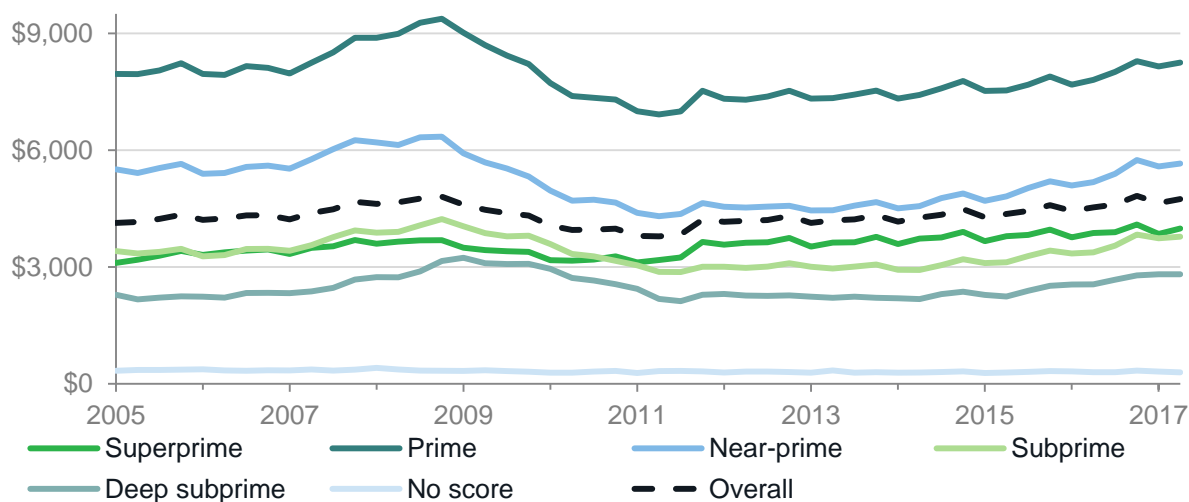
Per-consumer credit card debt shows a clear and sustained return to pre-recession levels. Figure 16 shows average credit card balances for consumers who held at least one open credit card product, private label or general purpose.¹⁵ After falling in the recession, per-consumer credit

¹⁴ Press Release, U.S. Census Bureau, *U.S. Population Projected to Cross 325 Million Threshold* (May 5, 2017), available at <https://www.census.gov/newsroom/press-releases/2017/cb17-tps43.html>.

¹⁵ The denominator, therefore, is not static over time, as some consumers become cardholders and others shift out of cardholding altogether.

card indebtedness has grown since 2011. Average consumer balances were over \$4,800 as of the end of 2016, the highest figure we observe in our data, which runs through mid-2017.

FIGURE 16: AVERAGE PER-CARDHOLDER CREDIT CARD DEBT (CCP)



This high is driven in substantial part by an increase in the average debt level of consumers with superprime credit scores. Given that these consumers are very likely to transact on their credit cards, this likely represents less a shift in consumer indebtedness patterns than in purchase behavior. For example, consumers who cease making purchases with cash or check, instead migrating their purchase volume to a credit card that they pay off in full each month, may double their average monthly credit card balance without actually altering their personal balance sheet meaningfully.

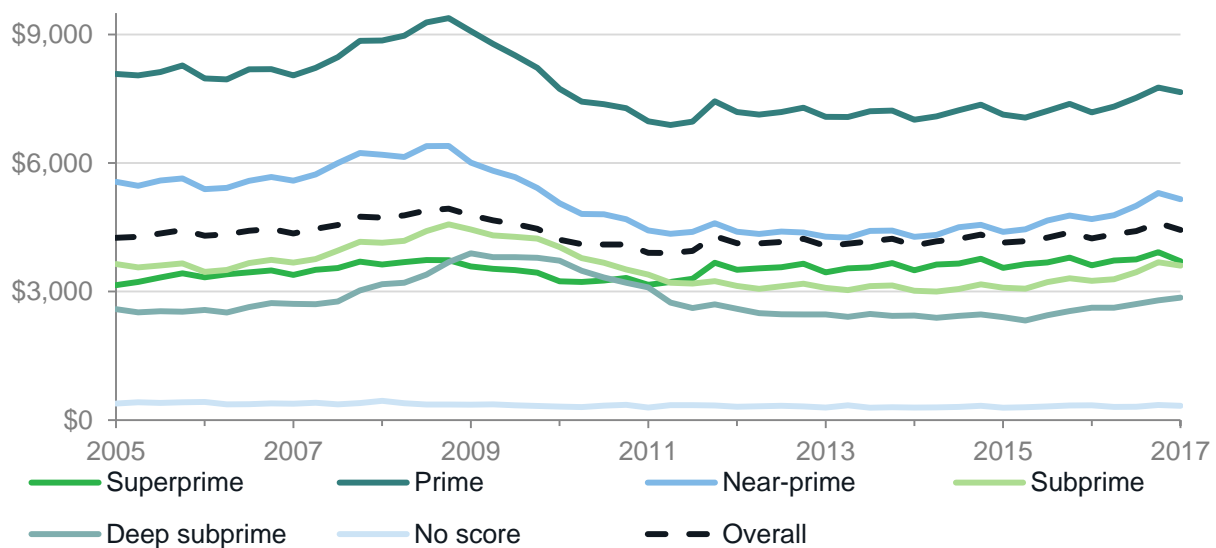
Although all credit score tiers other than superprime record lower per-consumer debt than previous highs before or during the recession, recent years have shown substantial growth in this metric for all credit score tiers. Per-consumer credit card debt for all cardholding consumers has increased 9% since the second quarter of 2015. Average balances for consumers with lower credit scores, however, have increased substantially more. In fact, the deep subprime credit score tier has seen average balances increase by 26% over this same time period. As we discuss in more detail below, payment rates have increased much more slowly and rates of revolving in these credit tiers are high. The growth in per-consumer debt among consumers with lower scores, therefore, is more likely to represent an increase in more persistent indebtedness, rather than solely a shift of purchase volume from one medium to another.

Cardholders with prime credit scores consistently have significantly higher credit card balances on average than consumers in any other credit score tier. Over the four most-recent quarters for which we have data, average balances for these consumers exceeded \$8,000 per cardholder. (A consumer revolving that amount at the 19% APR typical of prime general purpose accounts incurs about \$127 in interest charges each month. Section 3 has more information on interest rates and other consumer costs.) Unsurprisingly, the lowest balances held by cardholders with scores are recorded by consumers with deep subprime scores. These cardholders average over \$2,700 in consumer credit card debt in recent quarters.

GENERAL PURPOSE

General purpose balances comprise the overwhelming share of all consumer credit card debt. Accordingly, when we show average general purpose card debt owed by general purpose cardholders in Figure 17, we observe very similar trends as average balances across all card types. Again, while only superprime has surpassed its previous peak, the other credit score tiers have shown faster recent growth.

FIGURE 17: AVERAGE PER-CARDHOLDER GENERAL PURPOSE CREDIT CARD DEBT (CCP)



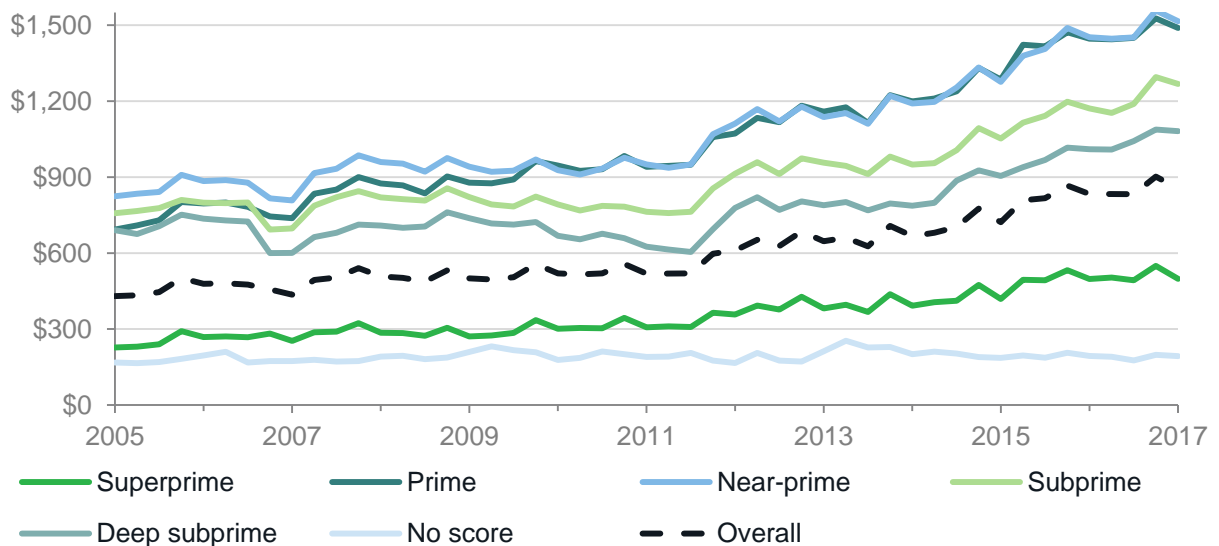
PRIVATE LABEL

Average private label credit card debt held by private label cardholders is substantially lower than the parallel levels for average general purpose debt. In addition, as Figure 18 reflects, trends in private label credit card debt are strikingly different from trends in general purpose debt. Average private label cardholder debt has doubled since 2005. Average general purpose

balances have grown only 6% over that period. Since the beginning of 2015, average private label balances have increased by 11%, more than twice the rate of growth for average general purpose balances over that period.

Consumers across all credit score tiers have experienced substantial growth in private label balances. By the end of 2016, average per-consumer private label credit card debt had reached the highest levels at every credit tier that we are able to observe in our dataset.

FIGURE 18: AVERAGE PER-CARDHOLDER PRIVATE LABEL CREDIT CARD DEBT (CCP)



2.3.2 Consumer cardholding

Most consumers have a credit card.¹⁶ Our data suggest that around 169 million consumers had at least one open credit card as of mid-2017. Figure 19 shows the breakdown between consumers

¹⁶ As of mid-2017, about 79% of consumers with a credit record had at least one credit card. It is harder, however, to determine with reliability the share of all consumers with a credit card because of a lack of data around the number of consumers without credit records—the “credit invisible” population. See Office of Research, Consumer Fin. Prot. Bureau, *Data Point: Credit Invisibles*, (May 2015), available at http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf. With that caveat, however, we estimate that, as of the middle of last year, around 64% of the adult population possessed a credit card account.

who hold only general purpose accounts, those who hold only private label accounts, and those who hold at least one of each. Many cardholders have both, but among those who hold only one type of card or the other, general purpose is dominant.

FIGURE 19: MILLIONS OF CONSUMERS HOLDING AT LEAST ONE CREDIT CARD, MID-2017 (CCP)

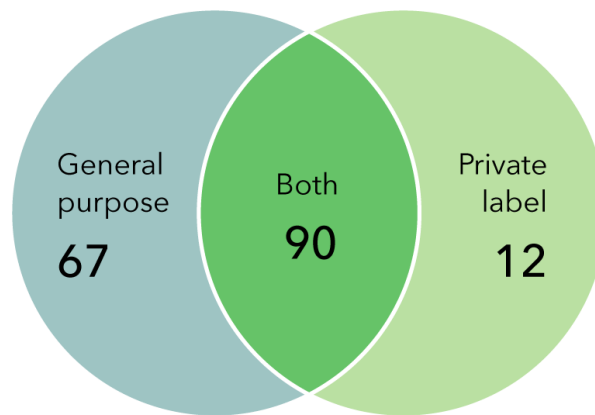
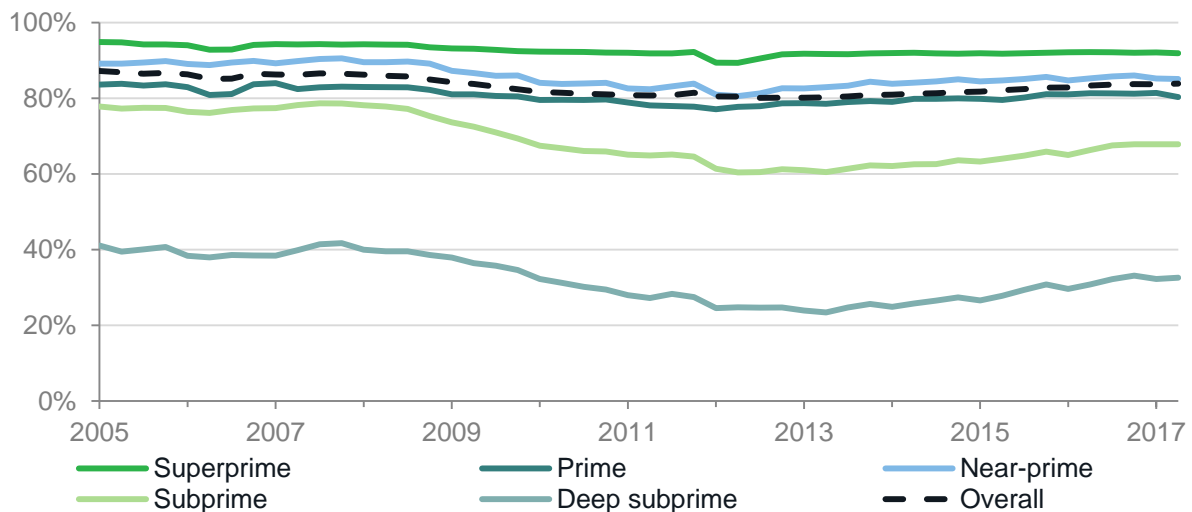


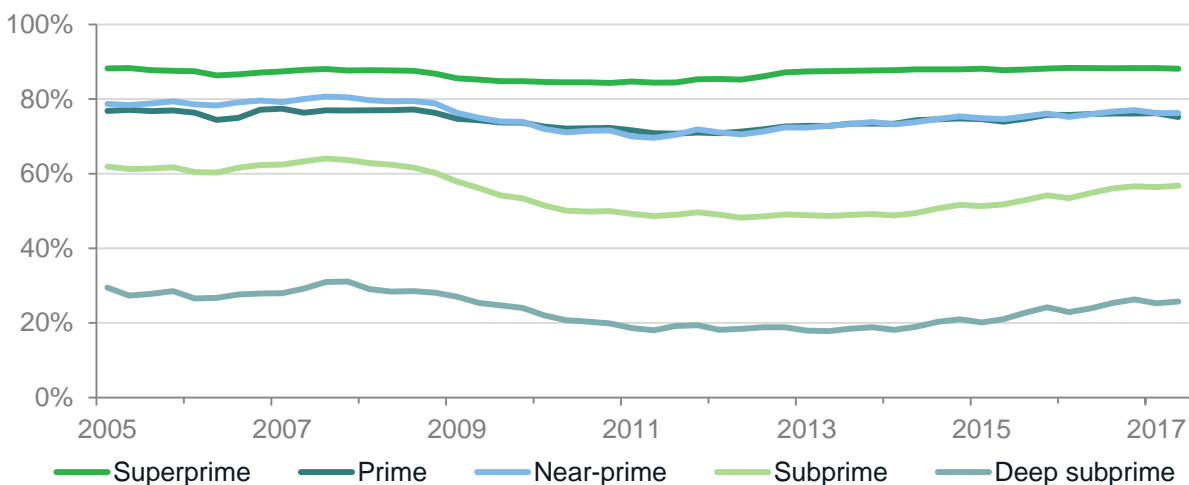
Figure 20 shows the share of consumers, by credit tier, holding at least one open credit card. The recession saw a significant drop in cardholding across every credit score tier, with the exception of superprime. In recent years this metric has seen significant growth, especially in the lower credit tiers. It has not yet returned, however, to pre-recession levels for consumers in any credit tier.

FIGURE 20: SHARE OF CONSUMERS WITH SCORES AND AT LEAST ONE CREDIT CARD (CCP)



General purpose cardholding trends are similar, albeit at a marginally lower rate of cardholding. Relevant data are shown in Figure 21. Consumers with higher credit scores, however, have now returned to pre-recession rates of general purpose cardholding. General purpose cardholding by consumers with lower scores remains below pre-recession levels despite significant recent growth, especially in lower credit tiers.

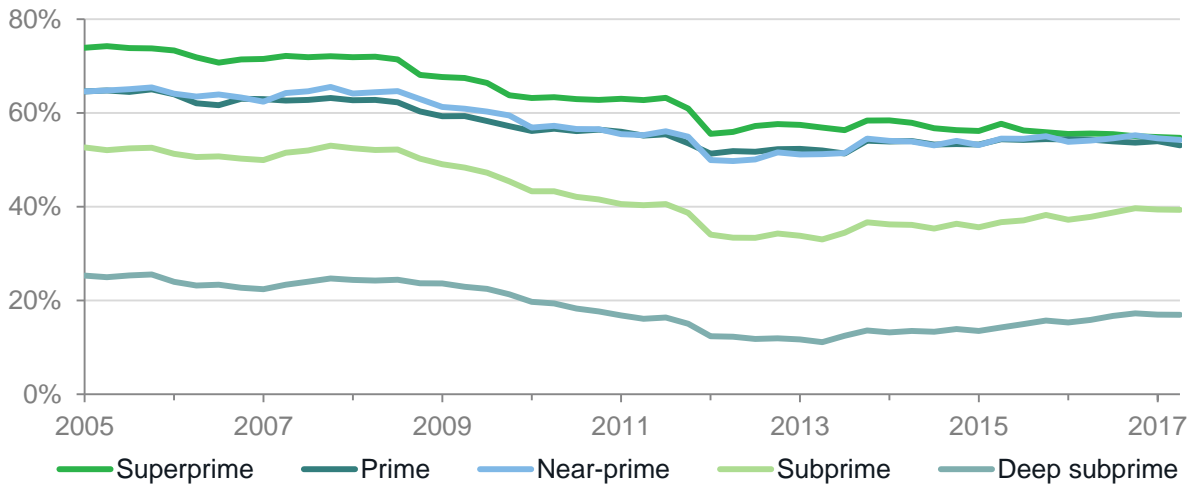
FIGURE 21: SHARE OF CONSUMERS WITH SCORES AND AT LEAST ONE GENERAL PURPOSE CREDIT CARD (CCP)



Private label cardholding presents a more complex picture, as reflected in Figure 22. For all tiers, private label cardholding remains well below pre-recession highs. Rates of growth since post-recession lows have been inversely related to credit score. In fact, private label cardholding rates have continued to fall for consumers with superprime scores through the present.¹⁷

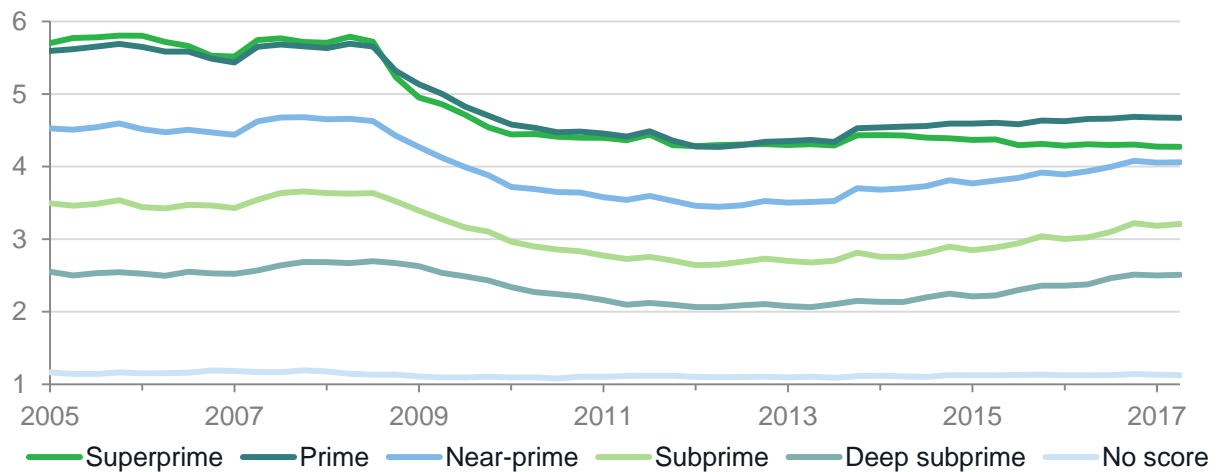
¹⁷ We note again, though, that shifts in issuer practices with respect to private label account closures may confound this analysis to some degree. *Supra* note 8.

FIGURE 22: SHARE OF CONSUMERS WITH SCORES AND AT LEAST ONE PRIVATE LABEL CREDIT CARD (CCP)



The average credit card holder holds multiple cards. For cardholding consumers with credit scores of 620 or above, the average cardholding is over four open accounts. Their subprime-scoring counterparts have three cards each. Even cardholders with deep subprime scores average more than two cards each. These data are shown in Figure 23.

FIGURE 23: AVERAGE NUMBER OF CREDIT CARD ACCOUNTS HELD PER CARDHOLDER (CCP)

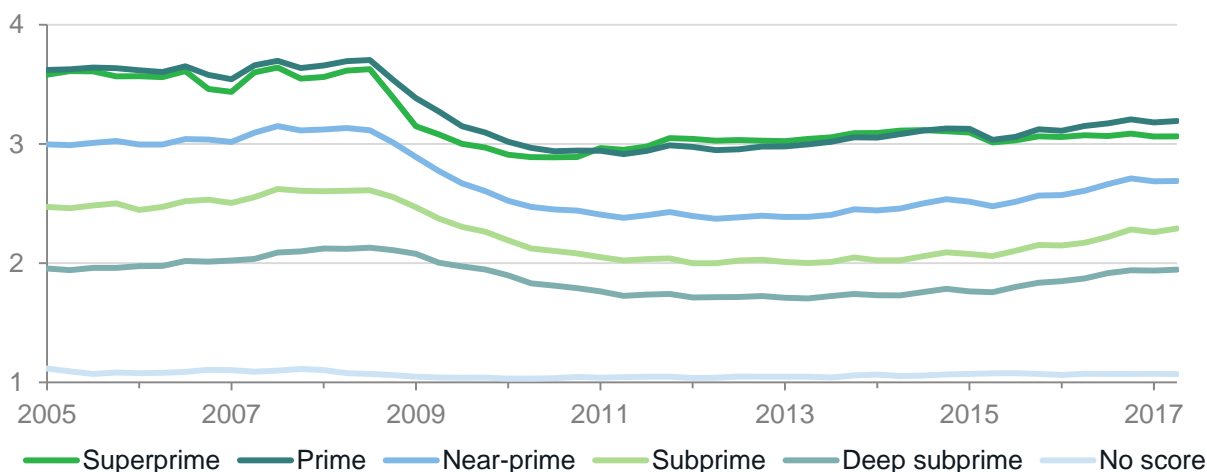


In fact, consumers who lack credit scores are the only group of cardholding consumers for whom the average is around one account. This result is driven by the dynamics of credit scoring. Consumers with a credit report but no score generally lack a score because they lack recent

credit history. Simply having a credit card is very likely to change that condition. As a result, most consumers without a score who procure a credit card move into scored status by the time they procure any subsequent cards.¹⁸

Figure 23 also shows that consumers in every credit tier hold fewer cards than the same credit tier held at the pre-recession peak. The decline is sharpest for consumers with prime and superprime scores, who averaged well over five accounts each before the recession. Cardholding consumers with superprime scores, in fact, recorded their lowest average card count at the end of our data period in mid-2017. Cardholders with subprime, deep subprime, and near-prime scores, however, have shown steady and sustained growth in the average number of open credit card accounts held since post-recession lows. Consumers with prime scores have also shown some growth on this metric since 2014. Figure 24 shows similar results—obviously at consistently lower levels—for average general purpose cardholding by general purpose cardholders.

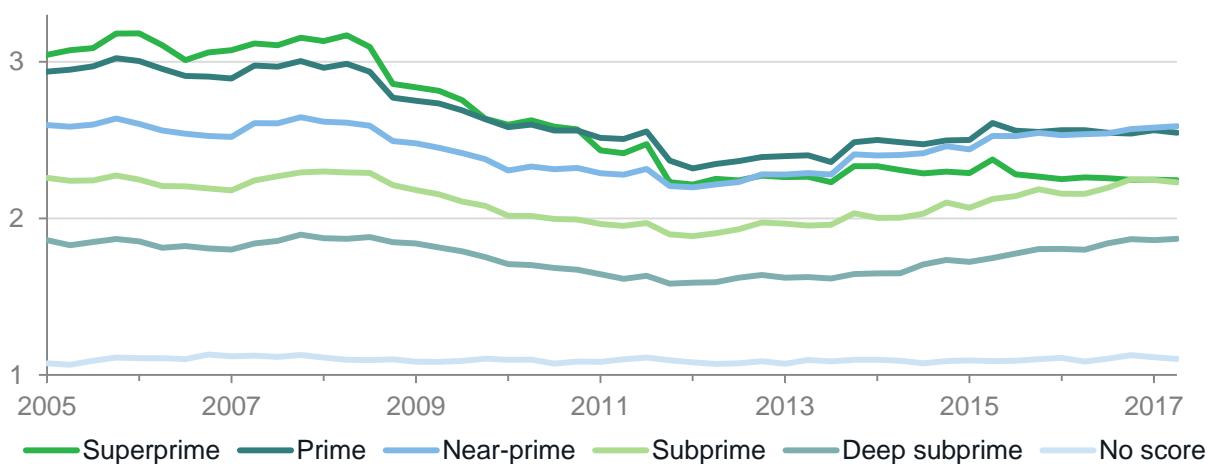
FIGURE 24: AVERAGE NUMBER OF GENERAL PURPOSE CREDIT CARD ACCOUNTS HELD PER GENERAL PURPOSE CARDHOLDER (CCP)



¹⁸ See generally Kenneth P. Brevoort & Michelle Kambara, Office of Research, Consumer Fin. Prot. Bureau, *CFPB Data Point: Becoming Credit Visible*, (June 2017), available at https://www.consumerfinance.gov/documents/4822/BecomingCreditVisible_Data_Point_Final.pdf. This analysis provides more detail about the dynamics of consumers moving from a “credit invisible” or unscored status to a scored status.

Figure 25, however, shows somewhat different results for the private label market. As with general purpose cards, this market shows recessionary declines in the average number of private label cards held by private label cardholders. Drops were steep for consumers with superprime and prime scores, particularly so for consumers with superprime scores, who have also seen no change in cardholding since their cardholding rates stabilized in 2012. Consumers with lower scores, however, have consistently shown an increase in cardholding since the recession, and their private label cardholding has returned to pre-recession levels.¹⁹

FIGURE 25: AVERAGE NUMBER OF PRIVATE LABEL CREDIT CARD ACCOUNTS HELD PER PRIVATE LABEL CARDHOLDER (CCP)



The above figures do not include cards issued to authorized users—individuals designated by the primary account holder to receive an access device tied to the same credit account. Our data indicate that the number of consumers who are not themselves cardholders but have at least one

¹⁹ Again, we note the shift in issuer practices regarding private label closures, which suggests that metrics focused on origination, indebtedness, and spending may be increasingly the better indicators of penetration and usage in this market. *Supra* note 8.

card they hold as an authorized user has hovered just over 12 million for the past three years.²⁰ This represents a substantial increase over the pre-recession average of about eight million. Those individuals are fairly evenly distributed across credit score tiers, with the exception of prime where the number of authorized-user-only consumers is nearly triple the other tiers. We observe around the same rates of growth from pre- to post-recession levels across all credit score tiers.

2.4 Card payment behavior

In this subsection, we examine three sets of questions relating to how consumers pay their credit card debts. First, we look at the share of accounts engaging in transacting or revolving behavior. Second, we look at payment rates. Third, we address questions relating to persistent indebtedness. Our data make it challenging to address this last set of questions, but we plan to examine the issue more closely in the future.

2.4.1 Transacting and revolving rates

At any given point in time most cardholders have a balance on at least one card. Accounts with balances can be identified as exhibiting one of two basic patterns in any given cycle.

“Transacting” accounts pay off the previous cycle’s balance in full before the end of the next cycle. “Revolving” accounts pay some amount less than that. An account can move back and forth between these two statuses over time either because of deliberate consumer choice or because a consumer inadvertently missed a payment. As we discussed in our previous report, however, many accounts exhibit persistent payment behavior over time.²¹

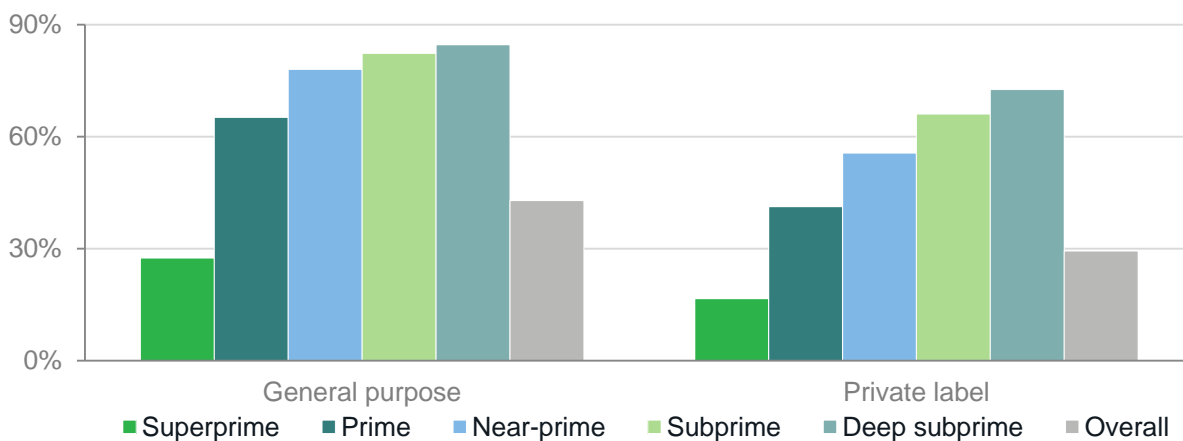
²⁰ Recent surveys find just over 70% of consumers report having a credit card. As noted above in this section, we find roughly 64% of consumers have one, though this does not include authorized users. At 12 million, authorized users would account for roughly an additional 5% of the adult population.

²¹ 2015 Report, at 50-52. The material on these pages summarized findings from Benjamin J. Keys & Jialan Wang, *Minimum Payments and Debt Paydown in Consumer Credit Cards*, (U. of Chicago Harris Sch. of Pub. Pol’y,

Figure 26 shows the average share of accounts revolving a balance from one month to the next in 2016, broken down by card type and cardholder credit score. For both card types, revolving rates decrease as credit scores increase. For all credit score tiers, general purpose revolving rates are higher than private label rates.

On average, two-fifths of general purpose accounts revolve a balance.²² This rate jumps to three-fifths if accounts with superprime credit scores are excluded and to four-fifths if considering only accounts held by consumers with lower scores. Private label cardholders with below-superprime credit scores show more differentiation in revolving share by credit score tier. The difference between the average revolving rates of prime and deep subprime accounts is 31 percentage points for private label versus 19 percentage points for general purpose.

FIGURE 26: SHARE OF ACCOUNTS REVOLVING, 2016 (Y-14)



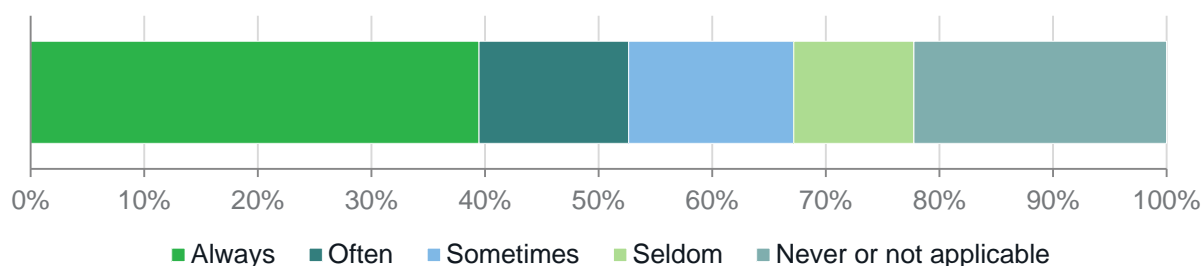
Our data on whether accounts revolve or transact come solely from the Y-14. This means we can quantify only the share of accounts that revolve, not the share of consumers that do so. However, three recent surveys shed some light on the consumer experience in this respect.

Working Paper 2015), available at <https://business.illinois.edu/finance/wp-content/uploads/sites/46/2015/01/Jialan-Wang-JMP.pdf>.

²² These shares include all accounts, including inactive accounts.

First, a recent survey carried out by the Board suggests that roughly half of consumers report that they generally avoid carrying any credit card balances. The other half report revolving on at least one account frequently or persistently.²³ In the latter group, about half reported paying consistently more than the minimum payment, while half reported paying the minimum payment frequently or persistently. Second, a survey conducted in 2016 by the Financial Industry Regulatory Authority (“FINRA”) found that 47% of consumers reported carrying a balance in some months in the previous year.²⁴ Third, the Bureau recently carried out a survey on overall consumer financial well-being.²⁵ It found that just under 40% of consumers report always paying their credit card bills in full every month, with another 13% reporting doing so often, a result similar to both FINRA’s and the Board’s.

FIGURE 27: FREQUENCY WITH WHICH CONSUMERS REPORT PAYING THEIR CREDIT CARD BILLS IN FULL (CFPB FINANCIAL WELL-BEING SURVEY)



2.4.2 Payment rates

Payment rates provide an additional measure of consumer reliance on credit cards as a source of credit. Payment rate data reveal the share of total cycle-beginning balances that are paid in a

²³ Federal Reserve Board, *Report on the Economic Well-Being of U.S. Households in 2016*, at 35 (May 2017), available at <https://www.federalreserve.gov/publications/files/2016-report-economic-well-being-us-households-201705.pdf>.

²⁴ FINRA, *Financial Capability in the United States 2016*, at 21 (July 2016), available at http://www.usfinancialcapability.org/downloads/NFCS_2015_Report_Natl_Findings.pdf.

²⁵ See Consumer Fin. Prot. Bureau, *Financial Well-Being in America*, (Sept. 2017), available at http://files.consumerfinance.gov/f/documents/201709_cfpb_financial-well-being-in-America.pdf.

given billing cycle. For example, a payment rate of 100% for a given segment corresponds to all account balances being paid in full. A payment rate of 0%, by contrast, indicates that no one is paying any credit card bill even in part.

As noted in our previous report, overall monthly payment rates were around 20% prior to the recession, but rose to 27% by the beginning of 2015. While we cannot directly compare outcomes observed in the Y-14 data with results from our previous report, that data source shows general purpose payment rates reaching nearly 29% on average in 2016, as reflected in Figure 28.²⁶ Although superprime accounts show markedly higher payment rates than accounts held by consumers in other credit tiers, accounts in all credit tiers are currently recording payment rates that are substantially higher than their pre-recession levels. This result is consistent with results we reported in 2015.

FIGURE 28: PAYMENT RATES, 2016 (Y-14)

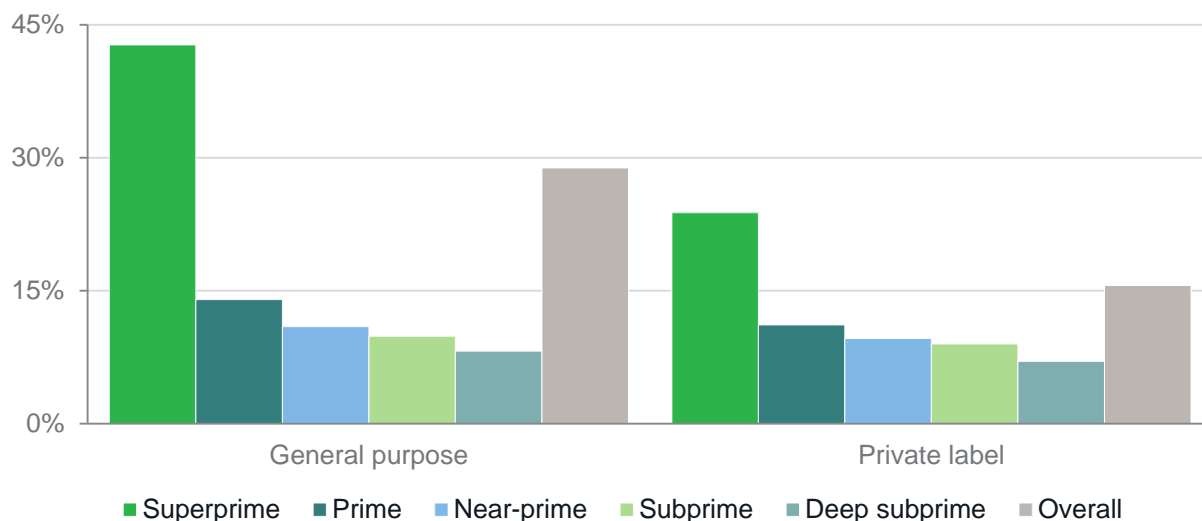


Figure 28 also shows that private label payment rates are lower overall than general purpose payments rates. While this is true across all credit score tiers, it is especially true for superprime accounts. Superprime general purpose balances are paid at a rate nearly double that of

²⁶ CCP data do not allow us to observe payment rates.

superprime private label balances. This may be the result of the prevalence of deferred interest promotions in the private label market. These promotions incentivize consumers to pay less than the full balance each month so long as the full promotional balance is repaid in full by the end of the promotional period. As of the end of 2016, deferred interest promotional balances outstanding for consumers with superprime scores were equivalent to over half of private label balances owed by those same consumers.²⁷ We discuss these promotions further in Section 3.

2.4.3 Persistent indebtedness

It remains unclear precisely what combination of factors has contributed to the change in payment rates relative to the pre-recession norm. It is also unclear whether the change will endure. Given that higher consumer payment rates represent both cause and effect of lower consumer risk in the market, finding ways to empower consumers to manage their balances as effectively as possible remains a core research and—given the efforts of a number of issuers in this area—market monitoring focus for the Bureau. We are interested in learning from issuers and other market participants about how consumers can best achieve this.

Other regulators have also shown a similar interest. The United Kingdom’s Financial Conduct Authority (“FCA”) has recently published a series of findings that address, among other market topics, what the FCA terms “problem credit card debt.”²⁸ The FCA defines and quantifies four indicators of such debt. Two indicators—“serious arrears” and “severe arrears”—focus on consumers who are failing to make timely payments, which is a subject that we address later in this section.

The FCA’s other two indicators focus on situations in which consumers are generally meeting minimum obligations (and thus avoiding default), but are still demonstrating patterns of indebtedness that may suggest significant consumer risk. The FCA defines “systematic minimum repayment” to cover consumers making only minimum payments in at least nine of 12 annual cycles. It defines “persistent debt” to cover consumers having greater than 90%

²⁷ Most, but not all, deferred interest promotions are offered on private label credit cards.

²⁸ See Fin. Conduct Auth., *Credit Card Market Study*, (Nov. 2015), available at <https://www.fca.org.uk/credit-card-market-study-interim-report>.

utilization on at least one card. Both measures apply only to consumers who are incurring interest charges.

Current data sources available to us do not allow us to produce findings parallel to the FCA's analysis. Our last report, however, highlighted research demonstrating that at least one-in-ten general purpose accounts appear to exhibit systematic minimum repayment behavior.²⁹

In addition, new research indicates that a significant number of U.S. credit card consumers carry persistent credit card debt.³⁰ This research does not focus on utilization, but instead examines the length of time accounts remain in a revolving status after they have first begun revolving. Revolving episodes for higher- and lower-credit-score accounts last for nine and 13 months on average, respectively. Nearly two-fifths of higher-score episodes and over half of all lower-score episodes last for six months or more. About 12% of higher-score revolvers and 20% of lower-score revolvers sustain balances continuously for more than two years, by which point only a small share of accounts transition out of revolving status in any given billing cycle.³¹

2.5 Rewards

Rewards cards have become increasingly central to the credit card market. In our 2015 Report, we identified rewards programs as benefits programs associated with credit card accounts

²⁹ See 2015 Report, at 50-52.

³⁰ This analysis is based on research carried out by Alexei Alexandrov, Özlem Bedre-Defolie & Daniel Grodzicki, *Consumer Demand for Credit Card Services*, (Oct. 13, 2017), available at <https://sites.google.com/site/danieljosegrodzicki/system/app/pages/search?scope=search-site&q=Consumer+Demand+for+Credit+Card+Services>.

³¹ These results are based on account-level measures from a data source that covers a significant majority, but not the entirety, of the consumer credit card market. See *id.* Self-reported evidence paints an even more negative picture at the consumer level. A recent survey reported that, as of August and September of this year, more than two-in-five consumers had been carrying a balance for at least two years, and nearly a quarter had been doing so for at least five years. See Michelle Crouch, *Survey: Who is Most Likely to Carry Credit Card Debt*, creditcards.com (Sept. 27, 2017), available at <https://www.creditcards.com/credit-card-news/card-debt-survey.php>.

sharing a set of key characteristics.³² In this section, we update certain key metrics in the rewards markets, and note certain other market developments.

2.5.1 Key rewards metrics

FIGURE 29: SHARE OF ACQUISITION MAILINGS ASSOCIATED WITH REWARDS CARDS (MINTEL COMPEREMEDIA)

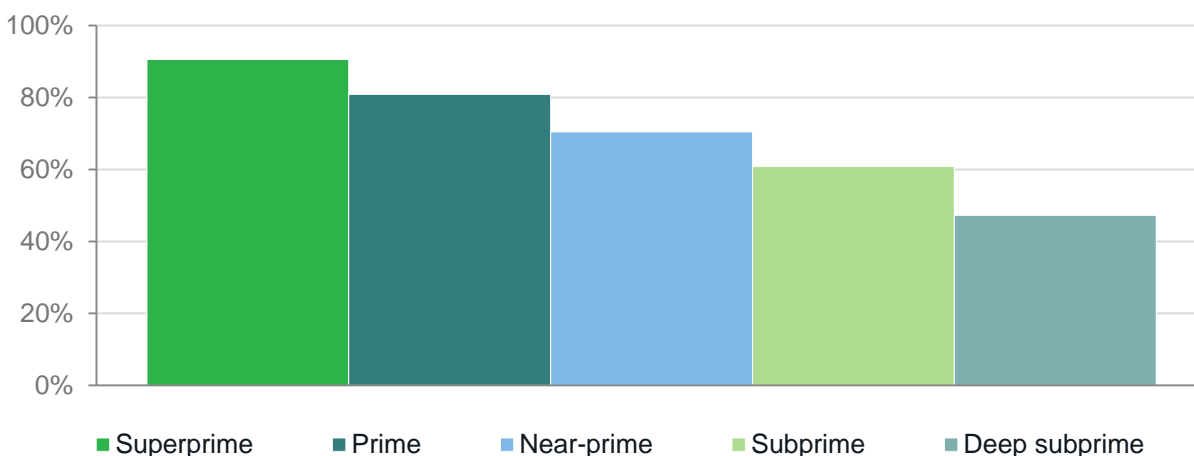


Rewards credit cards have maintained their prevalence since our last report, as evidenced by rewards card marketing and usage. Purchase volume on rewards cards in the Y-14 as a share of all purchase volume has increased steadily for consumers in all credit tiers since 2013. By 2016, it accounted for 88% of all general purpose purchase volume in the Y-14. Spending on rewards cards is proportionally more prevalent for consumers in higher score credit tiers. As shown in Figure 30, less than half of credit general purpose card spending by consumers with deep subprime credit scores was on a rewards card, contrasted with over 90% of spending by consumers with superprime scores in 2016.³³

³² 2015 Report, at 209.

³³ We do not provide a parallel depiction for private label card rewards spend. Less than 7% of private label purchase volume overall is attributable to any rewards program.

FIGURE 30: SHARE OF GENERAL PURPOSE PURCHASE VOLUME ON A REWARDS CARD, 2016 (Y-14)



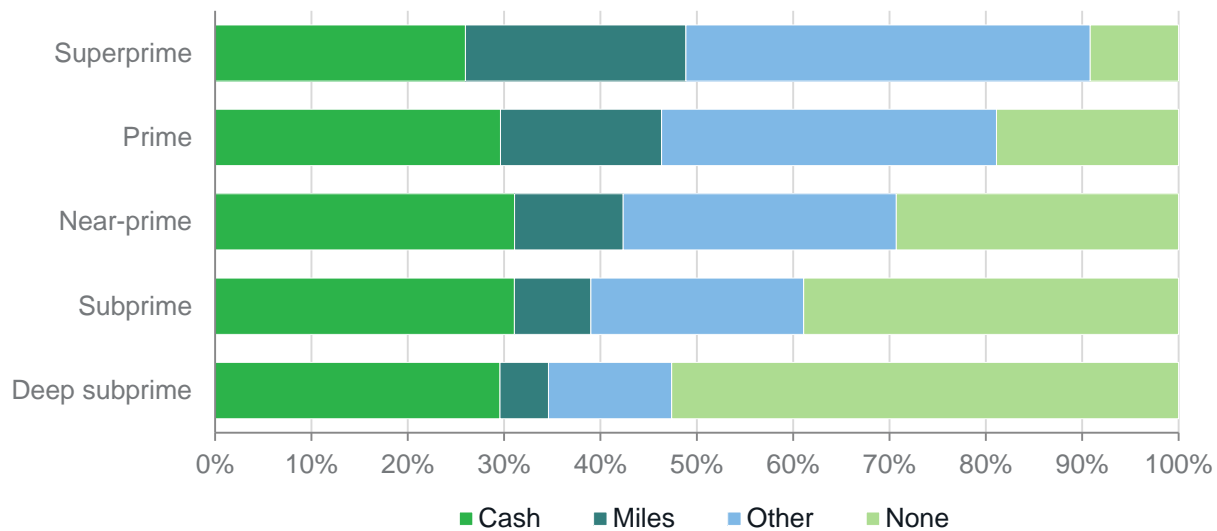
One major dimension of rewards programs is the form that the rewards take. The data available to us permit the subdivision of rewards programs into three types. First, “cash” or “cashback” rewards allow consumers to redeem rewards for statement credits, checks, deposits to an asset account, or cash at an ATM. Second, “miles” programs managed by third-party airlines are associated with co-brand cards that allow consumers to accumulate airline-branded rewards when using their card. The remaining programs are classified as “other,” a category that includes non-cashback issuer-managed programs (such as those that offer “points” redeemable for travel) as well as programs managed by third parties that are not airlines, such as hotel chains.

In 2016, purchases on cash rewards made up 27% of overall credit card spending. Purchases on miles rewards made up 21%.³⁴ As shown in Figure 31, cash rewards penetration is roughly equal (in proportional terms) across all credit score tiers. Miles rewards penetration, by contrast, is highly correlated with credit score tier. Spending by consumers with superprime scores on miles cards nearly equaled superprime spend on cashback cards. In contrast, spending on cashback cards among consumers with deep subprime scores outstripped deep subprime miles spend by a

³⁴ A number of RFI commenters confirmed cashback’s status as the single most popular rewards product. *See, e.g.*, Auriemma Comment Letter, at 12; Visa Comment Letter, at 5-6; Discover Comment Letter, at 5-6. One commenter attributed this popularity to “the ease of understanding the value proposition” and the ability to use the cashback reward “for any purpose.” Visa Comment Letter, at 5.

factor of nearly six. Miles cards are typically higher line products that are often marketed to consumers with higher scores.

FIGURE 31: PURCHASE VOLUME BY REWARDS TYPE AND CREDIT SCORE TIER, 2016 (Y-14)

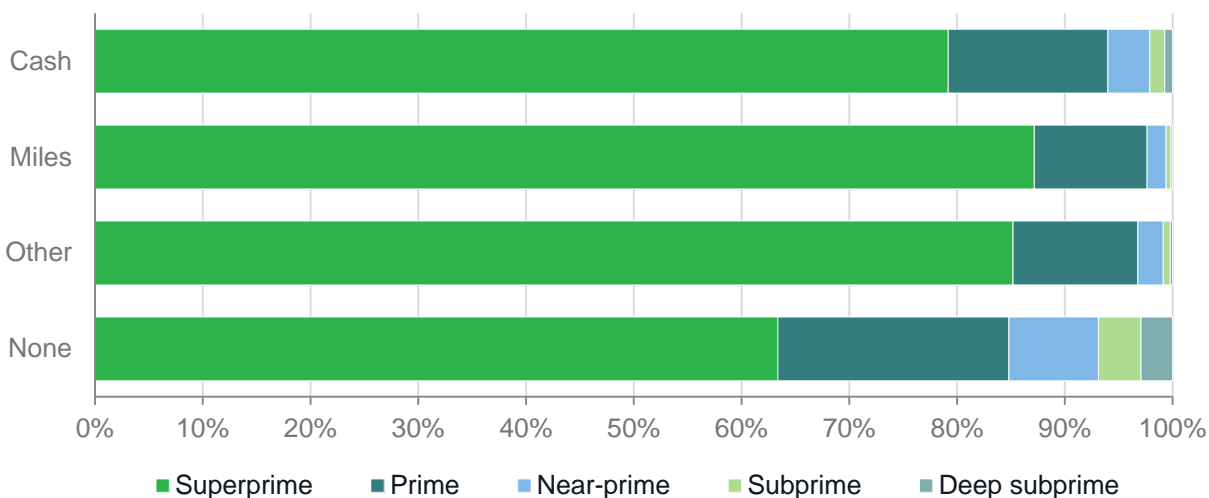


Both of these categories, however, are eclipsed by spending on “other” rewards products. That spend represented two-fifths of all general purpose purchase volume in 2016. Spend share in this category is also correlated with credit score tier. This is the largest single rewards category for consumers with prime and superprime scores. But consumers with deep subprime scores spent only 13% of their card dollars using those cards, less than half their spend on cashback cards.

As we noted earlier, the vast majority of purchase volume on general purpose credit cards is made by consumers with superprime credit scores. Their spending represents over four-fifths of all dollars spent on general purpose cards in 2016. As reflected in Figure 32, superprime is the dominant credit tier for spend via all rewards types. (Figure 32 inverts the analysis in Figure 31. It shows the credit score tier share of spend by rewards type, as opposed to the rewards type share of credit score tier spend.)

Despite the high penetration of rewards on superprime accounts, superprime accounts still represent the majority of all cards that have no associated rewards feature. Spending by consumers with superprime scores on non-rewards cards constituted over 7% of *all* general purpose dollars spent in 2016.

FIGURE 32: SHARE OF GENERAL PURPOSE PURCHASE VOLUME BY CREDIT SCORE AND REWARDS TYPE, 2016 (Y-14)



2.5.2 Other market developments

Rewards remain very popular with consumers.³⁵ Competition among issuers in the rewards credit card market has appeared to increase in intensity even over the past two years.³⁶ There is particularly visible and heated competition among issuers for high-spend consumers. Six of the largest issuers have recently debuted or substantially revised “premium” rewards credit cards, which feature exceptionally generous benefits for a high annual fee.³⁷ There is similarly intense

³⁵ If popular culture is any indication, a recent entry by the highest-traffic webcomic on the internet suggests many consumers may relate to the experience of investing significant time attempting to optimize their credit card rewards benefits. See XKCD, *Credit Card Rewards*, <https://xkcd.com/1908/> (last visited Dec. 5, 2017). One commenter noted that credit card rewards programs are “increasingly accessible and popular” and noted high consumer satisfaction with rewards program earning and redemption features. See Auriemma Comment Letter, at 13. Other commenters noted that rewards are often the primary factor considered by consumers in choosing their primary card. See AFSA Comment Letter, at 2; CBA/FSR Comment Letter, at 8.

³⁶ See, e.g., Magnify Money, *Spending on Credit Card Rewards has Exploded in Banks’ Frenzied Competition Over Customers*, Business Insider (May 5, 2017), available at <http://www.businessinsider.com/spending-on-credit-card-rewards-has-exploded-2017-5>.

³⁷ Section 3.3.3 presents more detailed data on the intersection of annual fees, rewards, and credit score tier.

competition for branding partners, including airlines, hotels, and certain retailers. Issuers presumably believe that a substantial number of consumers are inflexible in their loyalty to certain merchants or brands, and are therefore willing to offer these merchants generous terms for the exclusive rights to market credit cards featuring their brand and leveraging their loyalty rewards programs.

2.5.3 Market opportunities

In our 2015 Report, we identified a number of areas of potential concern regarding rewards card practices. While a number of these issues persist, progress has been made on others.³⁸ Additionally, the American Bankers Association, which represents most of the largest rewards cards-issuing banks, recently wrote a letter to the Bureau highlighting “principles that undergird [their] commitment to consumers.” These include a number of practices that, if universally adopted in the collaborative and constructive spirit of the letter, would address at least some of those concerns. These principles include ensuring consistent consumer access to rewards terms and conditions throughout the account lifecycle, a number of steps to ensure consumer-friendly experiences with sign-up bonuses and similar promotions, and better communication around expiration and forfeiture. The Bureau is encouraged by efforts to improve the clarity and user-friendliness of rewards card products and disclosures, and continues to monitor rewards programs closely for opportunities to improve consumer experiences and outcomes.

We also note in Section 9 below that the structure of rewards programs themselves are becoming more diverse, and in so doing are offering some consumers a wider variety of incentives. For example, the Bureau is aware of at least one significant program that offers consumers rewards tied at least in part to payments of balances on the card—not simply to the spend that causes those balances to accumulate. Issuer experimentation of this kind is a further sign of healthy competition in the market.

³⁸ One commenter noted that issuers “have taken steps to improve the clarity of rewards program marketing materials and disclosures.” *See* Auriemma Comment Letter, at 14.

2.6 Delinquency and charge-off

When a consumer fails to make a required minimum payment by the due date, the credit card account becomes “delinquent.” Accounts that remain delinquent for 180 days must be “charged off,” meaning that the issuer can no longer consider the outstanding balance as an asset on its balance sheet.³⁹ Both delinquency and charge-off generally result in a marked decline in a consumer’s credit score. This subsection summarizes delinquency and charge-off trends in the consumer credit card market since 2005.⁴⁰

2.6.1 Delinquency

Figure 33 shows the share of credit card accounts that are 60 or more days delinquent, meaning that they are at least three minimum monthly payments behind on their debt obligation.⁴¹ We refer to this level of delinquency as “severe” delinquency. Figure 34 shows the share of balances severely delinquent.

After a recessionary spike, balance delinquency rates on both general purpose and private label balances have fallen below pre-recession levels. That fall was steep for general purpose balance delinquencies, which have risen only slightly since their lowest post-recession point. Account delinquency rates show a similar pattern to balance delinquency rates on general purpose cards. For private label cards, which traditionally have higher balance delinquency rates, there has also been a fall from pre-recession levels, but it is smaller, and the rise in recent quarters is bringing

³⁹ Delinquent accounts may have to be charged off prior to 180 days in certain circumstances as, for example, with a bankruptcy. See Office of the Comptroller of the Currency, *Policy Implementation – The Guidance Attached to this Bulletin Continues to Apply to Federal Savings Associations*, OCC Bulletin 2000-20, (June 20, 2000), available at <https://occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>.

⁴⁰ We do not show delinquency and charge-off data by credit score because delinquency and charge-off themselves have such a large effect on that score.

⁴¹ Delinquency is often framed in terms of the number of days an account has been delinquent. An account three or more cycles delinquent is equivalent to an account more than 60 days delinquent.

the balance delinquency rate closer to pre-recession levels. Account delinquency rates on private label cards fell more modestly into the recession and are now well above pre-recession levels.⁴²

FIGURE 33: SHARE OF ACCOUNTS 60 OR MORE DAYS DELINQUENT (CCP)

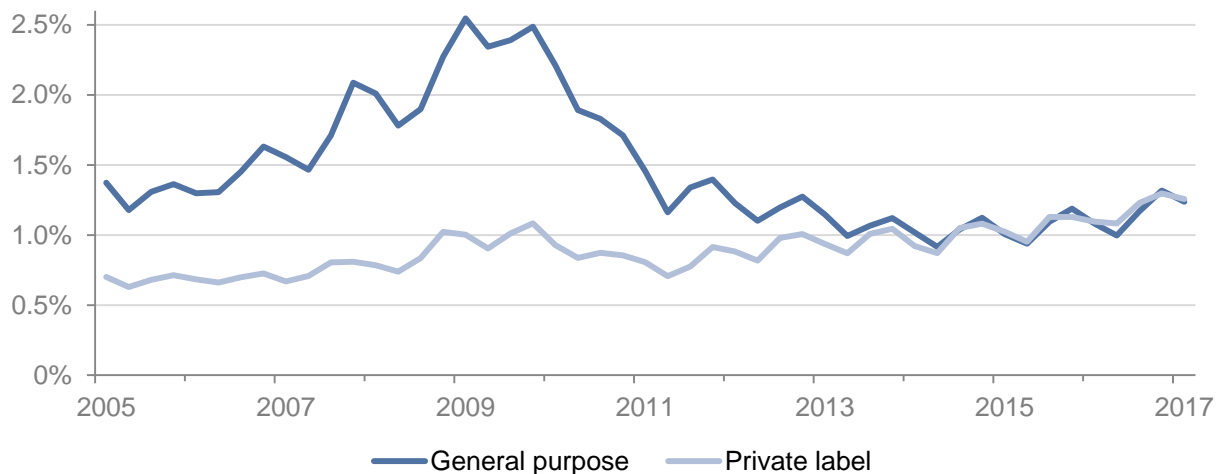
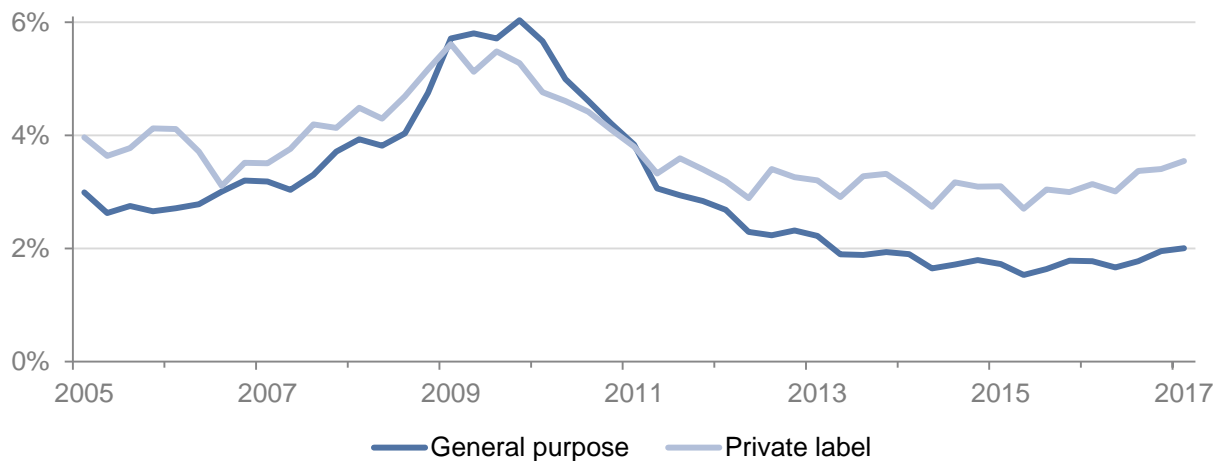


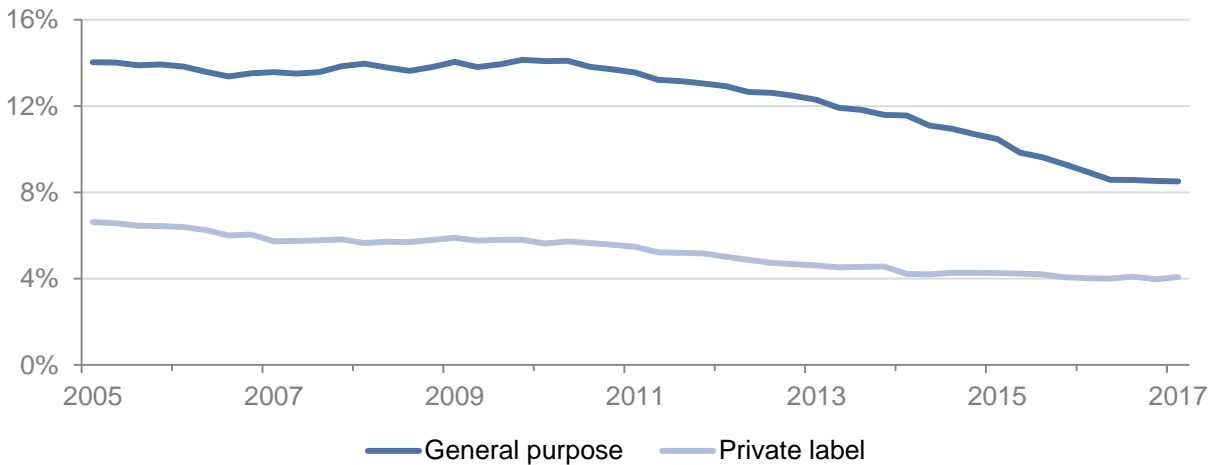
FIGURE 34: SHARE OF BALANCES 60 OR MORE DAYS DELINQUENT (CCP)



⁴² We note again the possibility that the denominator here was affected by a shift in issuer practices. *Supra* note 8.

The depictions above show snapshots of the overall delinquency picture at specific points in time. In contrast, Figure 35 shows the share of consumers with a credit record who have experienced a severe delinquency on either a general purpose or private label account in the preceding 12 months.⁴³

FIGURE 35: SHARE OF CONSUMERS WITH A CREDIT RECORD WHO HAVE AT LEAST ONE 60-OR-MORE-DAY DELINQUENCY ON A CREDIT CARD ACCOUNT IN THE PRECEDING YEAR (CCP)



This measure of severe, consumer-level delinquency was fairly stable for both general purpose and private label accounts pre-recession. Surprisingly, there was not a significant increase associated with the recession. Starting in 2011, however, this measure of severe delinquency has declined substantially in both the general purpose and private label markets. The general purpose market experienced a larger decrease, with the rate recently plateauing at between 8% and 9%, compared to its peak at over 14% in 2010. The private label side has fallen as well, and is currently stabilizing around 4%, the lowest level in over a decade.

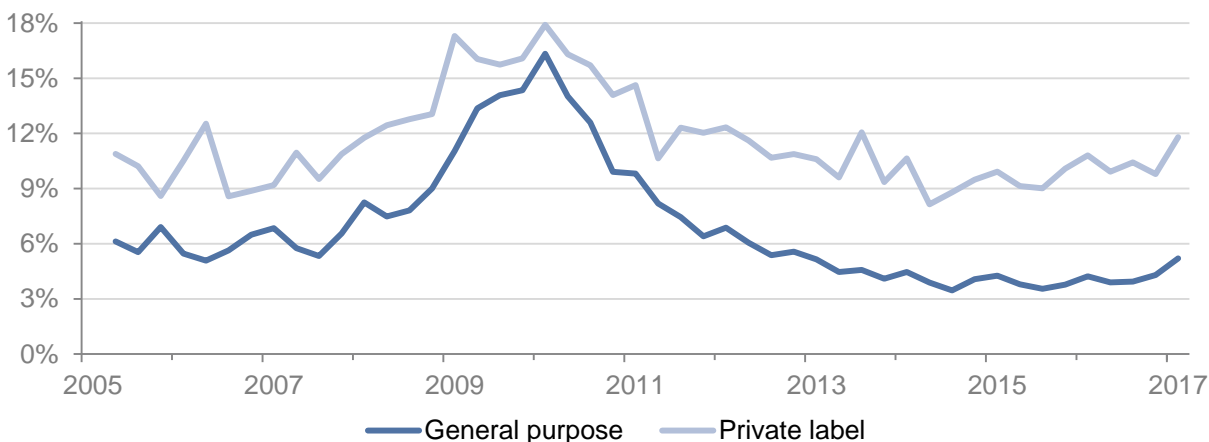
It is not immediately clear precisely why this consumer-level measure remained so stable even as the share of accounts severely delinquent spiked during the recession; the causes for the disjunction are a subject for further exploration.

⁴³ Note that these metrics are not mutually exclusive. A consumer who experienced a recent severe delinquency on at least one of each type of account would be included in both metrics.

2.6.2 Charge-off

Charged-off balances have behaved similarly to delinquent balances over the last decade, as Figure 36 shows. Both general purpose and private label charge-offs fell from their recessionary high points to pre-recession levels or lower for most of the past half-decade. However, both markets have seen upticks in recent periods, recording their highest levels in several years. Forward-looking loss projections at a number of major issuers suggest an expectation among issuers that charge-offs will continue to increase.⁴⁴ The uptick is more pronounced for private label cards. Research from one leading consultancy showed that consumers ranked private label cards amongst the least likely to be paid in both 2008 and 2010.⁴⁵

FIGURE 36: ANNUALIZED RATE OF GROSS OUTSTANDING BALANCES CHARGED OFF (CCP)

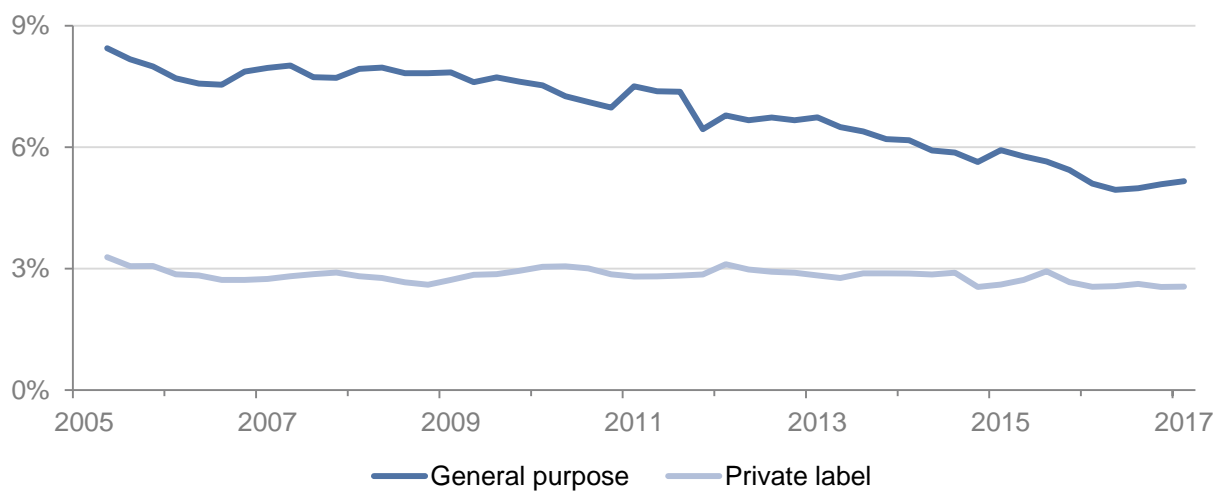


⁴⁴ See generally Federal Reserve Board, *Report to Congress on the Profitability of Credit Card Operations of Depository Institutions*, (June 2017), available at <https://www.federalreserve.gov/publications/files/ccprofit2017.pdf>. The substantial increase in loan loss provisions is the reason credit card bank profitability declined from 2015 to 2016 in spite of higher interest revenues. *Id.*

⁴⁵ Moshe Orenbach, *Cardbeat Newsletter*, at Slide 7, Auriemma Consulting Group (Vol. 16, Issue 12). Other distinct factors may influence private label credit card charge-off rates as well; two recent reports suggested that consumers may be less likely to pay back cards acquired at brick-and-mortar locations which have since closed. See Matt Townsend et al., *American's 'Retail Apocalypse' Is Really Just Beginning*, Bloomberg (Nov. 8, 2017), available at <https://www.bloomberg.com/graphics/2017-retail-debt>; AnnaMaria Andriotis, *Here's the Credit Card That's Gathering Dust in Your Wallet*, Wall St. J. (Nov. 30, 2017), available at <https://www.wsj.com/articles/heres-the-credit-card-thats-gathering-dust-in-your-wallet-1512050400>.

The share of consumers who have experienced at least one charge-off in the last year, for both general purpose and private label cards, resembles the parallel metrics for delinquencies. As shown in Figure 37, this metric was largely stable for both general purpose and private label before and during the recession. From there, however, the general purpose rate dropped steadily, with only a small recent uptick observable. Both rates are at or near the lowest levels we are able to observe in our data. While other charge-off indicators are less positive, this metric suggests that the overall charge-off picture remains more complex and deserving of further analysis.

FIGURE 37: SHARE OF CONSUMERS WITH A CREDIT RECORD WHO HAVE EXPERIENCED AT LEAST ONE CHARGE-OFF OF A CREDIT CARD ACCOUNT IN THE PRECEDING YEAR (CCP)



One particular concern about the recent—though still slight—upticks in delinquency and charge-off that are reflected in Figures 33, 34 and 36 is that they are occurring in the absence of a broader reversal of economic conditions. In the past, increases in credit card delinquencies and charge-offs have often been correlated with periods of economic recession, when total economic output and incomes contract and levels of employment decline.⁴⁶ At the time of writing, however, economic growth rates remain positive and unemployment remains low. To the degree that

⁴⁶ This can readily be seen by comparing changes in the Board’s data on credit card charge-off and delinquency rates at commercial banks, <https://www.federalreserve.gov/releases/chargeoff>, with the National Bureau of Economic Research’s list of US Business Cycle Expansions and Contractions, <http://www.nber.org/cycles.html> (both last visited Dec. 7, 2017).

deteriorating credit card performance suggests some fragility in the ability of credit card consumers to make ends meet, it may raise some concerns about what might transpire if macroeconomic trends were to change. Alternatively, however, recent trends may simply reflect a move back towards pre-recession underwriting norms, in which case the lack of an accompanying adverse shift in macroeconomic conditions would likely be a less reliable indicator of a significant shift in the overall financial health of consumers.

3. Cost of credit

The cost of card credit—both its level and its structure—is one of the most important factors in understanding the dynamics of the credit card market. As we have done in our prior reports, we assess overall costs to consumers using our “total cost of credit” measure. We further analyze the main components of consumer cost—interest charges and various fees. We also provide some updated metrics for deferred interest promotions.

Y-14 data provided to the Bureau by the Board are the main source for this section of the report.¹ This source is new to the Bureau. As a result, our ability to reconstruct backwards-looking cost trends has limits. Most charts we present in this section represent a snapshot of 2016, rather than a trend line covering a relatively short, and largely stable, interval. There is enough overlap between the data on which we rely here and the data underlying the results we presented in our 2015 Report, however, that we can and do set our results in the context of the results seen in our prior work.

In our 2013 Report, we observed that there were changes in certain components of credit card pricing such as the level of late fees and the incidence of overlimit fees that were directly attributable to the CARD Act, which specifically regulated those components.² We further observed an increase in interest rates during the period in which the CARD Act took effect but explained that we could “make no judgment on the extent to which the CARD Act, as distinguished from other factors such as the impact of the Great Recession, contributed to these increases.”³ We also noted an overall decrease in the total cost of credit but noted that it was

¹ For more detail on the Y-14 data, see Section 1.3.1. It is worth repeating that Y-14 data are not necessarily representative of the part of the market *not* covered by the Y-14 data. Some cost data associated with accounts outside the reach of our Y-14 review is included in Section 6, which covers costs (and a number of other metrics) on cards issued by smaller, subprime specialist issuers.

² See 2013 Report, at 5.

³ *Id.*

“again . . . unclear how much of that change is attributable to the CARD Act.”⁴ The current report cannot address these unanswered questions because we are looking here at a period further removed from the implementation of the CARD Act. Moreover, as noted, the Y-14 data that we use to look at the cost of credit start in 2012, which was after the CARD Act took effect.

3.1 Total cost of credit

To capture the all-in cost of using credit cards, we continue to rely on our total cost of credit metric, or “TCC.”⁵ TCC captures the totality of payments by consumers to issuers as an annualized percent of cycle-ending balances. For the purposes of reporting this and other metrics in this section, we show annualized figures. In this section, for example, we show the total cost consumers incurred over the course of 2016 relative to the average aggregate outstanding balances on those accounts over the same period.

3.1.1 TCC trends

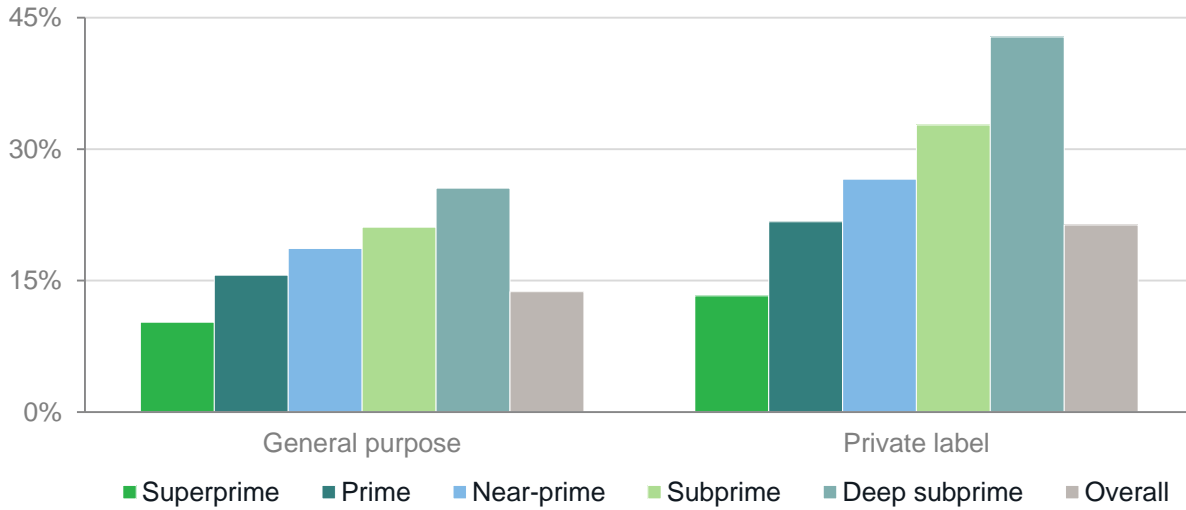
In our 2015 Report, we noted that average TCC fell significantly in the wake of the CARD Act and then stabilized. This was not only true overall, but also for each credit score tier. In that same report, we also compared TCC on small business cards, which are not subject to many of the relevant regulatory requirements of the CARD Act, to TCC on consumer general purpose cards, which are subject to those rules. That comparison showed that TCC for consumer general purpose cards had fallen in absolute terms in the years following implementation of the CARD Act, and had also fallen relative to TCC on small business credit cards.⁶

⁴ *Id.*

⁵ The TCC metric was initially introduced in our 2013 Report, and has since been used in our 2015 Report, as well as in other Bureau reports and research. *See* 2013 Report, at 19.

⁶ 2013 Report, at 35-36; 2015 Report, at 80-82.

FIGURE 1: TOTAL COST OF CREDIT, ALL ACCOUNTS, 2016 (Y-14)



Based on Y-14 data analyzed for this report, individuals carrying debt on a revolving basis pay the majority of fees and interest on credit card products. These revolving accounts generally comprise more than 85% of balances in the Y-14 data, incur more than 70% of all fees, and pay almost all interest charges.⁷ Consequently, as we have done in past studies, we also report the cost of credit for these consumers.

⁷ Assessing the number of consumers who revolve credit is a difficult task. The loan-level data that we use are not consumer level, so they can tell us the number of accounts in those data that revolve, but not the number of consumers who revolve them. The CCP database does contain consumer-level data, but it does not clearly delineate revolvers and transactors. The Board, however, reports that “[f]orty six percent of adults with a credit card report that they are carrying credit card debt, and at least 55 percent carried a balance at least once in the prior year.” Federal Reserve Board, *Report on the Economic Well-Being of U.S. Households in 2016*, at 2 (May 2017), available at <https://www.federalreserve.gov/publications/files/2016-report-economic-well-being-us-households-201705.pdf>. In a separate study, the Board also reports that 44% of families had credit card balances in 2016. See Federal Reserve Board, *Changes in U.S. Family Finances from 2013 to 2016: Evidence from the Survey of Consumer Finances*, at 8 (Bulletin Vol. 103, No. 3, 2017), available at <https://www.federalreserve.gov/publications/files/scf17.pdf>.

FIGURE 2: TOTAL COST OF CREDIT, REVOLVING ACCOUNTS, 2016 (Y-14)

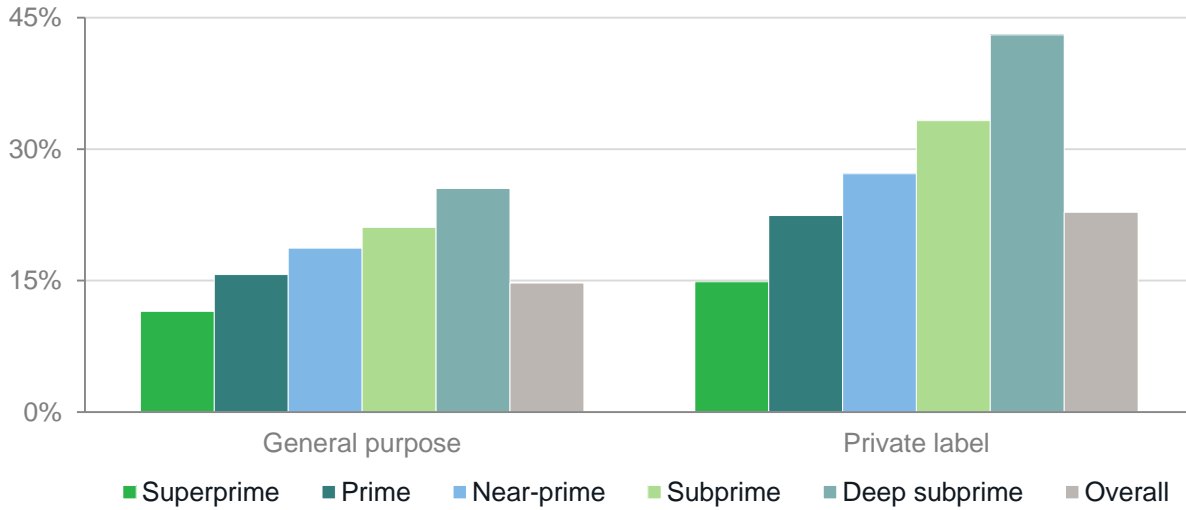


Figure 2 shows total cost of credit specifically for accounts revolving a balance. The consumer cost of private label credit remains consistently higher than general purpose at all credit score tiers. Our current data show that TCC, both overall and for consumers revolving balances, has remained broadly stable over 2015 and 2016. This remains the case for both general purpose and private label accounts, and across all credit score tiers. Overall, the available indicators show that the cost to consumers of using credit cards has not increased materially since we last reported on it in 2015.⁸ Exceptions to this are generally increases in interest rates attributable to the variable interest rate exception, which we discuss in further detail below.

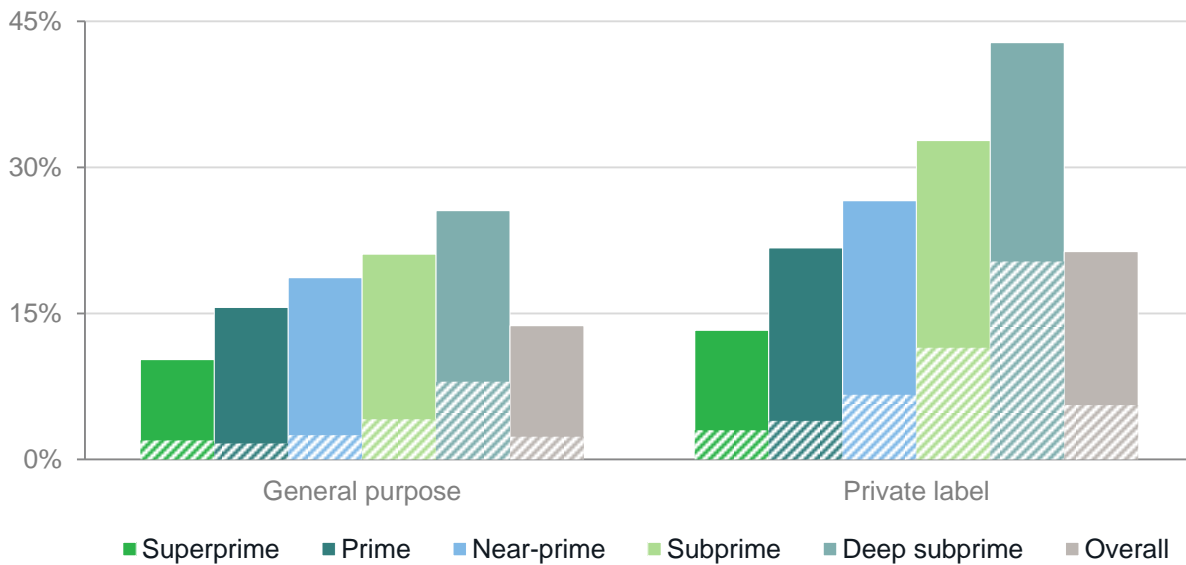
3.1.2 TCC composition

It is useful not only to measure the absolute level of TCC, but also its structure. Consumers pay for their use of credit cards in two primary ways—interest charges and fees, the latter of which can take a number of common forms. Whether and how much a consumer pays in either fees,

⁸ 2015 Report, at 77. Some commenters claim that the CARD Act has increased the cost of consumer credit. *See, e.g.*, ABA Comment Letter, at 6; AFSA Comment Letter, at 6-8. Such claims are either about one metric such as APR, but not overall cost to consumers, or are about a counterfactual claim that is particularly difficult to evaluate—that costs to consumers are higher than they would have been absent the CARD Act. *Id.*

interest, or both varies substantially based on their usage. For example, consumers could pay more or less in fees or interest charges depending whether they carry non-promotional balances from month-to-month, fail to pay their monthly credit card bills on time, use cash advance features, or acquire accounts which assess annual fees. “Revolvers” are consumers that carry balances from month-to-month, thereby incurring interest charges if the interest rate applicable to those balances is greater than 0%. “Transactors,” by contrast, incur no interest charges on purchases because they pay their purchase balance on time every month. They may, however, still incur fees, such as annual fees. They can also incur interest charges on certain balances, such as cash advance balances, which incur interest charges from the date they are made.

FIGURE 3: TOTAL COST OF CREDIT, 2016 (SHADED AREA REPRESENTS FEES, SOLID AREA REPRESENTS INTEREST CHARGES) (Y-14)

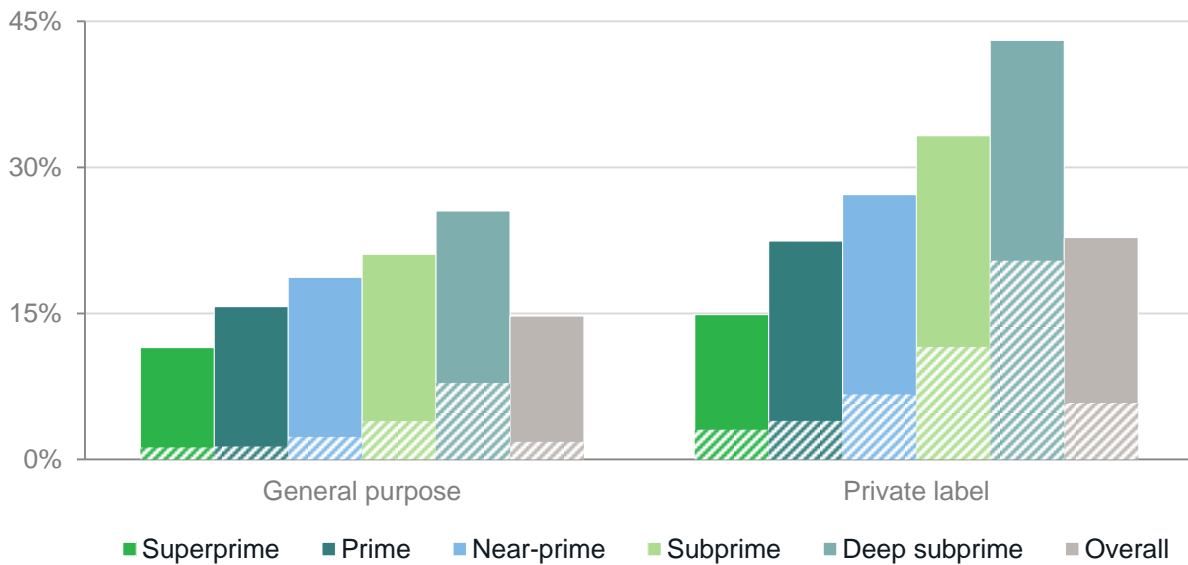


As shown in Figure 3, general purpose cards have a TCC of 14% on an annualized basis, of which only two percentage points comes from fees. Private label cards cost consumers 21% annualized, of which six percentage points comes from fees. The gap between private label and general purpose TCC is substantial. In fact, consumers with deep subprime credit scores experience a lower cost of credit on general purpose cards than consumers with near-prime scores do when using private label cards.

Overall, about 18% of the total cost to consumers of using credit cards is comprised of fees, while the remaining 82% comes from interest charges. This composition, however, varies across credit score tiers, between general purpose and private label cards, and between accounts that revolve

credit and those that solely transact. For example, general purpose cardholders with deep subprime credit scores saw fees as a share of TCC fall from 34% in 2015 to 31% in 2016, while general purpose cardholders with prime and superprime credit scores experienced no change. On the private label side, fees represented about one-quarter of TCC for consumers with superprime scores in 2016, while fees accounted for about half of TCC for consumers with deep subprime credit scores in that same year. In fact, deep subprime private label accounts in our Y-14 data show close to the same cost of credit—and the same mix of overall fees and interest charges—we reported consumers experiencing when using general purpose “subprime specialist” products in our 2015 Report.⁹

FIGURE 4: TOTAL COST OF CREDIT, REVOLVING ACCOUNTS, 2016 (SHADED AREA REPRESENTS FEES, SOLID AREA REPRESENTS INTEREST CHARGES) (Y-14)



⁹ However, the *composition* of fees is substantially different between the two types of accounts. See 2015 Report, at 64. We compare private label accounts to subprime specialist accounts in more detail in Section 6.

3.2 Interest rates

For consumers who routinely revolve a balance, periodic interest charges are generally the largest component of the cost of using a credit card. In this section, we review overall trends for consumer credit card interest rates. We also examine consumer costs associated with variable rate credit cards.

3.2.1 Interest rates generally

RETAIL APR

The interest rate applicable to credit card accounts is also referred to as the “annual percentage rate,” or APR.¹⁰ The interest rate applicable to most balances on a consumer’s card, including the balance generated by purchases, is often referred to as the “retail APR” or “purchase APR.”¹¹ Issuers calculate monthly interest charges on revolving accounts using a number of broadly similar methods of applying APRs to account balances. Since, as noted above, interest charges are the largest driver of costs to consumers, trends in non-promotional retail APRs are an important metric in understanding the costs consumers incur when revolving a balance on credit cards.

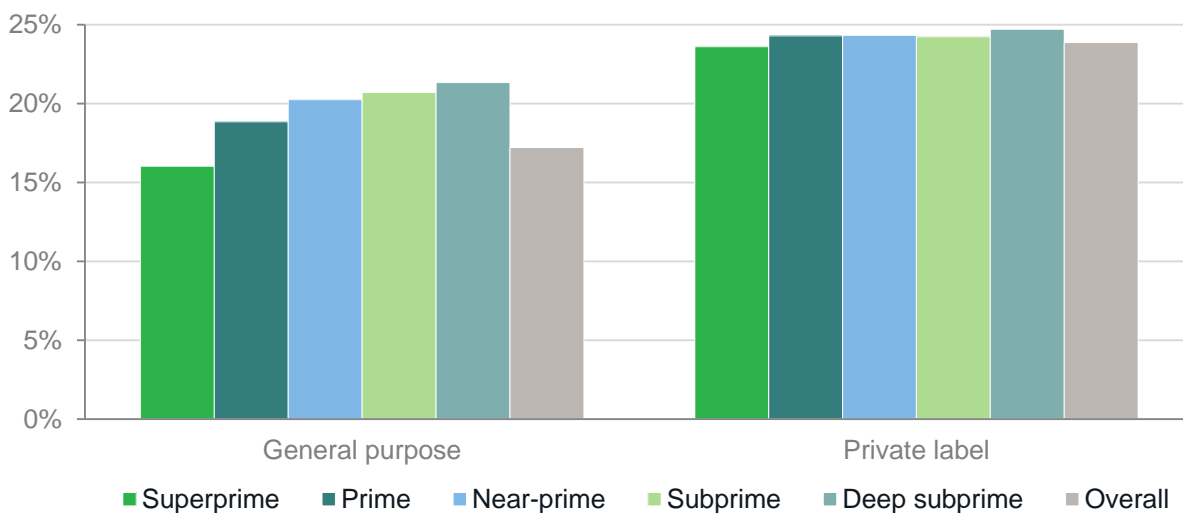
Average retail APR increased for general purpose cards for consumers in all credit score tiers from 2015 to 2016. Overall average retail APR increased on such cards from 16.6% to 17.2%, at least in part because of increases in the prevailing prime rate, which is a major driver of credit card interest rates, and which we discuss in more detail in Section 3.2.2. Average retail APR for

¹⁰ For closed-end loan products, the APR captures certain fees as well as the interest rate. However, for open-end credit, including credit cards, the APR is defined by Regulation Z to be equal to the interest rate.

¹¹ Credit card accounts can have multiple concurrent and overlapping balances with different interest rates applicable to them. This can be because of a lower promotional interest rate that is applicable to some but not all of the balances a consumer incurs on the account, such as a promotional rate on a balance transfer or a deferred interest promotion. It can also be because some balances are subject to a higher interest rate, such as those generated by a cash advance. For more on balance transfers, see Section 5.3; for more on deferred interest promotions, see Section 3.5.

private label cards was comparatively stable, increasing from 23.7% to 23.9%, reflecting modest increases for consumers in all credit tiers.

FIGURE 5: AVERAGE RETAIL APR, OPEN NON-PROMOTIONAL ACCOUNTS, 2016 (Y-14)¹²



Private label credit cards experience markedly higher interest rates generally, not just within credit score tiers but across the board. Furthermore, while the average retail APR for open general purpose accounts varies substantially by credit score tier, as evidenced in Figure 5, that variance is not observed on private label accounts. The average retail APR for general purpose cards held by consumers with deep subprime credit scores is even lower than that of private label cards held by consumers with superprime credit scores.¹³ As we discuss in more detail below, however, private label issuers can sometimes replicate the effects of risk-based pricing, through means such as deferred interest promotions.

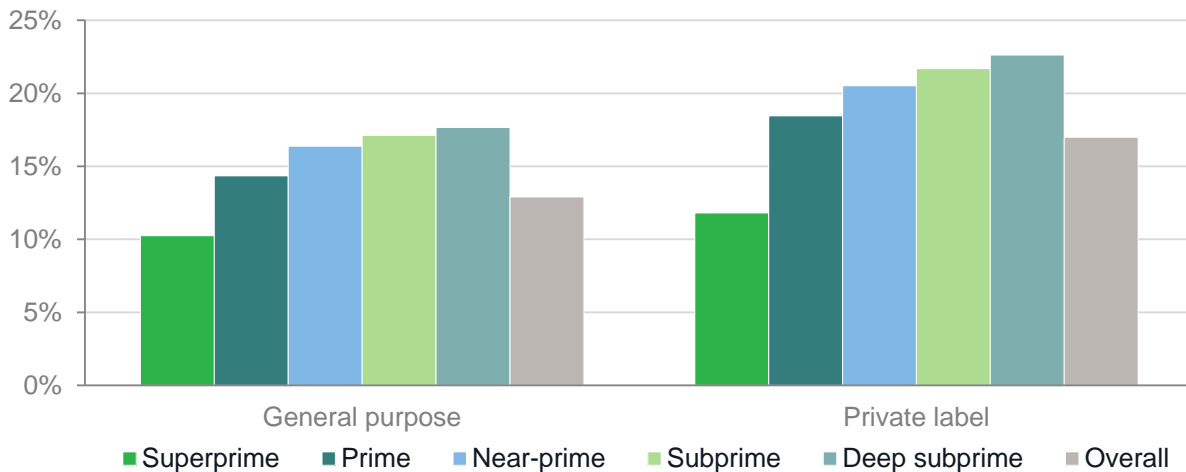
¹² Average retail APR excludes credit cards for which the retail APRs, as reported in Y-14 data, are below 4%. Rates that low likely represent short-term promotions.

¹³ There are a number of potential explanations for this. An important one is that some merchants strongly prefer not to use upfront differentiated pricing with their customers, which makes rates on these cards more uniform. The higher level of late payment rates and credit default rates experienced by private label cards is another, risk-based reason for higher APRs on private label cards. In addition, only one issuer typically offers a given merchant's private label cards. That lack of competition may also push rates higher on private label cards.

EFFECTIVE INTEREST RATES

While retail APRs are a useful barometer of issuer pricing strategies, industry observers often calculate the “effective interest rate” (“EIR”) to measure the effect of interest charges. Retail APRs have a number of limits as a measure of consumer costs, which persist even when the analysis is restricted to only revolving accounts.¹⁴ EIR compensates for these deficiencies by totaling any interest charges actually assessed, then computing an annualized figure using cycle-ending balances as a denominator. Figure 6 shows the EIR in 2016 for all revolving accounts by the credit score of the account holder. It covers promotional and non-promotional balances as well as balances subject to the cash advance interest rate, thereby capturing the effective interest rates that consumers experience when using their card accounts to revolve balances.

FIGURE 6: EFFECTIVE INTEREST RATE, REVOLVING ACCOUNTS, 2016 (Y-14)



In 2015 we reported that there had been a slight decline in effective interest rates since implementation of the CARD Act began in the first quarter of 2010. Overall, this remains true.

¹⁴ This is for two primary reasons. First, as noted previously, consumers may have many balances on a single account, not all of which are subject to the retail APR. Second, consumers may have different patterns of payment and spending within a cycle. Due to the way most credit card issuers calculate interest charges, this means that two accounts subject to the same retail APR that conclude a cycle with identical balances may nevertheless properly be assessed different interest charges as a result of differences in the composition of those balances over the course of the cycle.

Despite modest increases in retail APRs, the average cardholder revolving a balance is not paying a higher effective interest rate in 2016 than in 2015. This divergence between retail and effective APRs could arise in several possible ways, such as a greater share of balances being subject to lower promotional APRs, or a smaller share of balances being subject to higher APRs such as penalty APRs. However, we have begun seeing increases in EIR among lower credit score tiers. Cardholders revolving a balance in below-prime tiers saw their EIR rise from 16.8% in 2015 to 17.3% in 2016.

MINIMUM FINANCE CHARGES AND TRAILING INTEREST

Our prior report discussed practices and outcomes relating to the assessment of minimum finance charges.¹⁵ Minimum finance charges are assessed to consumers when the interest charge that would otherwise be assessed pursuant to the account’s interest rate (or rates) is less than some amount stipulated in the cardholder agreement. When this occurs, that stipulated amount, which is almost always one of \$0.50, \$1, \$1.50, or \$2, is assessed instead.

Data available to the Bureau show that overall patterns in the scope and distribution of minimum finance charges have not changed significantly from our prior report. Most such charges are assessed to private label accounts, and most are assessed by a small group of issuers. The charges continue to be assessed frequently, with total minimum finance charges continuing to exceed \$100 million annually.

In our 2015 Report, we noted the possibility that minimum finance charges may be associated with incidents of “trailing interest” that also entail further consumer risk.¹⁶ Minimum finance charges are associated with a large share, though not a majority, of cycles in which trailing interest is charged. Preliminary research further suggests that trailing interest incidents are associated with late fees with substantial frequency.

¹⁵ See 2015 Report, at 128-130.

¹⁶ 2015 Report, at 128. In such incidents, a consumer who had been revolving a balance makes no purchases in a given cycle and pays their balance in full by the due date—but is nevertheless assessed an interest charge (“trailing interest”) for the cost of revolving through the date of payment. That interest charge must be paid in the following cycle.

3.2.2 Repricing and variable rates

Prior to the CARD Act, credit card issuers were generally permitted to increase or decrease the interest rate on consumer credit cards—and often did so. Issuers could establish triggers that resulted in or permitted immediate rate increases (“upwards repricing”), not just on new purchases but also on existing balances.¹⁷ Price change triggers included conduct related to the credit card account—like a single late payment—but could also be based on the consumer’s credit conduct on unrelated credit accounts. Credit card issuers were even permitted to change the interest rate on existing balances independent of any particular triggering action by the consumer.

The CARD Act did not prohibit all interest rate changes to existing accounts, but it limited the conditions under which issuers could reprice both new and existing balances, and established new procedural steps for permitted rate increases.¹⁸ Our prior reports found that once the CARD Act became fully effective, upwards repricing declined to an average quarterly rate of 1.5% on active accounts in 2012.¹⁹

VARIABLE RATE CHANGES

The CARD Act permits rate increases on existing balances only in limited circumstances. One such circumstance is where the credit card agreement provides for an increase that is based on a change in an underlying linked rate that is outside the issuer’s control and available to the

¹⁷ Prior to the passage of the CARD Act, the Board, along with several other regulators, had adopted a rule restricting such retroactive price changes under its authority to prohibit unfair and deceptive credit card practices. *See* Unfair or Deceptive Acts or Practices, 74 Fed. Reg. 5498 (Jan. 29, 2009).

¹⁸ Some commenters contended that the limitations placed on issuers’ abilities to price risk have led to higher initial rates. They also contended that the same restriction causes issuers to place more reliance on using reactive credit line changes rather than interest rates to control for credit risk. *See, e.g.*, ABA Comment Letter, at 4-5. We discuss how credit line changes may relate to risk management in Section 4.2.5.

¹⁹ In our 2013 Report, we noted why certain data limitations make it difficult to establish a baseline regarding repricing rates prior to the recession, which drove repricing rates even higher than the prior norm. It is nevertheless the case that even the most conservative estimates show repricing rates declining by nearly two-thirds following the CARD Act’s limits on repricing. *See* 2013 Report, at 27-28.

general public.²⁰ Terms and conditions on many credit card accounts—both before and after the CARD Act—include a variable rate where the applicable interest rate varies with changes to a linked rate. In 2017, more than nine-tenths of general purpose revolving balances and more than half of private label revolving balances are subject to variable rates.²¹

The variable rate exception allows issuers to adapt to shifts in macroeconomic and credit market conditions.²² By allowing issuers to pass along their cost-of-funds risk to consumers, the variable rate exception to the CARD Act restrictions on repricing may enable issuers to lend when they otherwise would not do so or to set prices without the need to hedge for potential increases in the cost of funds over time, thereby expanding access to credit.

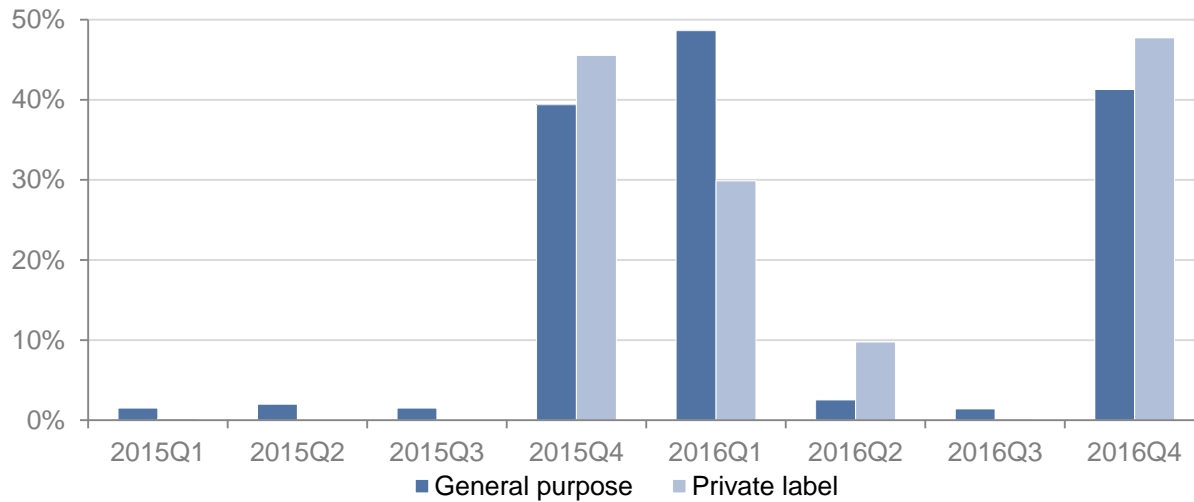
As Figure 7 shows, account repricing continues to occur at the lower frequency that has become the new post-CARD Act norm—except during those periods in which variable rate increases are triggered. At those points, repricing activity is very high, corresponding to the high share of accounts subject to variable interest rates. In December of 2015, the prime rate increased, and we observe corresponding spikes in repricing rates in the fourth quarter of 2015 and the first quarter of 2016. A similar increase in December of 2016 corresponds to a similar spike. Issuers we surveyed reported that well over 200 million accounts were subject to variable rate repricing in connection with that increase.

²⁰ 15 U.S.C. § 1666i-1(b)(2) (excepting “an increase in a variable annual percentage rate in accordance with a credit card agreement that provides for changes in the rate according to operation of an index that is not under the control of the creditor and is available to the general public.”).

²¹ In our 2015 Report, we found that the linked rate chosen by issuers whose agreements we examined was universally the *Wall Street Journal*'s “prime” rate. 2015 Report, at 83. Some issuers not surveyed by us in 2015 use other rates.

²² Several commenters concur. *See, e.g.*, ABA Comment Letter, at 11; Auriemma Comment Letter, at 14-15.

FIGURE 7: QUARTERLY INCIDENCE OF UPWARDS APR REPRICING, ACTIVE ACCOUNTS (Y-14)



Excepting those across-the-board increases, repricing rates for general purpose and private label accounts averaged 1.8% and 2.0% respectively in 2015 and 2016—higher than the low points observed in the years immediately following the implementation of the CARD Act, but still far below any level observed or reported for the pre-CARD Act period.

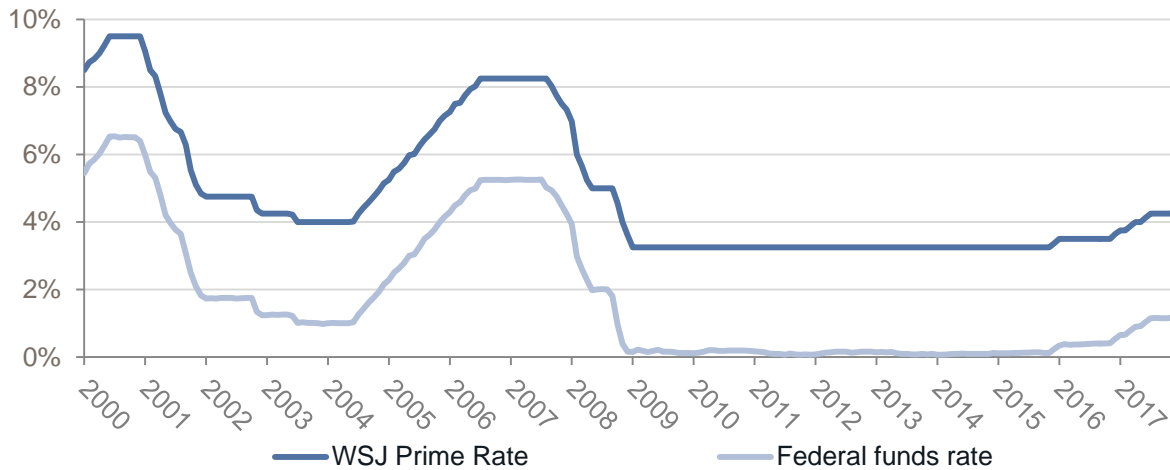
VARIABLE RATE COSTS

The data strongly suggest that interest rate increases pursuant to the variable rate exception are likely to be the primary driver in how consumers' cost of card credit changes in the coming years. As a result, it is important to understand and anticipate the contours of likely rate increases—and to help consumers and market observers be informed about them.

As noted, issuers that use variable rate pricing mostly rely on *The Wall Street Journal's* U.S. prime rate. That rate has historically tended to parallel the federal funds rate, a key macroeconomic and monetary policy indicator. Figure 8 shows how rates have begun increasing modestly since 2015, following a sustained period of low rates without modern precedent.²³

²³ More extensive data from the Board, not depicted here, show that since 1954 there has been no parallel to the seven-year stretch of nearly-0% interest rates that prevailed from 2009 through 2015.

FIGURE 8: FEDERAL FUNDS RATE COMPARED TO WSJ PRIME RATE²⁴



In our last report, we observed that, should underlying rates continue to increase, revolving consumers would be exposed to cost increases on their existing balances. For example, a consumer revolving \$15,000 in credit card debt would face an additional monthly interest charge of roughly \$12.50 following a single percentage point increase in rates. This would translate to nearly \$150 in additional interest charges annually.

The likelihood of such an increase in consumers' variable rates appears high.²⁵ Since our last report, the prime rate has increased by 125 basis points, or 1.25%. The Federal Open Market Committee ("FOMC") expects rates to continue to rise, with median projections of a roughly 65 basis point increase each year over the next two years.²⁶

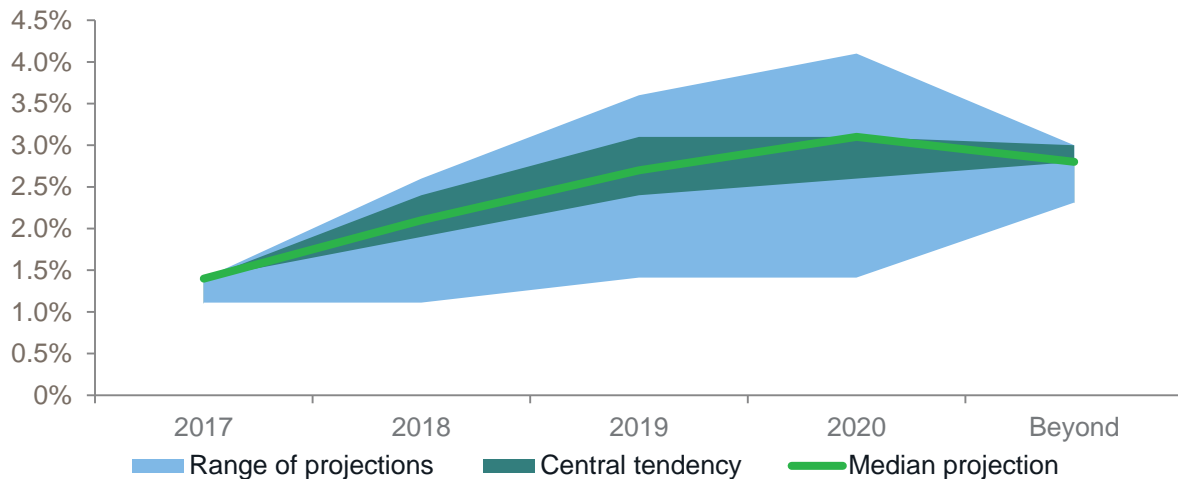
²⁴ Federal Reserve Bank of St. Louis, *Effective Federal Funds Rate*, <https://fred.stlouisfed.org/series/fedfunds> (last visited Dec. 12, 2017); Wall Street Journal, *Market Data Center*, http://www.wsj.com/mdc/public/page/2_3020-moneyrate.html (last visited Dec. 15, 2017).

²⁵ One trade group commenter agreed, stating its "members expect higher federal interest rates to put upward pressure on borrowing costs for variable account holders in the coming year." ABA Comment Letter, at 11.

²⁶ Federal Reserve Board Members and Presidents, *Economic Projections Under Their Individual Assessments of Projected Appropriate Monetary Policy*, (Dec. 2017), available at <https://www.federalreserve.gov/monetarypolicy/files/fomcprojtbl20171213.pdf>.

As of mid-2017, approximately \$672 billion in revolving balances on general purpose cards and \$48 billion of those on private label accounts are subject to variable rate repricing. A single percentage point increase in each rate would carry an estimated annual cost to consumers of over \$7 billion. Even a 25 basis point increase in interest rates would likely carry an annual average cost of nearly \$2 billion to consumers who revolve credit card debt. Should FOMC projections prove broadly accurate, and assuming that balances do not decline in response to rate increases, consumers revolving balances subject to variable rates will be assessed an additional \$24.5 billion in interest charges over the next three years absent any change to their revolving practices. Of course, as prices rise, consumption may fall, with potential implications for interest charge costs.²⁷

FIGURE 9: PROJECTED PATH OF MIDPOINT OF THE FEDERAL FUNDS TARGET RATE RANGE (FOMC)



VARIABLE RATE DISCLOSURES AND PRACTICES

Before the prime rate increased in December 2015, it had been nearly seven years since the benchmark changed in either direction. It was also during that seven-year window that the

²⁷ See Alexei Alexandrov, Özlem Bedre-Defolie, and Daniel Grodzicki, *Consumer Demand for Credit Card Services*, (Oct. 13, 2017), available at <https://sites.google.com/site/danieljosegrodzicki/system/app/pages/search?scope=search-site&q=Consumer+Demand+for+Credit+Card+Services>.

CARD Act was passed and implemented, dampening the rate of repricing. This means that, until December 2015, a substantial number of consumers spent years using credit cards without experiencing any upward change in variable interest rates. Outside of the expiration of promotional rates, in fact, many consumers newer to credit cards had likely never experienced an interest rate increase.

Under current rules, issuers do not need to call out variable rate changes with any particularity on monthly statements or on any other disclosure associated with account servicing.²⁸ Some issuers, nonetheless, have voluntarily chosen to provide an explanation of variable rate changes with monthly statements.²⁹ Others have not.

Issuer practice also varies with respect to the *timing* of variable rate changes. As noted by some market observers, a number of issuers charged increased variable rates on balances even before the prime rate increased.³⁰ That is because most large issuers impose variable rate changes back to the beginning of any billing cycle in which the rate changes, whereas only a minority do so from the billing cycle *after* the rate changes. This means that some consumers may see a variable rate change apply to their balances nearly 60 days earlier than other consumers, even though the rate change is based on the same underlying change in the prime rate. Of course, in a declining interest rate environment, the current majority practice would benefit most consumers by moving rate declines forward.

²⁸ Issuers are required to note applicable rates in the mandated disclosure of interest charge calculations that must be included in the billing statement. 12 C.F.R. § 1026.7(b)(4). On its face, however, this does not indicate change (other than by a side-by-side comparison with a prior statement) and, by the same token, it does not explain the change at all.

²⁹ In response to a formal Bureau inquiry, no surveyed issuer reported sending any proactive communication to consumers to notify them of—and explain—a variable rate change. Even so, the Bureau has observed several in-market servicing disclosures of variable rate changes to consumers. In response to our survey, issuers did report that their customer service representatives are prepared to explain variable rate changes to any consumer who calls and asks.

³⁰ See, e.g., Fred Williams, *Did Banks Jump the Gun On Card Rate Hikes?*, creditcards.com Blog (Jan. 30, 2016), <https://blogs.creditcards.com/2016/01/did-banks-jump-the-gun-on-card-rate-hikes.php>.

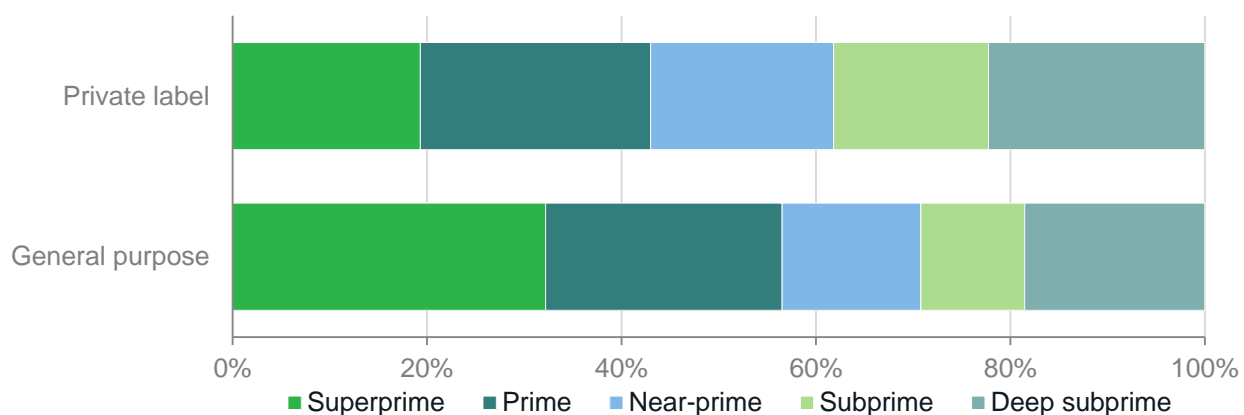
3.3 Fees

3.3.1 Total fees

Fees are the second largest cost to consumers from using credit cards. Collectively, fees represent just under one-fifth of consumer costs. The CARD Act did not prohibit any credit card fees outright, but it imposed a number of substantive controls on both the amounts of certain fees consumers could be charged and the conditions under which certain fees could be imposed. These controls have been associated with a substantial decline in overall fee costs to consumers. Total fees as compared to all account balances remained below 3% in 2015 and 2016, in line with the levels seen in our prior report, and, as reported there, below pre-CARD Act levels.³¹

Figure 10 shows the distribution of fees across credit tiers on revolving accounts. In 2016, consumers with lower credit scores paid less than half of all general purpose fees, and less than three-fifths of private label fees.³²

FIGURE 10: SHARE OF TOTAL FEES INCURRED BY REVOLVING ACCOUNTS, 2016 (Y-14)



³¹ 2015 Report, at 60-61.

³² Over three-fifths of all fees, general purpose and private label, were borne by consumers with lower scores in the pre-CARD Act era. See 2015 Report, at 62. The shift is at least in part the result of a change in the consumer credit profile overall, which we discuss in more detail in Section 1.3.2.

Fees on revolving private label card accounts, relative to balances, are much higher than fees on revolving general purpose card accounts, 5.8% as compared to 1.8%.³³ These data are shown in Figure 11.

FIGURE 11: TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, REVOLVING ACCOUNTS, 2016 (Y-14)

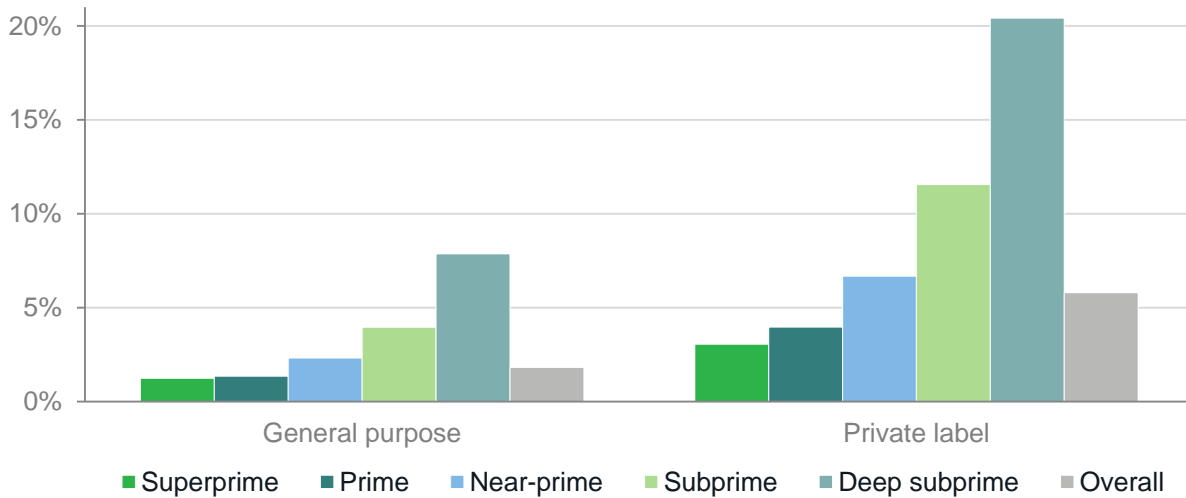


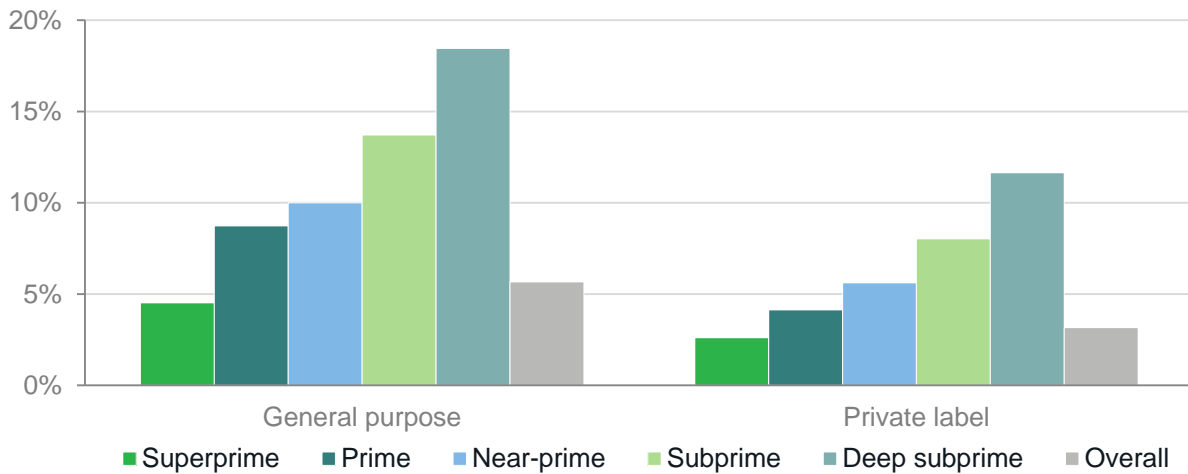
Figure 11 also shows that consumers with lower credit scores still incur more fees, relative to their balances on revolving accounts, than consumers with higher scores. When considering revolving accounts, this phenomenon appears more pronounced for private label. The relative disparity across credit score tiers, however, is not actually higher for private label accounts. Rather, similar disparities are exaggerated by higher overall fee costs relative to balances. To highlight the most extreme example, in both the general purpose and private label space, deep subprime revolving accounts experience a fee cost relative to their balances that is 6.6 times the equivalent relative cost that superprime accounts experience. For consumers with deep

³³ This reinforces our finding that the higher relative total cost of credit for private label cards is partly the result of higher costs associated with fees on those cards. As noted above in Section 2.3.1, average private label balances are generally lower than general purpose balances, which means that, shown as an annualized percent of balances, a \$27 late fee will often result in a higher cost of credit in the private label space than the same \$27 fee would in the general purpose space.

subprime scores, that reflects a fee cost equivalent to about 8% of balances on revolving general purpose accounts—but over 20% on revolving private label accounts.

For transacting accounts, as reflected in Figure 12, the dynamic is reversed. The differences in fee burden across credit tiers are more pronounced for general purpose than for private label. As we discuss in more detail below, this is because many general purpose accounts incur annual fees, which are mostly absent from private label accounts.

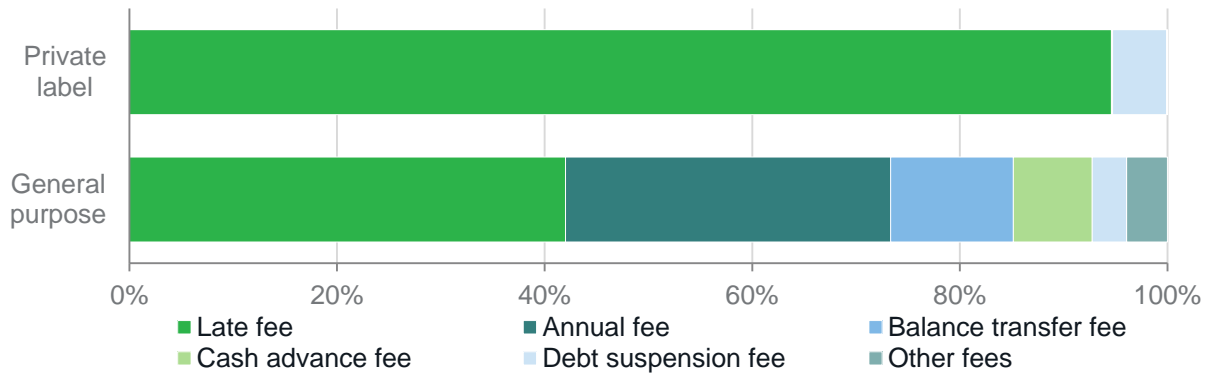
FIGURE 12: TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, TRANSACTING ACCOUNTS, 2016 (Y-14)



3.3.2 Fee composition

There are significant differences in fee composition between private label and general purpose credit cards. As shown in Figure 13, a number of different fees are prevalent on general purpose cards, including annual fees, cash advance fees, and late fees. But fully 95% of all fees charged on private label cards are late fees, with debt suspension fees comprising almost the entire remainder. Private label cards only rarely assess annual fees. Furthermore, because balance transfers and cash advances are generally unavailable on private label cards, these accounts have almost no cash advance or balance transfer fees.

FIGURE 13: SHARE OF TOTAL FEES COSTS INCURRED BY TYPE OF FEE, 2016 (Y-14)



Private label and general purpose fee composition has generally been stable since our last report. There is one exception.³⁴ Our 2015 Report noted that debt suspension or cancellation fee incidence had already fallen substantially in recent years, from nearly one in five of all accounts incurring that fee quarterly prior to the CARD Act to just one in 17 by 2015.³⁵ Over the following year, debt suspension fee volumes continued to decline from 5.8% of all general purpose fees assessed to just 3.3%. Private label debt suspension fee volumes also experienced a decline, from 7.0% of all private label fees assessed in 2015 to 5.2% in 2016. Relative to balances, the cost to consumers of debt suspension fees has fallen by over two-fifths on general purpose cards and one-quarter on private label cards since 2015.

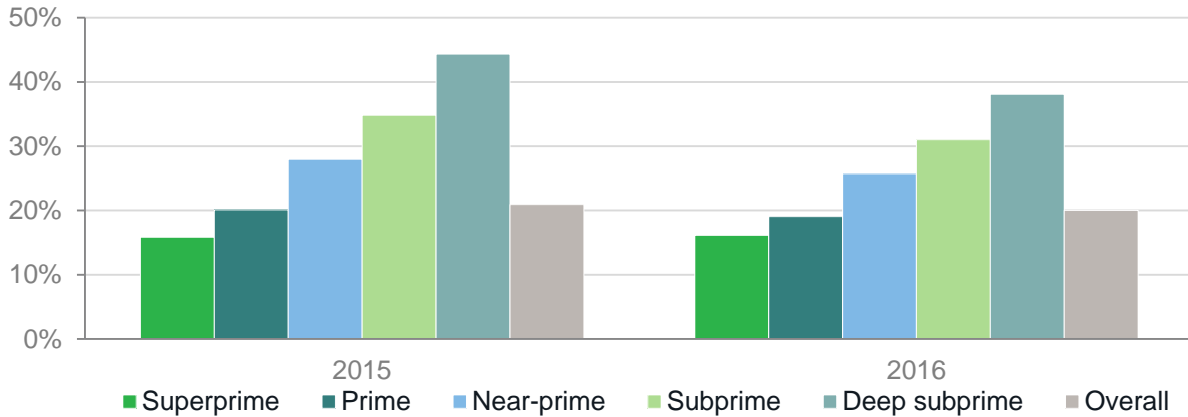
3.3.3 Annual fees

As used in this report, an “annual fee” refers to any general participation or maintenance fee assessed to the consumer as a condition of holding the account, regardless of any pattern of usage. Annual fees are a general purpose account phenomenon. Less than one-quarter of 1% of private label accounts in the data we reviewed were assessed annual fees in 2015 and 2016.

³⁴ There was also a small increase in the annual fee share, from 29.1% of all fees assessed in 2015 to 31.3% in 2016. This reflects increases both in the average annual fee amount and in the prevalence of annual fee cards, which we cover in Section 3.3.3.

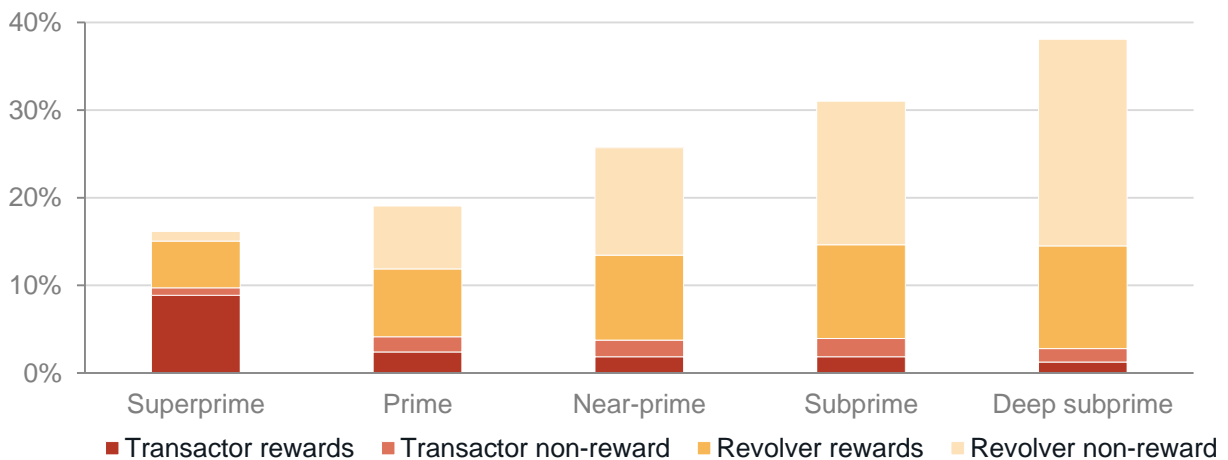
³⁵ 2015 Report, at 72.

FIGURE 14: ANNUAL FEE PREVALENCE, ACTIVE GENERAL PURPOSE ACCOUNTS (Y-14)



Despite recent changes in prevalence for some tiers, the prevalence of annual fees decreases with credit score. Annual fee prevalence has remained steady for prime and superprime credit tiers, but has fallen among consumers with lower credit scores. Consumers with deep subprime credit scores paid annual fees 49% of the time in 2014. Over 2015 and 2016, as shown in Figure 14, that rate has fallen to 44% and 38%, respectively. Despite these developments, the share of general purpose deep subprime accounts assessed annual fees is still more than twice the parallel share for general purpose superprime accounts.

FIGURE 15: SHARE OF ACTIVE GENERAL PURPOSE ACCOUNTS ASSESSED AN ANNUAL FEE, BY REVOLVE STATUS AND REWARDS FEATURE, 2016 (Y-14)

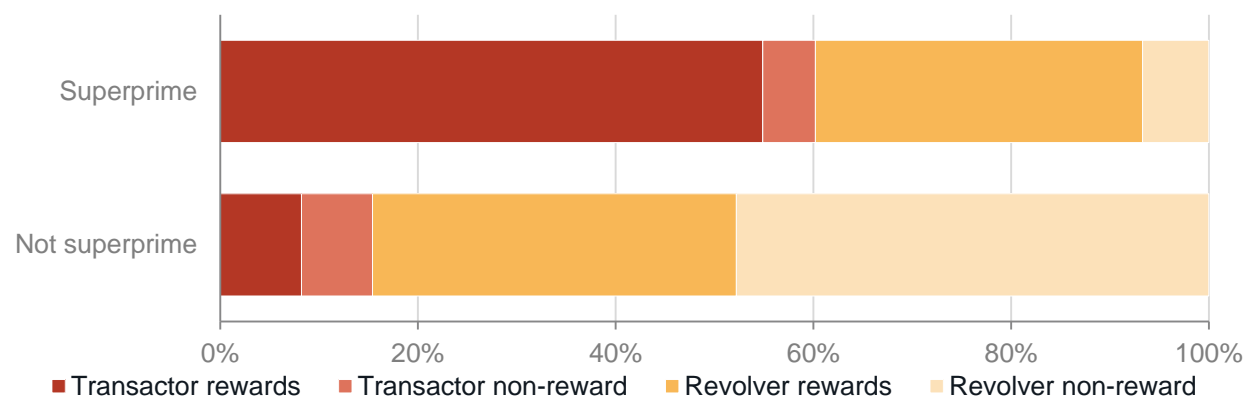


Across credit tiers, accounts with annual fees show a range of payment behaviors and rewards penetration. As shown in Figure 15, annual fee-paying cardholders with superprime credit scores overwhelmingly hold rewards cards, and are more likely to transact than revolve.

Conversely, consumers in the lowest three score tiers that pay annual fees generally do so for accounts that do not have a rewards feature, and these consumers are more likely to use their accounts for revolving than transacting. Revolving is increasingly predominant as credit profile declines and annual fee penetration deepens. These patterns suggest that the annual fees on lower credit score accounts often function as upfront payments for credit rather than for rewards.

For consumers with higher scores, by contrast, annual fees generally function as payment for access to particularly lucrative rewards programs. This gap is most evident when comparing superprime accounts with all others, as shown in Figure 16. In 2016, some 88% of annual fee-paying superprime accounts offered rewards, but less than half of non-superprime accounts paying annual fees did. Over half of all superprime general purpose accounts with an annual fee are rewards accounts that transact, while roughly 15% of comparable non-superprime accounts transact. From the issuer perspective, annual fees appear to offer a flexible means to help structure a wide range of credit card products to meet a variety of use cases.

FIGURE 16: DISTRIBUTION OF REWARDS AND REVOLVE STATUS AMONG ACTIVE GENERAL PURPOSE ACCOUNTS WITH AN ANNUAL FEE, 2016 (Y-14)



General purpose cardholders with lower credit scores are less likely to pay annual fees in 2016 than in 2015, but those who do are increasingly receiving rewards. Annual fee-paying consumers with lower credit scores held rewards cards 45% of the time in 2016, as compared to 36% in 2015 and 31% in 2014. The distribution of transactor and revolver status did not change appreciably for such annual fee-paying consumers between 2014 and 2016. However, for the roughly 85% of annual fee-paying consumers with lower credit scores who did revolve, 44% did so while earning rewards, as compared to 35% in 2015 and 29% in 2014.

General purpose cardholders with superprime credit scores demonstrated a similar trend toward rewards while keeping repayment behavior mostly constant, though, in contrast to consumers with lower scores, annual fee prevalence has not changed for these cardholders. Annual fee-paying consumers with superprime credit scores revolved a balance 40% of the time in 2016, as compared to 42% in 2014 and 2015. Annual fee-paying consumers with superprime credit scores held rewards cards 88% of the time in 2016, as compared to 85% in 2015 and 84% in 2014. Among the roughly 40% of annual fee-paying consumers with superprime credit scores who revolved a balance in 2016, 83% did so using a rewards card, as compared to 80% in 2015 and 78% in 2014.

3.3.4 Dynamics of late fees

Issuers generally assess a late fee to consumers who do not make at least their minimum payment by the monthly due date. These fees, along with other “penalty” fees, were targeted by specific CARD Act provisions, and the dollar amount of such fees is now subject to CARD Act restrictions. In general, these fees have to be “reasonable and proportional.”³⁶ There is a regulatory “safe harbor” for specific fee amounts, which the Bureau adjusts for inflation annually.³⁷ Initially, the safe harbor was set at \$25 for an initial late fee and \$35 for a second late fee within six billing cycles of a prior late fee. In 2017, the safe harbors were \$27 and \$38 respectively.³⁸

Since 2015 late fees have increased slightly, as shown in Figure 17. They nevertheless remain substantially below pre-CARD Act levels.³⁹ Since 2014, which was the first year in which a change from the original penalty fee safe harbors came into effect, most large issuers have taken advantage of the increased safe harbors by increasing their fee amounts. However, issuer

³⁶ 15 U.S.C. § 1665d(a).

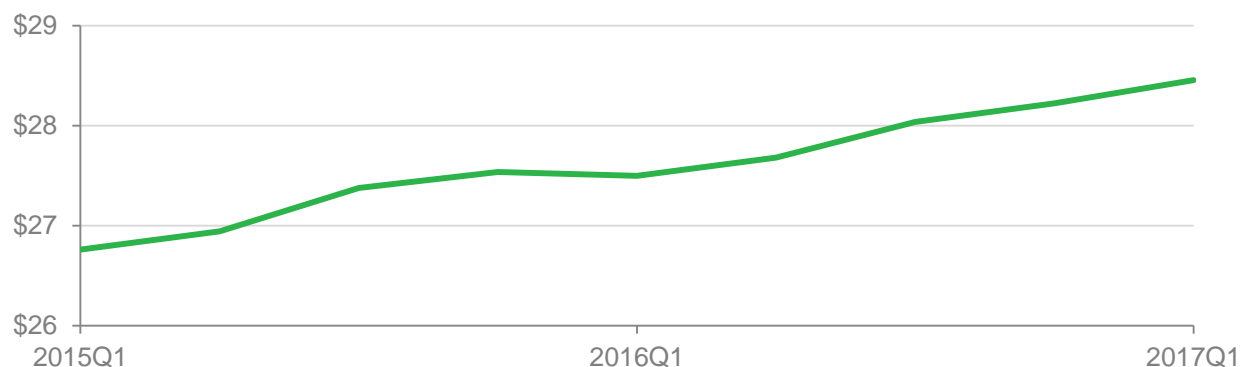
³⁷ Regulation Z requires the Bureau to annually adjust the safe harbors to reflect changes in the Consumer Price Index. 12 C.F.R. § 1026.52(b)(1)(ii)(D).

³⁸ 12 C.F.R. § 1026.52(b)(1)(ii); Comment 52(b)(1)(ii)-2.

³⁹ See 2015 Report, at 69.

practices appear to vary by the speed and consistency with which they implement increases across their products and portfolios. In combination with the two-tier safe harbor, this makes it challenging to assess what drives changes in average late fee amounts overall.

FIGURE 17: AVERAGE LATE FEE (Y-14)



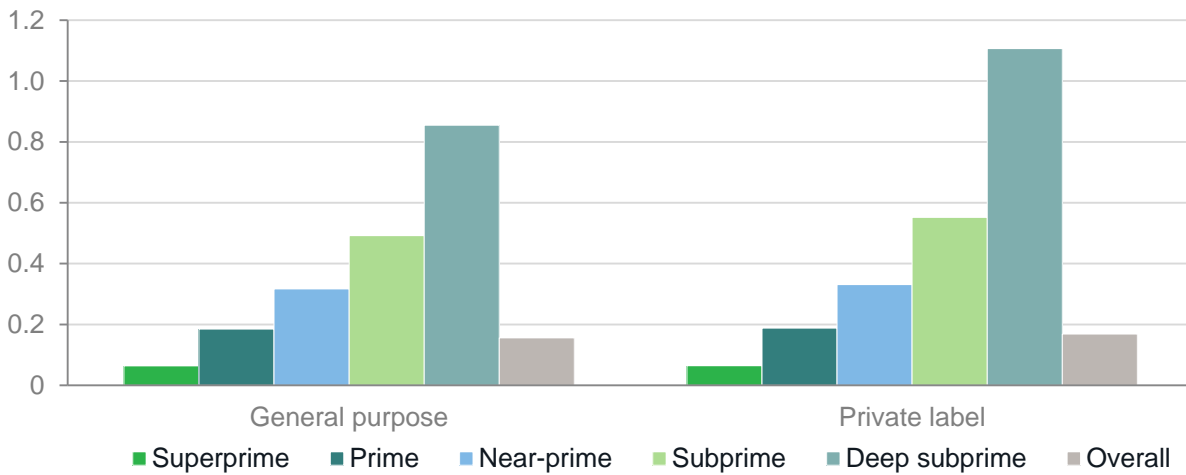
Consumer accounts in the Y-14 dataset incur an average of 0.16 late fees per quarter. According to our prior report, this is down from pre-CARD Act levels of about 0.25 per quarter.⁴⁰ More detailed data are in Figure 18 below. The CARD Act contained provisions specifically aimed at depressing late fee incidence, by limiting the circumstances in which a payment can be deemed late and making due dates more predictable.⁴¹ The decrease in late fee incidence, however, cannot be credited solely to the CARD Act. Improvements in the economic outlook, the changing credit risk composition of accounts, and potentially the advent of new digital account servicing tools have likely also contributed to the decrease in late fee incidence.⁴²

⁴⁰ 2015 Report, at 69.

⁴¹ See 15 U.S.C. § 1637(o)(2) (prohibiting issuers from considering a payment as late if the payment due date was on a date on which the issuer does not receive or accept payments by mail and the payment was received by mail on the next business day after the due date); 15 U.S.C. § 1637(o)(1) (requiring that the payment due date be the same day each month).

⁴² We discuss digital account servicing in detail in Section 5.1.

FIGURE 18: AVERAGE NUMBER OF LATE FEES ASSESSED PER QUARTER, ACTIVE ACCOUNTS, 2016 (Y-14)



For most credit tiers, there is little-to-no difference between the frequency of late fees across general purpose and private label credit cards. However, accounts held by consumers with deep subprime credit scores record a significant gap in this respect. On average, 1.1 late fees are assessed on a private label card every quarter, a frequency 30% greater than the comparable general purpose incidence. Of course, consumers who pay late will see this reflected in their credit scores, so late fee incidence will itself produce lower credit scores over time.⁴³

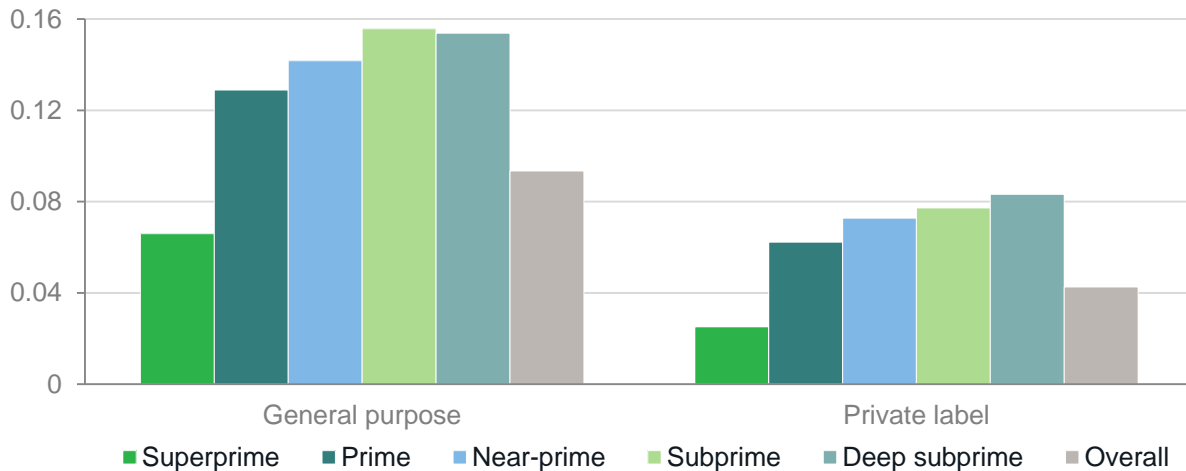
Preliminary Bureau research suggests that a relatively small number of accounts make up a large share of all late fees incurred, even as such high-incidence accounts appear to represent a small share of those accounts that have been assessed at least one late fee in their lifespan. The Bureau intends to work with issuers and other providers and market participants to better understand what innovations could help consumers avoid paying late, benefiting both themselves and their creditors. Some issuers report achieving significant progress in developing such innovations, and we may look more closely at this issue in our next report.

⁴³ It is not immediately clear, however, why there should be a difference between late payment rates on private label and general purpose cards among cardholders with deep subprime credit scores. Among consumers with deep subprime credit scores, average credit scores are actually higher among private label cardholders than general purpose cardholders.

3.3.5 Other fees

Other credit card fees not yet covered include fees for payments returned for insufficient funds (“NSF fees”) or exceeding the credit limit (“overlimit fees”); balance transfer fees; and cash advance fees, among others. Our previous report showed that such “other fees,” considered collectively, have steadily declined in prevalence since 2008.⁴⁴ The quarterly incidence of other fees has continued to fall, from more than 11% in the first quarter of 2015 to 7.5% in the final quarter of 2016. Detailed data on the incidence of other fees in 2016 are in Figure 19 below.

FIGURE 19: AVERAGE NUMBER OF OTHER FEES ASSESSED PER QUARTER, ACTIVE ACCOUNTS, 2016 (Y-14)



Declines in other fee incidence from the first quarter of 2015 through the final quarter of 2016 can be almost entirely attributed to the decline in the number of debt suspension fees assessed. Such fees have been in decline for several years, and we observed that decline continuing through 2016.

Overlimit fees were common before the CARD Act. As noted in our 2013 and 2015 Reports, issuers generally stopped charging overlimit fees in the wake of the CARD Act’s implementation

⁴⁴ 2015 Report, at 71-72.

of an “opt-in” regime for such fees—even as issuers continued to allow overlimit transactions. Overlimit fees remained almost nonexistent in 2015 and 2016.⁴⁵

As evidenced by Figure 19, general purpose cards see more frequent assessments of other fees. That is at least in part because such cards are more likely to offer balance transfer and cash advance features, which are often accompanied by fees. Incidence of other fees varies based on cardholders’ use of these card features, but also depends on which features are made available to consumers and whether fees are charged for them. Balance transfer usage and cost to consumers is covered at length in Section 5.3; cash advances are discussed briefly below.

3.4 Cash advances

Many general purpose credit cards allow consumers to obtain cash at an ATM or from a bank teller. These “cash advance” features are distinct in several ways both from balances generated by purchases as well as balances generated by balance transfers. Similar to balance transfers, cash advances are typically accompanied by a fee, and subject to a separate “cash advance APR.” Unlike balance transfers, cash advance APRs are typically higher than cards’ retail APRs. Cash advance balances are usually not subject to any kind of grace period, meaning they begin accruing interest at that higher APR at the point that the cash advance is taken. In this section we discuss basic metrics of usage and cost for cash advances.

3.4.1 Cash advance usage

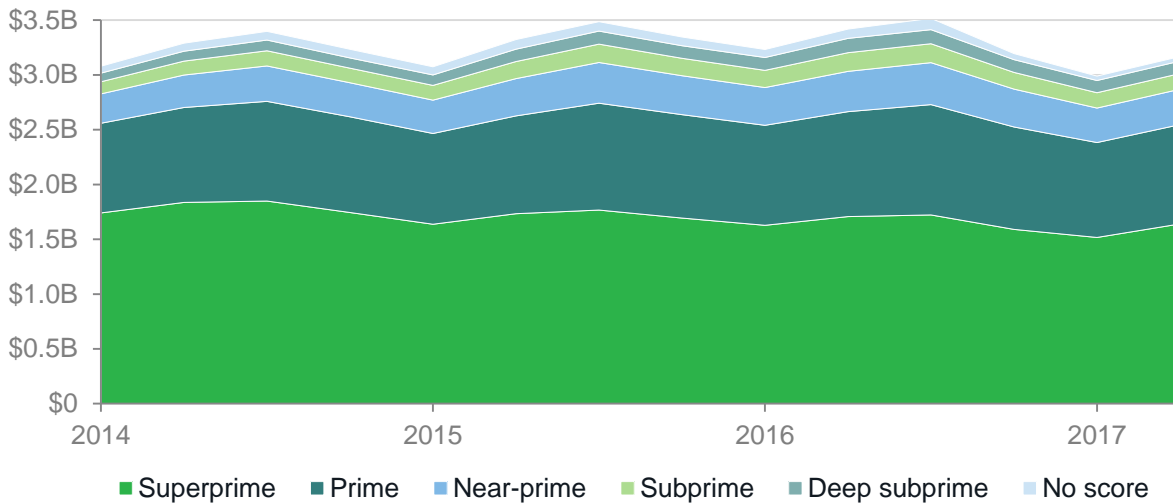
Consumers can effect cash advances through a variety of means. ATM withdrawals may be the most well-known form of cash advance, but they are not the only form. Issuers may treat credit card usage at certain merchants, such as casinos or online gambling sites, as cash advances. The

⁴⁵ We note in Section 5.4.3 that many issuers appear to have simply ceased assessing overlimit fees altogether, rather than maintain an opt-in regime. A survey conducted by [creditcards.com](http://www.creditcards.com) found only four of the 100 surveyed cards charge over-limit fees. All four are business cards. See Sienna Kossman & Taylor Tompkins, *2017 Credit Card Fee Survey: Consumers Catch a Break*, [creditcards.com](http://www.creditcards.com/credit-card-news/2017-card-fee-survey.php) (Aug. 9, 2017), available at <http://www.creditcards.com/credit-card-news/2017-card-fee-survey.php>.

purchase of other legal tender like foreign currency or traveler’s checks, or the purchase of gift cards or prepaid cards, may also be treated as cash advances. Cash advances may also be incurred in the course of a deposit account transaction when that account is linked to a credit card.⁴⁶

With some seasonality, cash advance volume has remained steady over the past three years, remaining roughly between \$3 billion and \$3.5 billion per quarter. This is shown in Figure 20 below. Roughly three-fourths of this volume has been generated by consumers with prime and superprime credit scores. Overall, balances subject to cash advance rates made up 2.5% of total cycle ending balances in 2016.

FIGURE 20: QUARTERLY CASH ADVANCE VOLUME, GENERAL PURPOSE ACCOUNTS (Y-14)

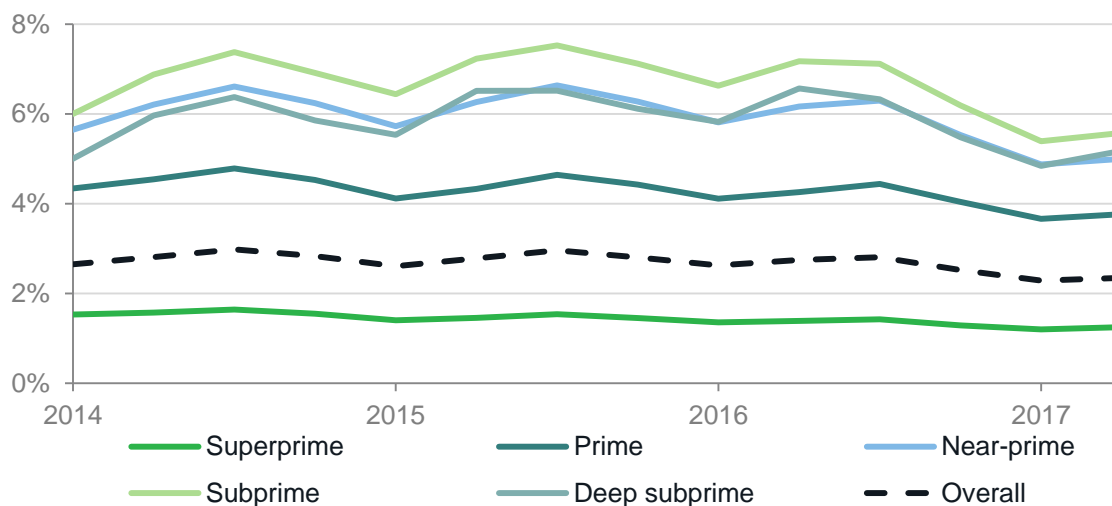


Accounts held by consumers with lower credit scores experience higher rates of cash advance use than do those held by consumers with higher scores. As shown in Figure 21, the quarterly

⁴⁶ Many transactions effectuated using a “convenience check” may also be treated as cash advances by issuers. However, not all such transactions are so treated; as we discuss in Section 5.3.2, some may be treated similarly to balance transfers. We therefore exclude convenience check transactions from this analysis (and from our analysis of balance transfers in Section 5.3), acknowledging that we are likely excluding at least some volume that may be identical or near-identical from the consumer perspective.

cash advance incidence has hovered around 6% for lower credit score accounts in recent years, as compared to 1.5% for the superprime tier.⁴⁷ Nevertheless, total cash advance volume in absolute terms is heavier on accounts with higher scores.

FIGURE 21: QUARTERLY CASH ADVANCE INCIDENCE, GENERAL PURPOSE ACCOUNTS (Y-14)



3.4.2 Cash advance costs

As compared to annual and late fees, cash advance fees do not make up a large percentage of fee revenue for the largest credit card issuers. In our prior reports, we noted that cash advance fee volumes were lower than in 2008, but had stabilized from 2012.⁴⁸ This remains true.

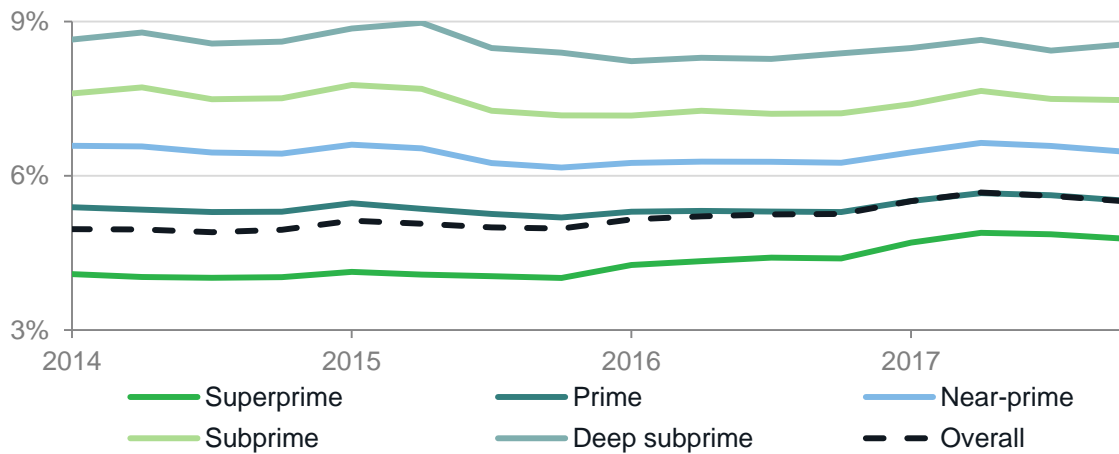
Issuers generally charge a fee on cash advances that is stated as a percentage of the cash advance, often with a fixed floor if the cash advance is small. Issuers often make available only a portion of each card’s total credit limit for cash advances. As outlined in Section 4.2.2, consumers with

⁴⁷ It is possible that in some cases consumers initiated multiple advances within a single cycle. The Y-14 data do not allow us to disaggregate intra-cycle activity; we therefore elect to consider all cash advance activity within a cycle as a single cash advance incident for the sake of simplicity.

⁴⁸ 2013 Report, at 89; 2015 Report, at 72.

lower scores generally have lower credit lines. We would therefore expect lower cash advance lines for consumers with lower scores from issuers that restrict cash advance lines. The result of these policies is that consumers in lower credit tiers end up paying more as a percentage of their cash advance volume than others due to the lower cash advance amounts requested and the fixed floor fees. As seen in Figure 22, cash advance fees as a percentage of volume are higher for accounts held by consumers in lower credit score tiers—twice as high in certain quarters, in fact, as for accounts held by consumers with superprime scores.

FIGURE 22: QUARTERLY CASH ADVANCE FEES RELATIVE TO CASH ADVANCE VOLUME, GENERAL PURPOSE ACCOUNTS (Y-14)



Apart from fees, cash advances may result in other costs to consumers that are not captured in Figure 22. Cash advances are generally not subject to a grace period and accrue interest from the transaction date. As reflected in cardholder agreements, cash advance interest rates tend to be higher than those assessed on purchases on most general purpose cards.⁴⁹

In addition, we note that some issuers allow credit cards to be linked to users’ checking accounts for overdraft programs, and that balances incurred on the credit card account as a result of such linkage are often treated as cash advances. The data available to the Bureau show that credit

⁴⁹ Cash advance interest rates are captured in the effective interest rate charts in Section 3.2.1.

cardholders of banks that offer this feature tend to have a much higher level of cash advance usage than consumers whose banks do not offer this feature.

3.5 Deferred interest promotions

3.5.1 Background and developments

Deferred interest (“DI”) promotions are a large and growing feature of the consumer credit card market. Almost always associated with private label and retail co-brand cards, deferred interest promotions are generally presented to consumers as an option to finance larger purchases. Consumers are given a fixed period of at least six months during which all interest charges are “deferred”—the issuer calculates how much interest the consumer would owe at the account’s retail APR, but does not immediately charge it to the consumer.⁵⁰ If the consumer pays down the full promotional balance during the promotional period, the deferred interest is never charged, and the consumer has gained the benefit of low-cost financing—almost always 0%.⁵¹ Conversely, a consumer who does not pay in full during the promotional period will generally have the deferred interest charged at the promotion’s conclusion. As noted above, in the case of private label cards, the average retail APR is roughly 24%.⁵²

⁵⁰ Deferred interest promotions of less than six months are effectively prohibited by the CARD Act and Regulation Z. 15 U.S.C. § 1666i-2(b); 12 C.F.R. § 1026.55(b)(1); Comment 55(b)(1)-3. Otherwise, promotion length usually increases with the size of the purchase. A new \$500 appliance would likely be six or 12 months, while a \$3,000 furniture purchase could offer a promotional period of several years.

⁵¹ In some cases, promotional balances are subject to an interest rate greater than 0% during the promotional period, but by far the most common promotional interest rate is 0%.

⁵² Some market participants and industry trade groups, both financial and retail, pointed to deferred interest promotions as providing value to consumers. *See* ABA Comment Letter, at 14-16; ASFA Comment Letter, at 2; Auriemma Comment Letter, at 11; Boscovs Comment Letter, at 1-2; CBA/FSR Comment Letter, at 3; HFA Comment Letter, at 1-2; Meineke Comment Letter, at 1-2; NRF Comment Letter, at 1-5; RILA Comment Letter, at 1-2; USCoC Comment Letter, at 1-2. Consumer advocates as well as some other industry observers and market participants, by contrast, have called for deferred interest to be banned or, barring that, substantially restructured. *See, e.g.*,

The Bureau's 2015 Report analyzed the legal background and current status of deferred interest promotions.⁵³ It also reported findings from promotional-level data covering the full portfolios of several large DI issuers over a period of several years.

3.5.2 Data and methodology

The data that support this report differ in kind from the data we reported on in 2015. There are two critical differences. First, the data are aggregate, not account-level. Second, they encompass a larger group of issuers. Overall, these changes broaden our picture of the deferred interest market but do not allow us to track some of the particular measures that our last report covered. However, while the 2015 Report data allowed analysis at the account level, the current data facilitate the establishment of a broad industry benchmark that can track metrics consistently over time.

3.5.3 Findings

PURCHASE VOLUME BY CREDIT SCORE AND MERCHANT TYPE

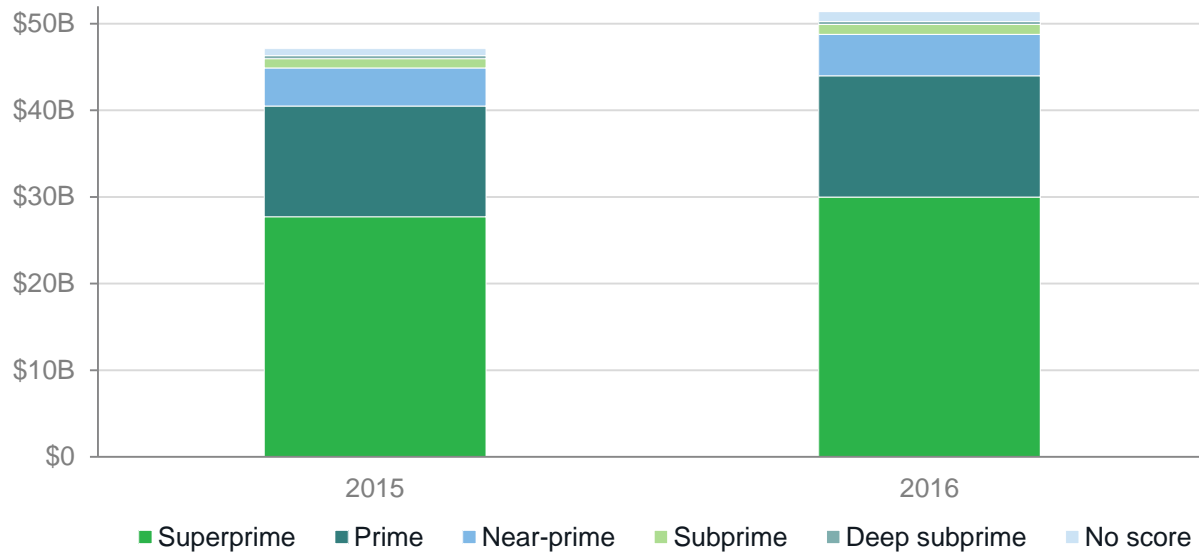
Deferred interest promotions remain generally popular with consumers.⁵⁴ Total purchase volume, as shown in Figure 23, was over \$50 billion in 2016, a 9% increase from the prior year. Growth was spread relatively evenly across credit tiers, with one exception: consumers with deep subprime scores saw aggregate purchase amounts decline slightly from 2015 to 2016. Consistent with our previous report, we find that consumers with higher credit scores comprise the bulk of deferred interest purchase activity.

Consumer Action Comment Letter, at 1-2; NCLC Comment Letter, at 1-5; Affirm Comment Letter, at 1-6; *see also* Alina Comoreanu, *2017 Deferred Interest Study: Which Retailers Use It?*, WalletHub Blog (Nov. 2, 2017), <https://wallethub.com/edu/deferred-interest-study/25707>. While not calling for any policy changes, one large retailer also transitioned away from offering deferred interest promotions earlier this year, citing complexity and unpredictability. *See* Daniel Eckert, *We're Taking a New Approach to Our Credit Card – Here's Why*, Walmart Today Blog (May 4, 2017), <https://blog.walmart.com/business/20170504/were-taking-a-new-approach-to-our-credit-card-heres-why>.

⁵³ *See generally* 2015 Report, at Section 6.

⁵⁴ This point is noted by several trade groups. *See, e.g.*, HFA Comment Letter, at 1-2.

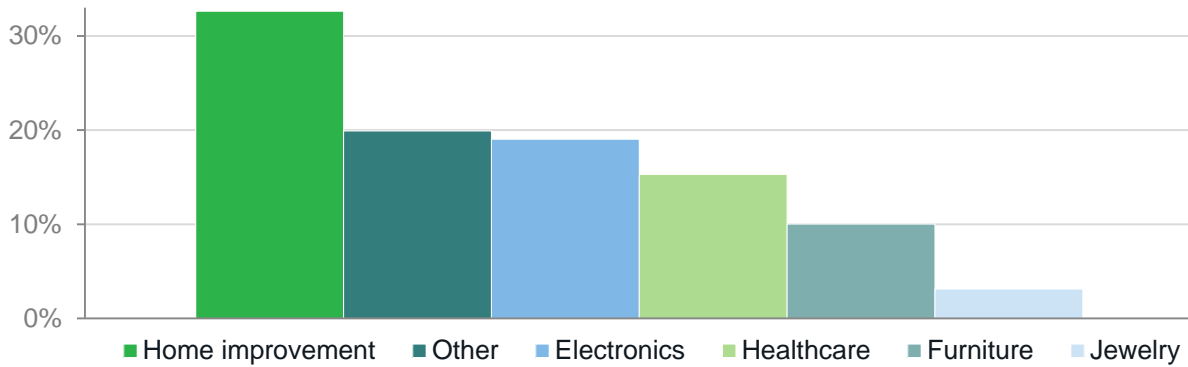
FIGURE 23: TOTAL PURCHASE VOLUME ON DEFERRED INTEREST PROMOTIONS (ADI)



Deferred interest promotions are generally used to finance larger purchases. As a result, they tend to be used most at merchants that specialize in offering larger-ticket goods or services. Figure 24 shows that four-fifths of all deferred interest dollars are spent at merchants that specialize in five specific product or service categories.⁵⁵ The remainder (represented by the “Other” bar in Figures 24 and 25) is spent either at merchants that specialize in other types of goods or services, or at merchants without a clear specialization. The latter includes department stores and shopping channels, where many of the actual products offered and sold may fall under one or more of the five enumerated categories. The actual share of spending on those types of goods and services, therefore, may be even higher than the merchant share shown below may imply.

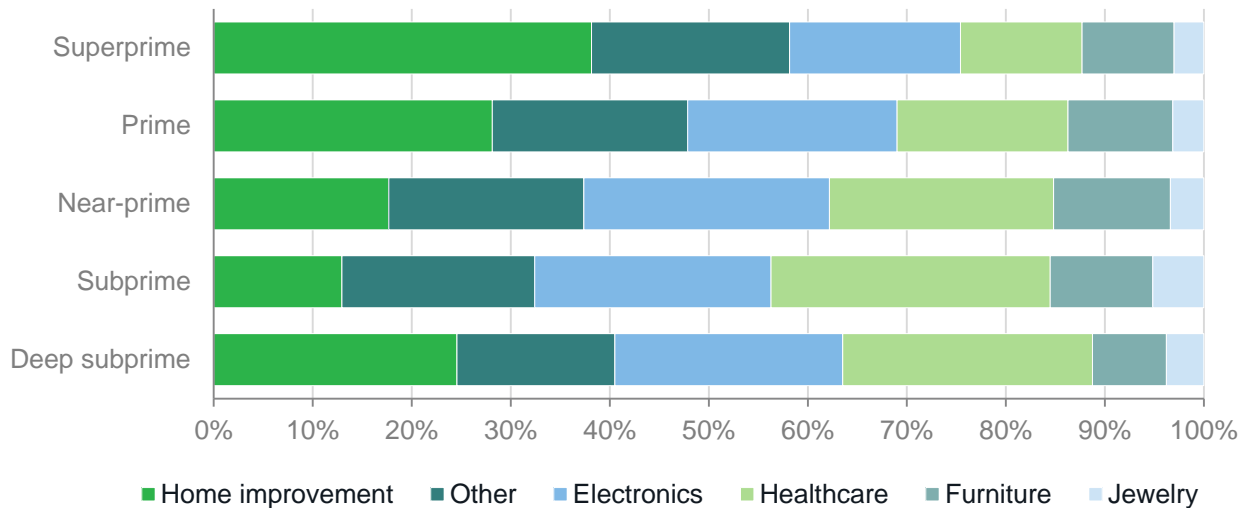
⁵⁵ Two caveats apply. First, the merchant classifications used here were provided by issuers, and we cannot be certain that they are completely constant from issuer to issuer. Second, these data classify merchants, not the actual goods and services bought. However, our market research suggests that, in most cases, most merchandise sold by the merchants that fall into our five enumerated categories would be categorized as falling into that same category—*e.g.*, most goods and services sold by “home improvement” merchants would be “home improvement” goods and services. An exception may be larger appliances, such as dishwashers and refrigerators, sold by “electronics” merchants which could be considered “home improvement” goods and services.

FIGURE 24: SHARE OF PROMOTIONAL SPENDING BY MERCHANT CATEGORY, 2015-2016 (ADI)



The mix of spending across merchants varies substantially by credit score tier. Figure 25 compares the spending that consumers in each credit score tier make on deferred interest promotions, by the type of merchant. Consumers with superprime scores, in particular, tend to concentrate their deferred interest spending at home improvement merchants. By contrast, relative to all consumers, those with subprime and deep subprime scores tend to make more of their deferred interest purchases on healthcare. Electronics is an important deferred interest channel for consumers in all tiers.

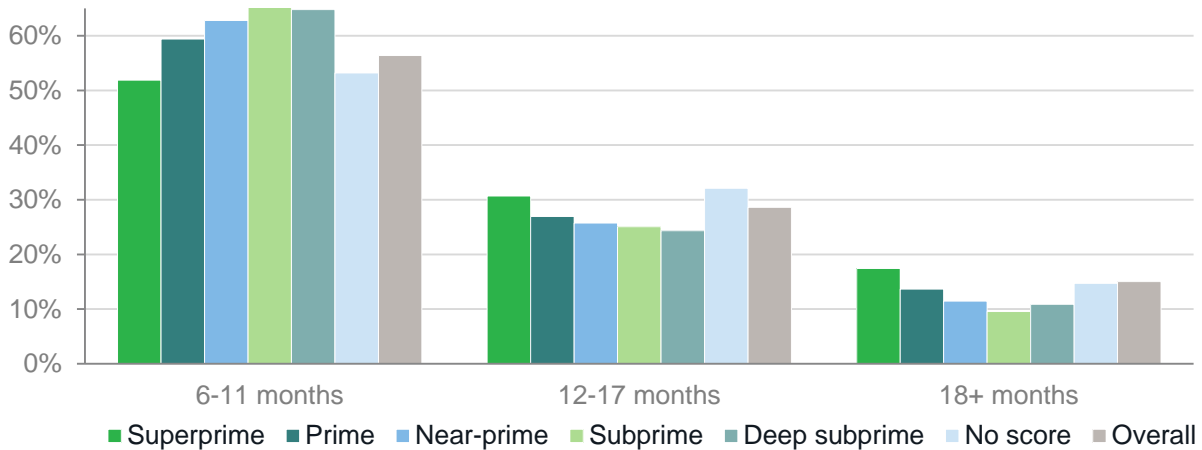
FIGURE 25: SHARE OF PROMOTIONAL SPENDING BY MERCHANT CATEGORY, 2015-2016 (ADI)



PROMOTION DURATION

Although deferred interest promotions can vary substantially in length, most are only six or 12 months long, as shown in Figure 26.⁵⁶ Additionally, consumers in lower credit score tiers take shorter promotions on average than consumers with higher credit scores.

FIGURE 26: SHARE OF DEFERRED INTEREST PROMOTIONS BY DURATION, 2015-2016 (ADI)



AVERAGE PURCHASE AMOUNT

Figure 27 compares the average purchase amount on a deferred interest promotion for each of three promotion lengths: six to 11 months, 12 to 17 months, and 18 months and above. Average purchase amounts increase with promotion length. This reflects how issuers structure products; consumers are generally offered longer promotional periods when making larger purchases. Overall, the average price of a deferred interest purchase was \$855.

⁵⁶ In our 2015 Report, we observed that almost all promotion lengths are structured in multiples of six months. Almost all promotions of six to 11 months are six-month promotions. Similarly, 12 to 17 month promotions are almost all 12 months in length, and 18+ month-long promotions are overwhelmingly either 18 or 24 months in length. See 2015 Report, at 160-161. Market monitoring indicates that this remains the case.

FIGURE 27: AVERAGE PURCHASE AMOUNT ON DEFERRED INTEREST PROMOTIONS BY DURATION, 2015-2016 (ADI)

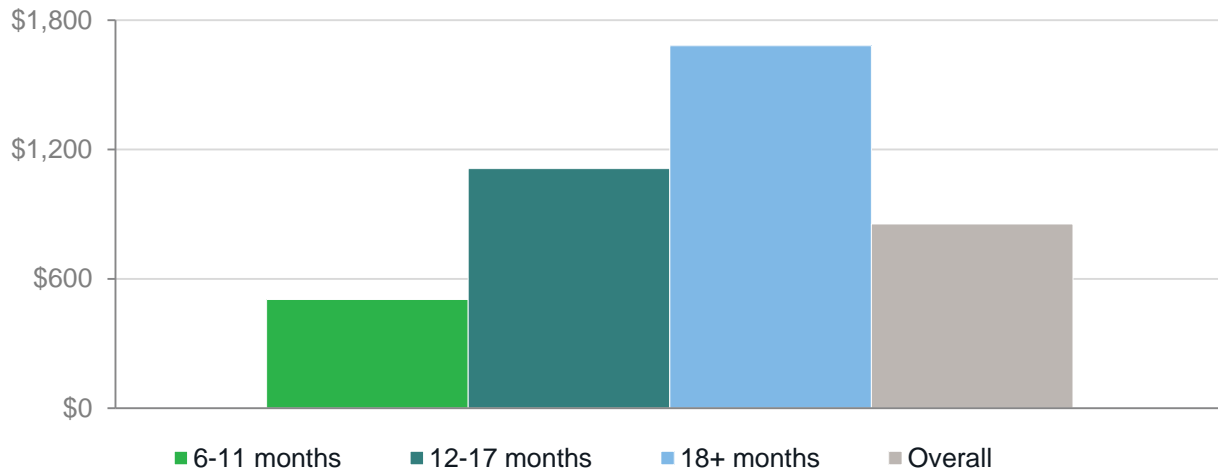


Figure 28 presents average purchase amounts on deferred interest promotions by consumer credit score tier. Consumers with superprime credit scores typically spend over \$1,000 per promotion, which is 40% more than the next highest spending credit tier. On average, consumers with below-prime credit scores spend less than \$600 per promotional purchase. Consumers with lower credit scores predominantly take deferred interest promotions six to 11 months in duration, likely as a result of lower-than-average spending per promotional purchase. Over 65% of purchases made on deferred interest promotions by consumers with deep subprime credit scores had a duration of six to 11 months, as compared to 52% for consumers with superprime credit.

FIGURE 28: AVERAGE PURCHASE AMOUNT ON DEFERRED INTEREST PROMOTIONS, 2015-2016 (ADI)

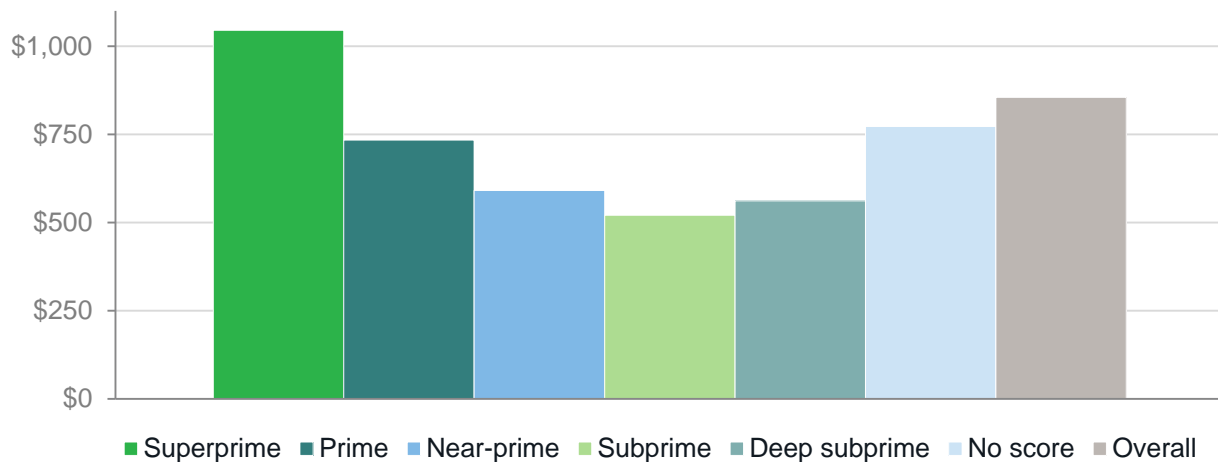
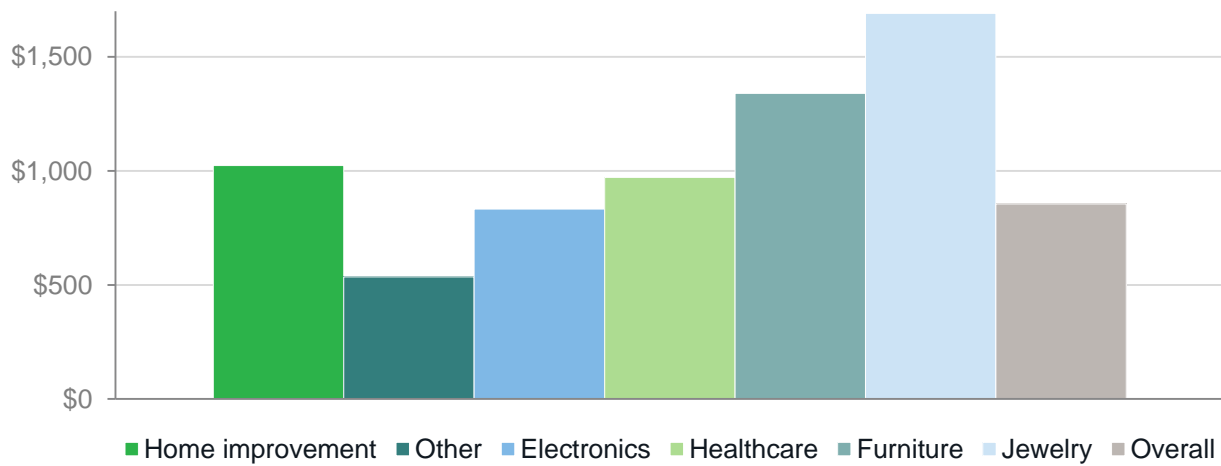


Figure 29 presents average purchase amounts on deferred interest promotions by merchant category. Average deferred interest purchases were highest at merchants specializing in jewelry and furniture at \$1,691 and \$1,340, respectively. Healthcare and home improvement purchase amounts averaged roughly \$1,000 each. Purchase amounts averaged \$832 for electronics merchants, which is similar to the overall average for deferred interest purchases. Deferred interest purchases at other types of merchants were typically for lower amounts than they were for merchants in any of the specific categories we enumerate.

FIGURE 29: AVERAGE PURCHASE AMOUNT BY MERCHANT CATEGORY, 2015-2016 (ADI)



PAYOFF RATES

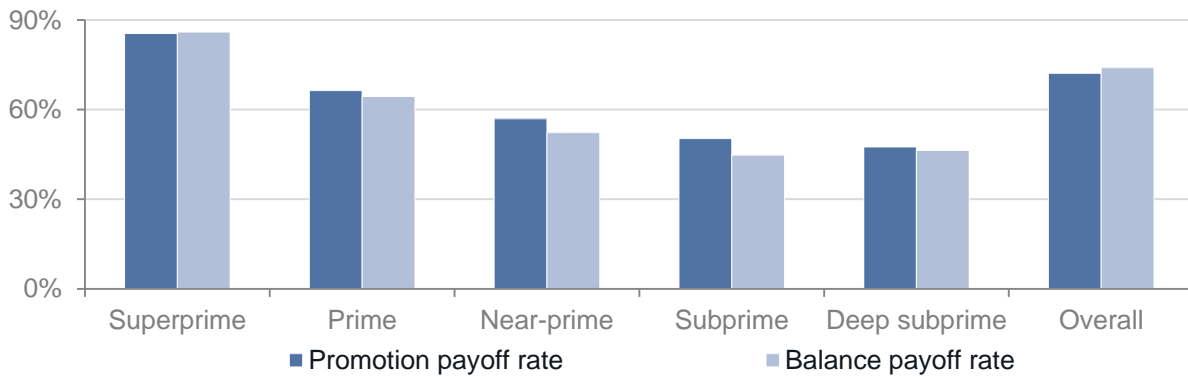
Consumers who make purchases on deferred interest promotions and successfully repay the balance within the promotional period benefit from deferred interest products. The Bureau’s 2015 Report found that overall promotion-level and balance-level payoff rates from 2009 to 2013 lay between 76% and 82%.⁵⁷

⁵⁷ 2015 Report, at 164.

Payoff rates recorded in the present study are slightly lower than those recorded in the 2015 Report, both overall and in all credit tiers. Promotion payoff rates on six to 17 month promotions originated in 2015 were 72%, and balance payoff rates were 74%.⁵⁸

The Bureau’s 2013 and 2015 Reports found deferred interest payoff rates to be strongly correlated with credit score.⁵⁹ The correlation between payoff rates and credit score persists into our current observation period, as shown in Figure 30.⁶⁰ We find that, on one end of the spectrum, 86% of superprime balances are paid off; on the other end, only 46% of deep subprime balances are paid off during the promotion period.

FIGURE 30: PAYOFF RATE ON DEFERRED INTEREST PROMOTIONS ORIGINATED IN 2015 (ADI)



⁵⁸ Payoff rates on deferred interest products can be expressed in several ways, including: (1) the number of total deferred interest promotions in which the full balance is repaid prior to the end of the deferred interest period divided by the total number of deferred interest products originated; and (2) the dollar volume of promotional balances paid in full during the promotional period divided by the total dollar volume of deferred interest balances originated. The 2013 Report generally used the second measure, which we refer to as the “balance payoff rate.” The 2015 Report used both the first measure, which we refer to as the “promotion payoff rate,” and the second measure. In this report, we again use both measures. The rates reported in this report, however, are not directly comparable to those in prior reports for two reasons. First, the issuer samples are different, with the present report covering a wider range of DI issuers. Second, this report generally splits the lowest credit tier from the 2015 Report into two separate tiers, with deep subprime now beginning below 580 rather than below 620.

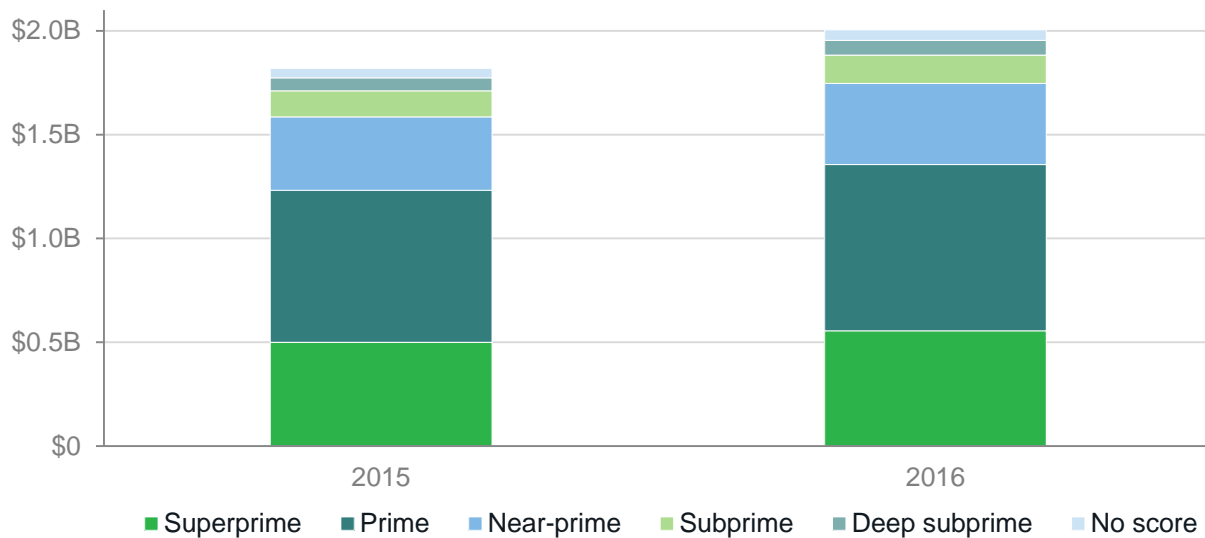
⁵⁹ 2015 Report, at 167-169; 2013 Report, at 80.

⁶⁰ Consumers with no credit score demonstrated payoff rates in line with the overall averages. They are therefore not shown here.

DEFERRED INTEREST ASSESSED

Though deferred interest promotions benefit consumers who pay their promotional balance in full within the promotional period, they are more costly for consumers who do not. The aggregate amount of deferred interest assessed to consumers increased by 10% from 2015 to 2016, to just over \$2 billion in total.⁶¹

FIGURE 31: TOTAL DEFERRED INTEREST ASSESSED (ADI)



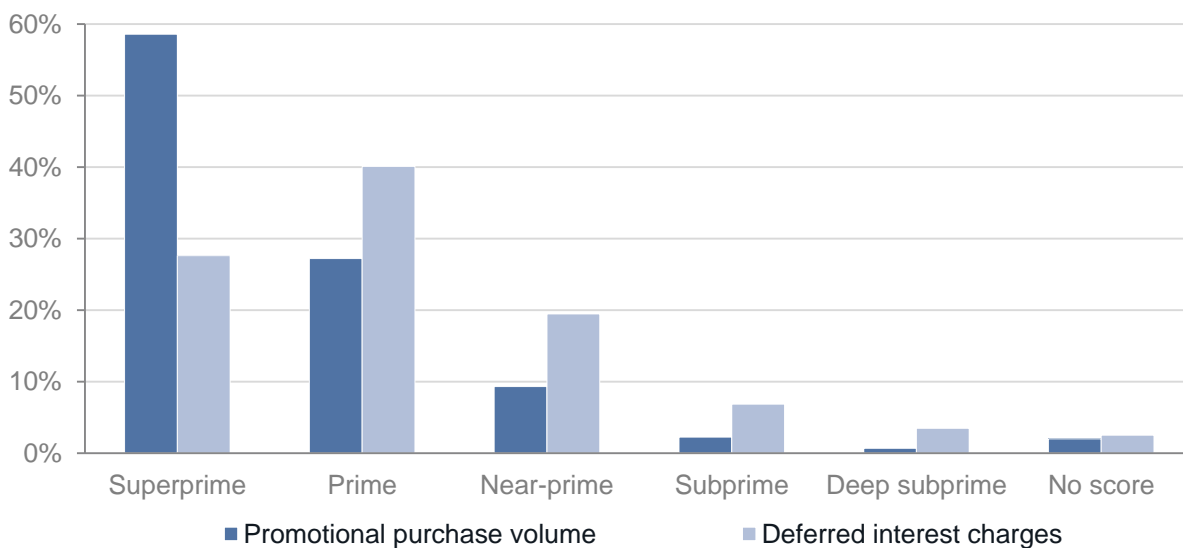
Growth in deferred interest assessed to consumers was spread relatively evenly across all credit score tiers. Consumers with higher credit scores continued to pay the largest aggregate deferred interest bill, as their share of overall activity in this space remains dominant even as their payoff rates are higher.

Figure 32 compares the share of promotional purchase volume in 2015 and 2016 accounted for by consumers in each credit score tier with each tier's share of deferred interest charges assessed in the same period. Only consumers with superprime scores and consumers with no score

⁶¹ Our data do not currently allow us to determine how much of this growth is driven by volume growth, and how much, if any, is driven by deterioration in payoff rates.

account for a larger share of spend than of deferred interest charges, and they do so by a large margin.⁶² Consumers with superprime scores incur just over one-quarter of deferred interest charges even as they represent nearly three-fifths of promotional spending. Meanwhile, consumers with lower credit scores comprise 12% of promotional spending and pay nearly 30% of the deferred interest bill.⁶³

FIGURE 32: SHARE OF PROMOTIONAL SPENDING AND DEFERRED INTEREST CHARGES, 2015-2016 (ADI)



⁶² The figures in this section are not net of waivers or reversals of deferred interest. Current waiver and reversal programs would not be expected to create less variance across tiers than is shown in Figure 32. Consumers with higher scores get larger shares of their total deferred interest bill waived than consumers with lower scores do.

⁶³ That gap only grows more pronounced with further credit score breakdown. The ratio of cost share to spend share in near-prime is just over two to one. That ratio is just over three to one in subprime. It is over five to one among consumers with deep subprime scores.

4. Availability of credit

Our previous reports examined a number of metrics relating to the availability of card credit. This report continues our prior approach. We also broaden our focus to monitor whether card credit availability is stable, contracting, or expanding, both overall and for specific credit score tiers.

We approach availability by exploring two broad areas: first, new account and line origination; second, line changes after origination. To accomplish this, we track the credit card account life cycle. We start with consumer solicitation and application, covering the myriad channels used. Next, we address issuer approvals as well as new account and line origination. Finally, we end with issuer line management of existing accounts.

As we noted in our prior reports, we lack a single metric to measure overall credit availability in a manner similar to the total cost of credit (“TCC”), discussed in Section 3, which measures the overall cost of consumer credit cards.¹ Moreover, to the extent there is a reduction in the number of new accounts being opened, it is difficult to ascertain whether this is a function of changes in credit supply, changes in credit demand, or a combination of the two. Therefore, our analysis of availability focuses, where possible, on metrics that permit us to observe the interaction between supply and demand most clearly.

In our 2013 Report, we observed that the CARD Act had, by design, affected credit availability in certain respects by requiring issuers to make an ability-to-pay determination before opening a new account or increasing the credit line on an existing account.² The current report finds that the CARD Act continues to affect approval rates for new accounts and finds that the rate of credit line increases, while increasing over the past two years, is still well below pre-CARD Act

¹ See 2013 Report, at 38; 2015 Report, at 86.

² 2013 Report, at 6.

levels, a result which may be attributable to the CARD Act's underwriting requirement.³ Beyond that, the 2013 Report found that "credit availability appears to have tightened during 2008 and 2009 and to have loosened in the following years."⁴ The current report finds that credit availability has continued to loosen over the past two years. Given the limit on available resources and the challenges in measuring credit availability across markets, we do not attempt to comprehensively compare credit availability in the credit card market with other consumer credit markets or to engage in the kind of econometric analysis that would be required to assess whether there is evidence that the CARD Act affected, either positively or negatively, the overall availability of credit.

4.1 New accounts

Every day, U.S. consumers submit over half a million applications for credit cards. Approving an application gives the applicant the ability to borrow (even if the applicant has no present intent to do so), so issuers must decide whether applicants are sufficiently creditworthy to issue the product for which they applied. That process is largely (though not completely) automated. Issuers compete to meet consumer demand for credit cards through broad-based advertising, such as television commercials. They also use targeted marketing, which is increasingly shifting away from the traditional direct mail-centric model towards one that leverages digital channels. We examine below the patterns of credit card marketing and solicitation, consumer applications, approval rates for new accounts, and the volume of new account and line origination. Where possible, we examine how these metrics vary by credit tier as well as by product and marketing channel.

³ See Sections 4.1.3 & 4.2.4.

⁴ 2013 Report, at 60.

4.1.1 Solicitations

Issuers use solicitations to make consumers aware of their credit products and to encourage consumers, especially those believed to be qualified, to apply for them. Solicitations may be targeted to specific people selected based upon their credit records. These are known as “pre-screened,” “pre-approved,” or “pre-selected” offers. Alternatively, solicitations may be sent to a specific person without any prior credit screening. These are often referred to as “invitations to apply.” Offers also may be distributed more widely to the “mass market” through a variety of channels, without regard to the qualifications of each individual recipient.

DIRECT MAIL

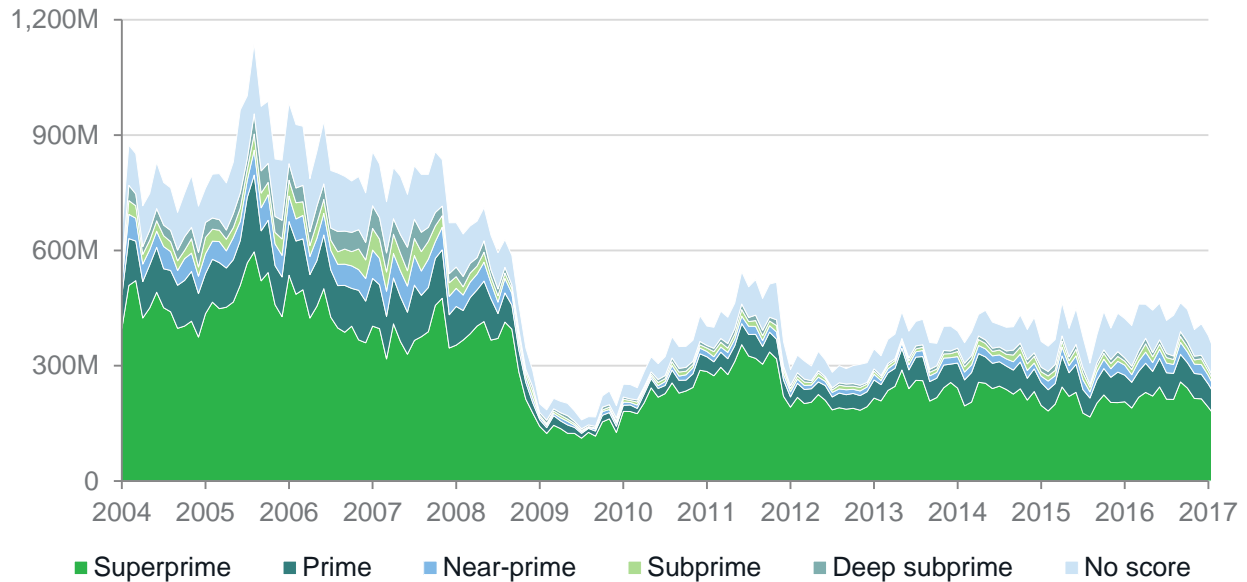
Historically, almost all credit card marketing was done by direct mail. In fact, consumers have been receiving credit card offers by post since the invention of the credit card. The effectiveness of direct mail has varied over time. It also varies across issuers, with some issuers and some offers eliciting higher response rates from consumers than others. In a recent survey by Mintel, response rates ranged from 0.3% to 2%, depending on the issuer and the network.⁵ Offers that included rewards had a response rate more than double that of offers that did not.⁶

The volume of credit card offers sent via post has decreased in recent years, as shown in Figure 1. This is the result of a number of factors. The lower cost of emerging online advertising channels has made digital solicitation more attractive. Consumers themselves are increasingly engaged in the digital space, meaning there is more consumer attention to be captured with digital solicitation than was previously the case. And increasingly sophisticated marketing processes have led issuers to send fewer but more targeted pieces of mail while concurrently expanding into low-cost channels. Some issuers have significantly reduced their mail volumes in the past year, in favor of email, digital presence on third-party comparison sites, or even word-of-mouth.

⁵ Response rate is defined as the number of consumers who respond to a solicitation divided by the total number of consumers to whom the solicitation was sent.

⁶ Mintel Comperemedia, *U.S. Credit Card Response Rates*, (Aug. 21, 2017).

FIGURE 1: MONTHLY MAIL VOLUME TRENDS BY CONSUMER CREDIT SCORE (MINTEL COMPEREMEDIA)



DIGITAL SOLICITATION

The shift to digital forms of solicitation can be seen not only in the reduction of mail volume, but also in the increased use of a variety of digital solicitation channels. According to recent Mintel data, nearly half of surveyed applicants reported obtaining offers for the relevant card via digital channels, as compared to 21% for direct mail, 17% in-person, and 13% via phone or other means.⁷ Consumer responses indicated that the 50% figure for digital solicitations generally held for all issuers covered in Mintel’s survey. In contrast, issuers vary in their reliance on direct mail and in-person channels to drive applications.⁸

The forms of digital solicitation are also growing more varied. Emails to consumers or banner ads directing consumers to the issuer’s website have become common marketing tools. Issuers are rapidly increasing and intensifying their use of mobile applications, text messages, social

⁷ *Id.*

⁸ *See id.*

media messaging, and third-party comparison sites, the last of which we discuss in further detail in Section 7. In the second quarter of 2017, roughly 12% of consumers with a recent application reported receiving the relevant offer via email, another 10% reported receiving it via a third-party comparison site, 6% via social media, 5% via a mobile app, 3% via text message, and 13% via the issuer’s own website.⁹

4.1.2 Applications and approvals

Consumers who seek a credit card must submit an application to an issuer, whether they respond to a specific solicitation or not. The issuer then decides whether or not to issue that consumer a credit card based on an internal underwriting process. At least for large issuers, that process typically is complex and largely, but not completely, automated.¹⁰

Below we first examine overall trends in consumer application volumes. We then review the rates at which those applications are approved. For these purposes, we analyze data from a subset of issuers that focus on mass market applications (“MMI data”). For these mass market issuers, we have at least some continuous data going back a full decade—and more granular data for a more recent period. These issuers represent a large majority of the market. Even so, it is important to acknowledge that these issuers may not be representative of the market as a whole. (Additional information on applications and approvals for specific market segments—like cards issued by subprime specialists and secured cards—is in Section 6.)

CREDIT CARD APPLICATIONS OVERALL

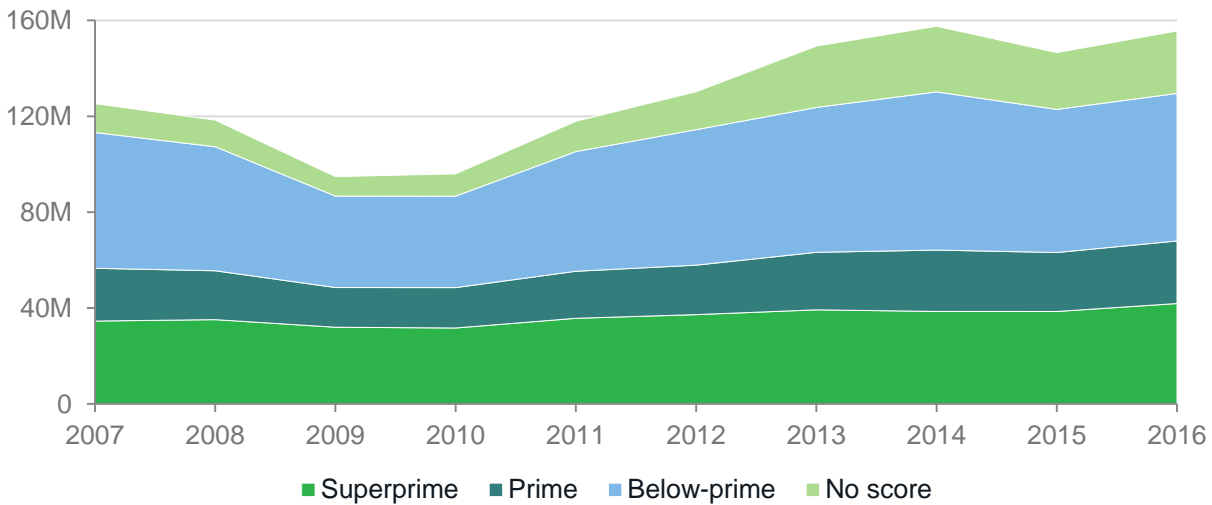
Consumers continue to apply for a large number of credit cards. On an average day, the mass market issuers for which we have data receive hundreds of thousands of credit card applications. As shown in Figure 2 below, that volume has been largely stable since 2013, both overall and

⁹ *See id.*

¹⁰ Although applications can be sorted into those that are approved and those that are rejected, the underwriting process will often produce more varied results than this. The approval decision, in fact, is in some sense not binary, but instead reflects a number of components, such as approved interest rate, credit line, and potentially other terms. The rejection decision, too, may be textured. With some rejections, for example, an issuer may “counter-offer” with a solicitation to apply for a product for which the consumer did not initially submit an application.

across the scored credit spectrum. (The data we use here only allow us to look at consumers with lower scores in a single, aggregated tier. More detailed data for below-prime tiers are available for a more recent period, as discussed below.) Mass market issuers have seen substantial growth in applications from consumers without credit scores over the last decade.¹¹ Since 2013, these consumers have consistently submitted applications at more than twice their rate in 2007.

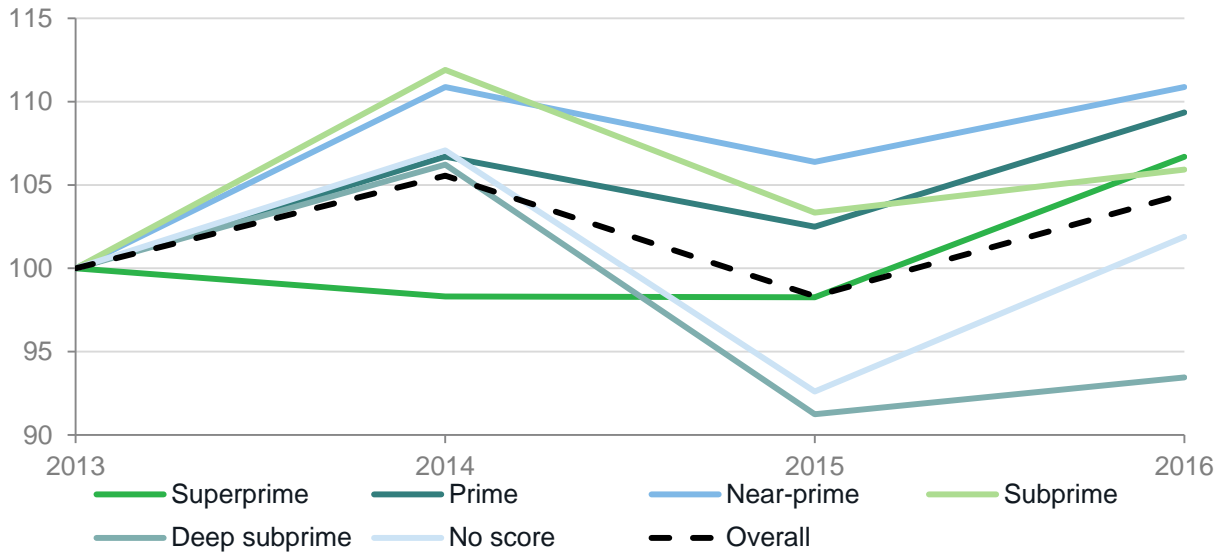
FIGURE 2: ANNUAL APPLICATION VOLUME FOR MASS MARKET ISSUERS (MMI)



The data allow a more granular examination of applications by credit score tier over the past four years. The results are in Figure 3. Compared to 2013, 2016 application volumes were higher for all credit score tiers except deep subprime. They were also higher, though only marginally so, for consumers without scores. Application volume has not increased consistently across all four years. In 2015, volume for all credit tiers fell relative to 2014, even though it still registered as an increase over 2013.

¹¹ Section 4.1.4 looks at the volume of originations over time. Data shown there indicate that growth in mass market issuer originations to consumers without scores outpaces substantial growth in originations to all consumers without scores in the market, as measured by the CCP. This suggests that high growth in applications and originations for mass market issuers may have distinct causes, including industry consolidation and specific instances of portfolio acquisition.

FIGURE 3: ANNUAL APPLICATION VOLUME FOR MASS MARKET ISSUERS, INDEXED TO 2013 (MMI)



CREDIT CARD APPLICATIONS BY CHANNEL

Applications can be submitted via a number of channels. These channels are distinct from the channel by which the application is solicited, though in many cases they are related. To take just one example, a consumer who is solicited to apply using a third-party comparison site will likely apply digitally, using the link the site provides. The nature and variety of the application channels available, and the ways in which they may interact with solicitation channels, can shape whether consumers apply for credit cards, and the cards for which they apply.¹²

Historically, mail and in-person were the traditional application channels, and these applications generally were in response to solicitation via those same channels—a mailed offer or an in-branch “take-one” paper application. Today, however, digital application channels predominate—even for mailed solicitations. Consumers are increasingly responding to direct

¹² Our market monitoring also suggests that, in at least some cases, application channel may be a factor in issuer underwriting—tying the medium by which a consumer applies for a credit card even more directly to whether and on what terms that card is made available to them.

mail using digital application channels. In the second quarter of 2017, 72% of survey respondents who responded to direct mail offers did so via a digital application.¹³

For purposes of the present analysis, we define a number of digital application channels. Some of these correspond directly to specific digital solicitation or marketing channels. For example, applications that are sourced via third-party comparison sites correspond to marketing material on those sites, as do applications submitted in response to more conventional digital advertising such as banner advertisements or paid placements on search engines. Others do not track to a single specific form of digital solicitation, such as applications submitted via a mobile device, which may be responsive to any number of different solicitation forms. (As a result, not all our categories are mutually exclusive.) We also track a number of application channels that do not directly implicate digital reliance by issuer or consumer, such as applications that were submitted via co-brand or private label partners, or applications submitted by consumers with an existing non-credit card account relationship at a given issuer.

Card type and applications

In this context, both issuer practice and consumer behavior differ significantly by card type. As a result, we break down many of our findings according to card type. Most of the data sources relied upon in this report allow us to subdivide cards into general purpose and private label. Our most recent mass market issuer survey, however, allows us in some cases to divide cards into three types. Specifically, it allows us to further identify a subset of general purpose cards as “retail co-brand” cards. These cards are generally included as general purpose cards in other data sources because they feature the brand of a major card network, allowing them to be used at a wide variety of merchants. They are issued, however, by a business unit at the issuer that primarily offers cards in partnership with and under the branding of select retailers. (It is important to note, however, that we do not include all co-brand cards in “retail co-brand.”¹⁴) In some important respects, these cards offer features and terms that resemble those on private

¹³ *Supra* note 6.

¹⁴ We exclude, for example, airline and hotel co-branded cards from the definition because these products tend to have terms and features that generally align with issuer-branded general purpose cards.

label cards more than those on other general purpose cards. As a result, they can be seen as something of a hybrid between general purpose and private label cards.

In fact, many issuers partner with merchants to offer both a retail co-brand and private label card with that merchant's brand. In some such cases, that merchant's customer will not be presented with an option to apply for one or the other. Instead, the customer is given the option to apply for a merchant-branded credit card. In such cases, merchants will first determine whether the consumer can be approved for a retail co-brand card—if so, they will issue them that card, but if not, they will then determine whether or not that consumer can be approved for a private label card. This process highlights the complexity of the credit card underwriting and usage ecosystem.

It also poses a specific tabulation problem. In instances where we are measuring metrics relating to application, including approval rates, it is not always clear whether a consumer's application was for a private label card, a retail co-brand card, or for one of the above-described programs that could result in one or the other. Therefore, in some cases, we cannot report private label and retail co-brand cards separately. In those cases, we combine results for both card types, and refer to the combined pool of cards as “store cards.” However, this problem only applies to metrics that relate to applications. Once a card is originated, it is definitively either private label or retail co-brand.

It is also important to note that, in this section when we refer to findings relating to “general purpose” cards drawn from our mass market issuer data, we are referring to a smaller group of cards than we are elsewhere in the report—because we are excluding retail co-brand cards from the pool of general purpose cards, both in cases where we can break out retail co-brand cards from private label cards and in cases where we consolidate them as store cards.

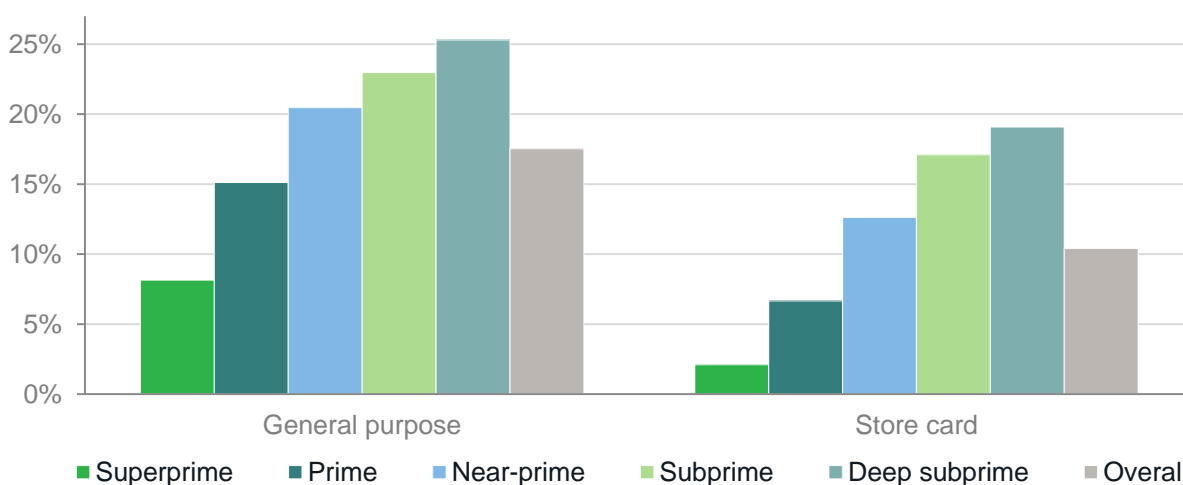
Digital solicitation

Our mass market data indicate that digital solicitation channels have become increasingly popular, and general purpose applications sourced from such channels have increased substantially in number. General purpose applications submitted in direct response to digital solicitation channels now constitute a substantial share of all applications, with digital advertising directly sourcing one in seven applications and third-party credit card comparison websites sourcing roughly one in five. We also find that nearly one in five general purpose applications are submitted using a mobile device.

General purpose applications in response to digital solicitations, or relying on mobile devices, represent a much higher share of applications submitted by consumers under the age of 65 than those over the age of 65. This suggests that current trends will only solidify over time.

Store cards, while not unaffected by this trend, are still firmly rooted in their traditional solicitation and application channel—at the physical point of sale. Nearly three-quarters of all applications for store cards were submitted in-person at a co-brand partner’s location in 2016.

FIGURE 4: APPLICATIONS SUBMITTED VIA MOBILE DEVICES AS A SHARE OF ALL APPLICATIONS IN EACH CREDIT TIER, 2015-2016 (MMI)



Consumers in lower credit tiers submit a larger share of their applications for credit cards using mobile devices than do consumers in higher credit tiers. As Figure 4 shows, there is an inverse relationship between credit score and propensity to apply via a mobile device. This striking trend is visible for both card types.

The especially high share of consumers with lower scores who apply via mobile may indicate opportunities to change some existing patterns and practices in credit card servicing. Consumers with lower credit scores exhibit a greater propensity to pay late, the greatest propensity to revolve, and the lowest average payment rates, as we noted in Sections 2 and 3 above, respectively. As a result, improving the effectiveness of mobile disclosures and mobile account servicing tools may offer a particular benefit to consumers with the lowest scores—who incur the most fees and pay the highest all-in costs for using cards. (We discuss the costs incurred by these consumers further in Section 3.)

Existing banking relationships and general purpose co-brand partners

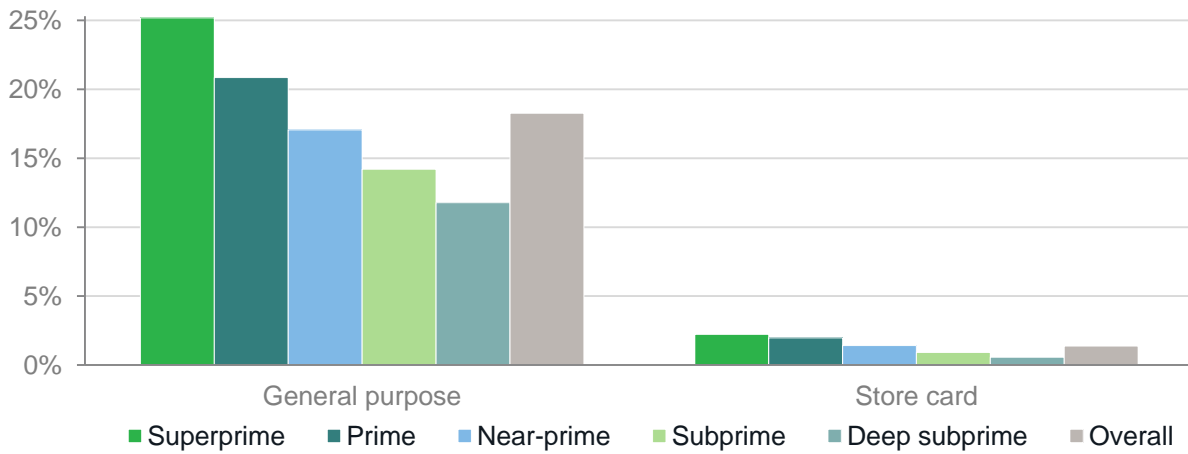
Many mass market card issuers do not specialize in credit cards. These banks offer a wide variety of consumer financial products, and in many cases may aspire to build broader, longer-term relationships with consumers that grow to include additional financial products and services, such as mortgages or investment products.¹⁵ However, recent revelations about the practices of some such banks have generated increased scrutiny of certain aspects of this approach from regulators and others.

To establish a factual baseline in this area, we requested that issuers identify the number of applications they received from consumers with whom they had any sort of pre-existing relationship. Our survey was agnostic as to whether consumers were solicited to apply in whole or in part because of that pre-existing relationship. The fact of a consumer submitting a credit card application to an issuer with which they already have another account, therefore, may or may not represent any kind of practice or program on the part of the issuer to solicit or otherwise encourage that application.

Figure 5 shows the share of all applications submitted by consumers with a pre-existing banking relationship with the issuer. Two points stand out. First, there are many such applications in the general purpose market, but very few for store cards. Second, this phenomenon is correlated with credit score. Consumers with higher scores record higher rates of applying to banks with which they already have at least one product.

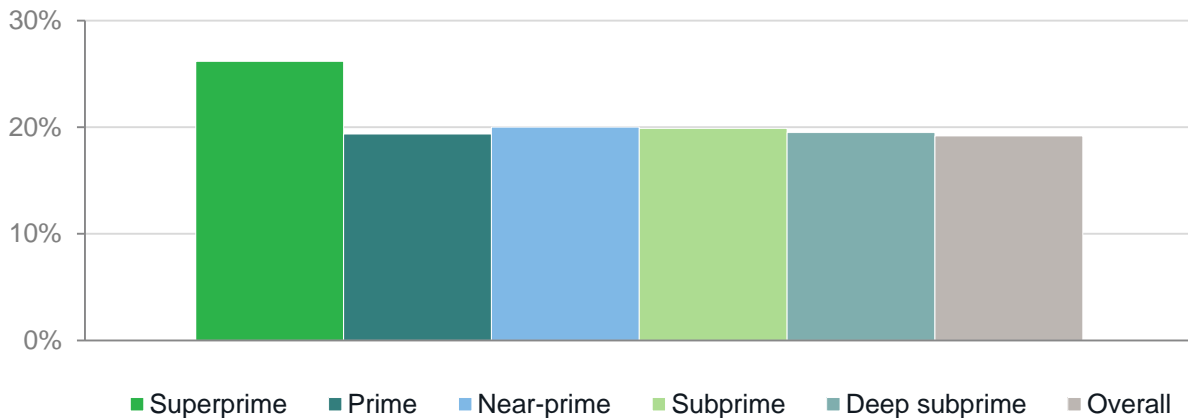
¹⁵ Our analysis here is limited only to the banks in our mass market issuer survey, but many other financial institutions also share this same goal, including smaller banks and credit unions.

FIGURE 5: SHARE OF ALL APPLICATIONS SUBMITTED BY CONSUMERS WITH EXISTING BANKING RELATIONSHIP WITH THE ISSUER TO WHICH THEY APPLIED, 2015-2016 (MMI)



Consumers may also be motivated to apply for credit cards on the basis of their relationship with a third party. This is clearly the case with store cards. But this dynamic is also present with general purpose cards. Consumers may feel a strong affinity for major brands such as airlines and hotels. In such cases, third parties often establish channels to receive applications for the credit cards bearing their brand, even when those cards are generally issued by a large mass market bank. As shown in Figure 6, co-brand partners accounted for nearly one-fifth of all general purpose card applications across 2015 and 2016, and over one-quarter of all general purpose applications from consumers with superprime scores.

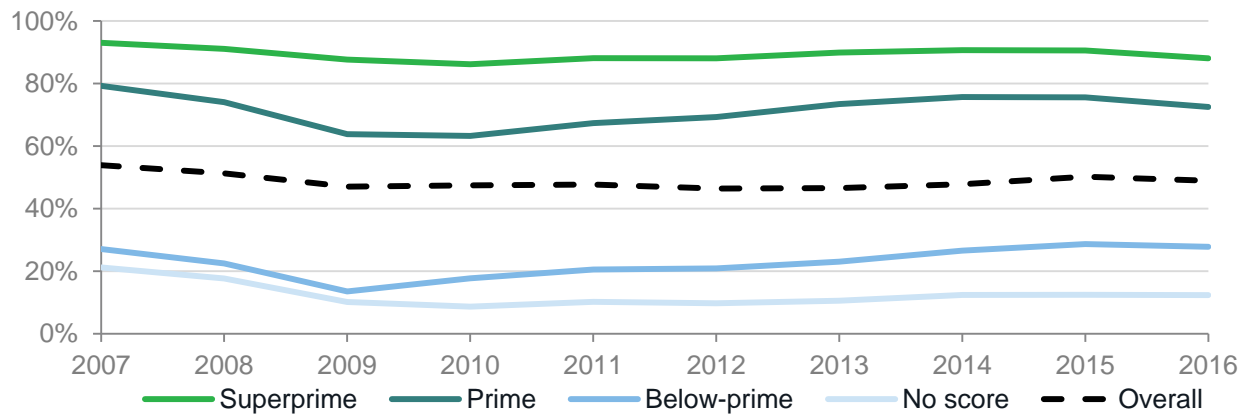
FIGURE 6: SHARE OF GENERAL PURPOSE CARD APPLICATIONS SUBMITTED VIA CO-BRAND PARTNERS, 2015-2016 (MMI)



CREDIT CARD APPROVAL RATES OVERALL

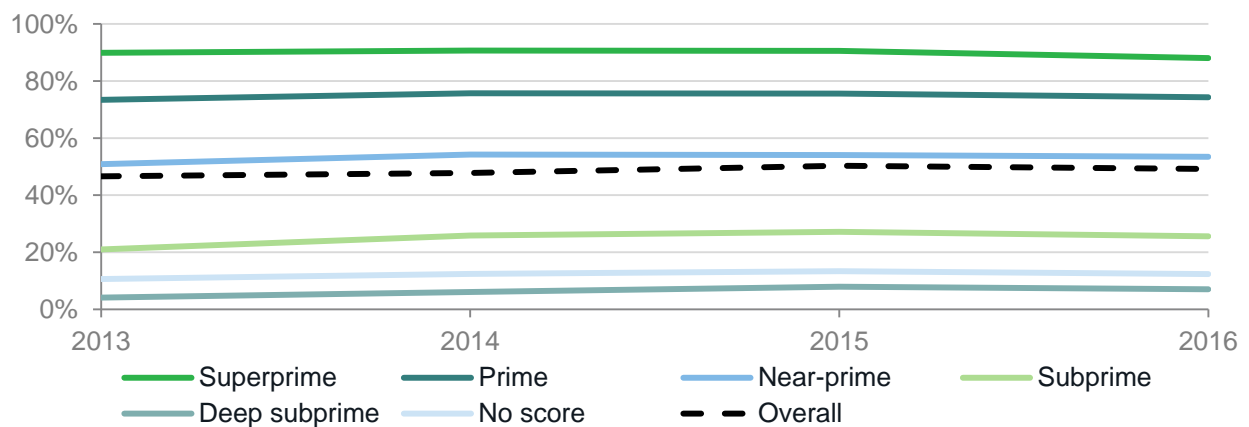
Following a drop associated with the recession, approval rates among mass market issuers have rebounded and remain fairly stable for consumers in all credit tiers. These data are shown in Figure 7. Some 28% of applications from consumers with lower credit scores were approved in 2016, which is slightly higher than the 27% recorded in 2007.

FIGURE 7: APPROVAL RATE FOR ALL MASS MARKET CREDIT CARD APPLICATIONS (MMI)



Recent data that permit more granular credit score tiering show that consumers in lower credit score tiers have maintained an across-the-board increase in approval rates since 2013. Even while consumers with deep subprime scores still experience very low approval rates in aggregate, they experienced the largest relative increase in approval rate between 2013 and 2016. These data are shown in Figure 8.

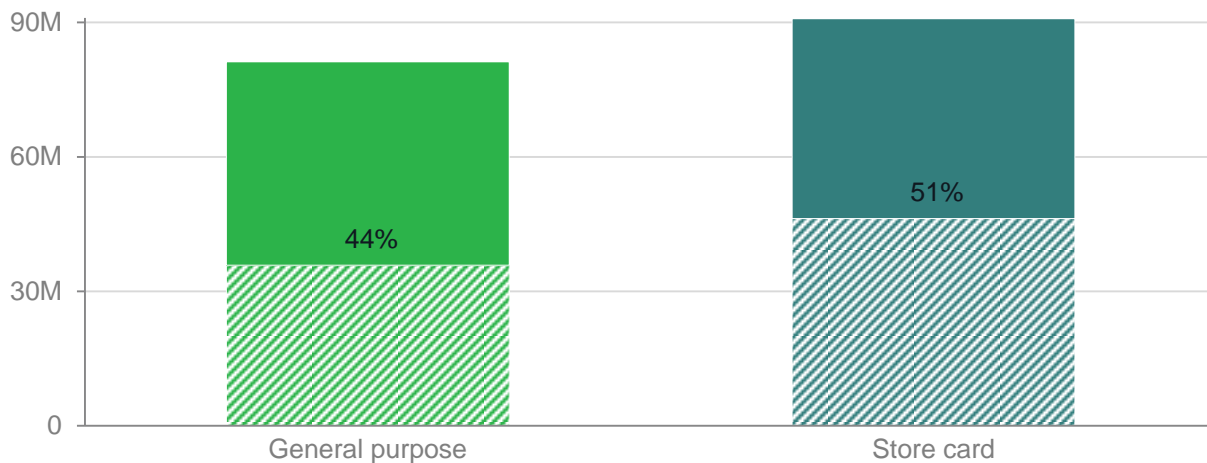
FIGURE 8: APPROVAL RATE FOR ALL MASS MARKET CREDIT CARD APPLICATIONS (MMI)



APPLICATIONS AND APPROVAL RATES BY CARD TYPE

For the mass market issuers in our dataset, application volumes and approval rates differ substantially by card type as well as credit score. Figure 9 below shows the breakdown of applications and approvals for each card type during 2016. Store cards represented a majority of credit card applications in 2016, but only by a narrow margin. Nearly four-fifths of approved store card applications were for private label cards, with only about one-fifth for retail co-brand cards. Approval rates are higher for store cards, for reasons discussed more fully below.

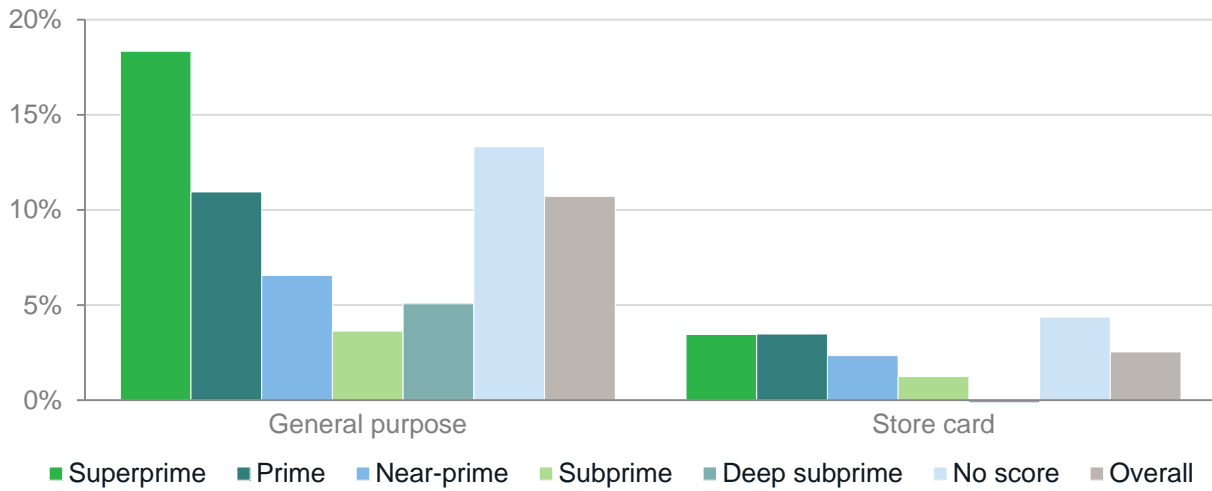
FIGURE 9: APPLICATIONS AND APPROVALS BY CREDIT CARD TYPE, 2016 (SHADED AREA REPRESENTS APPROVED APPLICATIONS) (MMI)



Compared to 2015, 2016 application volume for mass market issuers has increased, especially for general purpose cards.¹⁶ Conversely, it has only slightly increased for store cards. These data are shown, broken out by credit tier, in Figure 10.

¹⁶ The data are not limited to a single set of co-brand programs in 2015 and 2016. In theory, therefore, the growth rate in both categories could reflect program acquisition by MMI issuers from issuers outside this data pool. Our monitoring indicates, however, that the growth shown is predominantly accretive, meaning that it reflects organic growth in MMI programs—at least in their application numbers.

FIGURE 10: YEAR-OVER-YEAR GROWTH IN APPLICATION VOLUME, 2016 (MMI)



Figures 11 and 12 break down the data in Figure 9 by credit tier. They show that consumers with superprime scores submit the most applications of any individual credit score tier, for each card type. Subprime and deep subprime combined, however, represent a larger share of applications for general purpose and store cards than the superprime tier. Application volume dynamics vary substantially across card types. Application volumes generally decline with credit tier, but the size of those declines is not proportional across product types. For general purpose cards, there is not as large a gap in application volume between consumers with superprime and prime scores—the next largest applicant pool for every card type—as there is for store cards. The number of applications from consumers without credit scores also varies significantly across product types, with general purpose cards receiving substantially more applications from this group.

Approval rates decline consistently with credit tier across both product types. Store cards are the card type with the highest approval rates for applications from consumers with near-prime scores and above. This store card approval gap is most notable for prime and near-prime applications. For subprime and deep subprime applications combined, general purpose has the

highest approval rate and the highest absolute number of applications. The same is true for applications from consumers without scores.¹⁷

FIGURE 11: APPLICATIONS AND APPROVALS FOR GENERAL PURPOSE CARDS, 2016 (SHADED AREA REPRESENTS APPROVED APPLICATIONS) (MMI)

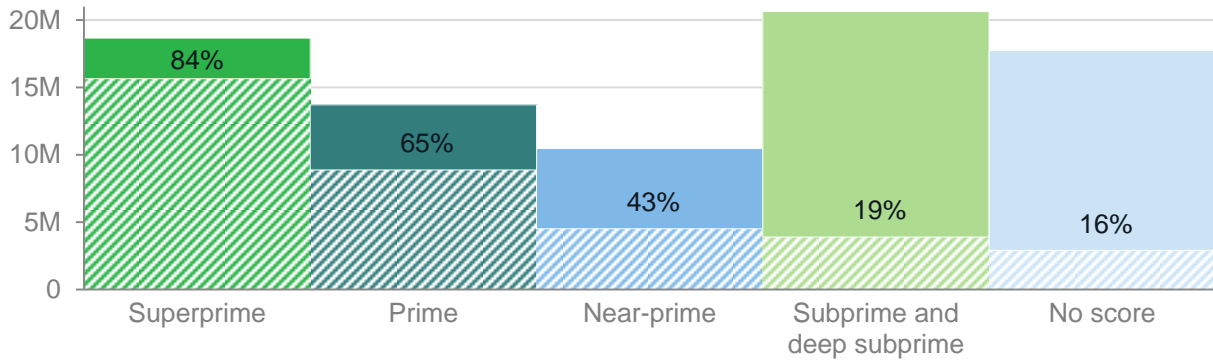
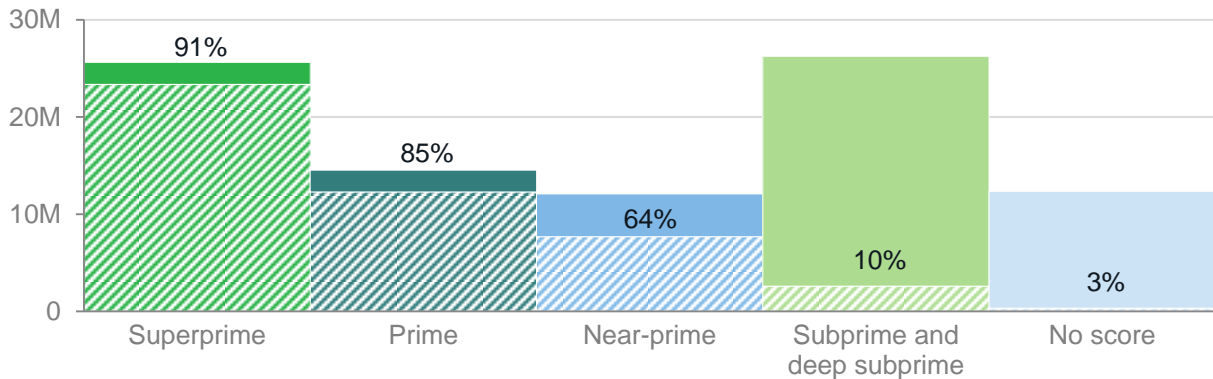


FIGURE 12: APPLICATIONS AND APPROVALS FOR STORE CARDS, 2016 (SHADED AREA REPRESENTS APPROVED APPLICATIONS) (MMI)



¹⁷ Our MMI data account for smaller shares of the overall market as they reach deeper into the credit spectrum. Accordingly, we have combined approval rate data in the two lowest score tiers, but still note that our approval results for that merged tier should be treated with additional caution. Additional application and approval data for consumers in lower credit tiers are included in Section 6, which uses data obtained from subprime specialist issuers. In addition, we have much more complete data on originations to, though not application volumes and approval rates for, consumers with lower credit scores because we can use the Consumer Credit Panel (which captures effectively all of the market, albeit via sampling) for those purposes.

4.1.3 Ability-to-pay tests in the approval process

The CARD Act requires issuers to consider a consumer’s “ability to pay” (“ATP”) when issuing a new credit card or increasing an existing card’s credit line. Our 2015 Report contains a detailed discussion of these ATP requirements and the various practices used by issuers to implement them.¹⁸ The applicable rules require issuers to consider a consumer’s debts and income (and/or assets) in determining whether the consumer has the capacity to make at least minimum payments on the account should the consumer choose to utilize the full credit line.¹⁹

Our 2015 Report found that around 4.7% of credit card applications were denied because they failed to meet ATP requirements.²⁰ This “ATP denial rate” varied substantially across issuers. We observe similar results in our current dataset covering the same group of mass market issuers.

There are several ways to measure how ATP has affected credit card approval rates. Ideally, one would want to know the number of applications that, had issuers applied each and every underwriting test they employ to all applications, would have failed ATP but passed every other underwriting test. However, the most practical method is to count applications that are in fact rejected for ATP reasons under the actual review practices used by issuers. Our analysis of MMI data follows this approach, as it did in our prior report.

This method has certain limitations. Issuers use a range of ATP practices. One important form of variation is the point at which issuers apply ATP tests to applications. Some issuers apply all underwriting tests, including ATP, simultaneously, meaning that they capture all the reasons that each application fails—including failure to clear ATP thresholds. Other issuers, however, apply their tests sequentially, rejecting an application once it has failed one test, and accordingly not determining whether that application clears any remaining tests. For those issuers that do not place their ATP test at the end of such a sequence, at least some applications could be

¹⁸ See 2015 Report, at 139-146.

¹⁹ 12 C.F.R. § 1026.51(a).

²⁰ 2015 Report, at 104.

recorded as rejected for ATP reasons when, had the issuer applied their remaining underwriting tests, the application would have failed one or more of those as well. Conversely, as an issuer pushes its ATP test towards the end of a test sequence, many applications that would fail ATP never get the chance to do so because they fail earlier tests and are, consequently, never assessed for ATP.

Therefore, our method includes some ATP-denied applications that *would have* failed other approval criteria, such as those employed in the credit underwriting process or in fraud screening. It excludes, however, applications that *would have* failed ATP had they not already failed some other application criteria. For practical reasons, we rely on this method despite these limitations.

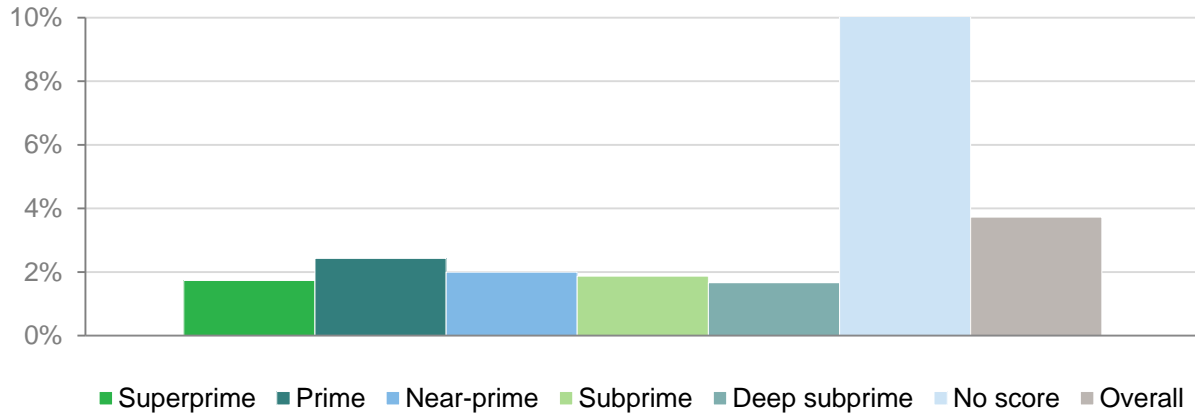
The number of ATP denials can be expressed as a share of total applications, which is the approach used to generate the 4.7% estimate above. We refer to this as the “ATP denial rate.” The number of ATP denials can also be expressed as a share of rejected applications. We refer to this as the “ATP rejection share.”

GENERAL PURPOSE

Our 2017 MMI data show an ATP denial rate of just under 4% for general purpose applications. For applications by consumers with a credit score, however, this rate fell to about 2%. The ATP denial rate is much higher for consumers without a credit score.

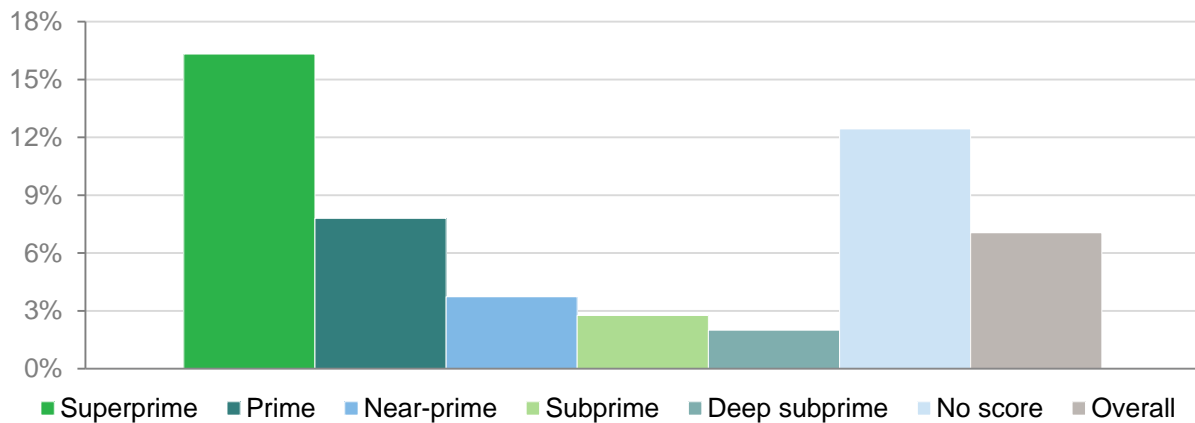
For consumers with a score, there is little variance in ATP denial rate across credit score tiers. There is especially large variation across issuers with respect to denial rates on applications from consumers without a score, suggesting that different issuer ATP practices may be affecting this particular measure.

FIGURE 13: ATP DENIAL RATE FOR GENERAL PURPOSE APPLICATIONS, 2016 (MMI)



ATP rejection shares vary more by credit tier than ATP denial rates do. Figure 14 below shows ATP rejection shares by credit tier. Rejection shares increase with credit score, likely because consumers with higher credit scores are more likely to pass issuers' other underwriting tests. As a result, ATP will tend to account for a higher share of whatever applications an issuer does reject in higher credit tiers.

FIGURE 14: ATP REJECTION SHARE FOR GENERAL PURPOSE APPLICATIONS, 2016 (MMI)

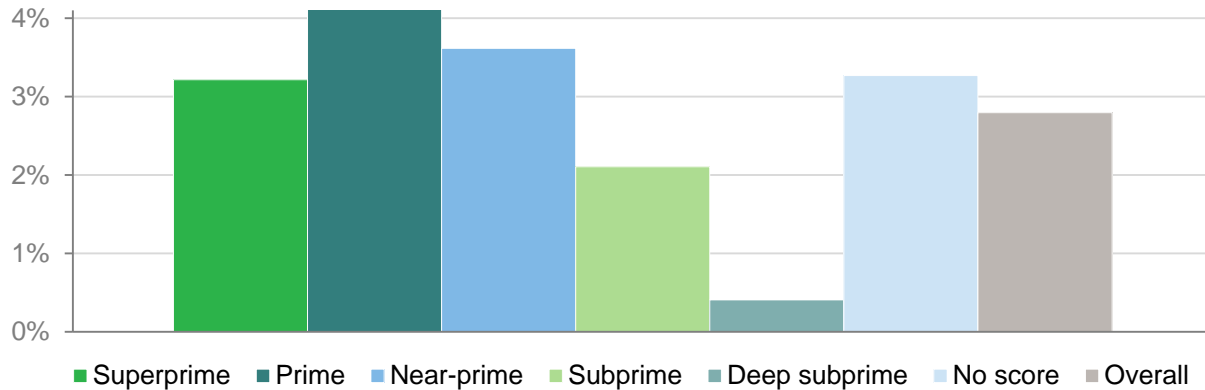


STORE CARDS

According to our current data, the ATP denial rate is roughly 3% for store card applications. This rate is significantly lower than the equivalent figure for general purpose cards. Figure 15 shows, however, that this is almost entirely the result of a substantially lower denial rate for store card applications from consumers without scores than for general purpose applications from those

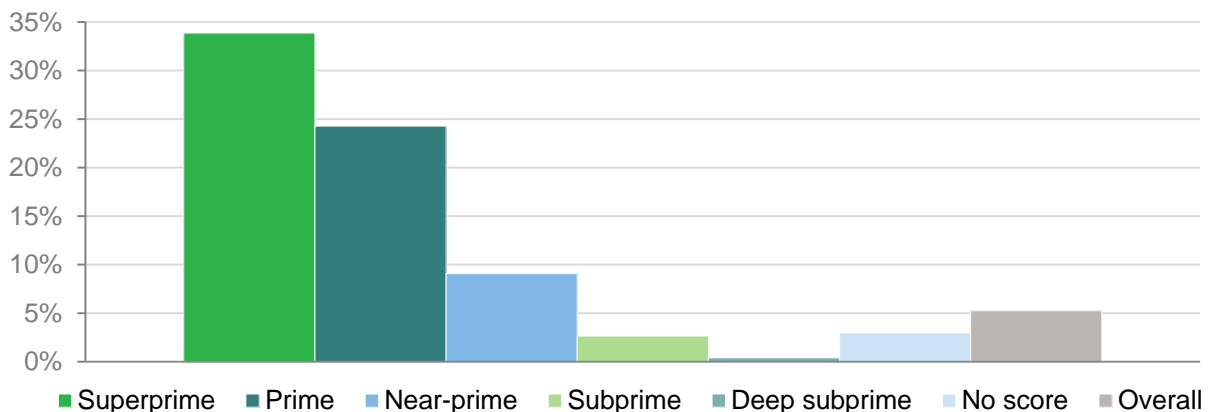
consumers. For most other credit score tiers, ATP denial rates are higher for store card than for general purpose applications, albeit only marginally so.

FIGURE 15: ATP DENIAL RATE FOR STORE CARD APPLICATIONS, 2016 (MMI)



Shifting to the ATP rejection share, which is shown in Figure 16 below, we observe the same general trends for store card rejections as we did for general purpose rejections. For store card applications, however, the overall share of rejections driven by ATP is much higher for the higher credit score tiers. This is striking especially because store cards generally feature lower initial lines than general purpose cards. This likely indicates that store cards generally have more liberal underwriting than general purpose cards, for consumers with higher scores, meaning that among the smaller share of such consumers rejected, ATP is more likely to be the cause of rejection.

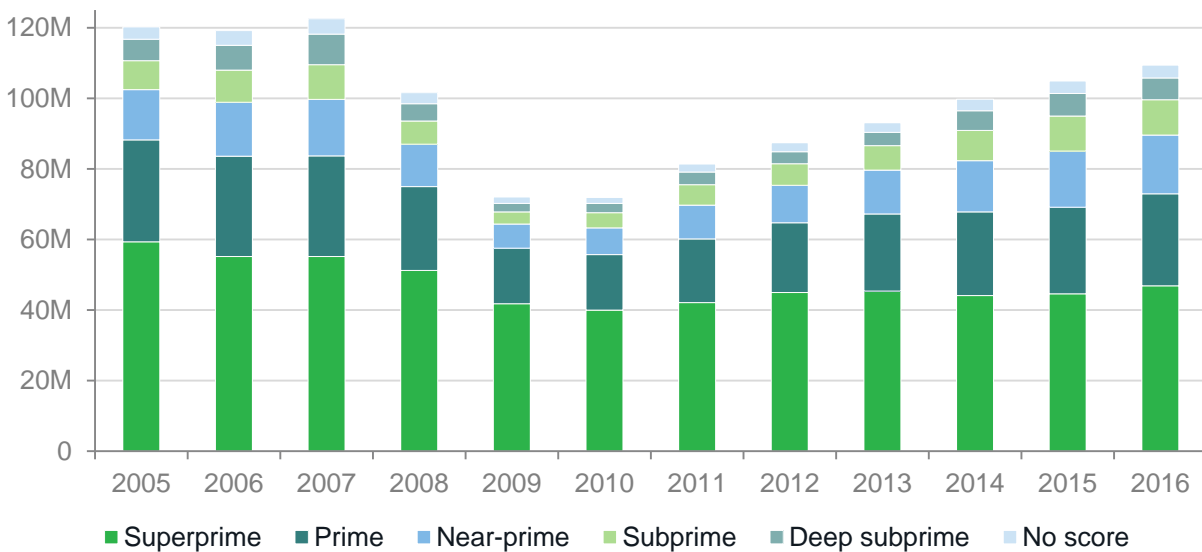
FIGURE 16: ATP REJECTION SHARE FOR STORE CARD APPLICATIONS, 2016 (MMI)



4.1.4 Account originations

Using the Consumer Credit Panel (“CCP”) we are able to examine account originations across all issuers and not just those mass market issuers within the scope of our MMI survey. In 2016, consumers opened roughly 110 million new credit card accounts. As Figure 17 shows, that is a higher total than in any single year since 2007. However, new account volume has not yet returned to the level it had reached in the years prior to the recession.²¹

FIGURE 17: ANNUAL NEW ACCOUNT VOLUME (CCP)

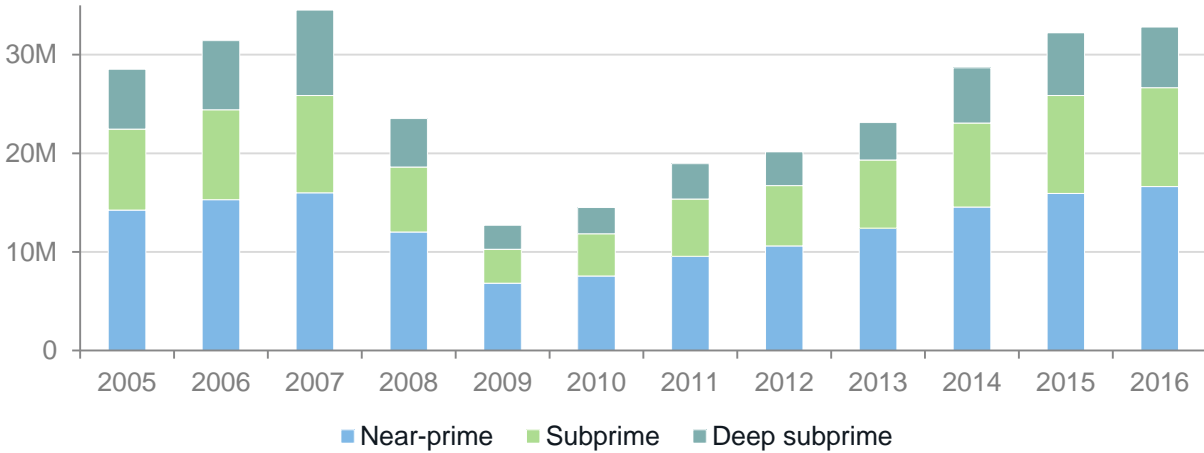


Consumers with prime and superprime credit scores opened more accounts in 2016 than they did immediately following the recession in 2010, but still continue to open fewer accounts than they did in the 2005 to 2007 period. By contrast, as Figure 18 shows, the number of accounts originated for consumers with near-prime and subprime credit scores in recent years matches or

²¹ In our prior report, we noted that Experian’s Market Intelligence Report data indicated that originations had returned to their pre-recession level. However, those data were erroneous as a result of underreported 2007 private label originations. Accordingly, that finding is not supported by currently available data.

exceeds levels recorded in the period preceding the recession. Originations among consumers with deep subprime scores are now nearing that mark as well.

FIGURE 18: ANNUAL NEW ACCOUNT VOLUME, LOWER CREDIT SCORE TIERS (CCP)

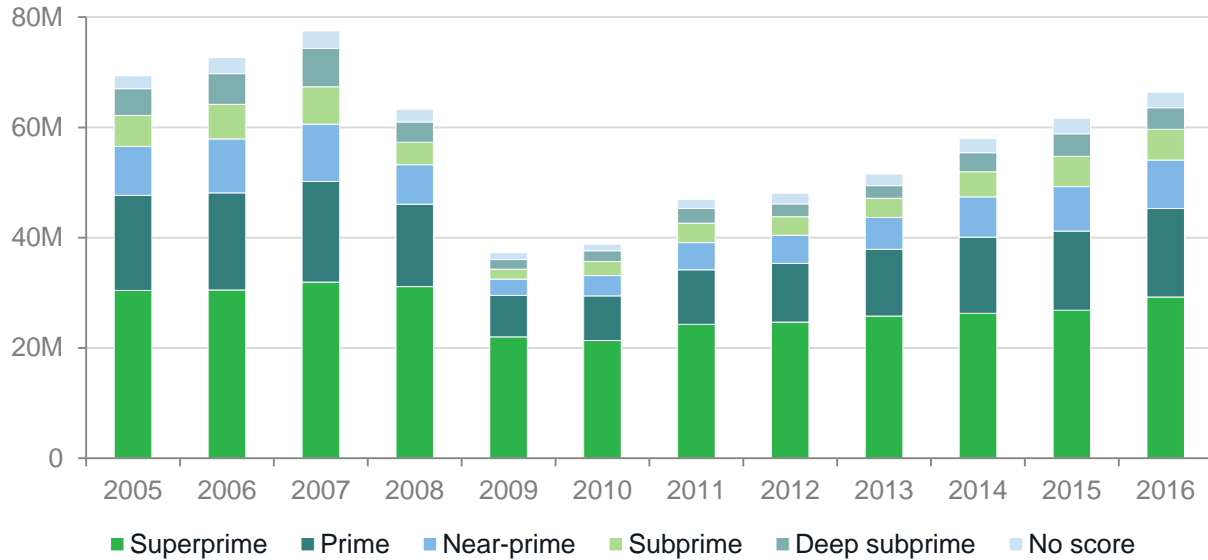


GENERAL PURPOSE

Growth in new general purpose account volume continues.²² Originations in 2016 exceeded 2008 levels. Compared to the overall card market, the recovery here is more even, with all credit score tiers regaining ground since 2009. Even so, no tier yet matches or exceeds levels reached in 2005 through 2007. These data are shown in Figure 19 below.

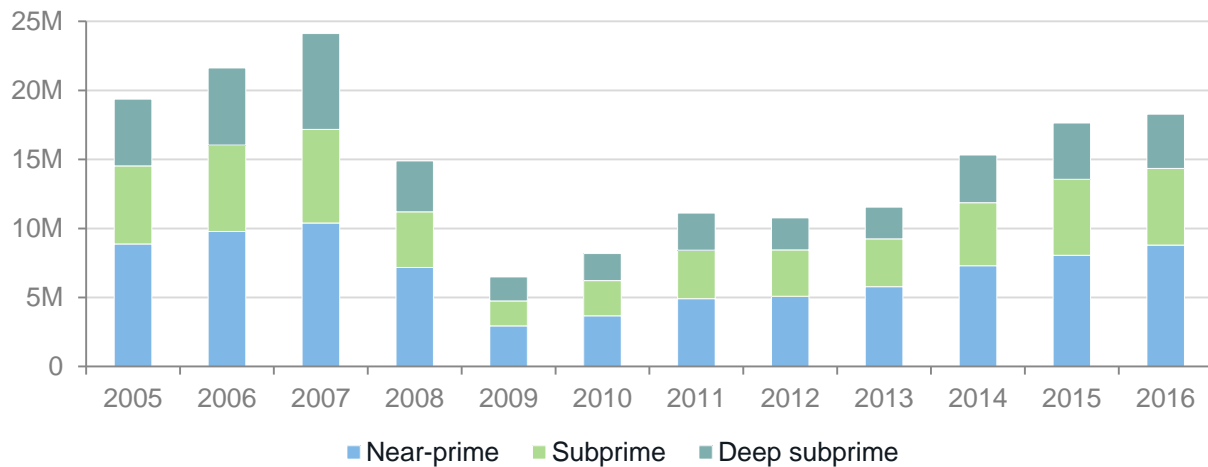
²² General purpose here refers to all cards that are not specifically identified as private label, and therefore may include retail co-brand cards. This is due to data limitations inherent in the CCP dataset.

FIGURE 19: ANNUAL NEW GENERAL PURPOSE ACCOUNT VOLUME (CCP)



Superprime accounts experienced the smallest drop-off in origination volume during the recession years. Originations in the lower tiers fared worse during the recession, but these tiers have experienced much faster growth in the subsequent years. Figure 20 shows the below-prime originations picture before, during, and after the recession in more detail.

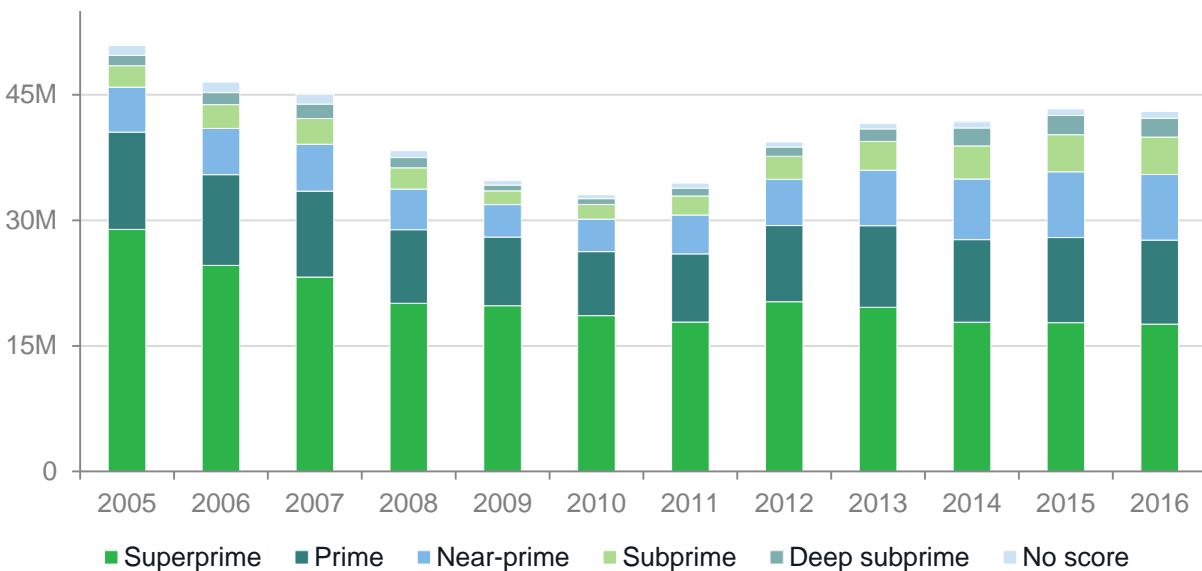
FIGURE 20: ANNUAL NEW GENERAL PURPOSE ACCOUNT VOLUME, LOWER CREDIT SCORES (CCP)



PRIVATE LABEL

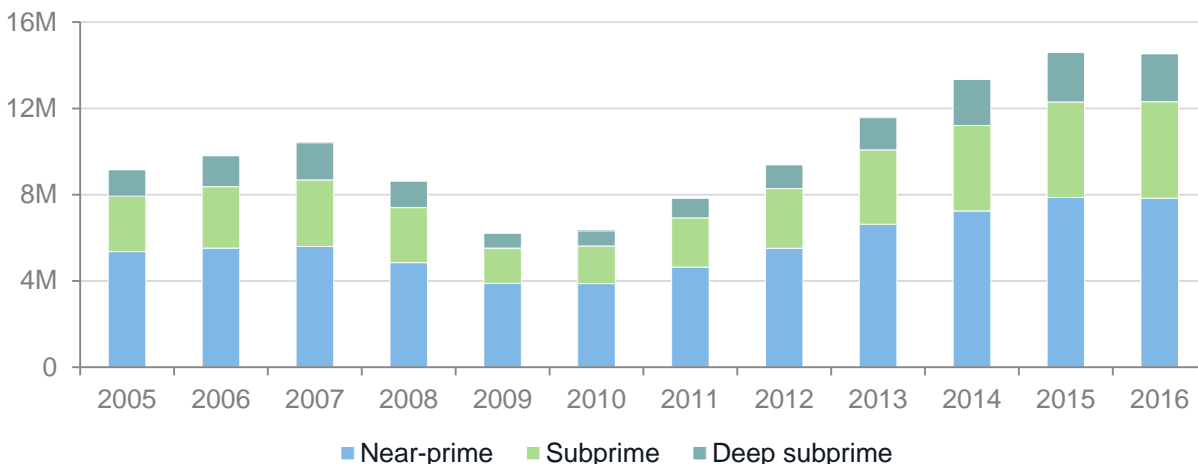
The fall-off in origination volume at the onset of the recession was much less marked for private label than for general purpose cards. In fact, there was a relatively gradual decline in private label originations from 2005, well before the recession hit. The number of new private label accounts has been stable over the last few years, although at a level below those observed prior to the recession. These data are shown in Figure 21 below.

FIGURE 21: ANNUAL NEW PRIVATE LABEL ACCOUNT VOLUME (CCP)



Despite that relative stability, there has been a notable shift in the composition of new private label accounts. Accounts opened by consumers with superprime scores represented half or more of all new private label accounts from 2005 through 2012. In the last four years, however, that share has dropped to 40%. Consumers with lower credit scores have made commensurate gains, representing 20% of new accounts in 2005 but 36% in 2016. In fact, each of the three lower credit tiers has doubled or nearly doubled both its volume and its share of private label originations since 2009. These data are shown in more detail in Figure 22.

FIGURE 22: ANNUAL NEW PRIVATE LABEL ACCOUNT VOLUME, LOWER CREDIT SCORES (CCP)

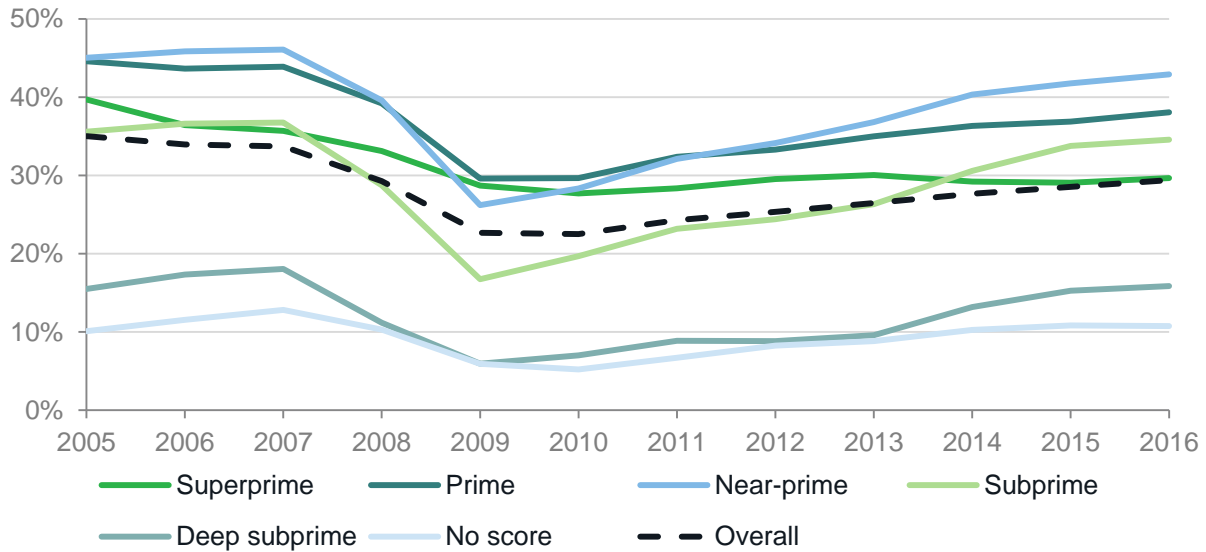


SHARE OF CONSUMERS ORIGINATING A CARD

Account origination figures do not give a complete picture from the consumer perspective because consumers can and do originate more than one card in a calendar year. Figure 23 shows the share of consumers within a given credit tier that originated credit cards in a given year.²³ In 2016, 29% of consumers in the CCP originated a credit card. The origination rate is highest for consumers with near-prime scores, followed by those with prime scores. For each of the last three years, consumers with subprime scores originated cards at higher rates than consumers with superprime scores. That represents a reversal from the years during and immediately following the recession. Consumers with deep subprime scores originated at a substantially lower rate than other consumers with scores, but they are the tier closest to originating cards at their pre-recession rate. In fact, the degree to which this origination metric has returned to pre-recession levels is inversely correlated with credit score.

²³ Because consumer credit scores fluctuate over time, some consumers spend time in more than one credit score tier within the course of a calendar year. For Figure 23, therefore, we sorted consumers based on the score that they had at the start of the relevant year. This allows the possibility that a consumer may have begun the year with one score, but had a lower or higher score by the time they actually originated a card that year. For consumers without a score, we only include consumers we observe in the CCP at some point over the year, and not those consumers who were completely “credit invisible.”

FIGURE 23: ANNUAL SHARE OF CONSUMERS WITH A CREDIT RECORD ORIGINATING A CREDIT CARD (CCP)

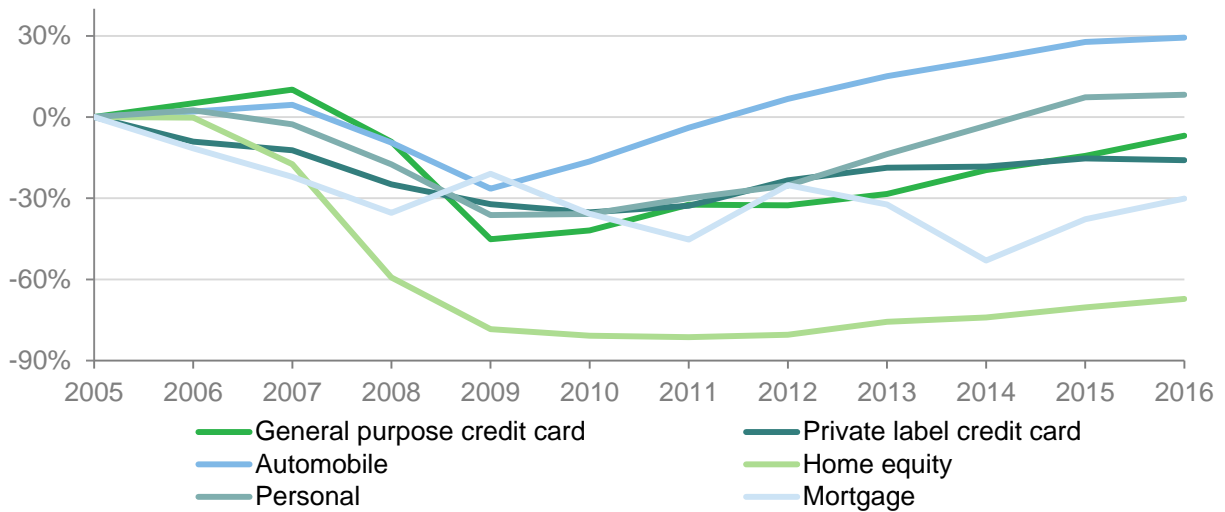


COMPARISONS TO OTHER CONSUMER CREDIT MARKETS

In our two previous credit card market reports, we compared the pace of new account origination in the consumer credit card market to other significant consumer credit markets, benchmarking each market to their 2007 and 2009 levels, respectively. For this report we use the CCP to expand our perspective back to 2005. While the rate of growth of credit card originations lags that in the auto loan and personal loan market, it greatly exceeds that of mortgage and home equity.²⁴

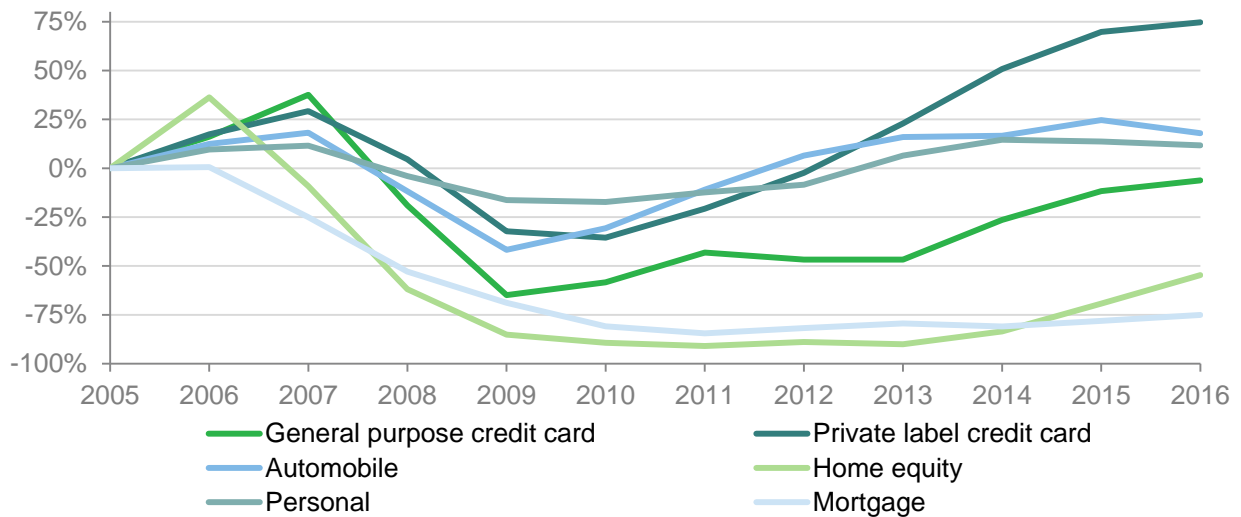
²⁴ Our definition of personal loans here is intended to capture a wide variety of loans, but is limited to products visible in the CCP and our definition here should not be taken to represent the Bureau’s perspective on what should and should not be considered a “personal loan” under all circumstances. We discuss recent developments in a segment of the personal loan market, and their relation to the credit card market, in Section 9.

FIGURE 24: NEW ACCOUNT ORIGINATIONS, % CHANGE SINCE 2005 (CCP)



Restricting our analysis to just those consumers with subprime and deep subprime credit scores, the same overall pattern can be detected in general purpose originations. However, Figure 25 shows private label originations have had significant and continuous growth in this segment since 2010 compared to all other consumer credit products, auto loans and personal loans included.

FIGURE 25: NEW ACCOUNT ORIGINATIONS TO CONSUMERS WITH SUBPRIME AND DEEP SUBPRIME CREDIT SCORES, % CHANGE SINCE 2005 (CCP)



4.1.5 Credit lines on originated accounts

Issuers assign a credit line to each originated account. The line determines how much a consumer, at least initially, is generally permitted to borrow on the account. Account origination, therefore, can be viewed not solely in terms of approvals and denials, but also as a continuum, as approved consumers receive more or less credit at the outset. Examining the flow of new credit line into the stock of credit available to consumers allows us a further window into the dynamics of new account origination.

GENERAL PURPOSE

Credit lines for new general purpose accounts have generally rebounded from their recessionary contraction. Within each credit score tier, average new line has increased since 2011. However, only the superprime credit score tier has average new lines that surpass the levels attained in the years immediately prior to the recession. These data are shown in Figures 26 and 27.

FIGURE 26: AVERAGE CREDIT LINE ON NEW GENERAL PURPOSE ACCOUNTS (CCP)

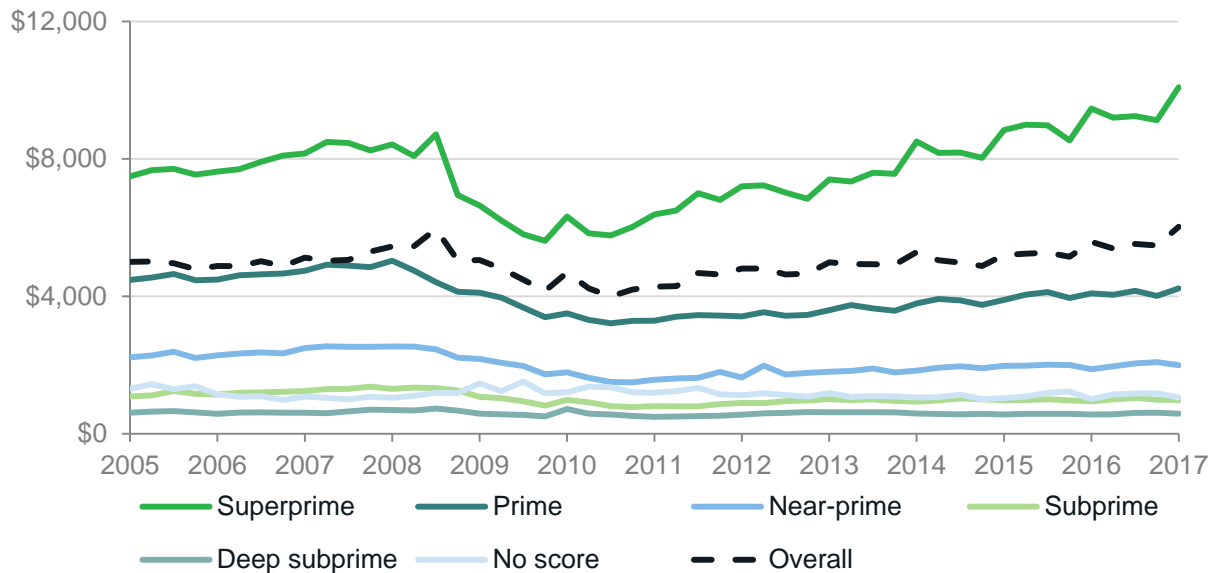
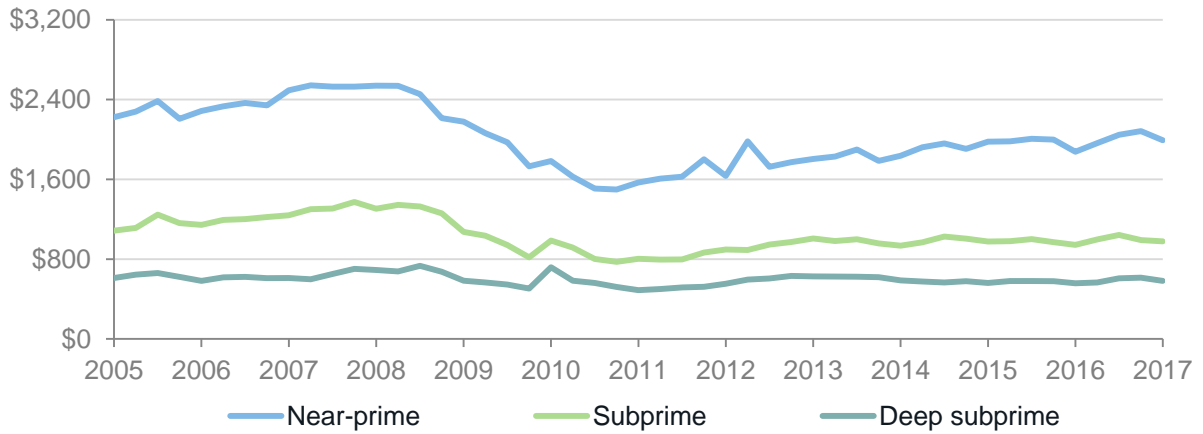


FIGURE 27: AVERAGE CREDIT LINE ON NEW GENERAL PURPOSE ACCOUNTS, LOWER CREDIT SCORES (CCP)



PRIVATE LABEL

Average new credit lines on private label cards have proven remarkably stable over the long-term, as Figures 28 and 29 reflect, with only superprime and, to a lesser extent, prime tiers showing an increase in recent years. For new accounts held by consumers with lower credit scores, both the recession and recovery are all but invisible by this metric.

FIGURE 28: AVERAGE CREDIT LINE ON NEW PRIVATE LABEL ACCOUNTS (CCP)

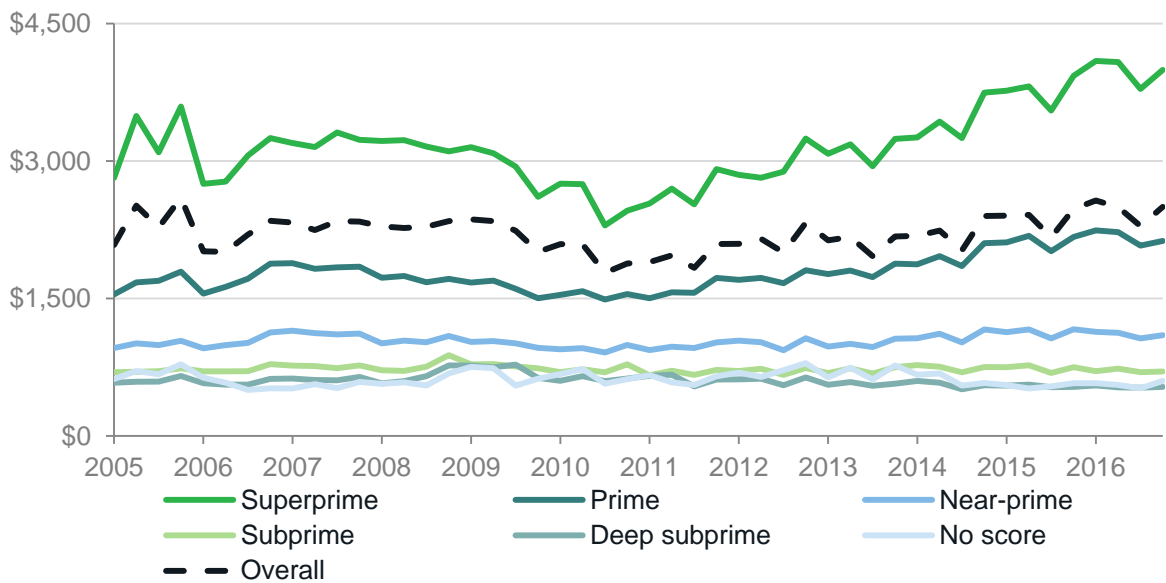
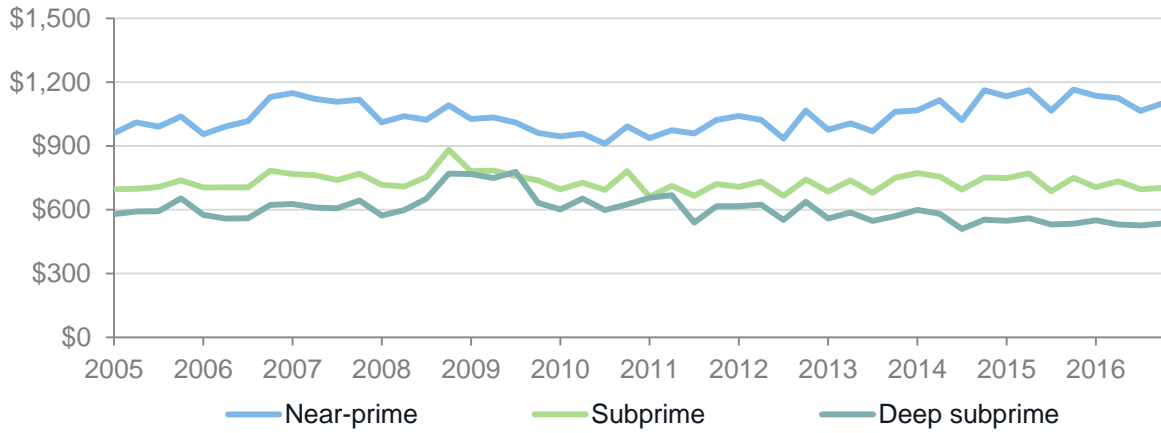


FIGURE 29: AVERAGE CREDIT LINE ON NEW PRIVATE LABEL ACCOUNTS, LOWER CREDIT SCORES (CCP)



4.1.6 Total new credit line

OVERALL

Figure 30 shows the overall amount of new card credit line originated to consumers annually. In 2016, that number exceeded \$450 billion for the first time since 2007, continuing the steady growth in new line since a 2010 trough. Although all credit tiers have seen significant growth in new line since 2010, only the superprime tier has matched the amount of line originated pre-recession.

FIGURE 30: ANNUAL INITIAL CREDIT LINE ORIGINATED (CCP)

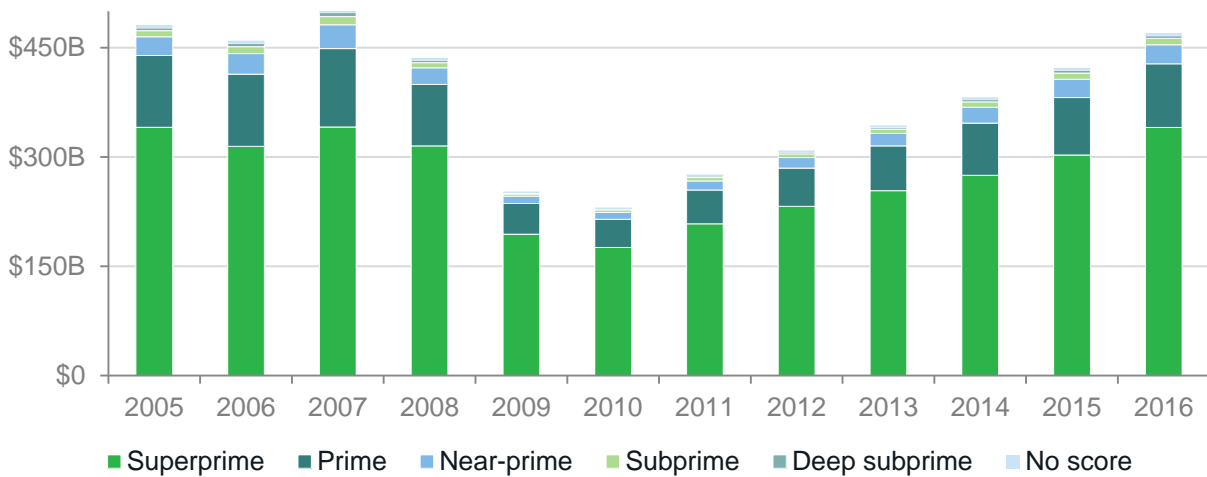
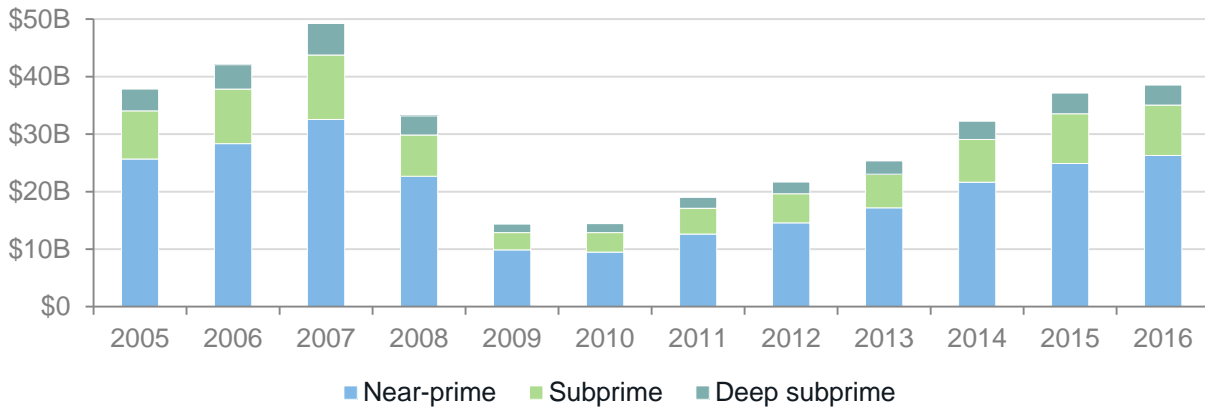


Figure 31 shows the overall amount of line on new accounts originated to consumers with lower scores. That amount exceeded the 2008 level in 2015, and in 2016 exceeded the 2005 mark, though it is still lagging behind 2006 and 2007 totals.

FIGURE 31: ANNUAL INITIAL CREDIT LINE ORIGINATED, LOWER CREDIT SCORES (CCP)



GENERAL PURPOSE

New general purpose account line, which in 2016 represented just under four-fifths of all new line, exceeded 2005 and 2006 levels in 2016. Growth was recorded across all credit score tiers over the past few years, but the biggest driver of growth in overall general purpose line origination came from superprime, which reached its highest level in 2016. Figures 32 and 33 show the relevant data in more detail.

FIGURE 32: ANNUAL INITIAL GENERAL PURPOSE CREDIT LINE ORIGINATED (CCP)

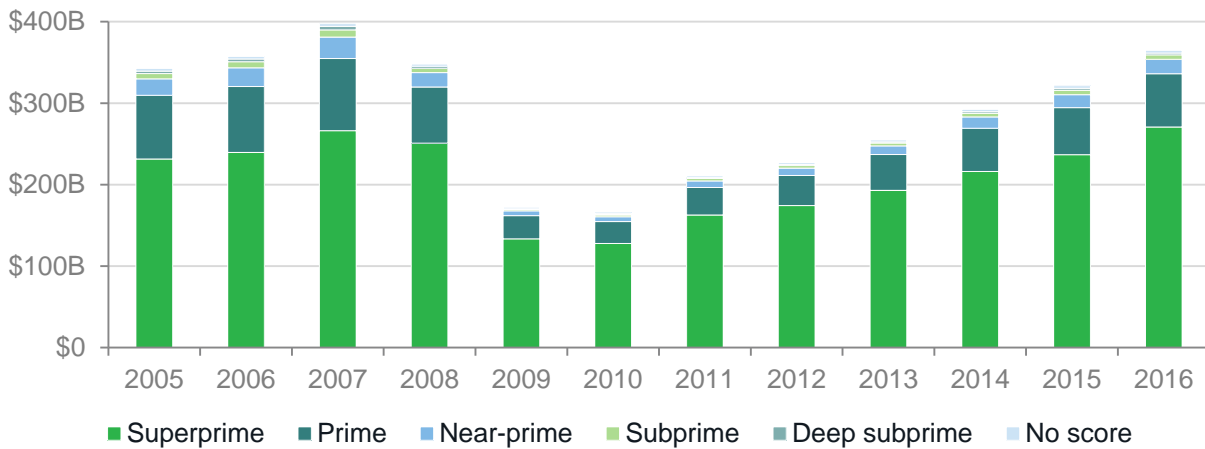
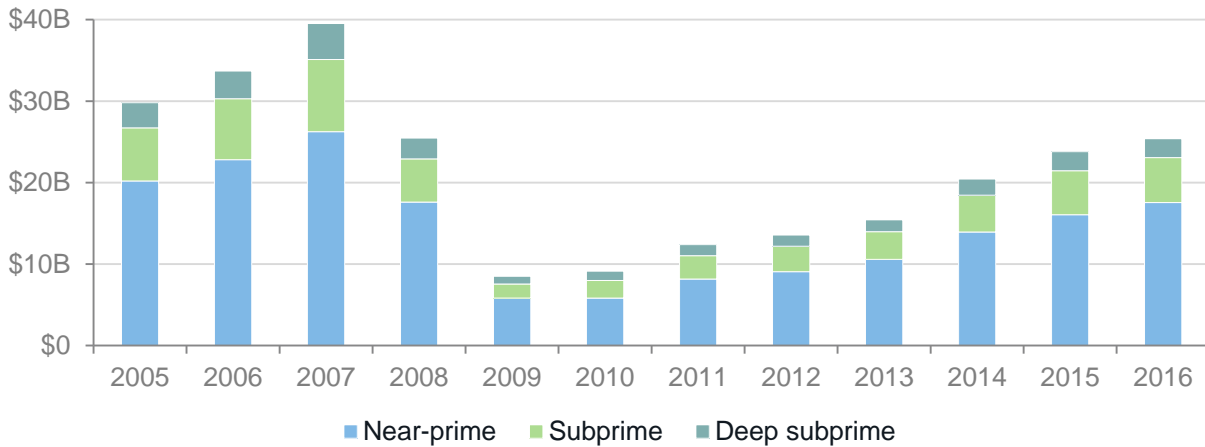


FIGURE 33: ANNUAL INITIAL GENERAL PURPOSE CREDIT LINE ORIGINATED, LOWER CREDIT SCORES (CCP)



PRIVATE LABEL

The private label market presents a different picture. In 2016, total new private label account line exceeded not only 2008 levels but 2006 and 2007 levels as well. This market has seen a shift in composition. The superprime share of new private label account line has declined from around three-quarters pre-recession to around two-thirds in recent years. Meanwhile, the prime share has increased by several percentage points, and the share represented by each of the three lower credit score tiers has doubled since 2005. These data are shown in Figures 34 and 35.

FIGURE 34: ANNUAL INITIAL PRIVATE LABEL CREDIT LINE ORIGINATED (CCP)

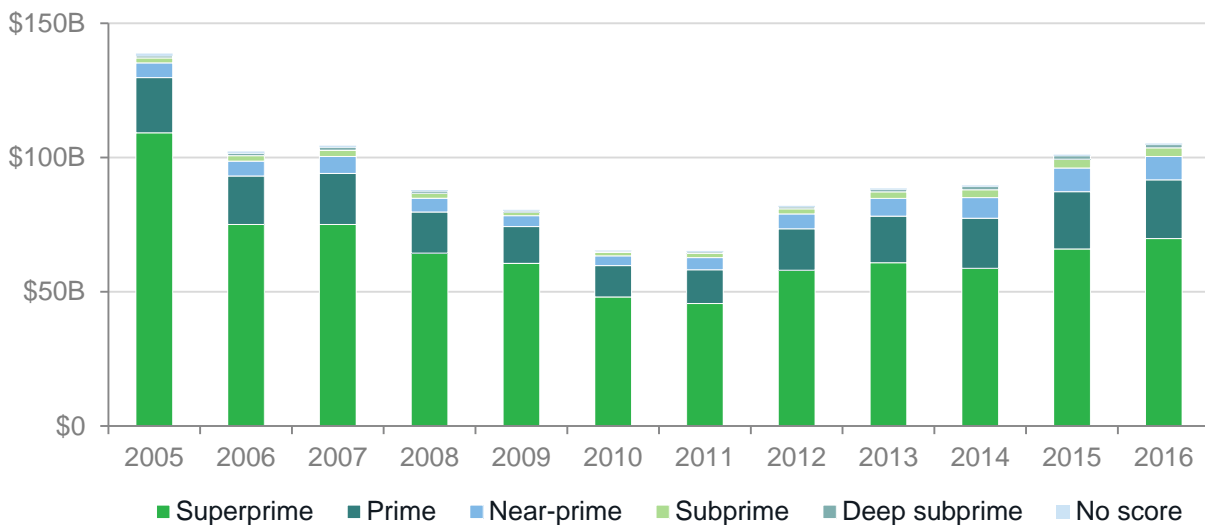
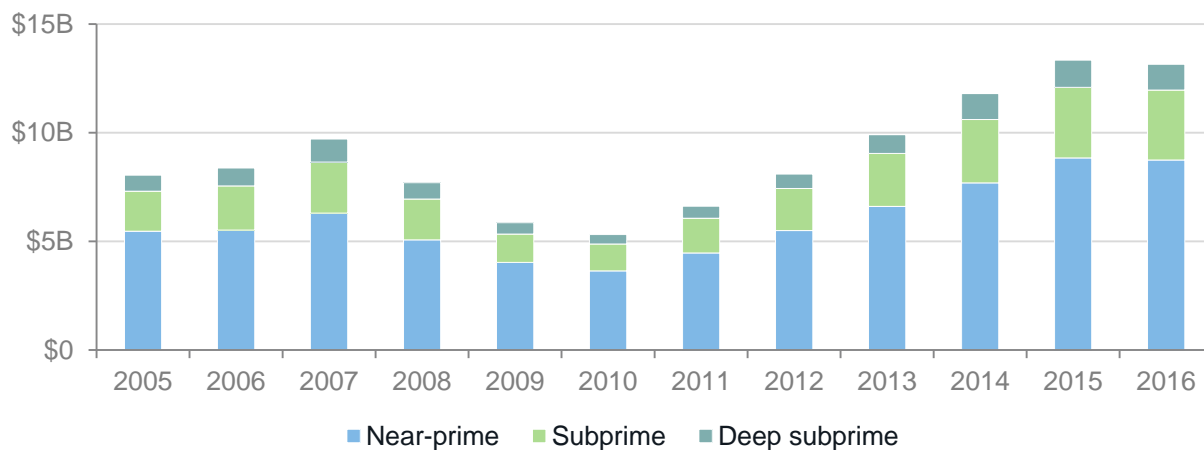


FIGURE 35: ANNUAL INITIAL PRIVATE LABEL CREDIT LINE ORIGINATED, LOWER CREDIT SCORES (CCP)



4.2 Credit lines

4.2.1 Total credit line

OVERALL

The total amount of line on credit cards is a function of the growth in new credit lines as discussed above, attrition in existing lines due to account closures (either voluntarily, by the consumer, or involuntarily, by the issuer) or line reductions, and increases in credit lines on existing accounts. In aggregate, consumers have over \$4 trillion in card credit line as of mid-2017, as shown in Figure 36. This represents an increase of \$0.3 trillion—or 11%—since mid-2005, although total line still remains below its mid-2008 high of \$4.4 trillion.

The increase since 2010 has been steady and experienced by consumers in every credit score tier. Consumers with subprime and deep subprime scores, however, have seen their aggregate credit line increase at less than half the rate of every other tier. Also notable is that between mid-2010 and mid-2017, consumers without credit scores experienced a 99% increase in line. The distribution of total credit line across credit score tiers has been stable since 2010, as Figure 38 shows, with aggregate credit line for consumers with superprime and prime credit scores still comprising 95% of the total as of mid-2017.

FIGURE 36: TOTAL CREDIT LINE (CCP)

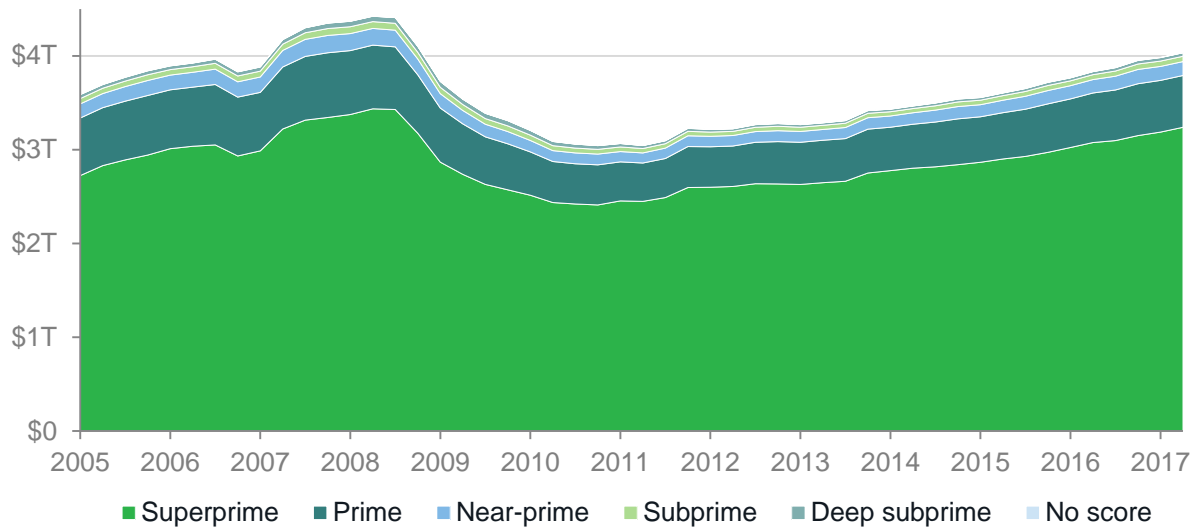


FIGURE 37: TOTAL CREDIT LINE, LOWER CREDIT SCORES (CCP)

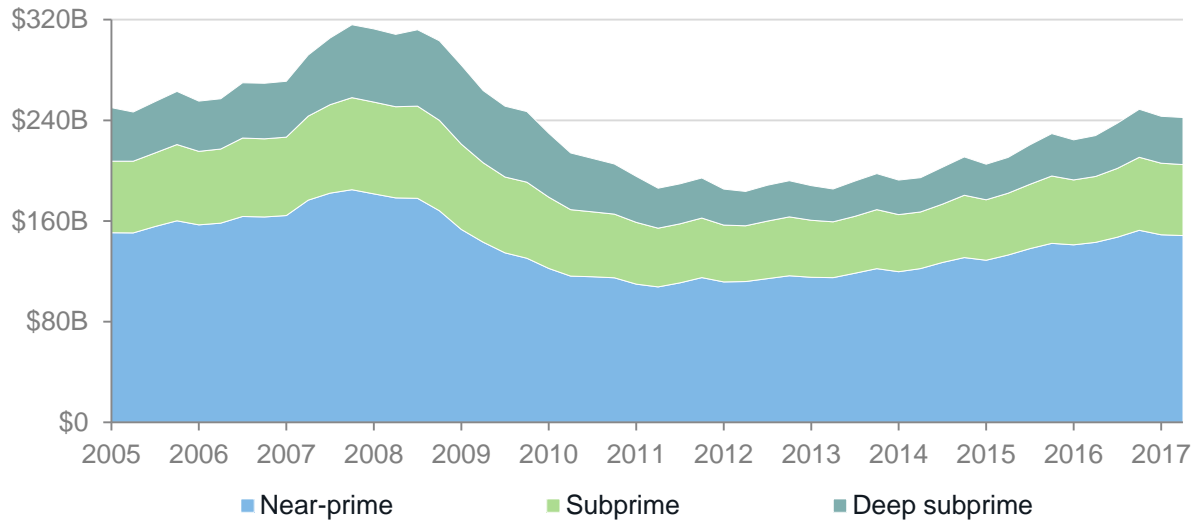
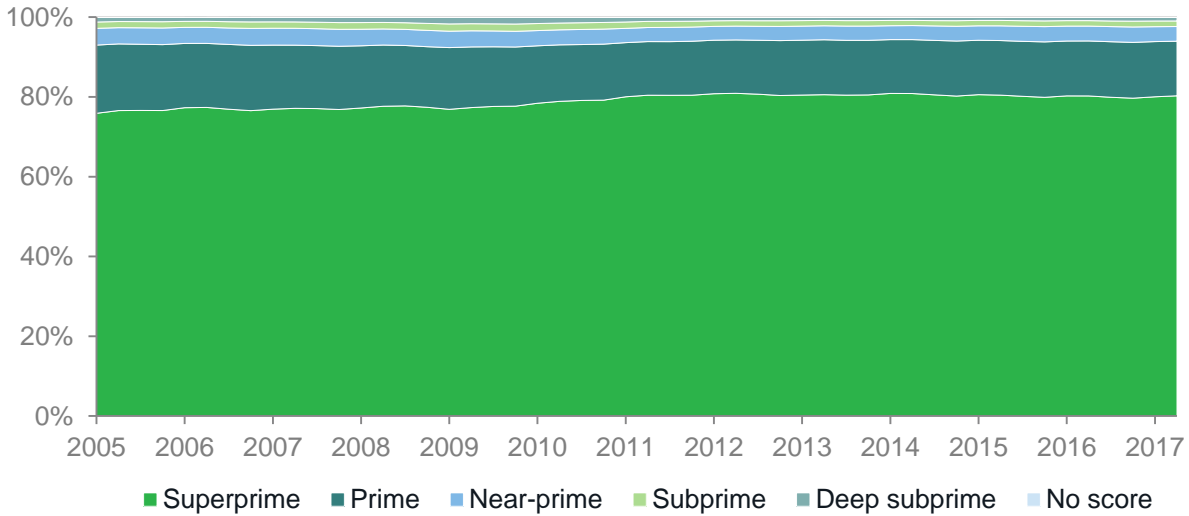


FIGURE 38: SHARE OF TOTAL CREDIT LINE (CCP)



GENERAL PURPOSE

General purpose cards represent most of the line on consumer credit cards, with total line nearing \$3.5 trillion by mid-2017. General purpose line has grown steadily since 2010. Although it does not yet match its pre-recession peak, there has been substantial growth not just overall but within each credit score tier and the total now exceeds the 2005 level. These data are shown in Figures 39 and 40.

FIGURE 39: TOTAL GENERAL PURPOSE CREDIT LINE (CCP)

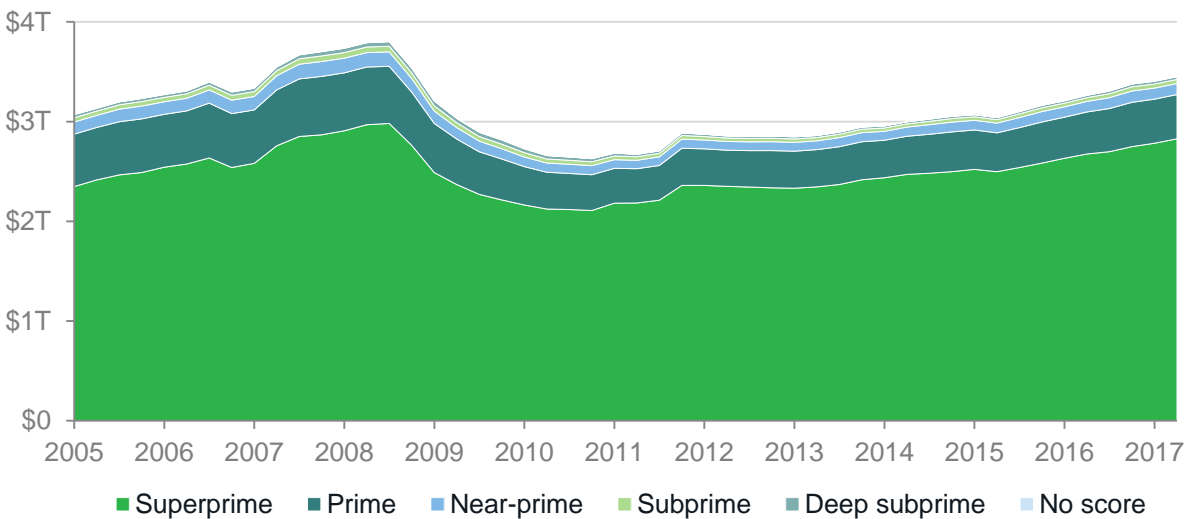
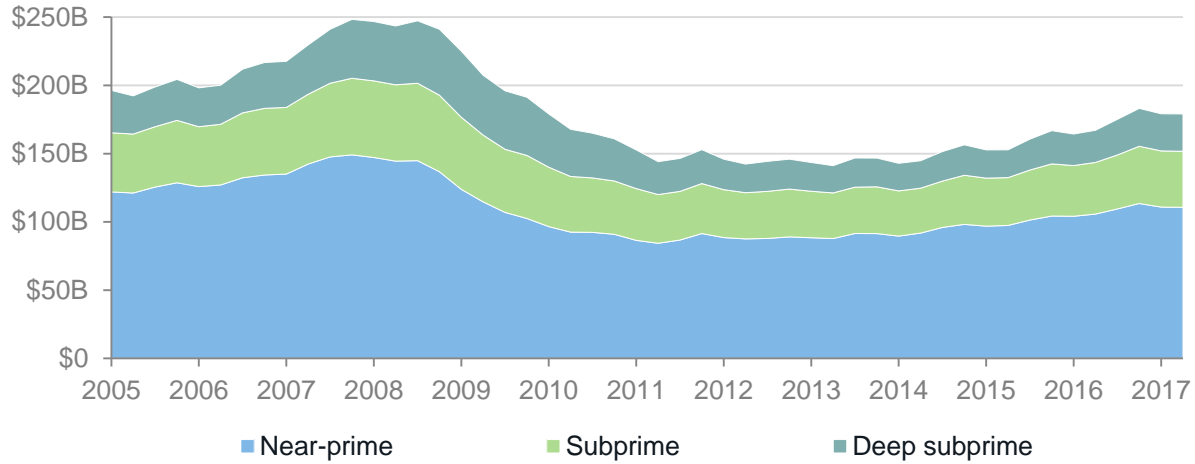


FIGURE 40: TOTAL GENERAL PURPOSE CREDIT LINE, LOWER CREDIT SCORES (CCP)



PRIVATE LABEL

Since mid-2005, private label line has grown 5%, or roughly \$22 billion, but has not yet returned to its previous peak level recorded in 2007. Since the mid-2012 nadir, private label line has grown by nearly 70%, growth experienced more-or-less evenly by every credit score tier. These data are shown in Figures 41 and 42.

FIGURE 41: TOTAL PRIVATE LABEL CREDIT LINE (CCP)

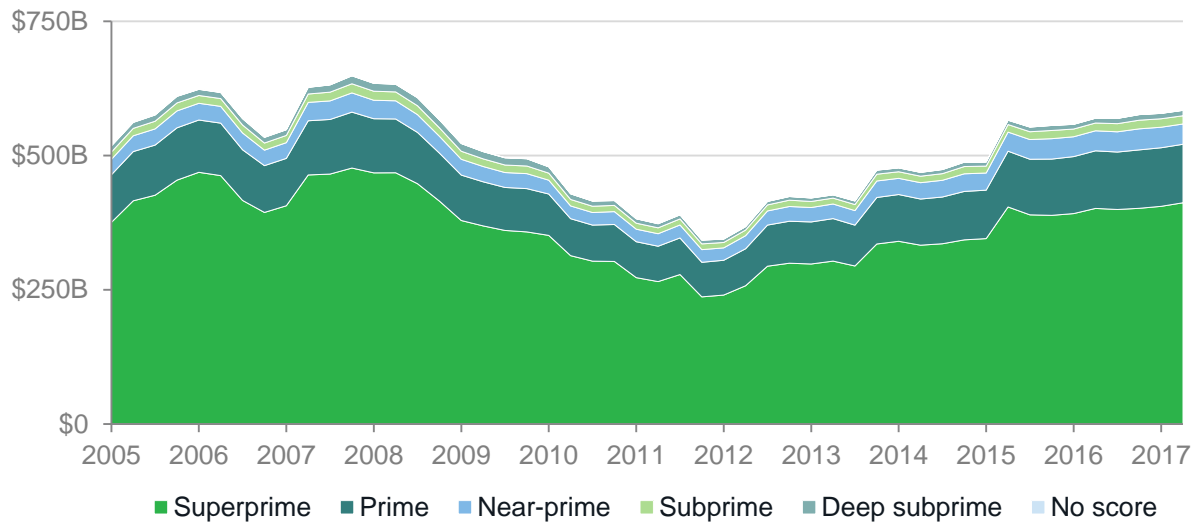
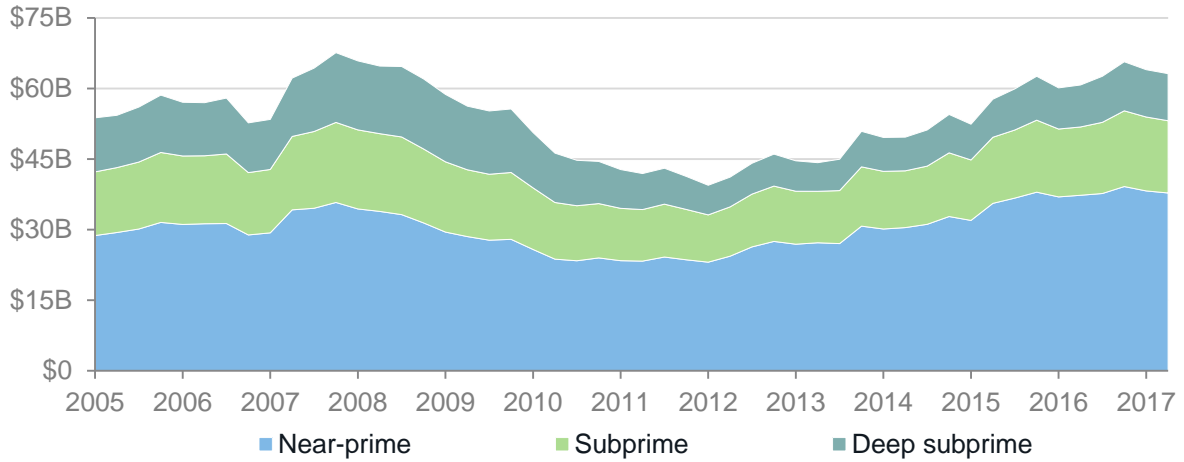


FIGURE 42: TOTAL PRIVATE LABEL CREDIT LINE, LOWER CREDIT SCORES (CCP)

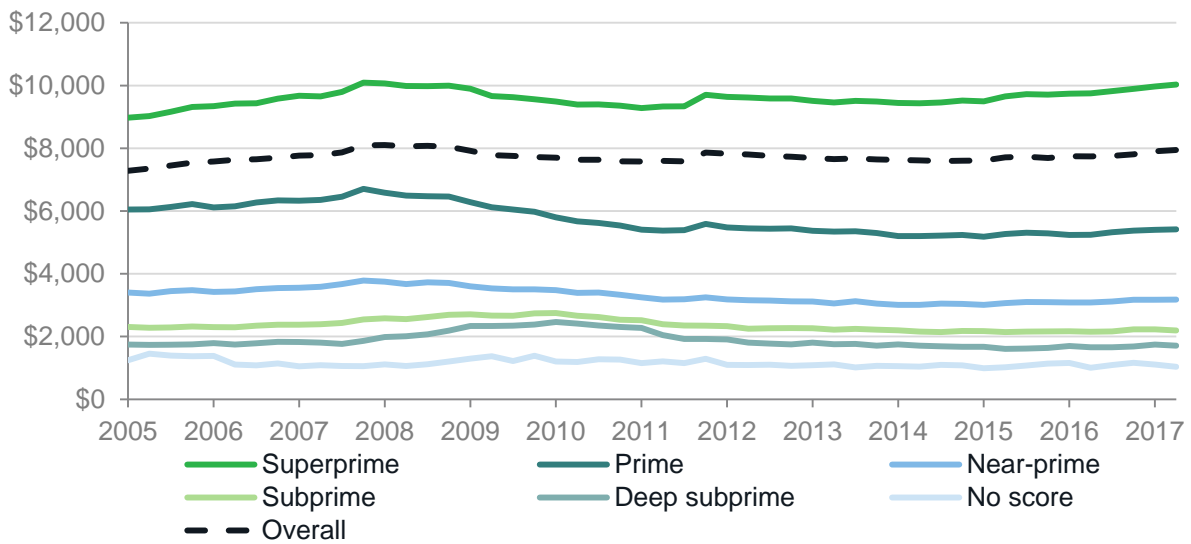


4.2.2 Credit line per account and per consumer

GENERAL PURPOSE

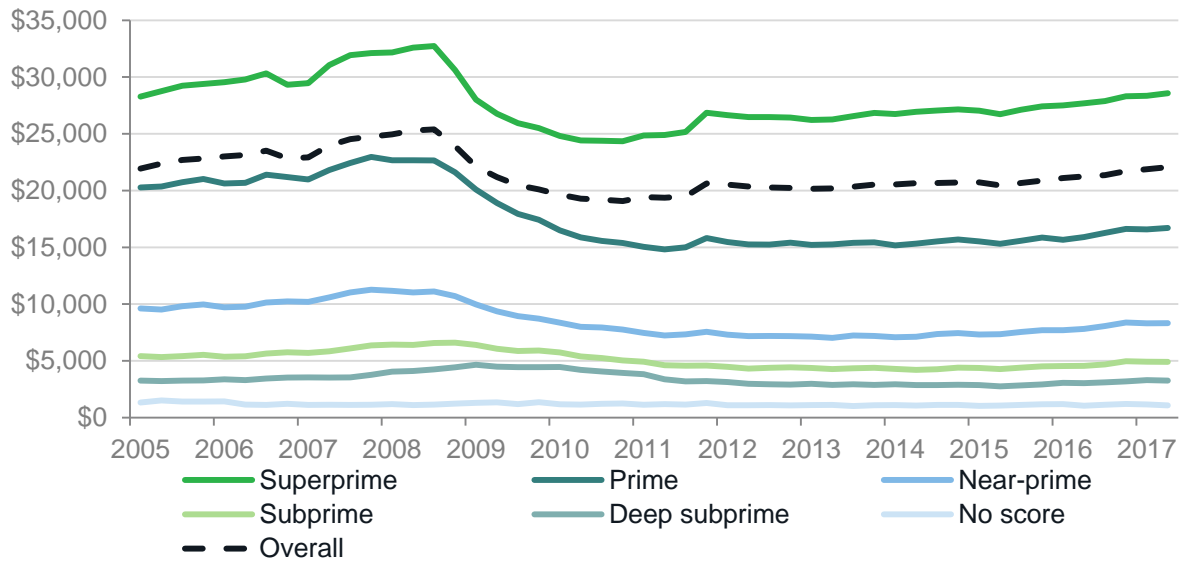
Figure 43 shows that for nearly every credit score tier, average general purpose credit line per account has steadily decreased from pre-recession highs. Consumers with superprime scores, however, have average lines per account only 1% below the late-2007 high and higher than the level in mid-2005.

FIGURE 43: AVERAGE GENERAL PURPOSE CREDIT LINE PER ACCOUNT (CCP)



Among all credit score tiers, general purpose credit line per consumer fell in the period during and following the recession, as shown in Figure 44. At this consumer level, general purpose line began steadily increasing across all credit tiers from 2012 or 2013.

FIGURE 44: AVERAGE GENERAL PURPOSE CREDIT LINE PER CONSUMER (CCP)



PRIVATE LABEL

Figure 45 shows that the average line on private label cards has grown steadily across all credit tiers since 2013. Figure 46 shows that average private label credit line per consumer has exhibited a path similar to average private label line per account. Between the final quarter of 2016 and the second quarter of 2017, both of these metrics reached the highest level we can observe, both overall and for each credit score tier.

FIGURE 45: AVERAGE PRIVATE LABEL CREDIT LINE PER ACCOUNT (CCP)

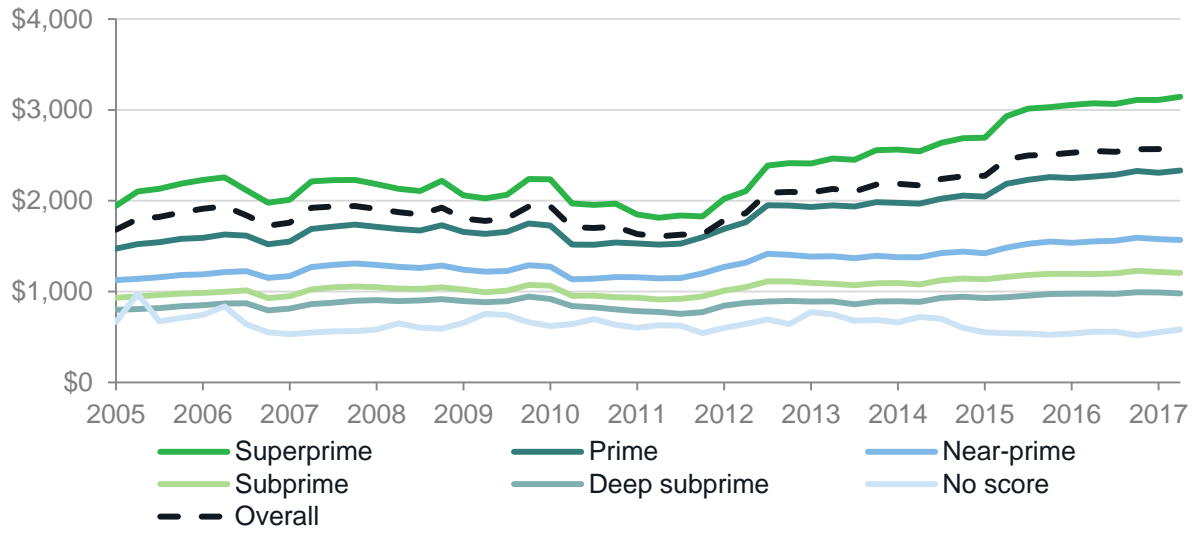
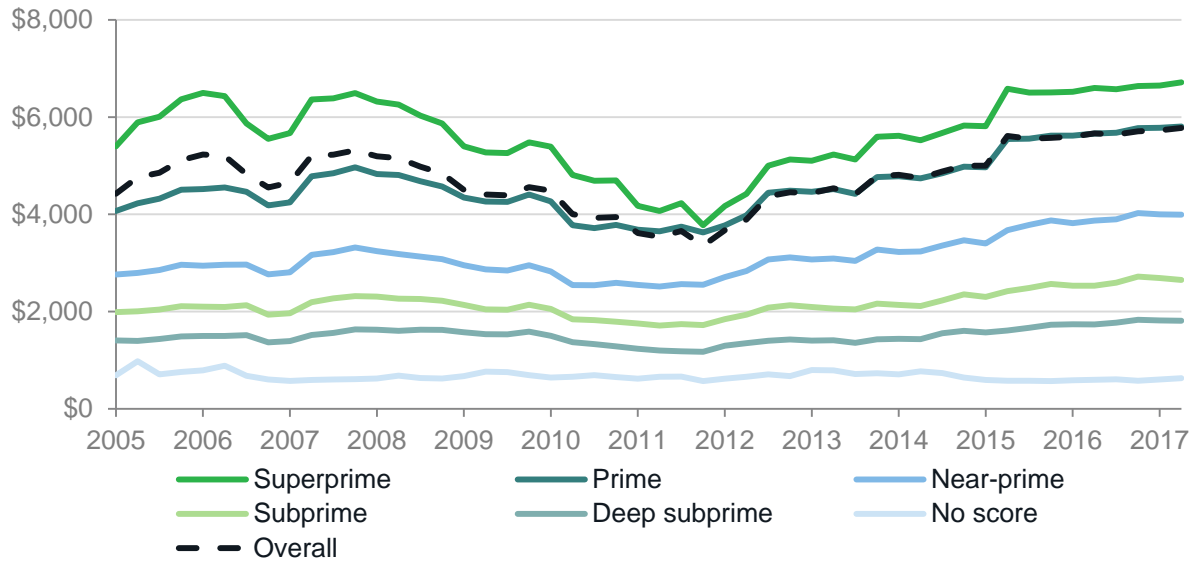


FIGURE 46: AVERAGE PRIVATE LABEL CREDIT LINE PER CONSUMER (CCP)

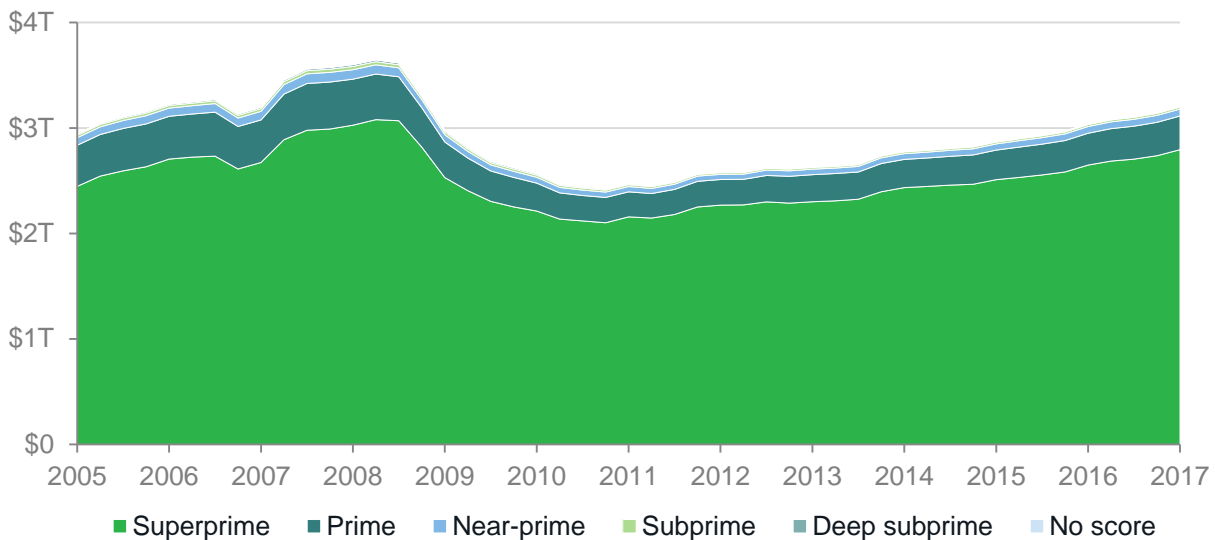


4.2.3 Unused line and utilization

UNUSED LINE

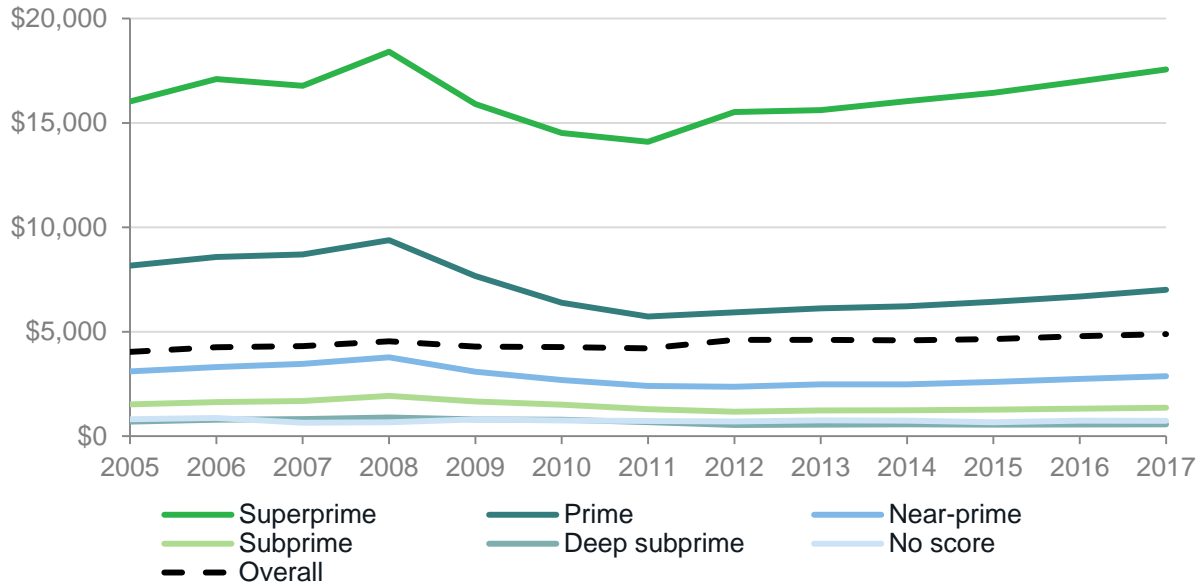
Most credit available to consumers on credit cards goes unused. Even as balances continue to grow, consumers collectively have access to \$3.2 trillion in unused line, more than they have had at any point since the end of 2008 and more than they had in mid-2005. As shown in Figure 47, since unused line bottomed out in late 2010, it has grown by nearly 30%. Each credit score tier has seen growth of at least 20% in unused line since its respective low point.

FIGURE 47: TOTAL UNUSED CREDIT LINE (CCP)



As shown in Figure 48, consumers with superprime credit scores have significantly higher volumes of unused credit on average than consumers in other credit score tiers. In the second quarter of 2017, average unused credit for consumers with superprime scores exceeded \$17,000, a figure more than double that of consumers with prime scores. Since 2012, consumers in most tiers have seen their unused line increase by double-digit percentages. The sole exception is consumers with deep subprime scores, who have seen almost no change in average unused credit line, despite the net increases in private label credit line observed in Figure 46 above.

FIGURE 48: AVERAGE UNUSED CREDIT LINE (CCP)



UTILIZATION

Utilization rates, the share of credit line accounted for by outstanding balances, are a key metric in assessing the dynamics of the credit card market. In particular, it is among the most useful barometers of the balance between credit supply and credit demand. If increases in consumer demand in the aggregate exceed the willingness of issuers to offer commensurate increases in available line, either through the origination of new accounts or by increasing existing lines, utilization will increase. If the opposite is true, utilization decreases.²⁵

²⁵ Economists have suggested that consumers’ utilization preferences are quite stable, such that increases in credit line accompany increases in debt. See, e.g., Scott Fulford & Scott Schuh, *Why is Credit Utilization Stable? Precaution, Payments, and Credit Cards Over the Business Cycle and Life Cycle*, Consumer Fin. Prot. Bureau (Dec. 2016), available at <https://huntsman.usu.edu/qspss/files/manuscripts/manuscripts-2017/Fulford.pdf>.

FIGURE 49: UTILIZATION (CCP)

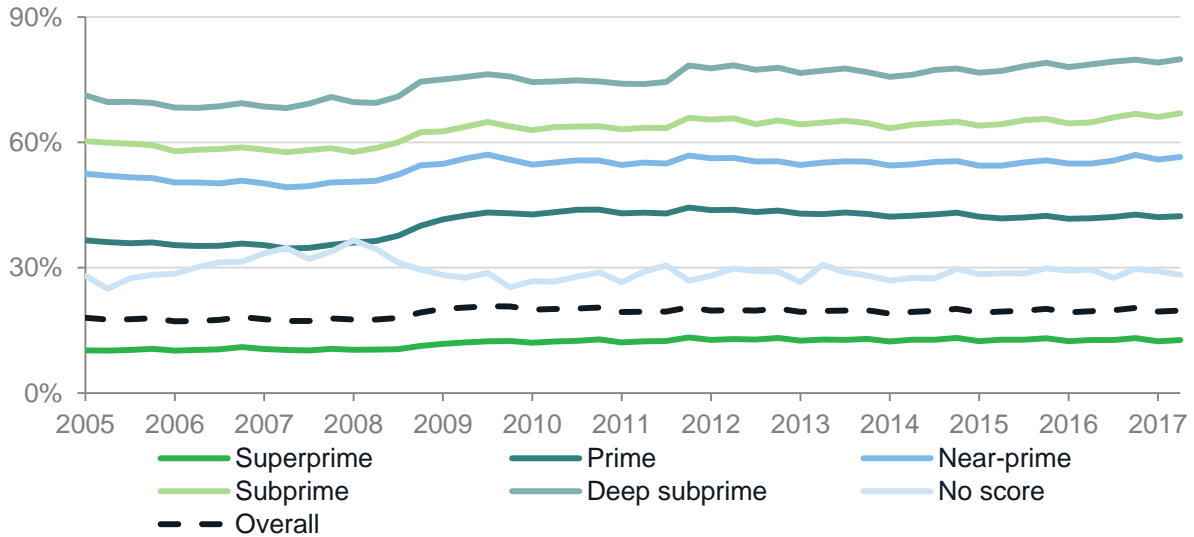


Figure 49 examines average utilization for each credit score tier, as well as for all consumers. Utilization has been stable since 2009 to 2010, both overall and within each credit score tier. This is notable especially in light of evidence later in this section that issuers increasingly rely on line management as a risk management tool. Figure 50 shows very similar results for average general purpose utilization.

FIGURE 50: GENERAL PURPOSE UTILIZATION (CCP)

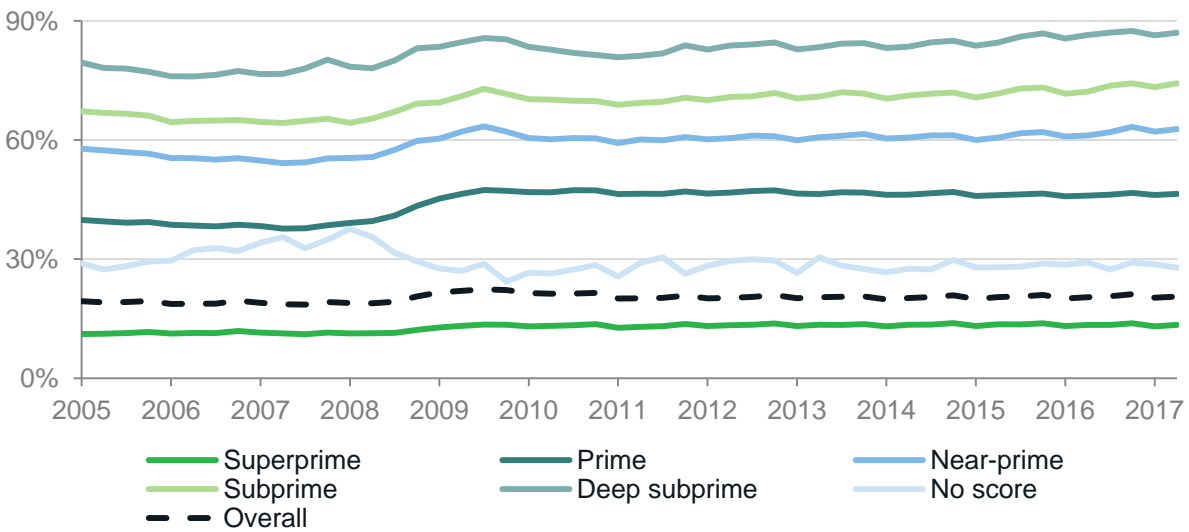


FIGURE 51: PRIVATE LABEL UTILIZATION (CCP)

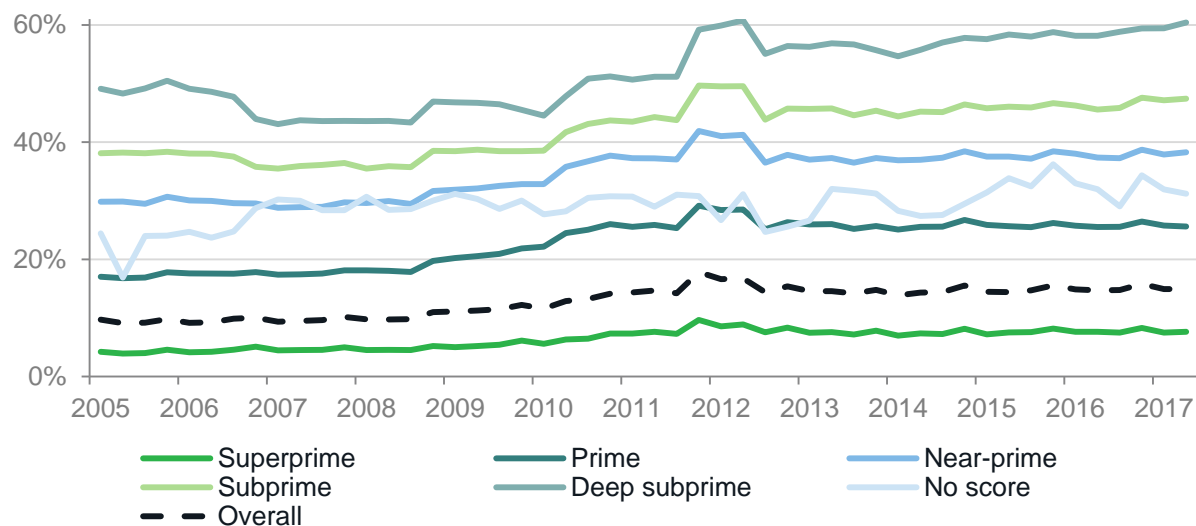


Figure 51 shows that average private label utilization has overall been stable since 2013. Average utilization on both private label and general purpose cards has settled into higher levels than either displayed over the period from 2005 through 2009. All credit score tiers have lower private label utilization than they do general purpose utilization.

4.2.4 Credit line changes

Credit lines are not static. Issuers can increase or decrease them—without consumer consent, if the issuer so chooses. Following the CARD Act, however, some credit line increases (but not decreases) are blocked by law if they cannot satisfy ATP requirements.²⁶

In the case of credit line increases (“CLIs”), issuers sometimes increase lines in response to consumer requests. These are “reactive” credit line increases (“RCLIs”). Sometimes issuers increase a line even without the consumer’s request. These are “proactive” credit line increases (“PCLIs”). In almost all cases credit line decreases (“CLDs”) are proactive, and made in response

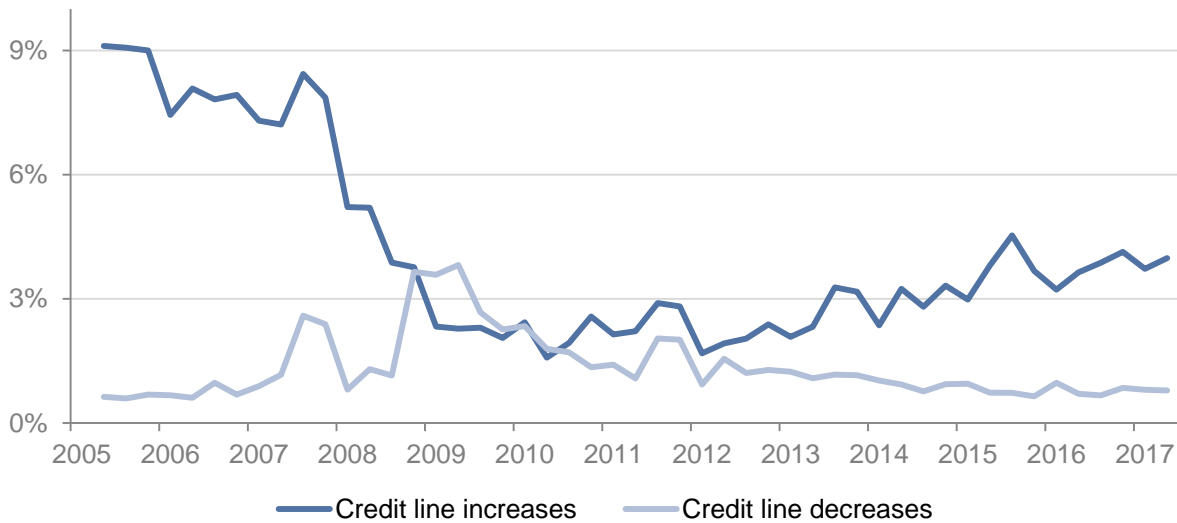
²⁶ See 15 U.S.C. § 1665e.

to a perceived increase in an account’s credit risk or a shift in an issuer’s overall risk appetite. This section examines CLI and CLD rates, and compares RCLI and PCLI practices.

OVERALL

Figure 52 shows the quarterly incidence of line increases and decreases on general purpose accounts.²⁷ Overall, CLI incidence has increased substantially in recent years after a severe reduction through the recession.²⁸ The incidence of CLDs rose sharply during the recession, but has now declined to roughly its pre-recession level.

FIGURE 52: QUARTERLY CLI AND CLD INCIDENCE FOR GENERAL PURPOSE ACCOUNTS (CCP)



²⁷ Credit lines are much more rarely increased or decreased on private label cards. Fluctuations in CLI and CLD rates on these accounts, therefore, are less indicative of broader trends in the availability of card credit.

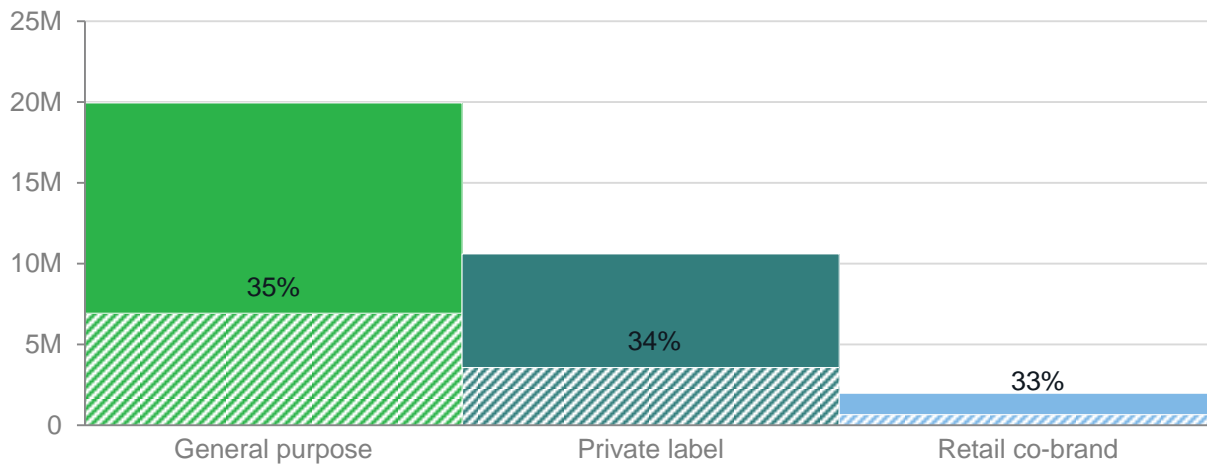
²⁸ In past reports, we derived our rates of credit line increases and decreases from data in which issuers explicitly reported cycles during which credit lines were increased or decreased. The CCP does not include such a “flag.” As a result, we constructed this measure from the data, comparing credit lines from one cycle to the next. This change in methodology, as well as shifting to a new data source that captures effectively all of the market, means our measure of CLI and CLD rates may not align perfectly with measures we reported in our 2013 and 2015 Reports.

REACTIVE CREDIT LINE INCREASES

Consumers apply for millions of RCLIs every year, as shown in Figure 53. Because the CCP does not distinguish between RCLIs and other credit line increases, and does not report the total number of applications for credit line increases, we rely here on our MMI data, which we again note represent less than the full market. In our 2015 Report, which also relied on MMI data, we found that the overall approval rate for RCLI requests was 37% across 2013 and 2014. Around 3% of such applications were denied for ability-to-pay (“ATP”) reasons.²⁹

Our current data show a slightly lower approval rate of 34% for RCLI requests, with relatively little variation across card type. The ATP denial rate for RCLIs also fell in this later period, comprising just 2% in 2015 and 2.4% in 2016. These rejections were concentrated in the general purpose and retail co-brand space. Only 0.5% of all private label RCLI requests were rejected for ATP reasons. In almost all cases, RCLI rejections were driven by the consumer failing to clear the issuer’s substantive ATP thresholds rather than its ATP information requirements.³⁰

FIGURE 53: RCLI REQUESTS AND APPROVALS, 2016 (SHADED AREA REPRESENTS APPROVALS) (MMI)



²⁹ 2015 Report, at 114. This is an ATP denial rate, not an ATP rejection share. See Section 4.1.3.

³⁰ An issuer will reject a new account application or a CLI for ATP reasons in two circumstances. First, the issuer lacks sufficient information about the consumer to assess whether or not they have the requisite ATP. Second, the issuer has enough information to do this, but the information shows that the consumer lacks the requisite ATP.

PROACTIVE CREDIT LINE INCREASES

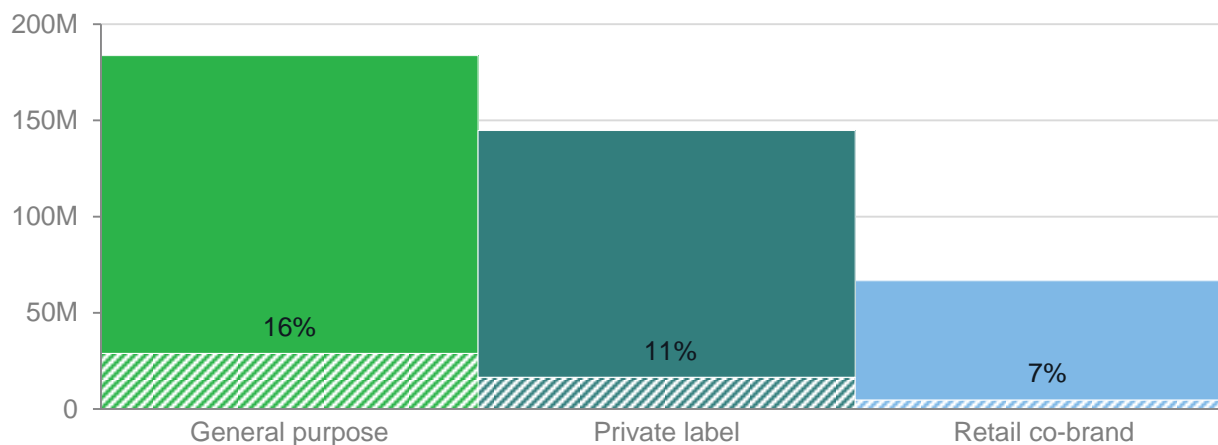
Most issuers do not increase credit lines only when qualified consumers request more credit. Instead, they routinely assess their portfolios to identify accounts that would profitably support a proactive credit line increase—consistent with the issuer’s risk tolerance, revenue projection, and ATP requirements. Accounts that meet predetermined issuer tests and conditions are automatically granted a PCLI. These programs are large in scope. In 2016 alone, issuers reviewed accounts for PCLI eligibility several billion times.

Issuers apply a variety of inputs and thresholds to determine PCLI eligibility. They often consider account use and payment behaviors, as well as projected risk and revenue potential under the increased line scenario, and the CLI record of the account. The issuer may also check for any updates to the consumer’s credit score and self-reported income.

PCLI practices vary substantially across issuers. The primary driver of this variance is the frequency with which issuers assess accounts for PCLI eligibility. Most issuers review accounts at regular intervals, with once a month being most common. Some issuers review more frequently than that. Given these differences across issuers, we primarily look at data at the account level, and we count an account as being reviewed for a PCLI if it was reviewed at least once during the calendar year, regardless of how many times any given account was actually reviewed. Likewise we count it as being awarded a PCLI so long as it was awarded at least one during the calendar year.

As Figure 54 shows, PCLI programs have a larger scope and effect than RCLI programs. Over the course of 2016, more than 12 times as many accounts were reviewed for PCLIs as requested RCLIs. While the share of reviewed accounts that were extended a PCLI at least once was lower than the RCLI approval rate, the scope of these programs still means that the total number of PCLIs approved in 2016 was well over five times the number of RCLIs. The gap between RCLI and PCLI incidence is large for all card types. It is starkest, however, for private label and retail co-brand accounts.

FIGURE 54: ACCOUNTS REVIEWED FOR A PCLI, 2016 (SHADED AREA REPRESENTS ACCOUNTS GRANTED A PCLI) (MMI)



The effect of ATP requirements on PCLI programs is larger than it is on RCLI programs. As we noted in our previous report, some—but not all—prudential regulators restrict issuers from using “modeled income” for ATP purposes. Using income models, some issuers can generate an income estimate even in the absence of reported income. Others, for supervisory reasons, cannot.³¹ Issuers that cannot use modelled income can only approve PCLIs if they can secure reported income—for example, by asking the consumer to report their income in order to take advantage of a potential line increase. Although issuers can generally obtain reported income from consumers at origination or if the consumer affirmatively requests a credit line increase, maintaining a regular flow of self-reported income to support potential PCLIs is much more challenging, at least for some issuers. As a result, our 2015 Report noted that issuers that were not subject to modelled income restrictions reported a much smaller overall effect of ATP requirements on their PCLI programs.³²

Our current data generally confirm the relevant findings from our prior report. Specifically, we find that the lack of consumer-reported income information is the cause of more than 90% of

³¹ See 2015 Report, at 115-117.

³² *Id.* at 116. Some commenters stated that this issue continues to impede the granting of PCLIs. See, e.g., ABA Comment Letter, at 7-8.

ATP-driven PCLI declines. Our 2015 Report also noted evidence that issuers may be finding methods to negotiate this challenge more effectively.³³ The evidence available to us for this report suggests this trend has continued to the present, as the ratio between the number of PCLI reviews that could not proceed due to lack of income information and the number of PCLIs awarded was significantly smaller in 2015 and 2016 than it was in 2013 and 2014.

4.2.5 Credit line management

As noted in Section 3, the CARD Act restricts various forms of repricing and controls penalty fees, which are both forms of pricing that can be used by issuers to respond to revealed risk post-origination.³⁴ Although the Act limited issuers' ability to use those specific tools for risk management, issuers may have replaced them with another risk management tool—specifically, extending smaller credit lines to borrowers at origination, then increasing those lines over time as borrowers demonstrate good payment behavior.³⁵ We assess this possibility empirically in two ways, finding some evidence to support it.

First, we look at the share of all credit line increases awarded to newer accounts. Issuers generally only rely on income stated at the time of application for up to a year. If an issuer is using line to control risk, they will have a one-year window post-origination to issue PCLIs to “top up” smaller initial lines without obtaining new income information.³⁶ Second, we review

³³ See 2015 Report, at 116-117.

³⁴ Some critics of the CARD Act contended that it left card issuers with too few tools to manage risk. See, e.g., ABA Comment Letter, at 2. Accordingly, some commenters contended that the CARD Act has forced issuers to control risk by limiting credit, whether in terms of originating fewer accounts or in originating smaller lines. See, e.g., ABA Comment Letter, at 4-6; Auriemma Comment Letter, at 6-9. CARD Act proponents contend that issuers relied on these kinds of tools at the *expense* of adequate upfront risk management, resulting in lax underwriting and unpredictable back-end costs to consumers.

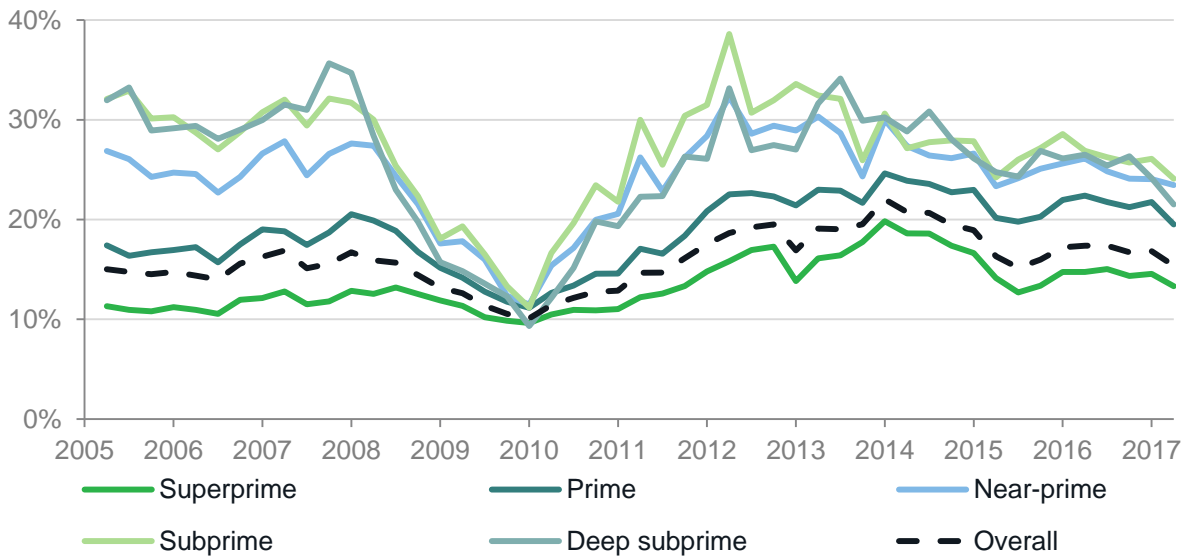
³⁵ One leading industry association stated that line management of this kind “has replaced [pre-CARD Act repricing practices],” and “has helped issuers expand access to credit while managing risk.” See ABA Comment Letter, at 5.

³⁶ If they can obtain refreshed income from some source (such as the consumer), they may be able to extend this window, or open additional windows, beyond this point. But since they cannot be assured they will succeed in this,

trends in average line on accounts that have existed long enough to reveal more risk information than is true for new accounts, and compare them to lines near origination.

Figure 55 below shows that the first-year share of all CLIs has generally been somewhat higher in recent years than in the period before the recession and the implementation of the CARD Act.³⁷ The first-year CLI share has always been high among lower score tiers. The growth in the overall first-year CLI rate, however, has been driven by increases in higher score tiers. This suggests that, if issuers are using line management as a risk management tool, the frequency of credit line increases may only provide partial insight into this practice.

FIGURE 55: SHARE OF CREDIT LINE INCREASES GRANTED TO ACCOUNTS LESS THAN ONE YEAR OLD (CCP)



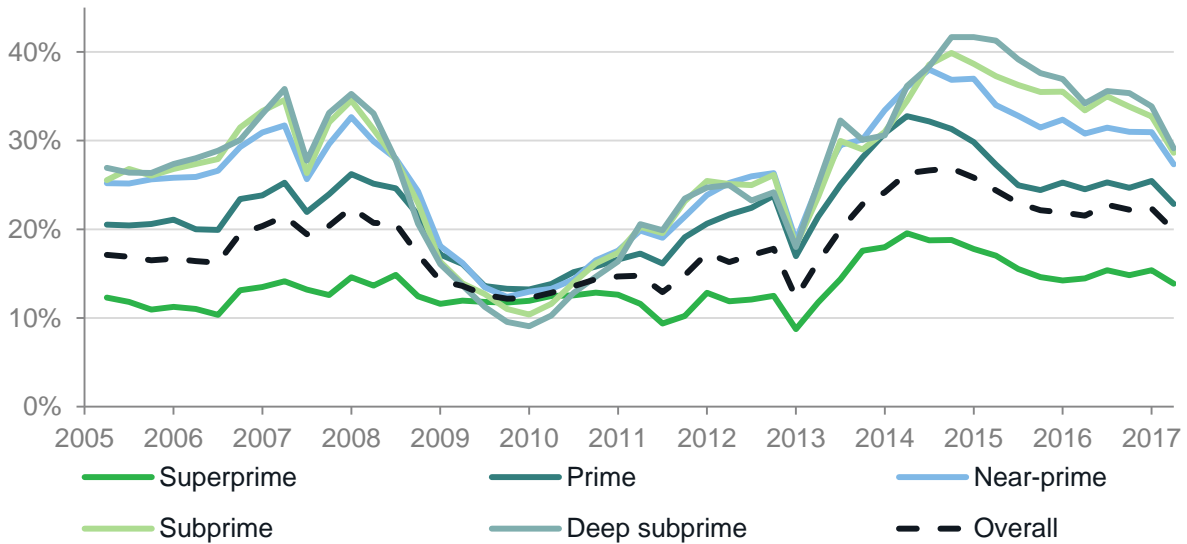
We also observe the parallel metric for credit line decreases. In Figure 56 below, we indeed observe that rates of first-year CLDs are higher both overall, and for each credit score tier, than

all other factors being equal, one would expect issuers to find it easier to increase lines in the first year of an account's life rather than in later years.

³⁷ The figure does not—because the CCP data do not let us—differentiate RCLIs from PCLIs. Given that PCLIs consistently make up an overwhelming share of all CLIs, however, this is only a minor concern.

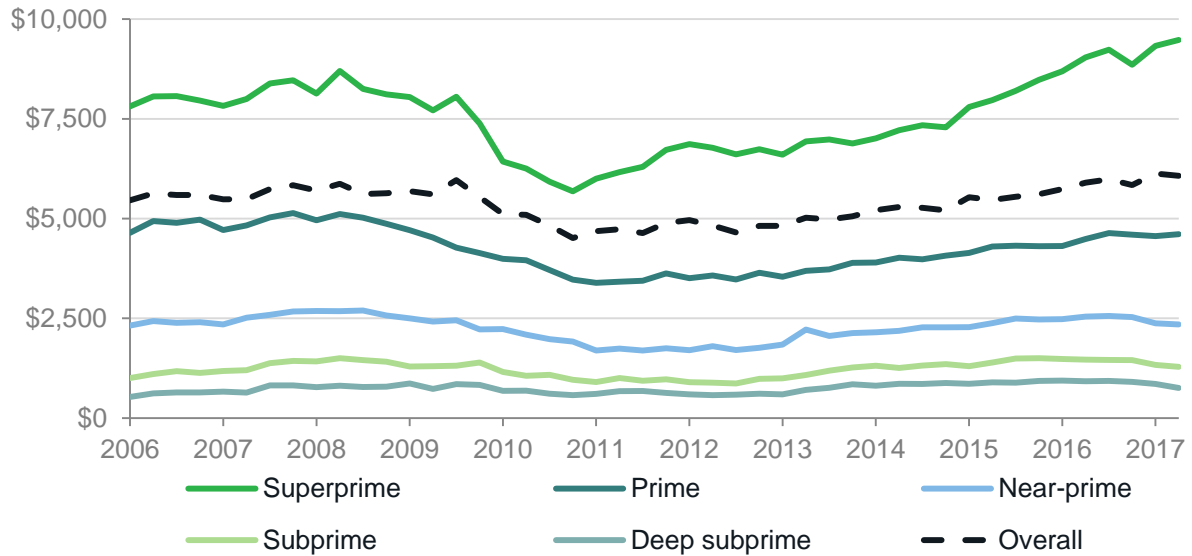
before the recession and the CARD Act, though again not starkly so. The high rates we observe in earlier periods, combined with the higher overall incidence of CLDs we observed above in the years surrounding the recession, lead us to interpret this with some caution.

FIGURE 56: SHARE OF ALL CREDIT LINE DECREASES OCCURRING ON ACCOUNTS LESS THAN ONE YEAR OLD (CCP)



We then turn to observe average lines on general purpose accounts that are exactly 13 months old—just past the one-year mark. We find that, while average *new* general purpose lines for each credit score tier have generally not returned to pre-recession levels (despite recent growth), average *13-month-old* lines did so by mid-2017 for consumers in every credit tier. In fact, average 13-month-old lines for all three lower credit score tiers exceed their 2006 levels even as average new lines lag those levels for all three tiers. This result appears to show some support for the notion that credit line management is playing a larger role in risk management than before the CARD Act and the recession.

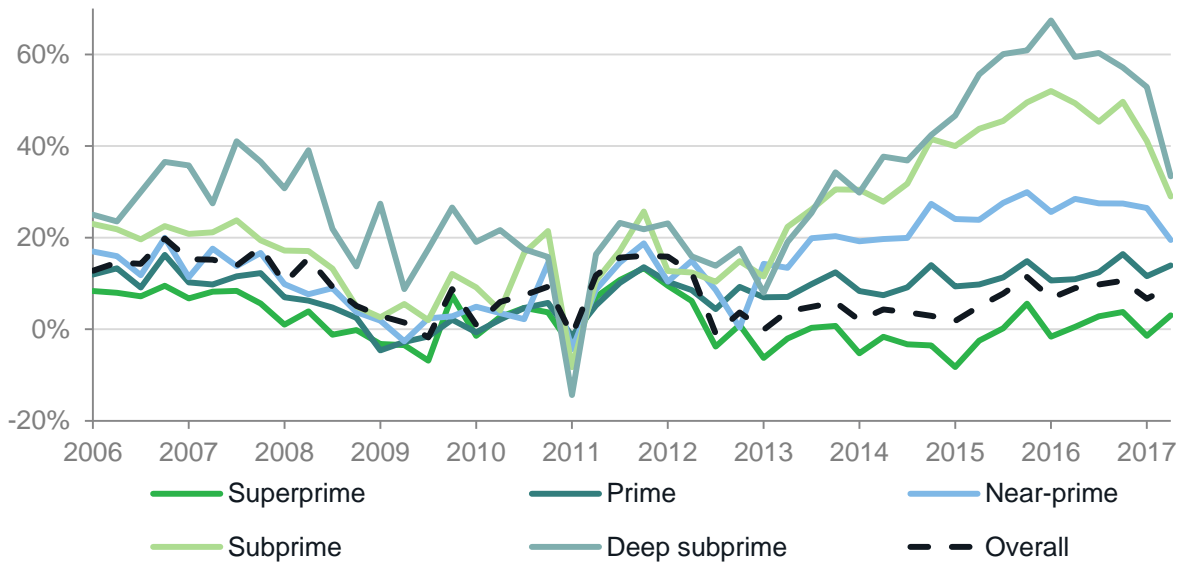
FIGURE 57: AVERAGE CREDIT LINE ON 13-MONTH-OLD GENERAL PURPOSE ACCOUNTS (CCP)



Our final method for examining this practice compares average 13-month-old lines with average new lines during the period those lines were originated. For example, we compare average 13-month-old lines in the second quarter of 2017 with average new lines in the second quarter of 2016.³⁸ We find that that this measure has ballooned in recent years, especially for consumers in the lower score tiers, though prime lines have seen some increase by this measure as well. The relevant data are in Figure 58.

³⁸ Our method here does not account for those accounts that have closed or charged off during the intervening year. This makes our measure only illustrative, not dispositive.

FIGURE 58: AVERAGE CREDIT LINE ON 13-MONTH-OLD GENERAL PURPOSE ACCOUNTS, RELATIVE TO AVERAGE CREDIT LINE ON NEW ACCOUNTS ORIGINATED 13 MONTHS PRIOR (CCP)



While only suggestive, these findings appear to support the possibility that in recent years issuers are relying more on line management to manage their risk. Certainly, the evidence provides no reason to doubt such a possibility.

5. Credit card issuer practices

In the CARD Act, Congress directs the Bureau to review “the terms of credit card agreements and the practices of credit card issuers” and “the effectiveness of disclosure of terms, fees, and other expenses of credit card plans.”¹ This is a broad mandate. In the past, the Bureau has met it by focusing on a number of specific disclosures and other practices. Thus, our 2013 and 2015 Reports have noted indications of the CARD Act’s effect on cardholder agreements and periodic statements; the length and readability of cardholder agreements; risk-based pricing and repricing; the variance in and prevalence of various pricing practices, including grace periods, late fees, minimum payment structures, and minimum finance charges; digital account servicing; issuer provision of credit scores to cardholders; and practices relating to the CARD Act’s ability-to-pay provisions. In addition, our 2015 Report included a number of separate sections that looked at deferred interest promotions, credit card rewards, and debt collection. These sections also addressed that broad mandate.

For this report’s iteration of this section, we again select several topics under the “terms, practices, and disclosure” mandate for additional review. Two of those topics—digital account servicing and issuer provision of credit scores—extend analyses from our 2015 Report. We also cover two additional topics: balance transfers and how complicated credit card products are. In addition, this report contains three practice-specific sections: one on products marketed to consumers who lack prime scores; another on third-party comparison sites; and a final one on debt collection. Debt collection, too, is a repeat focus from our 2015 Report.

5.1 Digital account servicing

As we discuss throughout this report, digital tools, platforms, and media are not just increasing their share of activity throughout the existing credit card lifecycle—in many ways, they are

¹ 15 U.S.C. § 1616(a)(1)-(2).

reshaping that lifecycle.² The effect of digital tools is particularly strong and clear in account servicing, which is central to the cardholder experience.

In this section, we draw on MMI data to examine how consumers use digital account servicing platforms—online account servicing portals (“online portals”) and smartphone-based account servicing applications (“mobile apps”). Many important aspects of the consumer digital experience are difficult to quantify. As a result, we conclude this section by briefly reviewing some recent developments qualitatively.

Note that this section also relies on the three-way distinction between “general purpose,” “private label,” and “retail co-brand” that we discuss in greater detail in Section 4.1.2. We will not repeat that definitional discussion here, but we will note that this means that the term “general purpose” in this specific section, Section 5.1, differs in meaning from most of the rest of the report.

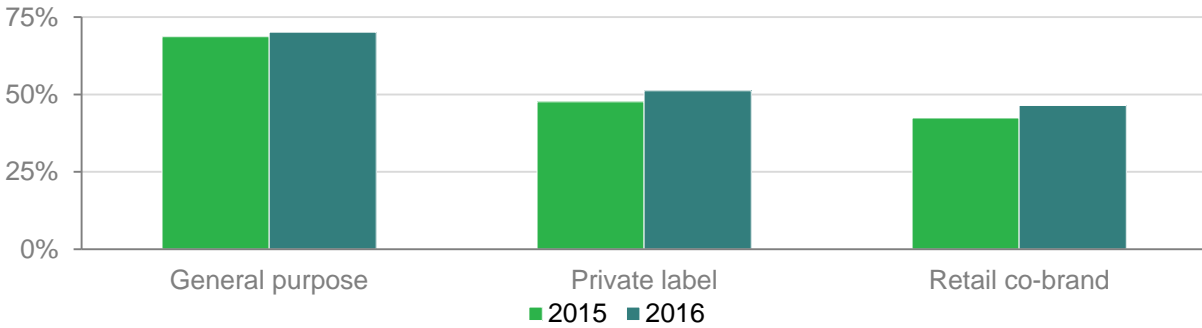
5.1.1 Enrollment and account information

Figure 1 shows the share of active mass market credit card accounts enrolled in issuers’ online portals. As of 2016, a majority of active accounts are enrolled in online portals for all three categories of account—general purpose, private label, and retail co-brand. Overall, the share of active accounts enrolled in issuers’ online portals grew from just under 58% in 2015 to over 60% in 2016. In our 2015 Report we reported that the share was 55% in 2014.³ The gap between general purpose cards and store cards—both private label and retail co-brand cards—is significant.

² Credit card solicitations and applications through digital channels are discussed in Section 4.1.1 & 4.1.2, and mobile payments are covered in Section 9.2.2. This report also includes a deeper review of one particular digital channel used by issuers to solicit applications—third-party comparison sites—in Section 7.

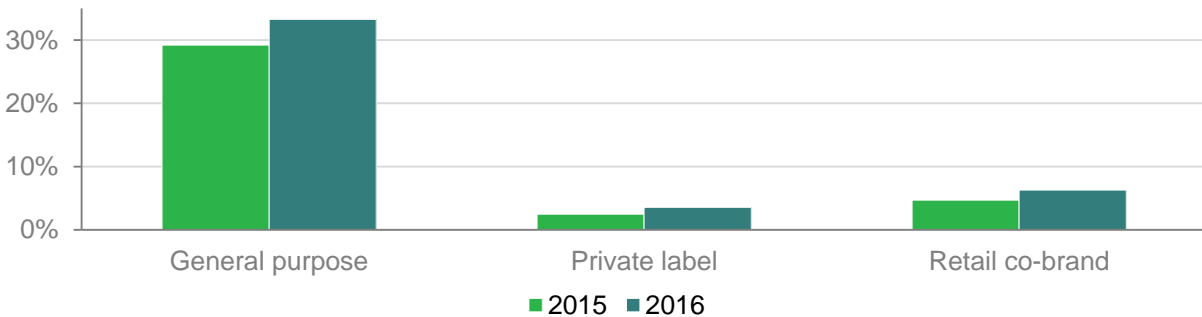
³ 2015 Report, at 133.

FIGURE 1: SHARE OF ACTIVE ACCOUNTS ENROLLED IN ONLINE PORTALS (MMI)



The share of active accounts enrolled in issuers' mobile apps is shown below, in Figure 2. Only a minority of accounts are enrolled across all three card categories. The gap between general purpose and store cards is even starker, though we observe growth in all three categories. There is also a higher rate of enrollment here in retail co-brand cards compared to private label cards, which is not the case for online portals. No individual issuer we surveyed reported a decrease in the share of active accounts enrolled in a mobile app for any of the three categories between 2015 and 2016. Taken together, the share of active accounts enrolled in issuers' mobile apps grew from less than 17% in 2015 to nearly 20% in 2016. In our 2015 Report we found that share to be just over 15% in 2014.⁴

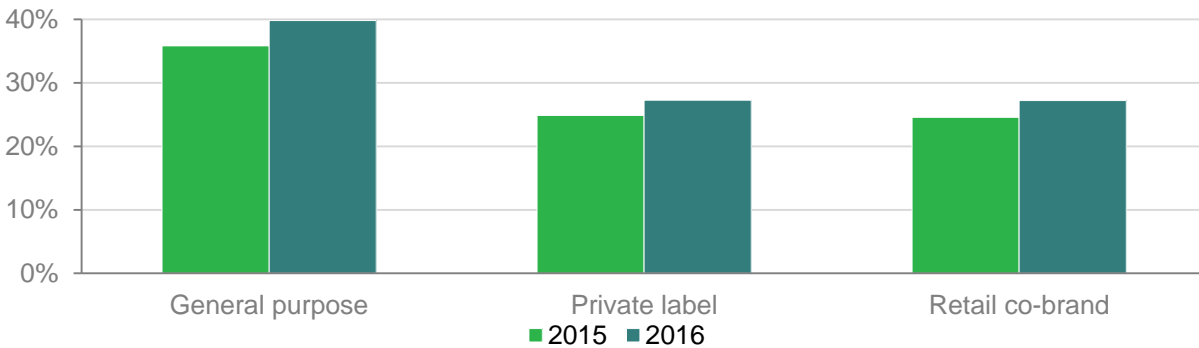
FIGURE 2: SHARE OF ACTIVE ACCOUNTS ENROLLED IN MOBILE APPS (MMI)



⁴ *Id.*

We also asked issuers how many of their active accounts had opted to receive periodic statements electronically and not also in paper form. Figure 3 shows the share of active accounts for which the cardholder had elected to receive no paper statements, but only electronic ones. Here, as with online portal and mobile app utilization, we see a higher share of general purpose cards opting out of paper statements. We also see the same steady increase in share across all three categories of accounts. Taken together, the share of active accounts opting to receive only electronic periodic statements grew from 30% in 2015 to 33% in 2016. In 2015, we found that share to be 28% in 2014.⁵

FIGURE 3: SHARE OF ACTIVE ACCOUNTS RECEIVING ONLY ELECTRONIC STATEMENTS (MMI)



As we noted in our 2015 Report, consumers who use digital platforms can open and download electronic versions of their statements, but they do not need to do so in order to see certain core information like payment amounts, due dates, and detailed transaction histories. Outside of that downloaded file, however, a digital platform does not necessarily present the consumer with all of the same information and disclosures that a periodic statement does. While digital platforms contain a number of electronic functionalities that the downloadable statement does not (like the ability to search through one’s transactions with greater precision and flexibility), they may lack some of the information required by the CARD Act to appear on statements to help consumers avoid late payments and increase their payment rates. Of course, digital platforms

⁵ 2015 Report, at 134.

may offer other features and functionalities that speak to these same goals. We discuss issues relating to disclosures and digital servicing in more detail in Section 5.1.4.

5.1.2 Payments

Online portals and mobile apps allow consumers to make payments on their accounts. After entering their deposit account information, consumers can authorize non-recurring one-time payments or recurring “automatic” payments. For a one-time payment, consumers can generally enter any payment amount and payment date they want. For automatic payments, all issuers we surveyed allowed consumers to choose their full statement balance or their minimum payment amount. Many, but not all, also allowed consumers to choose a different, fixed payment amount rather than the full balance or minimum payment.

FIGURE 4: SHARE OF ACTIVE ACCOUNTS ENROLLED IN AUTOMATIC PAYMENTS AT YEAR-END (MMI)

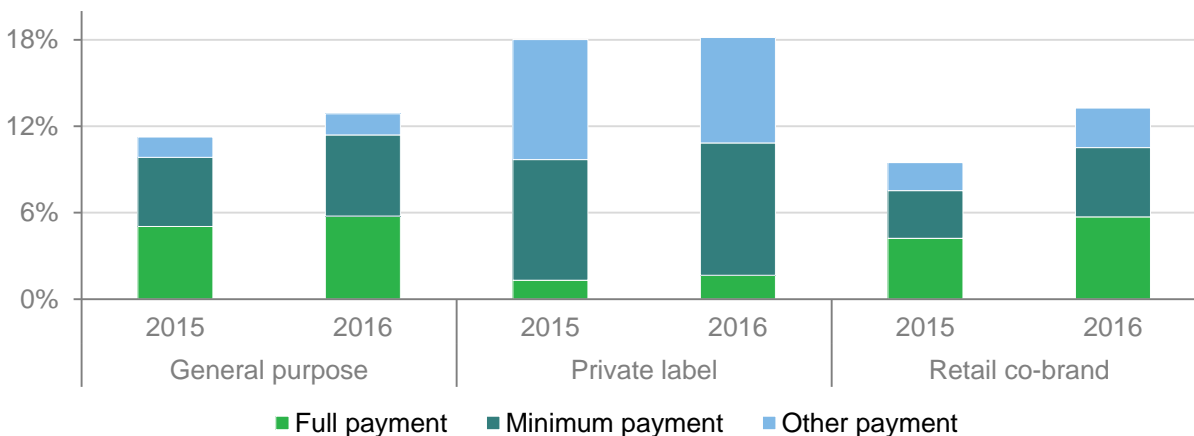


Figure 4 shows the share of accounts in each category that issuers reported as enrolled in automatic payments as of the end of 2015 and 2016. Despite their lower rates of enrollment in digital account servicing platforms generally, private label accounts had the highest rates of automatic payment enrollment. However, private label accounts also had the lowest rates of automatic payments-in-full. Instead, we observe that they had rates of automatic minimum payments and automatic “other” payments substantially higher than other cards. The latter may be explained by the prevalence of deferred interest promotions on these accounts. While our digital account servicing data do not address this directly, it may be that some consumers use private label account servicing portals to “set-and-forget” payments against a deferred interest

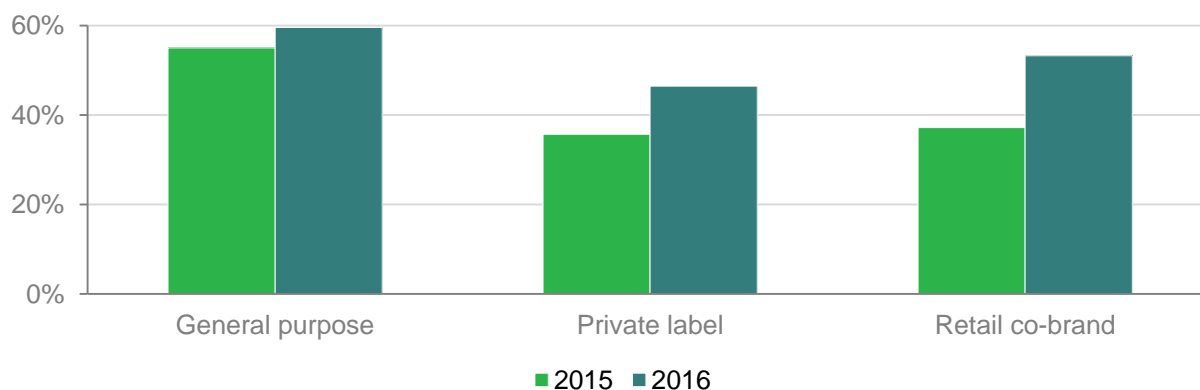
promotion, presumably at a level intended to pay off the promotion during the promotional period.

The prevalence of recurring minimum payments on private label accounts may be explained by one or both of two phenomena. As we discuss in Section 2.2, the credit score composition of private label card portfolios is lower than it is for general purpose cards. Consumers with lower scores generally exhibit lower payment rates, which would explain a higher rate of minimum payments in the portfolio. But that would not necessarily explain a higher rate of *automatic, digitally-enabled* minimum payments. Instead, it may be that this is also a deferred interest-related phenomenon.⁶ In our 2015 Report, we found that many consumers who pay off their deferred interest promotions—as well as many who do not—make the bulk of their payments in the promotion’s final two cycles. It seems credible that a significant number of such consumers may set minimum payments against the account for most of its lifecycle, and then make a single, large ad hoc promotion-extinguishing payment nearer the expiration date.

Beyond the distinctive dynamics of private label accounts, what may be most notable about the rate of automatic payment enrollment is how low it is. Even looking only at those accounts enrolled in online service portals, one-fifth of general purpose accounts were enrolled in *any* kind of automatic payment at year-end 2016. Put another way, despite substantial growth over 2015 rates, the 2016 share of general purpose accounts enrolled in automatic payments was lower than the average quarterly share of general purpose accounts that incurred a late fee in the same year.

⁶ It seems unlikely that consumers with lower scores would have a disproportionately high enrollment in automatic payments given that lower-score accounts are the likeliest to pay late. A key benefit of automatic payments is the avoidance of late or insufficient payments; consumers who avoided such payments routinely would presumably have lower late fee incidence, and perhaps also higher credit scores.

FIGURE 5: SHARE OF ACTIVE ACCOUNTS THAT MADE AT LEAST ONE NON-AUTOMATIC PAYMENT VIA ONLINE PORTAL OR MOBILE APP (MMI)



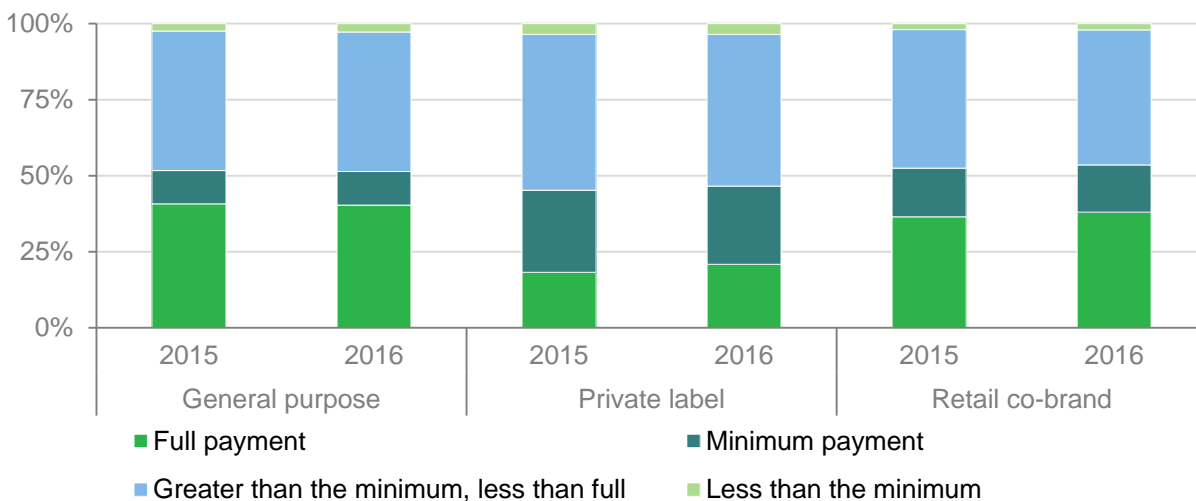
The share of accounts that made at least one ad hoc payment via a digital account servicing platform over the course of the year is markedly higher than the rate of automatic payment enrollment.⁷ In 2016, mass market issuers’ customers made nearly 1.4 *billion* one-off payments against their credit cards via digital channels.⁸ These payments had a relatively high per-account frequency. On average, accounts that engaged in non-automatic payment activity via digital servicing platforms did so in over half of their annual billing cycles in 2016, a figure that rises to nearly two-thirds for general purpose accounts. That likely indicates that a substantial number of consumers *always* pay digitally—but on an ad hoc basis, instead of via recurring automatic payments.⁹

⁷ Note that these data only include payments initiated from the card issuers’ digital account servicing platforms. They do not include payments that may have been originated digitally from a consumer’s deposit account.

⁸ This number is a floor because we asked issuers that provided data to count all payments on an account made within a single cycle as a single payment. For example, if a consumer made an ad hoc payment every week, that would count as 12 payments over the course of a year, not 52 payments. As a result, the 1.4 billion figure is technically the number of billing cycles during which consumers made at least one ad hoc payment using digital channels provided by the issuers. Framed this way, we can also observe that in 2016 more than one-quarter of mass market account-cycles had at least one ad hoc digital account servicing payment.

⁹ Consumers enrolled in automatic payments also can and do make ad hoc payments. Our aggregate data do not allow us to determine the amount of overlap between automatic and one-off payments. It is possible that at least some

FIGURE 6: SHARE OF NON-AUTOMATIC PAYMENTS VIA ONLINE PORTAL OR MOBILE APP BY PAYMENT AMOUNT (MMI)



As shown in Figure 6, these payments amounted to the minimum payment with relative infrequency during most cycles, though the minimum payment rate was higher on private label cards. Instead, payments were predominantly for amounts between the minimum and full payment, with full payment close behind in frequency on general purpose and retail co-brand accounts. Less than 3% of all digitally-facilitated payments over 2015 and 2016 were for less than the minimum payment.

Automatic payments can provide consumers assurance that their payment will be sufficient and timely with minimum effort, freeing up their attention for other financial or non-financial matters. It is possible that at least some consumers who have not already done so would benefit from enrolling in automatic payments.

It is challenging, however, to assess how many consumers would benefit from automatic payment enrollment. Consumers with significant credit card debt and little liquidity may put a premium on controlling the precise timing of flows in and out of their transaction accounts.

consumers are “setting-and-forgetting” minimum payments, then making larger variable ad hoc payments as their finances allow.

Beyond that, many consumers may prioritize maximizing control over the convenience of automation.¹⁰

5.1.3 Digital account servicing developments

The above metrics cover only basic facts and features relating to digital account servicing. Digital servicing platforms continue to evolve in power and sophistication, even compared to our last review two years ago. Today, most consumers who are enrolled in digital servicing can, with the click of a button (or the tap of a touchscreen) not just review transactions and make payments, but also transfer balances, request cash advance PINs, activate new cards, request replacement cards, download their full account statements, send and read messages to and from account servicing professionals or chat with them in real time, receive information about other card benefits, add or remove an authorized user from their accounts, inform their issuer of upcoming travel, report a card lost or stolen, or change their account's due date.¹¹ Additionally, those consumers whose accounts are associated with rewards programs are often frequently provided with additional features, or separate linked platforms, for managing their rewards. As we discuss in Section 5.2, consumers enrolled in digital account servicing platforms can also often view information relating to their credit record, including their credit score. Some consumers can now turn purchase functionality on or off, which is discussed in more detail in Section 9.3.1.

¹⁰ Issuers may be well-placed to identify some consumers who would likely benefit from enrollment in automatic payments. Issuers have detailed data on their customers' payment patterns, and may have even more information on those consumers who also hold other accounts with that issuer beyond their credit card account. As we note below, more and more issuers are also offering other services to consumers through digital account servicing portals that take in data about a consumer's accounts held by other financial service providers. In short, at least some issuers may have an increasingly complete picture of their customers' financial lives. Issuers with a high capacity to leverage that information seem well-positioned to market automatic payment functionality. That may not only benefit consumers—by reducing late payments and improving payment rates—but may improve the quality of the issuers' portfolios as well.

¹¹ Of course, consumers do not do all of these digital activities with equal frequency. One recent survey suggests that accessing basic account information and making payments are by far the most common tasks consumers perform when accessing their accounts online, and that a minority of consumers enrolled in mobile apps may even be averse to taking certain kinds of account actions through digital platforms. See Auriemma Consulting Group, *Digital Servicing and Account Management, Cardbeat U.S. Edition, Q3 2017*, at 20-21 (Sept. 2017).

We have also observed the increasing penetration and sophistication of personal financial management (“PFM”) tools associated with digital account servicing platforms. These tools are presented to consumers as ways to understand and navigate not only their current card, but their broader financial lives as well. At least one major issuer is testing a PFM tool attached to their credit card digital account servicing platform that aggregates data from across all of a consumer’s accounts, including those held by other issuers.¹² As consumers shift more financial engagement to the digital realm, we expect that competition focused on digital account servicing platforms’ scope and features will only become fiercer—and, it seems likely, a more prominent part of the overall package of features and messaging that issuers use to attract and retain consumers.¹³

5.1.4 Going forward

As our 2015 Report observed, digital platforms that allow consumers to access and manage their accounts can have clear benefits for both consumers and issuers.¹⁴ More powerful tools for

¹² See Pay Before, *Barclays US Tests Personal Finance Tool*, (Oct. 4, 2017), available at <http://paybefore.com/mobile-emerging-payments/barclays-us-tests-personal-finance-tool>.

¹³ One major third-party comparison site recently released free-standing reviews of eight large issuers’ mobile apps, independent of the terms and features of any of those issuers’ particular card products. See Kimberly Palmer, *American Express Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 6, 2017), <https://www.nerdwallet.com/blog/credit-cards/american-express-credit-cards-mobile-app-review>; Ellen Cannon, *Bank of America Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 6, 2017), <https://www.nerdwallet.com/blog/credit-cards/bank-of-america-credit-cards-mobile-app-review>; Paul Soucy, *Capital One Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 5, 2017), <https://www.nerdwallet.com/blog/credit-cards/capital-one-credit-cards-mobile-app-review>; Gregory Karp, *Discover Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 2, 2017), <https://www.nerdwallet.com/blog/credit-cards/discover-credit-cards-mobile-app-review>; Melissa Lambarena, *Citi Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 3, 2017), <https://www.nerdwallet.com/blog/credit-cards/citi-credit-cards-mobile-app-review>; Claire Tsosie, *Barclaycard Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 2, 2017), <https://www.nerdwallet.com/blog/credit-cards/barclaycard-credit-cards-mobile-app-review>; Channele Bessette, *Chase Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 4, 2017), <https://www.nerdwallet.com/blog/credit-cards/chase-mobile-app-review-credit-cards>; Channele Bessette, *Wells Fargo Credit Cards Mobile App Review*, NerdWallet Blog (Oct. 4, 2017), <https://www.nerdwallet.com/blog/credit-cards/wells-fargo-credit-cards-mobile-app-review>.

¹⁴ See 2015 Report, at 135. Multiple industry commenters noted these benefits in response to our RFI. See CFSI Comment Letter, at 7 (“Consumers who use online and mobile account servicing can benefit from receiving account

consumers to access and manage their accounts can increase consumer control and lower servicing costs for issuers—savings that competition may allocate to consumers.

Digital platforms may also present some challenges. Consumers who do not receive paper statements, but also do not access their statements digitally, may not see required disclosures containing certain account information, such as the full picture of the fee burden on an account, or the expected cost of carrying balances over certain lengths of time. In our 2015 Report, we found that only 10% of active accounts actually opened an online statement in a given quarter.¹⁵ Combined with the increasing share of active accounts opting out of paper statements, this means that, for a significant and growing portion of accounts, the account holder does not see account statements at all.¹⁶

alerts, reminders, and updates, and issuers can use emails and text messages to verify purchases and control fraud.”); CBA/FSR Comment Letter, at 7 (“Online and mobile account servicing platforms are making it easier for consumers to monitor their credit card transactions, identify fraud and initiate error resolution procedures, make payments, and otherwise manage their accounts.”); ICBA Comment Letter, at 7 (“Community bank credit card issuers report that digital servicing is generally more secure than mailing paper statements to a cardholders’ residence, and allows for more information to be archived for cardholder access for extended periods of time.”); Discover Comment Letter, at 5 (“Having the ability to easily access updated account information enables customers to better manage their balances and receive helpful reminders about the status of their accounts.”).

¹⁵ 2015 Report, at 134.

¹⁶ One commenter that advocated for paper statements noted the risks this trend can pose to consumers who do not have home broadband internet access and may therefore have limited means of accessing electronic statements. *See* NCLC Comment Letter, at 4 (“Electronic statements create barriers for consumers to access vital information because it takes effort to remember the task, find the free time, go to the correct webpage, remember their password, and download the document – as opposed to simply opening an envelope.”). Several industry commenters disagreed, noting that access to an electronic archive of account statements allows consumers to retrieve account information when and where they need it. *See, e.g.*, ICBA Comment Letter, at 7 (“While some cardholders might not be reviewing electronic disclosures on a regular basis, these disclosures are archived and remain available to the cardholder. By contrast, paper disclosures are frequently discarded by cardholders and are not readily available should the cardholder later have questions about the administration of the account.”); CBA/FSR Comment Letter, at 7 (“Indeed, the core purposes of periodic statements are being fulfilled by online and mobile account servicing platforms: monitoring transactions for errors and fraud; receiving payment information and related disclosures; receiving cost and fee information; and making a retainable copy of periodic statements available.”).

5.2 Credit score access

Credit scores have a tremendous effect on consumers' access to credit as well as on the terms of credit available to them. Most creditors, including most credit card issuers, use credit scores when deciding whether, and under what terms, to extend credit to a consumer. Issuers also rely on credit scores when they examine existing accounts for eligibility for credit line increases, other promotions, or adverse actions such as credit line decreases and account closures.

Despite their importance in consumers' financial lives, credit scores traditionally have not been especially accessible to them. Although consumers have the right to request a free copy of their credit *report* every 12 months from each of the three largest credit reporting agencies, only a minority of consumers exercise that right in practice.¹⁷ Further, there is no analogous consumer right for consumers to routinely access their credit *scores* for free.

Routine access to credit scores has the potential to benefit consumers in multiple ways. If scores are lower than expected, consumers may take the initiative to request their credit reports, address concerns, investigate errors or fraud-related entries, or improve negative aspects of their credit usage. They may also be less likely to become delinquent or to default on their accounts, and to take other action to protect or improve their credit standing. Consumers who improve their scores may gain greater access to more affordable credit options and experience measurable improvement in their financial lives.

In 2013, several credit card issuers began offering customers free access to a credit score through the newly established FICO Score Open Access program.¹⁸ As of April 2017, the Fair Isaac Company reported that over 100 financial institutions were providing free credit score

¹⁷ See 15 U.S.C. § 1681j(a)(1)(A); 12 C.F.R. part 1022; see also Free Annual File Disclosures, 75 Fed. Reg. 9726 (Mar. 3, 2010) (to be codified at 16 C.F.R. part 610). See also Consumer Fin. Prot. Bureau, *Consumer Voices on Credit Reports and Scores*, at 7 (Feb. 2015), available at <https://www.consumerfinance.gov/data-research/research-reports/consumer-voices-on-credit-reports-and-scores> (“... roughly 90 percent of the eligible population does not take advantage of this free benefit in a given year.”).

¹⁸ See Press Release, FICO, *FICO Makes Free FICO Scores Available to Millions* (Nov. 4, 2013), available at <http://www.fico.com/en/newsroom/fico-makes-free-fico-scores-available-to-millions-11-04-2013>.

access to more than 200 million customer accounts.¹⁹ Many institutions are also offering free credit score access to their auto loan, student loan, mortgage, or online banking customers. Some institutions have begun offering free credit score access to all consumers, even those who do not have an existing relationship with the institution.²⁰ VantageScore, another credit scoring company, also partners with third parties to provide free credit scores to those parties' customers, noting that those parties have combined "subscriber bases as high as 60 million."²¹ (The Bureau maintains a list on its website of credit card issuers that self-identify to the Bureau as making free scores available to their customers.²²)

In our mass market issuer survey, we asked issuers what portion of their active accounts were eligible to view their credit scores via the issuer's online portal or mobile app, as well as what portion of accounts receive their credit score on paper statements. Most issuers provided some portion of their general purpose cardholders with online or mobile access to their credit scores. With one significant exception, providing consumers with their credit score on paper statements

¹⁹ Press Release, FICO, *FICO Score Open Access Reaches Milestone of 200 Million Consumer Financial Credit Accounts* (Apr. 11, 2017), available at <http://www.fico.com/en/newsroom/fico-score-open-access-reaches-milestone-of-200-million-consumer-financial-credit-accounts-04-11-2017>.

²⁰ See, e.g., BusinessWire, *CreditWise from Capital One Now Available to Everyone*, (Mar. 10 2016), available at <http://www.businesswire.com/news/home/20160310006493/en/CreditWise-Capital>; Ann Carrns, *Discover Offers No-Strings FICO Score*, N.Y. Times (May 25, 2016), available at <https://www.nytimes.com/2016/05/26/your-money/discover-offers-no-strings-fico-score.htm>; Experian, *Your Experian Credit Report and FICO Score are Completely Free. See Them Now!*, [freecreditscore.com](https://www.freecreditscore.com), <https://www.freecreditscore.com> (last visited Dec. 4, 2017).

²¹ VantageScore, *Explore Credit Scoring - Where to Get a Credit Score*, <https://your.vantagescore.com/where-to-go> (last visited Dec. 4, 2017). One increasingly prominent class of consumer credit score access providers are third-party comparison sites, a phenomenon we discuss in more detail in Section 7.

²² See Maria Jaramillo, *Check Our New List to See if Your Credit Card Offers Free Access to One of Your Credit Scores*, Consumer Fin. Prot. Bureau Blog (Mar. 2, 2017), <https://www.consumerfinance.gov/about-us/blog/check-our-new-list-see-if-your-credit-card-offers-you-free-access-one-your-credit-scores>. The Bureau is presently updating that list, and companies can self-identify through January 12, 2018. See Maria Jaramillo, *Add Your Company to the List of Sources for Free Credit Scores*, Consumer Fin. Prot. Bureau Blog (Nov. 13, 2017), <https://www.consumerfinance.gov/about-us/blog/add-your-company-list-sources-free-credit-scores>. The Bureau is also soliciting comment from providers and users of free scores. See Maria Jaramillo, *Has Having More Access to Free Credit Scores Made a Difference? Let Us Know!*, Consumer Fin. Prot. Bureau Blog (Nov. 13, 2017), <https://www.consumerfinance.gov/about-us/blog/has-having-more-access-free-credit-scores-made-difference-let-us-know>.

was an uncommon practice. No issuer we surveyed charged consumers a fee for accessing their credit score.

Figure 7 below shows the share of general purpose accounts eligible to view their credit score via an online portal or mobile app for free as well as the share that accessed or viewed their credit score at least once over the course of the year. We do not display data for store cards because eligibility is extremely low. Credit score access is, with few exceptions, a general purpose phenomenon.

FIGURE 7: SHARE OF GENERAL PURPOSE ACCOUNTS ELIGIBLE TO ACCESS FREE CREDIT SCORE AND SHARE WHICH ACCESSED THEIR CREDIT SCORE AT LEAST ONCE DURING THE YEAR (MMI)



There was sharp growth in both eligibility and uptake from 2015 to 2016, around 35% and around 40%, respectively. In both 2015 and 2016, uptake was much lower than eligibility. In both years, just over one-third of eligible accounts accessed or viewed their credit scores at least once. Given that two-thirds of accounts were eligible by 2016, however, this means that nearly one-quarter of all general purpose accounts accessed their scores at least once during the year.

These figures are all at the account level, not the consumer level. As discussed in more detail in Section 2.3.2, most cardholders have more than one credit card account. As a result, they may well hold several accounts that provide free credit score access. Furthermore, as noted above, some market players now offer free credit score access to consumers without requiring those consumers to hold an account with them. As a result, it is difficult to draw definitive conclusions from these data about what share of consumers are actually making use of the increasing availability of free credit score access. Nevertheless, our data show that over 50 million accounts accessed their credit scores at least once last year—meaning that a large number of consumers are taking advantage of access to information about their credit standing that they did not have several years ago.

5.3 Balance transfers

Card issuers sometimes offer new or existing cardholders the ability to transfer balances from other credit card accounts.²³ Such “balance transfers” were introduced to the U.S. market in the early 1990s.²⁴ They now account for the transfer of tens of billions in credit card debt every year. They also feature prominently in issuer marketing to new and existing customers.

This section of the report describes the balance transfer market in more detail. We first describe general facts and patterns regarding usage. We then look at prevalence and variance of the product’s terms and conditions, and how balance transfers are marketed. We conclude with some analysis of outcomes for consumers who use balance transfers.

5.3.1 What are balance transfers?

Most card issuers offer balance transfers as a feature of their credit card accounts. This feature allows consumers who have an account with a certain issuer to reduce or eliminate a balance on a credit account held by a different lender while simultaneously incurring a new, equivalent balance on their credit card.²⁵

Balance transfers offer two major benefits to consumers. First, they allow consumers to consolidate their debts. For example, a consumer who owes \$2,000, \$1,000, and \$750 on three different credit cards may find it easier to manage a single account with a balance of \$3,750. The

²³ In the normal course, a cardholder cannot use a credit card to pay other outstanding credit card balances because most credit card accounts do not allow the accountholder to make payments against the account’s bill over payment card networks. In the balance transfer model, the transferring issuer pays the other(s) directly, and that obligation is then added to the cardholder’s credit card account.

²⁴ See David S. Evans & Richard Schmalensee, *Paying with Plastic: the Digital Revolution in Buying and Borrowing*, at 225-26 (MIT Press, 2nd ed. 2004).

²⁵ Historically, balance transfers have primarily facilitated the transfer of balances between credit card accounts. Depending on the issuer, however, balance transfers can be used for transferring balances from other types of credit accounts, including non-card lines of credit, personal loans, auto loans, and student loans. Our data do not allow us to determine the source of balances being transferred. At this point, however, our assessment is that the transfer of credit card balances is still the predominant use case.

second and more quantifiable benefit is lower costs. Most issuers offer consumers temporary promotional interest rates to incentivize balance transfers. As we discuss in more detail below, that promotional rate is often 0%. Balance transfers also impose some costs. Most come with an upfront fee. In some cases, as discussed further below, they also can result in consumers incurring certain interest charges that would not have been incurred absent the balance transfer.

For issuers, balance transfers are in part a marketing tool. They may encourage consumers to open a new account or intensify their usage of an existing account. Over a longer time horizon, this can build or reestablish a more regular relationship between an issuer and a consumer, increasing the possibility that the consumer may begin to use that card more broadly and frequently. Additionally, consumers who do not pay off their full transferred balances during the promotional period generally find the remaining amount subject to the card's non-promotional balance transfer APR.²⁶

5.3.2 Data and methodology

We rely on two primary sources of data. The first is Y-14 data. These data cover a large share of the credit card market, but they may not be representative of the market not covered by Y-14 data. Y-14 data also do not allow us to draw any conclusions at the consumer level.²⁷ It is difficult, therefore, to use these data to assess the effect of balance transfers on consumers' overall financial position, or see how balance transfers relate to consumers' other financial activities.

Y-14 data also cover balance transfer information separately from convenience check information. Convenience checks allow consumers to draw on their credit limit using an issuer-

²⁶ Issuers can subject transferred balances to rates different than purchase balances, including both those balances not initially subject to promotional rates as well as those for which the promotional rates have expired. Issuers must disclose such non-promotional balance transfer APRs separately on mandatory account opening tabular disclosures if they differ from the APRs for purchases and cash advances. *See* 12 C.F.R. part 1026, Supplement I, Appendix G(5)(ii). In practice, however, we observe that these rates mirror cards' purchase APRs. This is not the same for all such separate balances. Cash advances, for example, are almost always subject to higher rates than purchases or transferred balances.

²⁷ The CCP allows for consumer-level analysis, but does not allow for insights into balance transfers specifically.

provided check. In many cases, consumers may pay another credit card bill using such a check, in effect transferring a balance. Such transactions may be treated similarly to balance transfers by issuers, even if other convenience check transactions (such as payments to merchants) are not. As our data do not allow us to distinguish between different kinds of convenience check transactions with enough granularity to determine which ones effectively function as balance transfers, we only look at those transactions reported in the Y-14 as balance transfer transactions, acknowledging that this means we do not consider some number of transactions that are near-identical to balance transfers from the consumer perspective.²⁸

Our second source is Mintel Comperemedia, which maintains a database of marketing mailings sent to consumers, including credit card mailings. These mailings allow us to examine terms and conditions offered to consumers, as well as the broader language and imagery that issuers use for balance transfer offers.

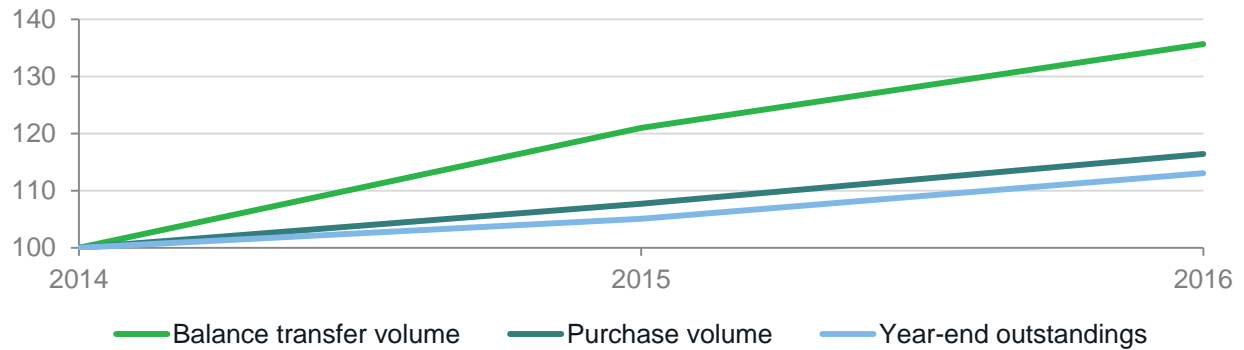
5.3.3 Use

Balance transfers represent tens of billions of dollars in volume each year, and have been growing in recent years. As reflected in Figure 8, balance transfer volume in 2016 was 35% greater than in 2014. This growth is double the rate of growth in purchase volume and outstandings over the same period.²⁹ Consumers who hold accounts with banks for which we reviewed Y-14 data transferred nearly \$50 billion of balances to those accounts in 2016.

²⁸ For the banks for which we have data, convenience check volume is significant, but still makes up less than one-third of balance transfer volume.

²⁹ To the Bureau's knowledge, balance transfer features are only offered on general purpose credit cards. While consumers can transfer balances *off* private label cards, it appears that only general purpose cards presently allow transfers *onto* the account.

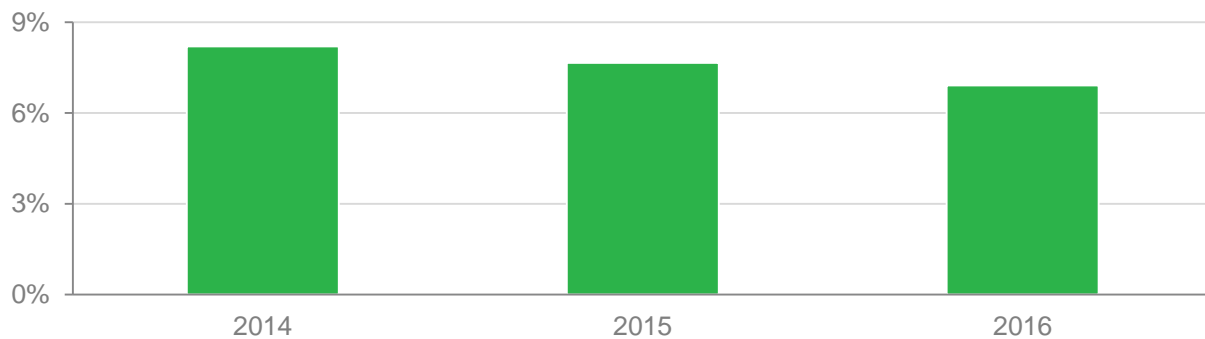
FIGURE 8: BALANCE TRANSFER DOLLAR VOLUME, PURCHASE VOLUME, AND YEAR-END OUTSTANDINGS INDEXED TO 100 IN 2014 (Y-14)



BALANCE TRANSFER INCIDENCE

Balance transfer features, however, are not actually utilized by most accounts. Figure 9 shows that, even years after origination, less than one-tenth of accounts have ever conducted a balance transfer. This result is borne out by survey data. Less than one-fifth of current cardholders report having ever transferred a balance. Only a minority of those cardholders report doing so recently.³⁰

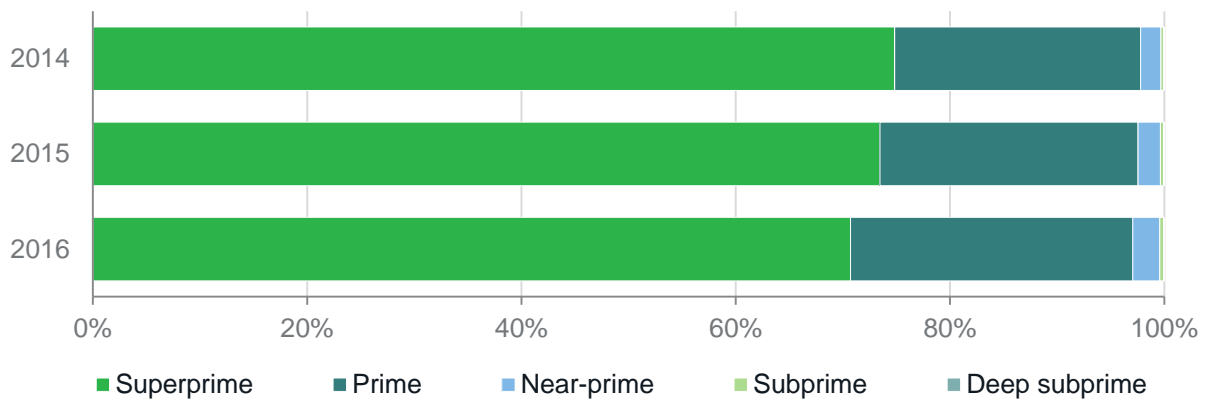
FIGURE 9: SHARE OF ACCOUNTS THAT HAVE EVER TRANSFERRED A BALANCE AS OF YEAR-END 2016, BY YEAR OF ORIGINATION (Y-14)



³⁰ See Auriemma Consulting Group, *Seasonal Impact on Card Usage, Mobile Payments, Acquisition, and Redemption, Cardbeat U.S. Edition, Q2 2017*, at 32 (July 2017).

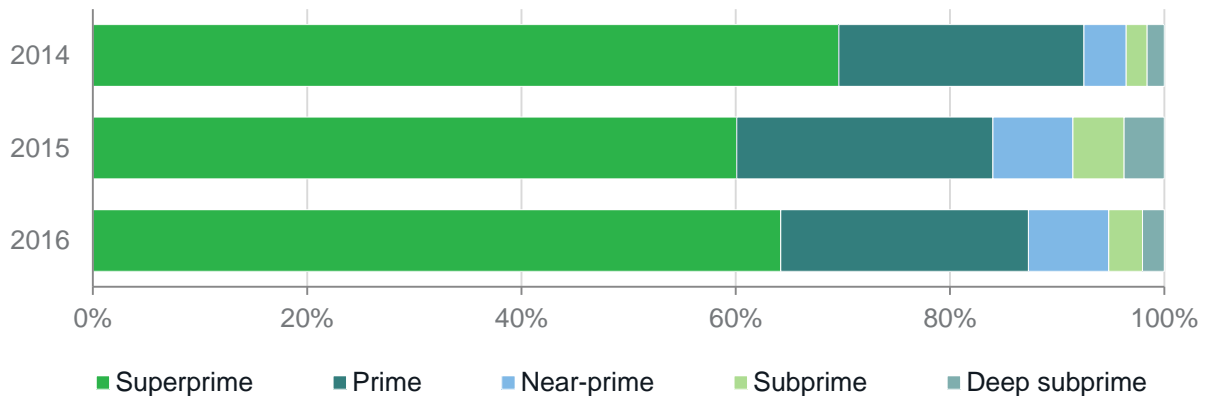
Figure 10 shows that balance transfers are overwhelmingly used by consumers with higher credit scores. Accounts owned by consumers with prime or superprime scores represented over 97% of balance transfer volume in each of the last three years. There has been a downward shift in overall credit score composition of transferred balances in that time period, with growth among near-prime and some growth in prime at the expense of superprime, but that shift has been slight.

FIGURE 10: SHARE OF BALANCE TRANSFER DOLLAR VOLUME (Y-14)



As reflected in Figure 11, most balance transfer acquisition marketing mail is directed to consumers with superprime and prime scores. That share is somewhat less than these tiers' share of transfer volume.

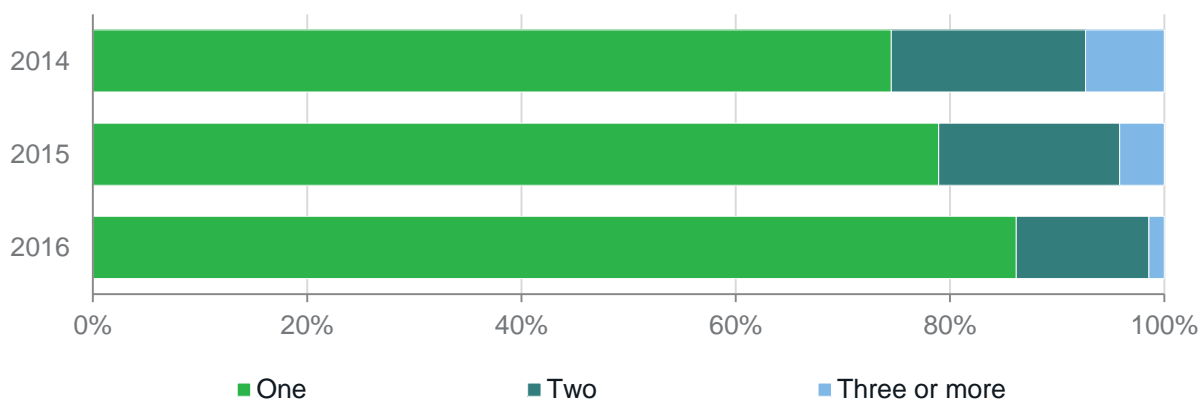
FIGURE 11: SHARE OF BALANCE TRANSFER ACQUISITION MARKETING MAIL VOLUME (MINTEL COMPEREMEDIA)



Balance transfer volume is heavily concentrated. The five issuers in our Y-14 data with the highest balance transfer volume represented over nine-tenths of all such volume in the Y-14 data last year—a substantially higher degree of concentration than in purchase volume or balances. It appears, therefore, that a small number of large issuers play a dominant role in this space, even more so than in the credit card space generally.

Repeat balance transfer activity is relatively unusual, at least at the account level. Figure 12 shows that of accounts with at least one balance transfer in 2016, over six in seven only had a transfer in a single cycle that year.³¹ Even three years after origination, over three-quarters of accounts that engaged in any balance transfer activity had only a single transfer.

FIGURE 12: NUMBER OF BALANCE TRANSFERS ON ACCOUNTS WITH AT LEAST ONE OBSERVABLE BALANCE TRANSFER AS OF YEAR-END 2016, BY YEAR OF ORIGINATION (Y-14)



Consumers who make multiple transfers to a single account may confront disadvantageous payment allocation if the promotional periods for those transfers overlap. The CARD Act and its

³¹ It is possible that in some cases consumers effected multiple transfers within a single cycle. The Y-14 data do not allow us to disaggregate intra-cycle activity; we therefore elect to consider all balance transfer activity within a cycle as a single balance transfer incident for the sake of simplicity.

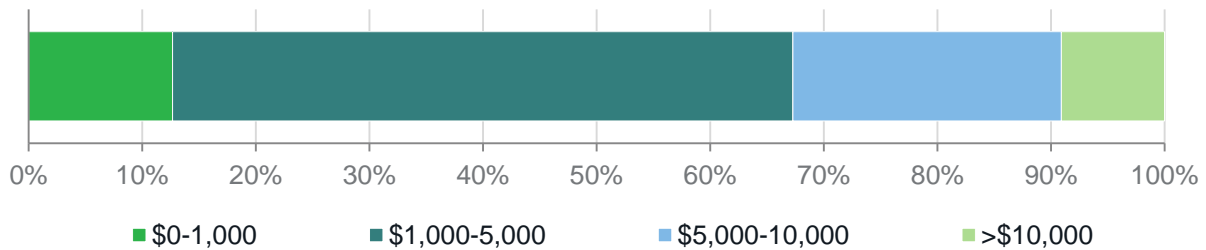
associated regulations address payment allocation across balances with differing interest rates.³² With limited exceptions, however, they do not restrict how payments are allocated between balances with *identical* interest rates, even if the balances, over time, carry different interest rate implications.³³ All other factors being equal, a consumer with multiple overlapping transferred balances subject to the same promotional rate, but with different promotional rate expiration dates, would prefer to have payments allocated to the balance that has its promotional rate period expiring first.

Data available to the Bureau indicate, however, that at least some issuers allocate payments to the most recently transferred balance. Consumers who understand the implications of this type of allocation may not be able to counteract it on the account. The CARD Act does not require issuers to enable consumers to instruct payment of one transferred balance before another.

BALANCE TRANSFER SIZE

The average transferred balance is substantial, exceeding \$4,300 in each of the last three years. The median transfer incident has been \$3,000 in each of the last three years. Figure 13 contains additional distributional information on balance transfer size.

FIGURE 13: DISTRIBUTION OF BALANCE TRANSFERS BY SIZE, 2014-2016 (Y-14)



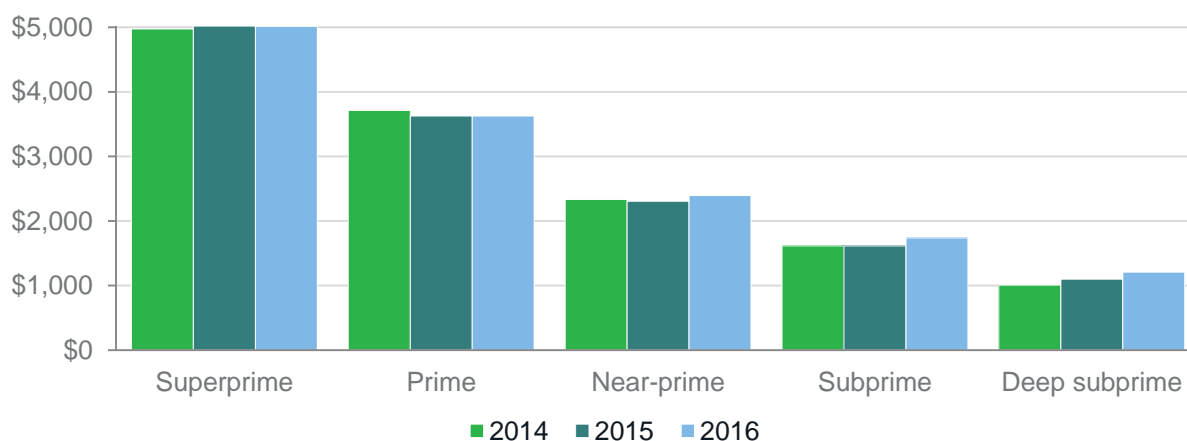
³² 15 U.S.C. § 1666c(b); 12 C.F.R. § 1026.53. Note that, because balance transfers are not subject to *deferred* interest charges, the general CARD Act payment allocation rule appears to work unambiguously well when allocating across balances subject to different interest rates.

³³ 12 C.F.R. § 1026.53, Comment 53-4.

Consumers tend to use a large portion of their total credit line on a given account when accepting a balance transfer offer. In fact, all transfers we observe can be broken into three roughly equivalently-sized tiers. One-third of all transfers were for less than half the size of the line. Another third used more than half the line, but less than 90% of it. The remaining third used almost all the line on the account.

Balance transfer size is also strongly correlated with credit score, as reflected in Figure 14. This is presumably a result of consumers with higher scores having higher average lines.³⁴ Superprime transfers are, on average, over quadruple the size of deep subprime transfers. Figure 14 also makes clear that there has been little change in average size within any tier over the last three years.

FIGURE 14: AVERAGE BALANCE TRANSFER SIZE (Y-14)



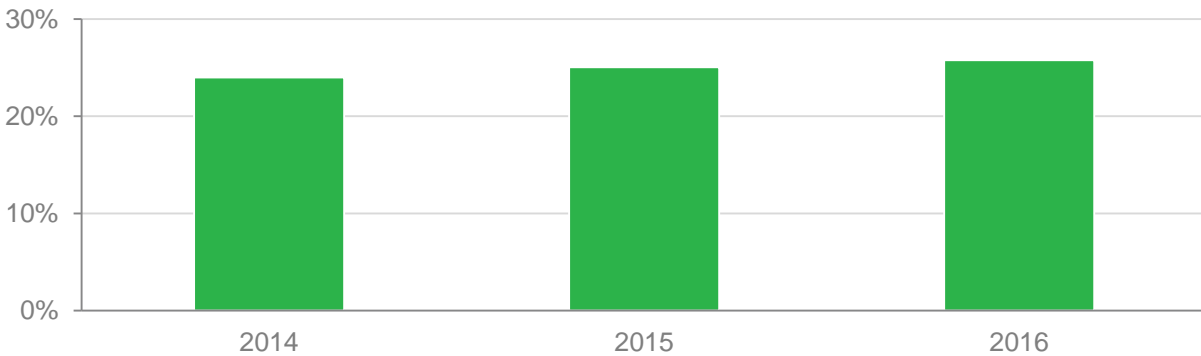
OTHER METRICS OF USE

A substantial share of balance transfers in a given year occur proximately to the origination of the account receiving the transfer. As reflected in Figure 15, that share has increased over the past two years. Our market monitoring suggests these transfers are especially likely to be

³⁴ Section 4.1.5 contains data on the distribution of credit lines by credit score.

associated with promotions offering discounted interest rates for an extended period. We discuss the prevalence of such promotions in marketing materials, and the terms of such promotions, in the next section.

FIGURE 15: SHARE OF BALANCE TRANSFERS TAKEN WITHIN 60 DAYS OF ACCOUNT OPENING (Y-14)



Balance transfers on older accounts are associated with a decline in purchase activity on the account. Limiting our analysis to accounts originated at least six months prior to the balance transfer, we observe a significant and sustained drop-off in monthly average purchase volume in the period following transfers. This result, which is shown in Figures 16 and 17 below, appears to be driven in large part by accounts eschewing purchase activity completely after transferring a balance. Issuers have confirmed this result to the Bureau. There are a number of reasons why this might occur, including the loss of available line resulting from a balance transfer. For accounts that were transacting prior to the transfer, however, the drop in purchase activity may also be related to the transfer's potential elimination of the account's grace period, which increases interest costs associated with new purchase activity. We discuss this in more detail below.

FIGURE 16: AVERAGE PURCHASE VOLUME IN THE CYCLES SURROUNDING A BALANCE TRANSFER (Y-14)

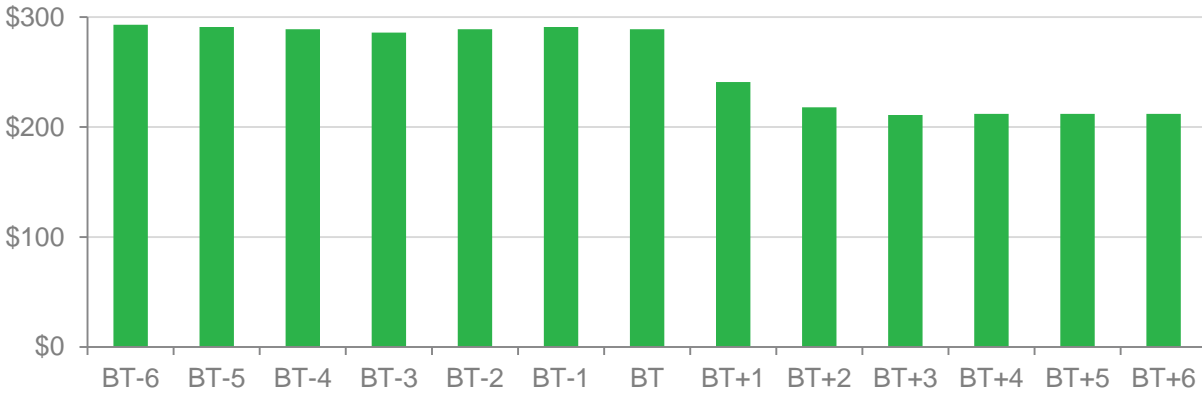
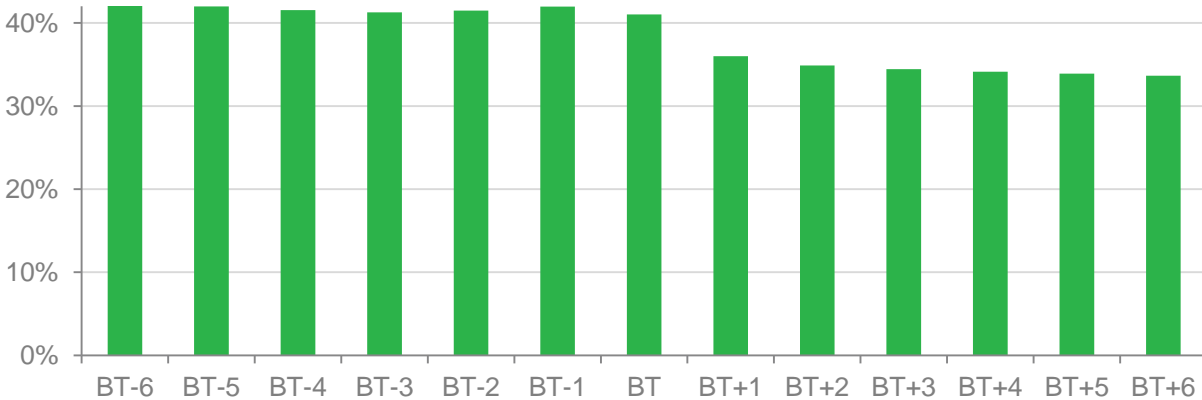


FIGURE 17: SHARE OF ACCOUNTS MAKING ANY PURCHASES IN THE CYCLES SURROUNDING A BALANCE TRANSFER (Y-14)



5.3.4 Cost terms

From the consumer perspective, the most important terms that apply to balance transfers are likely those that determine its cost. These include those that most directly determine cost—the applicable fees and interest rate or rates—as well as those that indirectly determine cost—primarily the length of the promotion and the effect of the transfer on the card’s “grace period.” We discuss these below.

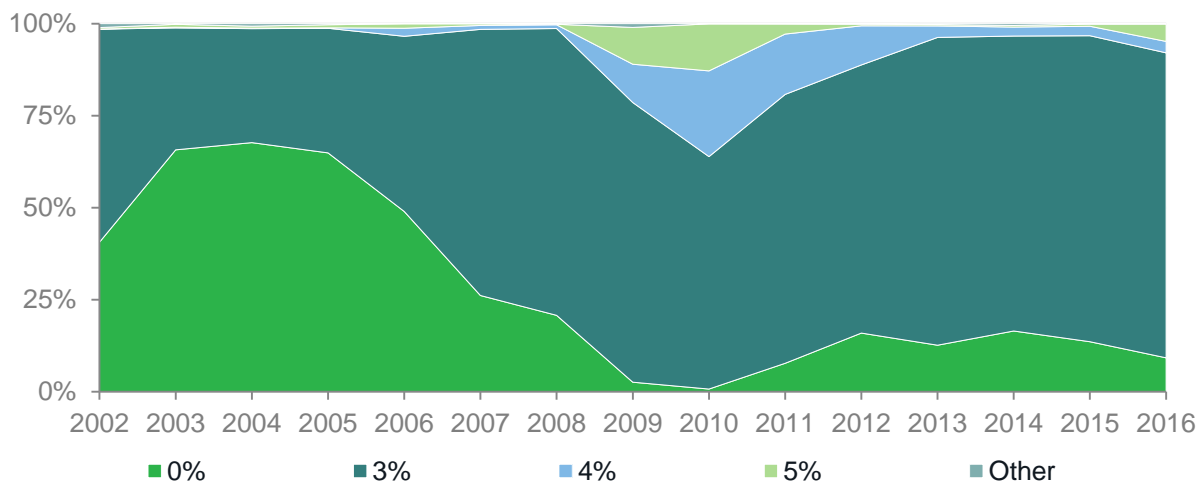
FEES

Many issuers assess consumers a fee for transferring a balance. This fee is generally expressed as a percent of the amount transferred. For example, an issuer may set their fee at 3% of any

amount transferred.³⁵ Over the 2014 to 2016 period, about 86% of all transfers in the Y-14 data were associated with a fee.

Mintel data allow us to examine the prevalence of different fee amounts in issuer acquisition mailings.³⁶ We observe a substantial shift away from fee-free transfers, as well as towards higher price points, in the years 2005 through 2010, followed by a partial reversal of that shift over the subsequent five years. In 2016, there was a downtick in fee-free offers relative to offers with higher fees. These marketing data results are shown in Figure 18.

FIGURE 18: PREVALENCE OF BALANCE TRANSFER FEE LEVELS IN CREDIT CARD ACQUISITION MARKETING MAIL (MINTEL COMPEREMEDIA)



Directly extrapolating from marketing data to consumer experience from the Y-14 data, however, is not recommended. Expressed as a share of the total amount transferred, aggregate balance transfer fees have declined from about 3.3% in 2014 to about 2.9% in 2016. Put another

³⁵ There is usually a fixed floor on balance transfer fee amounts. For example, an issuer may set the fee at 3% but no less than \$10.

³⁶ “Other” fee levels include both those in the 0% to 5% range which were not precisely 0%, 3%, 4%, or 5%, and those which were greater than 5%. Such fees have rarely represented even 1% of all offers.

way, the upfront fee cost of transferring a balance dropped over the period by more than 11%, representing a substantial reduction in costs to consumers. Had consumers in our data paid 2014-level fees on their 2016 transfers, their aggregate costs would have been more than \$160 million higher.

Given that the share of balance transfers associated with fees has not declined over that same period, the decline in total fees must be driven by a decline in the average fee assessed. This appears to have happened concurrently with an increase in the average fee marketed. This suggests that balance transfer offers with lower fees may be seeing their uptake rates growing relative to higher-fee offerings.

INTEREST RATES

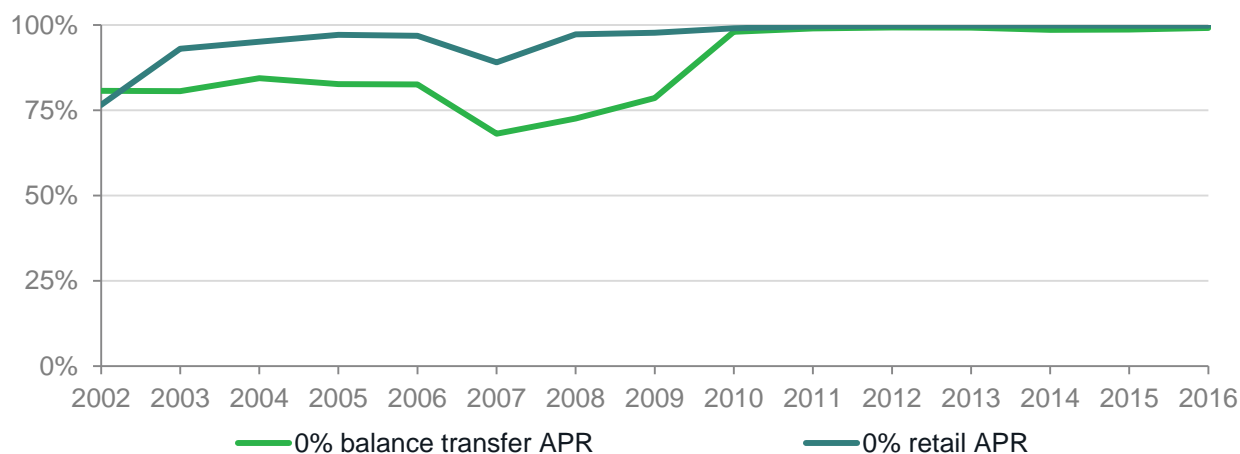
The other major determinant of balance transfer cost is the interest rate. The “go-to” balance transfer interest rate offered to consumers is generally the same as the card’s retail APR.

Critically, however, most balance transfers occur as promotions, meaning most consumers pay substantially less over the promotional period than the go-to rate. As shown below in Figure 19, in recent years, balance transfer offers on new accounts have almost all been at 0% promotional rates.³⁷ This has also been the case for promotions offered on purchases, too, which we show for comparative purposes in Figure 19.

Y-14 data do not allow us to conclusively identify the share of balance transfer volume receiving a promotional rate. But the indirect evidence from mailings strongly suggests that the share is very large. Overall, it appears to be the case that most consumers who transfer balances do so using promotions that offer very low interest rates, often 0%.

³⁷ The data in this and the subsequent figure only include acquisition mailings—solicitations sent to potential new customers. Issuers also market balance transfers to existing customers. Evidence available to the Bureau suggests that consumers are more frequently offered higher rates and shorter promotion terms in such “portfolio solicitations.”

FIGURE 19: SHARE OF PROMOTIONAL ACQUISITION MAILINGS THAT OFFER A 0% PROMOTIONAL APR (MINTEL COMPEREMEDIA)

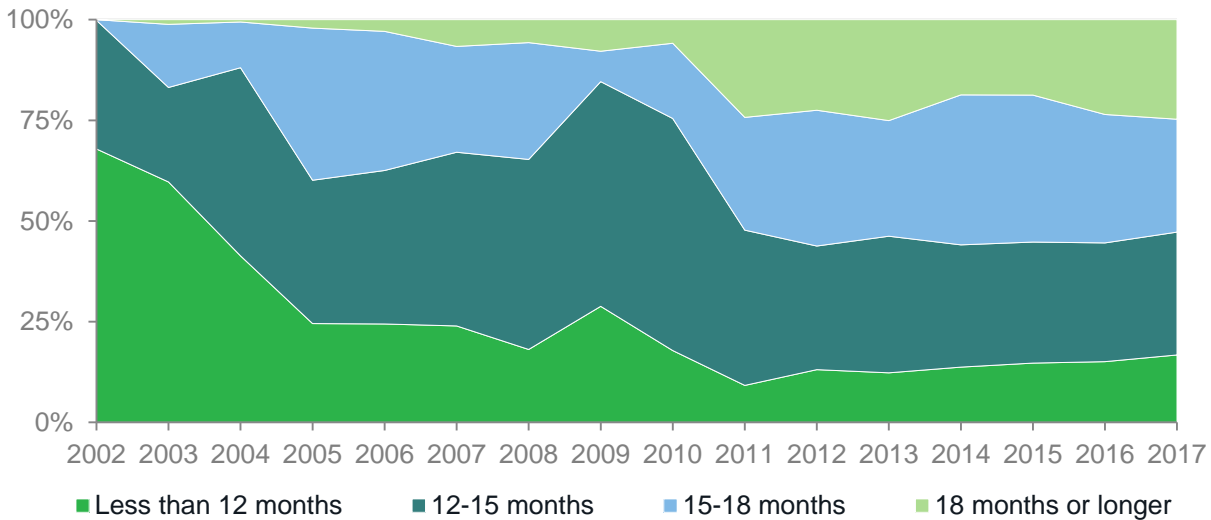


PROMOTION LENGTH

Since a major benefit of balance transfer promotions is receiving rate relief, promotion length is a major factor in determining the benefits and costs of transferring a balance. Promotions in balance transfer offers have lengthened markedly over the period we can observe. Offers with a promotion length of 15 months or longer, which represented as little as one-fifth of all acquisition offers in 2009, have represented over half of all such offers each year since 2011. Full data are in Figure 20 below. Although we do not have direct data on the distribution of promotion length for balance transfer offers that are accepted, average actual promotion length may increase with average offered length.³⁸

³⁸ It is possible that consumers who are offered longer promotions have lower uptake rates, in which case average *actual* promotion length could remain relatively unchanged even as average *offered* promotion length increases. It is also possible, however, that consumers prefer longer promotions, and therefore seek out the longest promotions for which they are eligible, which could have the opposite effect. The extent of both of these effects is unknown to the Bureau.

FIGURE 20: SHARE OF BALANCE TRANSFER ACQUISITION MAILINGS BY PROMOTION LENGTH (MINTEL COMPEREMEDIA)



The likely increase in transfer promotion length and the decline in offered promotional interest rates coincide with the reduction in broader market interest rates. We discussed in Section 3.2.2 of this report how recent and projected future increases in those rates will likely lead to higher consumer costs. In this segment of the market, the evidence suggests that increasing interest rates will also lead to higher consumer costs. Those costs may not come directly through higher promotional interest rates, however, but indirectly through shorter promotional periods. No-interest balance transfer offers may be sufficiently compelling to relevant consumers that issuers may only be able to adjust other terms to control credit and price risk. The downticks in promotion length in 2015 and 2016—along with the slight uptick in the upfront balance transfer fees marketed to consumers—may indicate that this is occurring already.³⁹

³⁹ There are echoes here of the claim made by one commenter that issuers now put increasing weight on line management as a risk management tool. *See* ABA Comment Letter, at 3-6. We discuss this claim in more detail in Section 4.2.5.

GRACE PERIOD

For some cardholders, the loss of a grace period can be a potentially significant source of costs associated with balance transfers. To save money by transferring balances from one credit card account to another, the consumer needs to revolve at least some of the transferred balance. We noted in Section 3 above that the average retail APR on prime accounts in 2016 was around 19%. A consumer who, pursuant to a 12-month, 0%-interest rate promotion, transferred a \$4,500 balance from an account charging that 19% APR might incur an upfront fee of \$135. But such a consumer would save as much as \$800 over that period by leaving that amount on the transfer-receiving account and making only minimum payments on that account. If the consumer paid off the transferred balance right away, the upfront fee would be incurred for no interest savings—a net cost.

If a consumer had previously been transacting on the account receiving the transferred balance and paying the balance in full each month, the consumer would need to revolve some portion of the transferred balance to be able to realize any interest savings. In other words, even as the consumer's monthly payments may continue to cover the amount of new purchases made in a given cycle, the account would move into revolving status.

Under the practices that prevailed in the market until recently and that many issuers continue to follow, that change in status from transactor to revolver meant that such consumers would lose their grace period, thereby incurring interest charges on any new purchases from the date of purchase.⁴⁰ Significantly, that would happen even if those consumers' monthly payments equaled the full amount of purchases and were applied to those purchases so that the consumers paid in full for any new purchases each month. The revolving transferred balance would end those consumers' grace periods, no matter that new purchases were covered by full and timely payment.

⁴⁰ As discussed previously in this report, a consumer who pays the full balance on an account each cycle, a behavior termed “transacting,” generally does not pay interest charges. This is because the consumer is protected by the account's “grace period,” which can be lost by a consumer who does not pay their balance in full in any given billing cycle, and can also be restored by a consumer, generally by paying the account balance in full in two consecutive billing cycles.

The Bureau promulgated compliance guidance in 2014 that clarified the importance of prominent disclosure for this particular feature of balance transfers.⁴¹ There are several reasons why disclosure might be important in this context. By paying credit card balances in full when due, a consumer generally avoids all interest charges. If such a consumer viewed a 0% balance transfer as not being due until the end of the promotional period, however, the relationship between full payment when due and the avoidance of interest charges would unexpectedly break down after taking the balance transfer. It is worth noting that other promotions, such as deferred interest promotions, generally do not have this type of effect on the account's grace period.⁴²

Assessing the aggregate costs associated with this grace period effect is not straightforward. Bureau research on the period prior to the issuance of the 2014 guidance showed that a relatively small share of accounts were transactors when they made balance transfers. Among issuers with substantial balance transfer volume, that share ranged from as few as one in 40 transferring accounts to as many as one in ten.⁴³ Given the volume of balance transfers, however, even that minority represents a significant number of consumers that stood to be affected by the loss of their grace period—if they continued to make new purchases.

⁴¹ Consumer Fin. Prot. Bureau, *Marketing of Credit Card Promotional APR Offers*, CFPB Bulletin 2014-02, (Sept. 3, 2014), available at http://files.consumerfinance.gov/f/201409_cfpb_bulletin_marketing-credit-card-promotional-apr-offers.pdf. We discuss issuer practices with respect to the disclosure of grace period effects in balance transfer offers—including changes following the issuance of the bulletin—in more detail below.

⁴² Consumers who transfer balances generally have an outlet for avoiding interest charges on new purchases—the card from which they just transferred their balance, at least assuming that they cleared that account's balance entirely. One research team has deemed continuing to make new purchases on an account revolving a transferred balance a consumer “mistake.” See Sumit Agarwal & Bhashkar Mazumder, *Cognitive Abilities and Household Financial Decision Making*, at 193-207, *Am. Econ. J., Applied Econ.* 5(1) (2013), available at http://www.ushakrisna.com/cogability_proof.pdf.

⁴³ For these purposes, we excluded the substantial share of accounts that accepted their transfer proximate to their origination for many reasons, primary among them that many such accounts may have been subject to a concurrent promotional interest rate on purchases, rendering this issue moot. We also limited our sample to accounts with higher credit scores, which as we noted above represent the overwhelming share of transfer activity.

The majority of such accounts did continue making new purchases subsequent to the transfer, with the share of accounts doing so varying across issuers from three-fifths to five-sixths. Those accounts that continued making purchases registered significant purchase volumes—generally several thousand dollars over the six months following the transfer. At prevailing interest rates, these accounts may have been subject to \$100 or more in interest charges. While generally not enough to offset the full benefit of a promotional balance transfer, that cumulative interest charge is comparable to the average balance transfer fee prevalent at the time—meaning the cost to those consumers of transferring balances was effectively doubled by continuing to use their card to make purchases, even if their monthly payments to the account exceeded their monthly purchase volume.

Issuer disclosures on balance transfers show that some issuers have revised their applicable grace period policies since the issuance of our guidance. These disclosures show that some issuers now allow consumers to retain their grace period while revolving a transferred balance so long as they pay the balance generated by new purchases in full each month. Although issuers lose some interest revenue from this type of change, they may also realize some benefits. The decreased cost of new purchases may cause increased use of the card for such purchases. In addition, the issuer may avoid any customer service costs associated with the prevailing grace period policy on balance transfers.

MARKETING AND DISCLOSURES

Balance transfers are generally marketed to consumers as a means of achieving a specific personal and financial goal. The advertised uses for balance transfers in mailers we have reviewed include consolidating debt, reducing debt, paying utility bills, meeting emergency expenses, home improvement, car repair, educational expenses, medical expenses, shopping, and travel. Shopping and travel goals have waned as selling points since 2009.⁴⁴

⁴⁴ Some of these offers advertise both both balance transfers and promotions on convenience checks; as we noted above, the latter are treated separately in Y-14 data, even though in many cases the terms and consumer experience can be similar.

We have also observed substantial changes since 2014. We reviewed two samples of disclosures mailed to consumers, one from the first half of 2014 (which was prior to the promulgation of our applicable guidance) and one from the second half of 2016 (which was two full years after that guidance). We found that in 2014, most issuers included language referring to interest on new purchases in the “question and answer” (“Q&A”) section of the mailing, but the majority did not include it on the first page. By contrast, almost all issuers included such language on the first page of their mailings in 2016 as well as in the Q&A section. While hard to quantify, we also observed that the prominence of first-page language appeared to increase from 2014 to 2016, typically through changed placement or bolding.

We also found that, in the Q&A section, more issuers included the term “grace period” in 2016 compared to 2014. Perhaps more importantly, they also included more concrete examples that explained the potential grace period consequence of taking a transfer. For example, one 2016 mailing we examined from a large issuer used the example of a consumer who carries a \$2,000 balance and subsequently makes a \$500 purchase, stating that the consumer would incur interest charges on the \$500 purchase balance. These and other similar recent mailings appear to put substantially more weight on ensuring consumer understanding of the way grace periods are affected by balance transfers.

5.3.5 Payment behavior

Consumers can realize significant interest charge savings from balance transfers with promotional interest rates even if they do not pay the transferred amounts in full before the promotional period expires. But their longer-term savings or debt reduction may in many cases be driven by the share of the balance they are able to pay before the promotional period expires.

Because we do not have data on balance transfer promotion length, we cannot report on how many balance transfers—or how many dollars transferred—are paid before promotion

expiration.⁴⁵ But we can examine total account balances to see the pace at which accounts with a balance transfer are paying transferred balances over time. We find that overall between roughly one-fifth and two-fifths of accounts paid off their balance transfer balances after one year, and between half and three-quarters did so after two years. The data also indicate that the rate at which accounts reach full payment slows after 18 months, and that a significant share of accounts still have residual transferred balances after two years, even though we observe very few balance transfer offers with promotional periods this long.⁴⁶

5.4 How complicated are credit cards?

This section examines how credit card products have become more or less complicated over time. We begin by laying out a conceptual framework for our analysis and the data and methodology we rely on. We then share our main findings. Our analysis does not *evaluate* complication, but simply seeks to track this metric over time.

5.4.1 Background

Defining what it means for a financial product to be complicated is challenging—even when limiting analysis to terms that directly determine a product’s cost. For example, a measure that compares (whether across products or across time) the number of parameters that determine cost would ignore the fact that familiar parameters—even if more numerous—may be more easily understood than a smaller number of unfamiliar ones. In addition, any particular single measure that analyzes how complicated a product is will be vulnerable to confounding factors specific to that measure. For example, tracking the number of fees that accounts may be assessed may not adequately account for consumer behavior. If, over an observation period, more consumers choose to use their credit cards abroad, the relevance of a foreign transaction

⁴⁵ Another limitation is that although Y-14 data allow us to quantify the number and dollar volume of balance transfers in the cycle they were initiated, these data often do not allow us to distinguish reliably between transferred balances and other balances in subsequent billing cycles.

⁴⁶ We lay out our method for these calculations in the Appendix.

fee to their calculations of the all-in cost of using various cards may increase. This means that the product may become more complicated in practical terms even if the underlying foreign transaction fee practices are static over the same period.

Using mandatory disclosures to assess how complicated credit card products are offers some potential benefits, but raises certain other limitations. Certain information must be included or excluded, and formats often standardized, thereby facilitating comparison between different products over time. Yet, because such disclosures are the product of regulation, their content can change both with regulation and with changes in the underlying terms of the product—and disaggregating the two forms of change may not be straightforward.⁴⁷

EXISTING RESEARCH

In our 2013 Report, we compared the length and readability of a small sample of credit card agreements that predated the CARD Act to a comparable sample from the post-Act period. Our 2015 Report expanded this analysis, relying on a larger sample, distinguishing between different classes of issuer, and examining both ranges of findings as well as averages. The public credit card agreement database created as a result of the CARD Act has empowered other market observers to survey the length and readability of cardholder agreements as well.⁴⁸

However, these analyses bear only to a limited extent on whether—or how—credit card products are more or less complicated. A complicated product, at least in theory, may be explained in short, straightforward terms. Conversely, a simple product may sometimes be described in longer terms that are hard to understand. This is not to say that cardholder agreement length

⁴⁷ This is true, for example, with respect to regulatory changes associated with the CARD Act. Though the CARD Act may not have been intended to make products simpler, many of its provisions directly limit fee amounts or the circumstances in which fees can be charged, or the issuer's ability to increase interest rates in certain circumstances. *See, e.g.*, 15 U.S.C. §§ 1637(i)(1), 1637(k), 1637(n), 1665d, 1666i-1(b)(4), 1666i-2(a). These kinds of changes are *prima facie* likely to have affected whether credit card products are more or less complicated. But the CARD Act and its attendant regulations also contained measures intended to improve market transparency. This includes some changes that altered key disclosures, including, as we note below, those in issuer solicitations.

⁴⁸ *See, e.g.*, creditcards.com Staff, *Study: Credit Card Agreements Unreadable to Most Americans*, creditcards.com, (Sept. 16, 2016), available at <https://www.creditcards.com/credit-card-news/unreadable-card-agreements-study.php>.

and readability are not important. Whether or not consumers have information to understand their cards and use them optimally are important questions in their own right. But they are conceptually distinct from the issue of whether underlying products are complicated.

There are few prior studies on point. A 2010 study conducted by the Center for Responsible Lending measured how complicated products are by tabulating price points in mandatory disclosures.⁴⁹ That paper found a steady increase in the number of price points over the decade leading up to the CARD Act's passage and implementation, followed by a quick decline.⁵⁰ The study's observation period, however, only allowed for limited visibility into the post-CARD Act implementation era.

5.4.2 Methodology and data

Our methodology draws on the 2010 Center for Responsible Lending study. Like that study, it attempts to quantify certain properties of mandatory credit card disclosures, then tracks changes in those quantified disclosure metrics over time.

We construct a sample of credit card solicitation mailings from a dataset maintained by Mintel Comperemedia. We select the largest solicitation mailing sent by each of the 25 largest issuers

⁴⁹ Joshua M. Frank, *Numbers Game: The True Cost of Credit Card Mail Offers*, Center for Responsible Lending, (Oct. 2010), available at <http://www.responsiblelending.org/credit-cards/research-analysis/numbers-game-final-v2.pdf>.

⁵⁰ This core finding was corroborated by findings published by the Federal Reserve Bank of Philadelphia. See Mark J. Furletti, *Credit Card Pricing Developments and Their Disclosure*, (Federal Reserve Bank of Philadelphia, Payment Cards Center Discussion Paper No. 03-02, 2003), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=572585; Mark J. Furletti & Christopher J. Ody, *Another Look Credit Card Pricing and its Disclosure: Is the Semi-Annual Pricing Data Reported by Credit Card Issuers to the Fed Helpful to Consumers or Researchers?*, (Federal Reserve Bank of Philadelphia, Payment Cards Center Discussion Paper No. 06-08, 2006), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=920621.

during November of 2006, 2009, 2010, 2012, 2014, and 2016.⁵¹ Five of the largest 25 issuers sent no mailings during any of those periods, leaving us with a sample of 20 issuers.

We then applied an approach similar to the Center for Responsible Lending analysis described above. We examined each solicitation’s “Schumer box” to count each numerical figure in that disclosure.⁵² For simplicity, we term such figures “price points,” although some figures factor into an account’s pricing less directly than others. We also categorized price points by subject area to better track likely drivers of observed change. Our findings generally take average measures across disclosures without making weight adjustments for the size of the issuer or the scale of the solicitation. This has the advantage of simplicity, but may mean we are reporting findings that would not square with the average consumer experience. To help mitigate this, we also report on variance across issuers in our sample.

Our methodology relies on trying to observe changes in how complicated products are by measuring changes in mandatory disclosures. This offers advantages but has some limitations as well. We note two such limitations in particular. First, disclosure rules prescribe the inclusion and exclusion of certain terms. The Schumer box is no exception. As a result, both as a point-in-time snapshot as well as an across-time comparison, disclosures can only be an imperfect barometer of how complicated the underlying products are. This cuts in both directions—limits on a disclosure’s flexibility may either inflate or deflate measures.⁵³

⁵¹ We use Nilson data from 2015 as the base year to identify these 25 issuers. If issuers sent no solicitations in a relevant period, we excluded them from that period’s sample, but did not make any substitutions and continued to include that issuer in other periods’ samples.

⁵² We also count some figures falling directly below the Schumer box if they are on the same disclosure page and they relate to account pricing. This helps ensure consistency in our count, as different issuers employ different practices as to whether certain information is included in the Schumer box or directly below it. We count numerical figures whether or not they are expressed in numerals or words.

⁵³ An example relating to penalty fee disclosure may help clarify this. Under current regulation, if an issuer charges different amounts for a certain fee depending on the circumstances of that fee, only the maximum amount of that fee needs to be disclosed in the Schumer box. This means that two issuers may disclose the fee identically on the Schumer box (“Up to \$35”) even if one underlying fee structure is more or less complicated than the other.

Second, disclosure rules change over time. Again, the Schumer box is no exception. Therefore, comparisons of how complicated products are before and after the CARD Act rules altered the box must carefully track which changes were attributable to regulatory changes modifying Schumer box requirements, and which were not.

5.4.3 Findings

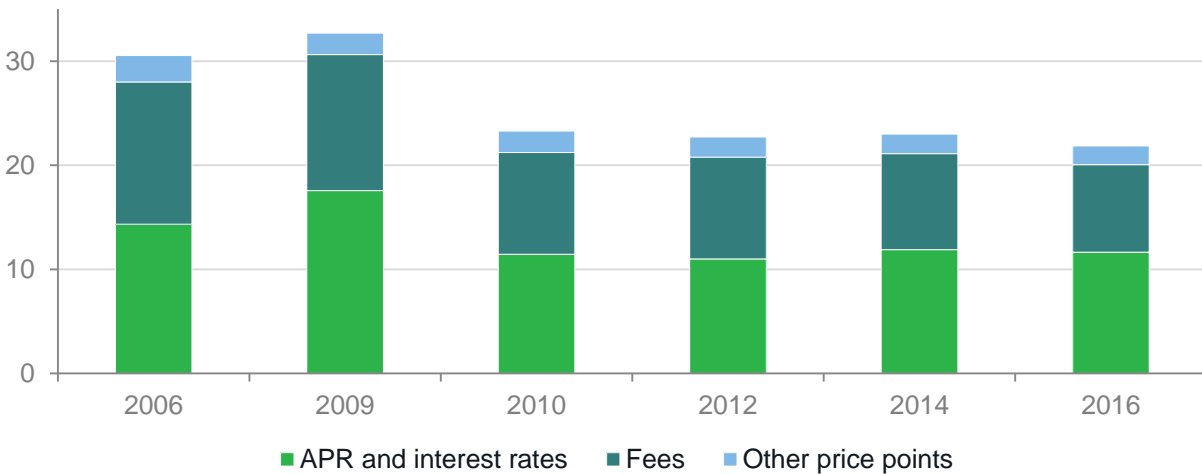
We lay out findings across four dimensions. First, we look at the overall number and distribution of Schumer box price points over the past decade. Second and third, we examine in more detail APR- and interest rate-related price points, and then fee-related price points. Fourth, we look at how variability across issuers changed over time.

OVERALL

We begin our analysis by tracking broad trends in the total number of Schumer box price points. We find that the average number of price points disclosed fell substantially following the CARD Act, and has remained relatively stable since then. This fall was generally across-the-board, with the number of APR- and interest rate-related price points and fee-related price points disclosed in 2016 well below 2006 and 2009 levels, and with a smaller drop among all other price points.⁵⁴ These results are shown in Figure 21. Further analysis of specific changes is then required to determine what portion of this change is likely attributable to an underlying change in product terms.

⁵⁴ We also note that, for the periods where our sample overlaps with the Center for Responsible Lending's sample, our findings largely comport with theirs.

FIGURE 21: AVERAGE SOLICITATION PRICE POINTS (MINTEL COMPEREMEDIA)

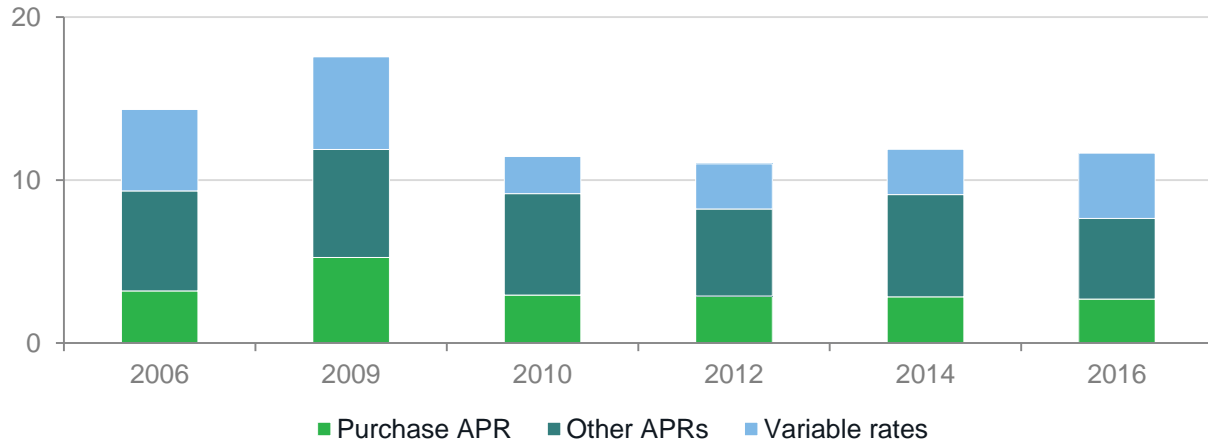


APR AND INTEREST RATE PRICE POINTS

The change in APR- and interest rate-related price points over our observation period, which is shown in Figure 22, is likely attributable primarily to regulatory changes in the disclosures. This is because the bulk of the decline is driven by the reduction in the number of variable rate-related price points. Regulatory changes issued prior to the CARD Act that became effective in 2010 prohibited certain terms relating to variable rates from being included in the Schumer box.⁵⁵ However, we do observe some decline in the number of price points relating to purchase APRs and other APRs. These have no obvious cause in changes in disclosure rules. It is plausible that the CARD Act's restrictions on repricing practices may have led some issuers to opt for simpler pricing practices, and that this decline may indicate a real tendency towards simplification in the market, albeit a slight one.

⁵⁵ See 74 Fed. Reg. 5244 (Jan. 29, 2009).

FIGURE 22: AVERAGE APR- AND INTEREST RATE-RELATED PRICE POINTS (MINTEL COMPEREMEDIA)



FEE PRICE POINTS

Change in fee price points are shown in Figure 23. The overall drop here was driven entirely by a net reduction in price points relating to penalty fees. The average number of penalty fee price points in Schumer boxes fell by over half from the pre- to post-CARD Act implementation period.

FIGURE 23: AVERAGE PENALTY- AND NON-PENALTY FEE-RELATED PRICE POINTS (MINTEL COMPEREMEDIA)

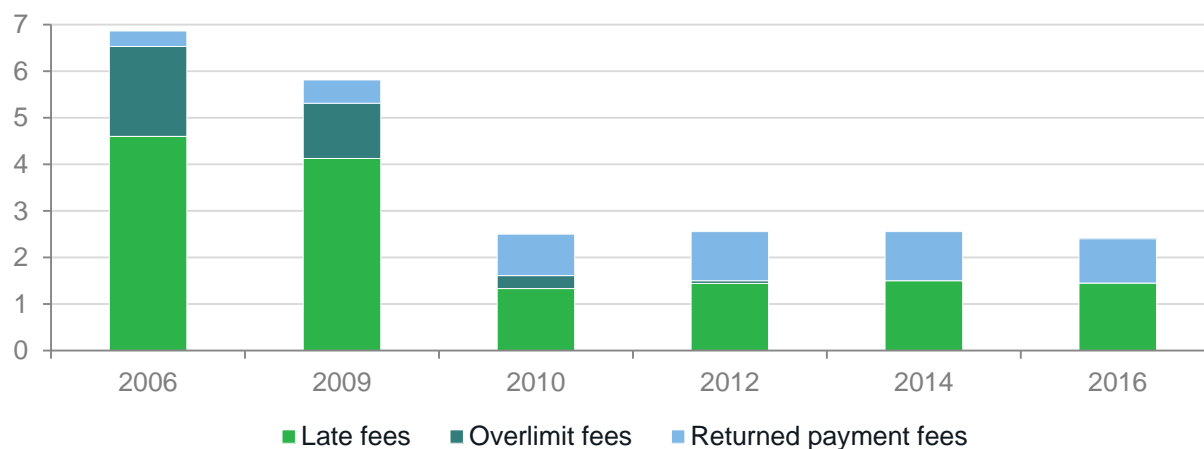


The penalty fee story, which is laid out in more detail in Figure 24, is one that encompasses both real changes in underlying product terms as well as changes in disclosure rules. The

disappearance of overlimit fees from solicitation disclosures is driven by the all-but-disappearance of such fees from the market.⁵⁶

Observed changes in late fee and returned payment fee price points, however, are likely driven by disclosure rules. New rules that became effective in 2010 allowed issuers to simplify the way they disclose late fees in the Schumer box, a change of which many issuers took advantage. Returned payment fees were newly required to be included in the Schumer box by those same rules, thus accounting for their increased prevalence in more recent observation periods. This highlights the limits of our methodology. Without digging deeper into accounts' full terms and conditions, we cannot determine whether late fee structures are indeed simpler in the post-CARD Act era, or whether returned payment fees have in fact become more prevalent.

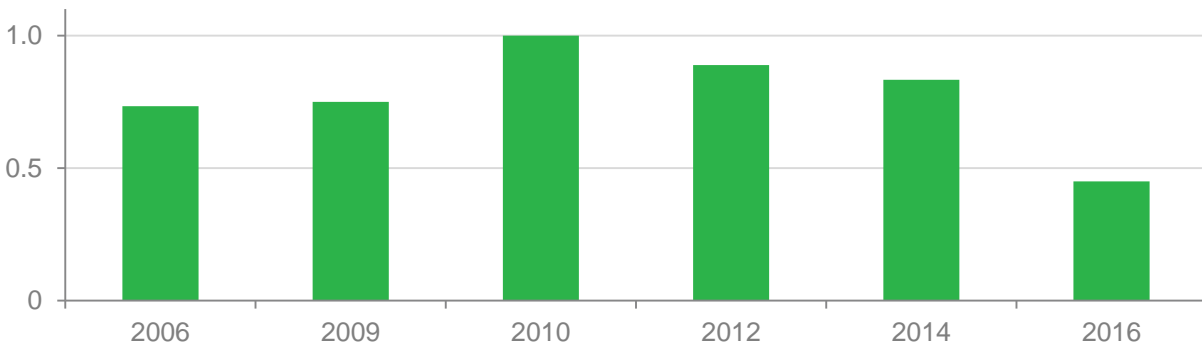
FIGURE 24: AVERAGE PENALTY FEE-RELATED PRICE POINTS (MINTEL COMPEREMEDIA)



By contrast, for most non-penalty fees, including annual fees and fees for utilizing account features such as balance transfers and cash advances, we notice little change over the period. There is one exception—foreign transaction fees. Data on these fees are shown in Figure 25. Here, there appear to be changes in how complicated credit card products are in addition to changes in how complicated disclosures are.

⁵⁶ We discuss the disappearance of overlimit fees in greater detail in Section 3.3.5.

FIGURE 25: FOREIGN TRANSACTION FEE-RELATED PRICE POINTS (MINTEL COMPEREMEDIA)



The increase in foreign transaction fee price points we observe from 2009 to 2010 was likely driven by a phenomenon similar to returned payment fees above. These fees were similarly designated as mandatory inclusions in the Schumer box by a regulatory change that became effective in 2010. But disclosure rules do not appear sufficient to explain—at least not directly—the subsequent decline in the inclusion of foreign transaction fees in the Schumer box. This decline seems driven primarily by fewer issuers assessing such fees. One recent study, which examines the full terms and conditions of a larger number of products, confirms that foreign transaction fee prevalence in the market is declining.⁵⁷ This appears to represent a real change in how complicated credit card products are. The CARD Act did not have any provisions that directly addressed foreign transaction fee practices, so the change may be driven primarily by competition. It is possible, of course, that competition may have been driven in part by increased disclosure of such fees.

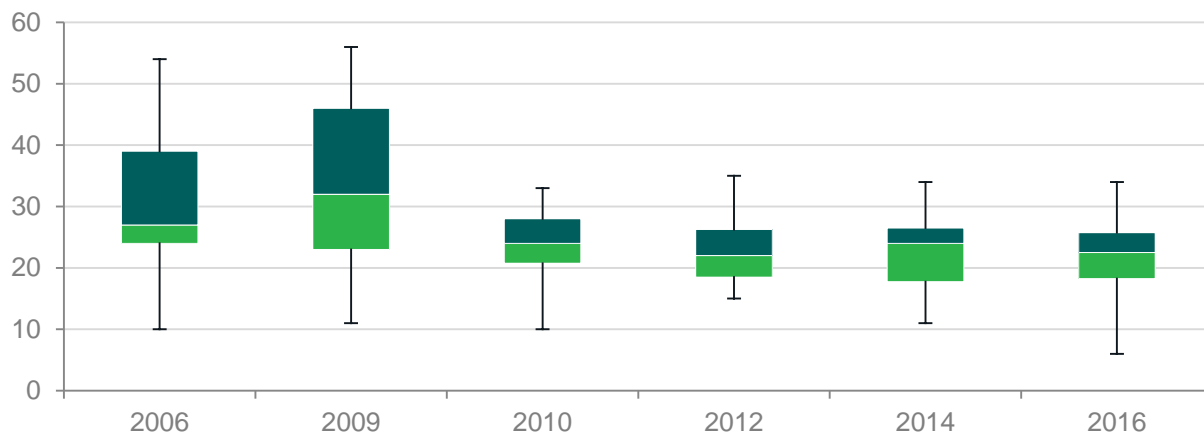
VARIABILITY ACROSS ISSUERS

As noted above, looking strictly at average price point counts can mask significant variation across issuers. We therefore examine the variation of total price points across the issuers in each observation period's sample. The bars in Figure 26 show the median number of price points, as

⁵⁷ See Sienna Kossman & Taylor Tompkins, *2017 Credit Card Fee Survey: Consumers Catch a Break*, creditcards.com (Aug. 9, 2017), available at <https://www.creditcards.com/credit-card-news/2017-card-fee-survey.php>.

well as the 25th and 75th percentiles. The “whiskers” show the highest and lowest values we observe for price points in each period’s solicitation disclosures.⁵⁸

FIGURE 26: ISSUER PRICE POINT VARIANCE (MINTEL COMPEREMEDIA)



The overarching story here is one of compression across issuers. Over the past decade, the median number of price points has fallen. This is also true for the 25th percentile. The minimum shows no definitive trend. However, the higher end of the distribution has collapsed—the average gap between the median and the 75th percentile dropped from around 13 in the pre-CARD Act observation periods to just over five in post-Act periods. A similar comparison between the median and the maximum records a parallel fall from nearly 26 to just below 14.

5.4.4 Going forward

The evidence accumulated above offers support for a hypothesis of slight but still real declines in how complicated credit card products are, as well as some concurrent shifts in disclosure practices. The limitations of our methodology, however, prevent us from drawing any conclusions stronger than those. This leaves a challenge for future research.

⁵⁸ More specifically, the green bars represent the range between the 25th percentile and the median; blue bars represent the range between the median and the 75th percentile; and the whiskers represent maximum and minimum values.

6. Products marketed to “non-prime borrowers”

The CARD Act directs the Bureau to report on the “cost and availability of credit, particularly with respect to non-prime borrowers.”¹ Throughout this report and its previous iterations, we have attempted to highlight the experience of these consumers. For example, in our 2015 Report, we reported metrics about a class of products offered to consumers with lower credit scores by “subprime specialist” providers.

In this chapter, we expand that focus. First, we describe the population of consumers who lack prime credit scores and identify four classes of credit card products marketed to such consumers. We have a primary focus here on “secured cards,” a product class that we have not yet covered in depth in prior reports, and one that is garnering more attention from a variety of stakeholders. We then look at data that show a range of outcomes for consumers who originated a product in one of these four classes in late 2014.

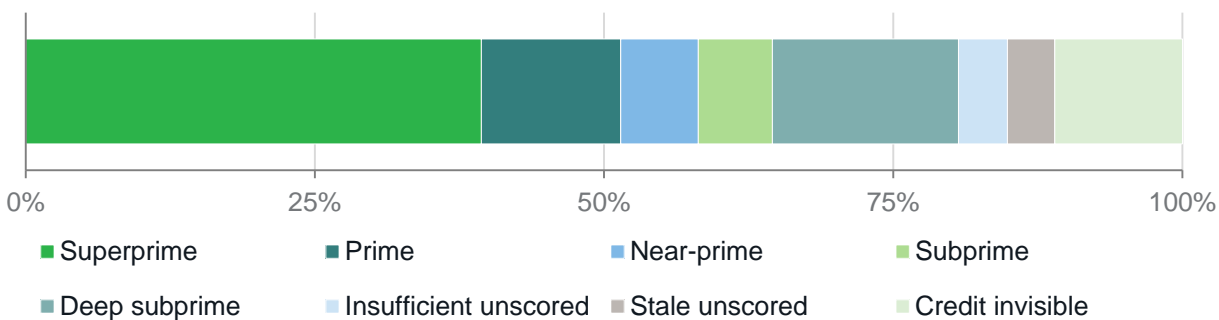
6.1 Consumers without prime credit scores

When determining whether to extend credit to a consumer, most creditors rely at least to some extent on information provided to them by a credit reporting agency. Credit reporting agencies maintain large databases of information relating to consumers’ histories with credit products and with any debts in collection. These companies may also provide credit scores on consumers in their databases. Scores now range from a minimum score of 300 to a maximum of 850.

¹ 15 U.S.C. § 1616(a)(4)(A).

Following common industry practice, the Bureau has historically relied on a threshold of 660 to distinguish “prime” from “subprime” scores.²

FIGURE 1: U.S. ADULTS BY CREDIT SCORE TIER OR CREDIT RECORD STATUS, YEAR-END 2010 (CCP, CENSUS)



Consumers who lack prime scores can be sorted into one of two groups: first, those with a credit score less than 660; and second, those without a score. The second group can be further subdivided into consumers with a credit record that is too thin or too stale to yield a score and those without any such record at all. The Bureau refers to consumers with no record at all as “credit invisibles.” The Bureau has found that, in 2010, approximately 26 million consumers were credit invisible, and a further 19 million consumers had a record but no score using a commonly-used scoring model.³

² In this report, we generally use the terms “prime” and “subprime” to refer to specific credit score tiers. To avoid confusion with the industry-standard use of these terms, we instead generally use the terms “higher score” and “lower score” to refer to scores above and below 660, respectively. For the purposes of titling and introducing this section, however, we revert to using “prime” to refer to all scores above 660, not just the 660-719 range, in order to better align with industry-standard terminology. The CARD Act’s mandate, it should be noted, is to study the cost and availability of card credit, particularly with respect to “non-prime borrowers.”

³ Kenneth P. Brevoort, Philipp Grimm & Michelle Kambara, Office of Research, Consumer Fin. Prot. Bureau, *Data Point: Credit Invisibles*, at 6 (May 2015), available at http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf. Preliminary analysis we conducted using 2013 data does not indicate any major shifts, in either direction, of the number or share of consumers who are credit invisible since 2010.

Consumers who lack prime credit scores face challenges in consumer credit markets. These consumers may have equivalent, or in some cases even greater, demand for transactional credit than consumers with prime credit scores, but their lack of a prime score may reduce or eliminate their chances of approval for many widely-marketed credit card products. Given the higher late payment and default rates associated with consumers who lack a prime credit score, products issued to these consumers generally feature higher all-in costs than products issued to consumers with higher scores.⁴

Consumers who lack a prime credit score and who seek a credit card may have several options. Four product classes in particular constitute a large share of all products originated to this group. The first is unsecured general purpose accounts offered by mass market issuers. The second is accounts offered by subprime specialists. These are generally unsecured as well. The third is private label credit cards. The fourth is secured cards offered by mass market issuers. We examine each in turn. Not all these products, it should be noted, may be equally available to consumers without prime scores.

6.2 Unsecured general purpose cards offered by mass market issuers

Most mass market issuers originate the majority of their credit card accounts to consumers with prime credit scores. This is especially true for general purpose cards, as we show in Section 4.1.2 above. Even so, almost all mass market issuers originate at least some general purpose accounts to consumers without prime scores. For some mass market issuers, in fact, this volume is quite substantial. As a result, unsecured general purpose cards offered by mass market issuers comprise a substantial share of credit cards originated to consumers without prime credit scores.

⁴ As noted in Section 1.3.2, issuers use credit scores to predict a consumer's relative likelihood of repaying a debt when compared to other consumers. For a comparison of the total cost of credit for consumers in each credit score tier, see Section 3.1.1.

Offerings from mass market issuers to consumers lacking prime credit scores generally take two forms. Some consumers lacking prime scores are offered products substantially similar in their terms and structure to those offered to consumers with prime scores, albeit with a higher price (such as a higher interest rate), a lower credit limit, or both.⁵ Some mass market issuers, however, design separate products specifically for consumers with lower scores. Those products are also designed to mitigate the risk of offering credit to such consumers. Those products may feature key terms similar to those that distinguish subprime specialist products, which we describe in more detail below. Our data do not allow us to distinguish between the two types of mass market general purpose offerings.

6.3 Products offered by subprime specialists

Subprime specialists—a term which encompasses card-issuing banks as well as non-bank program managers that may play a role in designing and servicing credit card products in this segment of the market—tend to market their products predominantly to consumers who lack prime credit scores. Their products are therefore designed specifically to ensure their portfolio remains commercially viable even when comprised largely of accounts held by consumers with lower credit scores, which tend to have a correspondingly higher default rate than accounts held by consumers with higher credit scores. Subprime specialist products generally have high interest rates as well as high fees when compared to mass market products.⁶ These fees include annual or maintenance fees nearer the maximum limit set by the CARD Act.⁷ Subprime

⁵ See Sections 3.2.1 & 4.1.5.

⁶ See 2015 Report, at 79.

⁷ See 15 U.S.C. § 1637(n); 12 C.F.R. § 1026.52(a). Section 1026.52(a) limits the total amount of fees required to be paid by the consumer on an account during the first year after account origination to 25% of the initial credit line, with exceptions for certain penalty fees and optional fees. Section 6.6.2 below contains a comparison of fee composition across products.

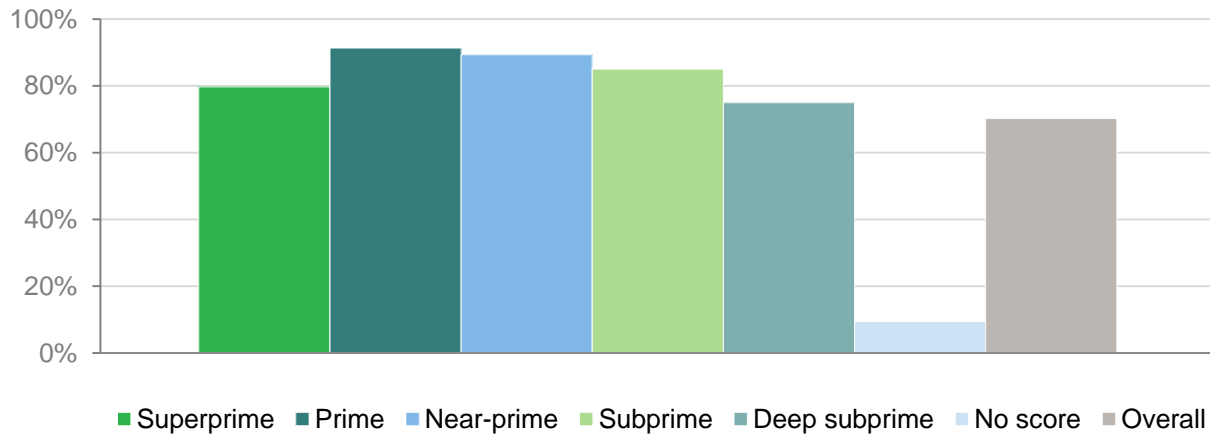
specialists may also charge fees for services and account activities for which mass market issuers tend not to charge, such as granting a credit line increase.

Subprime specialists employ a marketing model that centers on high volumes of pre-approved and targeted mail offers. To acquire new accounts, subprime specialists rely heavily on marketing to consumers whose credit profiles meet their underwriting standards. Data from Mintel Comperemedia and *The Nilson Report* suggest that these providers send mail to consumers with non-prime scores in volumes that well outstrip some mass market issuers with much larger credit card portfolios. Subprime specialists send a relatively high percentage of “pre-screened” offers to consumers they have selected based on credit bureau data and their internal models. Our market monitoring suggests that some subprime specialists may refuse most applications that do not result from pre-screened offers.

Subprime specialist cards have higher approval rates for consumers with lower credit scores than mass market issuer unsecured and secured cards.⁸ Figure 2 provides a snapshot of approval rates for subprime specialists in October, November, and December 2014, which is the time period that forms the basis for the broader analysis in the second half of this section. The subprime specialist approval rates for consumers with near-prime, subprime, and deep subprime scores are significantly higher than the corresponding approval rates for mass market credit card applications submitted by consumers from those credit score tiers, as shown in Section 4, and for parallel secured mass market issuer credit card applications, as shown in Section 6.5.3 below. One notable exception is the low approval rate for consumers with no credit score applying for cards from subprime specialists. This population made up roughly 19% of total applications for these products but only 3% of total approvals.

⁸ In the fourth quarter of 2014, subprime specialist card applications were approved at a rate of 70%, as shown in Figure 2. That compares to roughly 50% for mass market issuer unsecured card applications in 2014. See Section 4.1.2, Figure 7.

FIGURE 2: APPROVAL RATE FOR SUBPRIME SPECIALIST CARD APPLICATIONS, 2014Q4 (SSV)



6.4 Private label credit cards

Retail credit—financing offered to consumers by the same entity selling them the good or service that the consumer may wish to finance—is almost as old as retail itself. According to one history, “[m]ost retailers of durable goods sold them on credit by 1930; that year, 80 to 90% of furniture was bought on credit, as were 75 percent of washing machines, 65 percent of vacuum cleaners, 18 to 25 percent of jewelry, 75 percent of radio sets, and 80 percent of phonographs . . . large department stores offered to sell everything on some form of installment plan.”⁹ Even as the general purpose credit card market grew from nascence to ubiquity over the latter half of the twentieth century, the retail credit model has continued to prove attractive to consumers and merchants. This model is by no means limited to credit cards, but cards play a prominent role in the retail-branded credit market. Today, a wide variety of merchants, including many of the

⁹ David S. Evans & Richard Schmalensee, *Paying with Plastic: The Digital Revolution in Buying and Borrowing*, at 48 (MIT Press, 2nd ed. 2004).

nation's largest, offer consumers credit cards that can only be used for purchase with that merchant.¹⁰

Private label cards are distinctive in a number of ways. They are overwhelmingly issued to consumers in the course of the retail experience, as we illustrated in Section 4.1.2. They also tend to feature smaller lines than general purpose accounts across the credit spectrum. Interest rates on private label cards are not only higher than rates on general purpose cards, they also vary little across the credit spectrum, as shown in Section 3.2.1. Consumers exhibit different usage patterns with digital account servicing, as we note in Section 5.1. Very few private label cards incorporate “rewards” programs similar to those prevalent on general purpose cards; instead, they offer consumers loyalty discounts and access to deferred interest promotions, the latter of which we discuss in depth in Section 3.5.

In recent years, there have been two significant developments in the private label credit card industry that have affected consumers lacking prime credit scores. The first shift is in consumer composition and usage. As shown in Sections 2.2.2 & 4.1.4, the credit score mix of private label card users has changed substantially. More consumers with lower scores are receiving cards, more credit is being extended to such consumers, and that credit is becoming increasingly utilized. While total new private label originations remain below pre-recession highs, the annual number of private label cards originated to consumers lacking prime scores has exceeded pre-recession levels in each of the previous four years. This shift is also reflected in usage patterns. The total amount of private label credit available to consumers with non-prime credit scores is now nearing all-time highs. Private label utilization rates for consumers with lower scores are also at levels substantially higher than those we observe prior to the recession.¹¹

The second shift has been in the structure of the market. In the recent past, private label credit cards were often issued by retailers themselves. However, few American retailers of substantial

¹⁰ As we note in Section 4.1.2, many of these same merchants also offer retail co-brand products; however, these products are much more limited in their availability to consumers who lack prime credit scores.

¹¹ Additionally, a recent report by the Center for Financial Services Innovation also noted that “Retail Credit Cards” are a “ubiquitous credit card option for those with FICO scores below 700.” See Eric Wilson and Eva Wolkowitz, *2017 Financially Underserved Market Size Study*, at 23 (Dec. 2017).

size currently offer credit cards directly to their consumers. Instead, large retailers are partnering with bank credit card issuers and other credit card specialists. These issuers and specialists often focus (or have divisions that focus) on private label credit card issuance and management.

This shift in market structure predates the recession, but the last decade has seen this trend approach its logical endpoint. According to *The Nilson Report*, in 2004, even as large private label specialists were ascending to dominance, a number of America’s most prominent retailers still issued their own credit cards, including many of the nation’s largest department stores, apparel retailers, and jewelers.¹² In its comparable report on the market in 2016, *Nilson* reported that nearly 97% of all private label purchase volume occurred on cards issued by just six large banks. In May of this year, the retailer with by far the largest remaining “in-house” consumer credit card program announced it would be transitioning away from in-house credit, partnering with one of the large bank specialists to begin issuing the majority of its cards.¹³

These two shifts suggest private label credit cards are becoming a larger source of credit for consumers with lower credit scores. The private label credit card debt of consumers lacking prime credit scores was once owned by non-financial retailers with a primary business of selling household goods and services. This same debt is increasingly on the books of banks that have greater economies of scale, experience managing debt, easier access to capital markets, and a primary commercial focus on assembling and maintaining loan portfolios. In both our 2015 Report and this report, we have increased our focus on the private label market as the contours and consequences of these shifts have become apparent.

¹² The Nilson Report, *Store Cards in the U.S. 2004*, Issue 838, (July 2005).

¹³ The Nilson Report, *Store Cards in the U.S. 2016*, Issue 1112, (June 2017). This trend also encompasses retail co-brand cards; one retailer that operated one of the largest “in-house” retail co-brand portfolios just this year divested its branded credit card portfolio, to a large mass market issuer. See Press Release, Synovus, *Synovus Announces Closing of Cabela’s Transaction* (Sept. 25, 2017), available at <http://www.businesswire.com/news/home/20170925005838/en/Synovus-Announces-Closing-Cabela%E2%80%99s-Transaction>; see also Press Release, Signet Jewelers, *Signet Jewelers Announces First Phase of Strategic Outsourcing of Credit Portfolio* (May 25, 2017), available at http://s2.q4cdn.com/912924347/files/doc_news/2017/Credit-release-Final.pdf.

6.5 Secured credit cards

Many consumer loans are “secured,” meaning that the consumer agrees that, in the event of default, a specifically-designated material asset or assets can be taken by the creditor. In some of the largest consumer credit markets, this is the dominant model. Most mortgages and auto loans are secured by the home or vehicle purchased using the proceeds of the loan.

Most credit card loans are unsecured. That has been true since the origin of the credit card market in the middle of the twentieth century.¹⁴ However, a small but growing portion of the credit card market consists of secured credit cards that require the applicant to provide a security deposit before issuance, helping offset concerns the issuer may have about a borrower’s creditworthiness.

Traditionally, secured cards have not been a primary focus for bank issuers. This fact is evidenced by low penetration and few major marketing campaigns for such products. Until recently, some mass market issuers had not developed their internal secured card models and processes as fully as those for their unsecured products. In many cases, these issuers used secured products for “counter-offers”—offers of a “next-best” product made alongside the rejection of a consumer’s application for an unsecured product. Recent years, however, have seen secured cards receive more attention from issuers, consumer groups, and media outlets,

¹⁴ There are two notable exceptions to this, other than the secured credit card products we discuss at length in this section. The first are private label credit cards, some of which are secured by the product(s) consumers purchase. To the Bureau’s knowledge, this represents a minority of private label accounts. The second are credit cards issued by many credit unions as well as at least some banks, for which the issuer may attempt to assert a more general security interest in the funds in consumers’ deposit accounts held by the issuer, without regard to a consumer’s usage of those deposit accounts or whether those accounts have balances that generally match or exceed the card’s credit line. Of course, the unsecured nature of most credit card loans does not preclude issuers from pursuing delinquent borrowers in court, where a consumer could be ordered to forfeit a portion of their assets or wages to satisfy their debt. This is distinct, however, from a model in which a distinct quantity of segregated funds is mutually agreed upon in advance to serve as collateral.

perhaps because the products may offer a route for individuals looking to establish or build their credit scores to do so.¹⁵

Today, most mass market bank issuers offer a secured credit card product. Several issuers are testing and implementing innovative approaches to structuring, explaining, marketing, and servicing these products. This section highlights the practices of mass market bank issuers offering secured credit card products. We do not presently have adequate data to include secured cards practices of credit unions in this analysis.¹⁶

Below, we examine the secured card market in three stages. First, we give a broad overview of secured cards and how they work. Second, we analyze how secured cards, their role in the market, and perceptions of them have evolved over time. Last, we examine mass market issuer practices in detail, noting both what is common as well as what varies across major providers.

6.5.1 How do secured cards work?

The core proposition behind secured cards is simple. Issuers require consumers to provide a dedicated security deposit in order to protect themselves against the potentially high credit risk of issuing cards to borrowers with lower credit scores or limited credit information. The issuer can mitigate or avoid losses by expropriating the deposit if the account holder falls sufficiently behind on their payments. As we discuss in more detail below, the security deposits allow issuers to offer credit cards to consumers without prime scores on terms generally considered more favorable relative to other card products available to them.

¹⁵ Recent Bureau research suggests that secured cards play a role in facilitating credit visibility in outsized proportion to their share of the overall market. See Kenneth P. Brevoort & Michelle Kambara, Office of Research, Consumer Fin. Prot. Bureau, *CFPB Data Point: Becoming Credit Visible*, (June 2017), available at https://www.consumerfinance.gov/documents/4822/BecomingCreditVisible_Data_Point_Final.pdf.

¹⁶ Industry commenters have showcased different secured card practices in various credit unions and community banks, asserting these institutions drive much of the consumer-friendly innovation within the secured card market. See generally Rob Levy et al., *Secured Credit Cards: Innovating at the Intersection of Savings and Credit*, CFSI, (May 2016), available at <http://cfsinnovation.org/research/secured-credit-cards-innovating-at-the-intersection-of-savings-and-credit>.

Secured credit cards can provide consumers both card credit and a path towards an improved credit record. A consumer’s credit score can increase with regular, timely repayments on a secured card because mass market issuers generally report secured credit card information to the credit reporting agencies. Additionally, if consumers display consistent, timely repayment habits, many issuers will consider converting them to unsecured credit card products through the return of the security deposit. This process is often referred to as “graduation.”

Secured credit cards potentially allow issuers to develop relationships with a segment of consumers they have traditionally found risky to serve. Outside research reports suggest secured card portfolios have slim, and sometimes negative, profit margins in the short term, which could be either a cause or an effect of issuers viewing secured card customers as longer-term investments.¹⁷ Several mass market issuers, however, report that their secured card portfolios are independently profitable—but nevertheless confirm that shorter-term intra-portfolio profits are not the sole, or even primary, focus of offering secured cards. Consumers who graduate to an unsecured product may feel some degree of gratitude or loyalty to the issuer that facilitated their credit entry or credit score rehabilitation; at that point, the issuer may be able to interest them in other products. Additionally, that issuer may have an advantage over competitors in terms of both quality and timeliness of information about those consumers.

Secured cards can either be fully or partially secured, depending on whether the credit limit equals or exceeds the security deposit. To the Bureau’s knowledge, the majority of secured cards are fully secured at origination. Structuring products in this manner ensures an issuer will generally have recourse equivalent to the entirety of the consumer’s outstanding balance in the case of severe delinquency or default.¹⁸

Some mass market issuers allow for credit line increases that cause the card’s total limit to rise above the amount of the security deposit. These increases make the product partially secured,

¹⁷ *See id.*

¹⁸ In some cases, payment card network rules may result in a consumer’s balance exceeding their credit limit. In particular, network rules generally require that issuers settle a transaction if they had earlier authorized it. In certain circumstances, that may lead to exceeding credit limits temporarily.

even if the card was originated as a fully-secured product. The account at this point becomes riskier to the issuer because the security deposit no longer fully covers the credit limit. Only a minority of large bank issuers allow secured cards to become partially secured.

The major risk to consumers using secured credit cards is that of severe delinquency or default. A consumer who fails to make timely payments on their secured card could find that their attempt to rehabilitate or establish their credit record has failed. However, the credit reporting consequences of secured card failure are generally no different than for any other credit card. This risk is the risk all consumers take when they utilize card credit.¹⁹

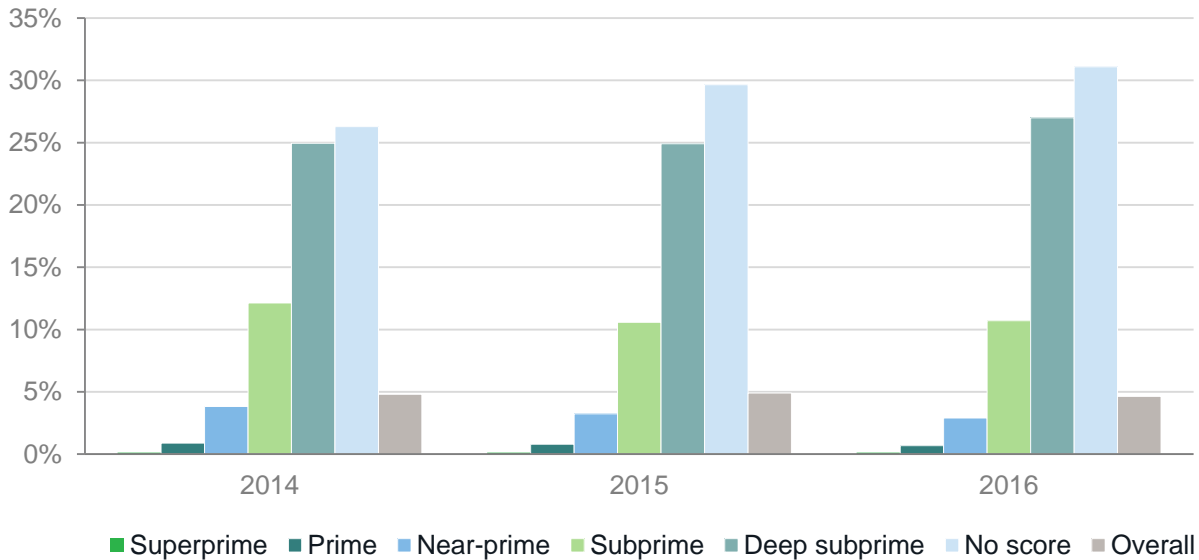
As shown in Figure 3 below, secured card products comprise only a small fraction of the credit card market, accounting for roughly 5% of new general purpose credit card accounts in 2016, according to Y-14 data.²⁰ However, there has been recent growth in originations with nearly 1.8 million secured card accounts opened in 2016, a 15% increase over 2014.²¹ This growth is concentrated among consumers without scores and consumers with deep subprime scores, and secured cards have consistently represented over one-quarter of mass market accounts originated to such consumers in recent years.

¹⁹ Consumers who default on their secured cards are also at risk of losing their deposit.

²⁰ As we have noted throughout this report, Y-14 data cover a large share of the credit card market but may not be representative of the market share that they do not cover. Given the reports that community banks and credit unions offer significant numbers of secured cards, this caveat may be particular apt in the secured card context. Nevertheless, information available to the Bureau does not suggest that the secured card share of the overall market is much larger than the figures we derive from Y-14 data.

²¹ We deliberately show the share of originations, not the share of open accounts. Over a long-enough time horizon many secured cards will graduate into unsecured cards, which are difficult to distinguish in the data from cards that began life as unsecured cards. At any given point in time, therefore, the secured card share of open or active accounts will underestimate the effect of secured cards on the market. Even so, the secured card share of accounts in the Y-14 has grown rapidly over the last few years.

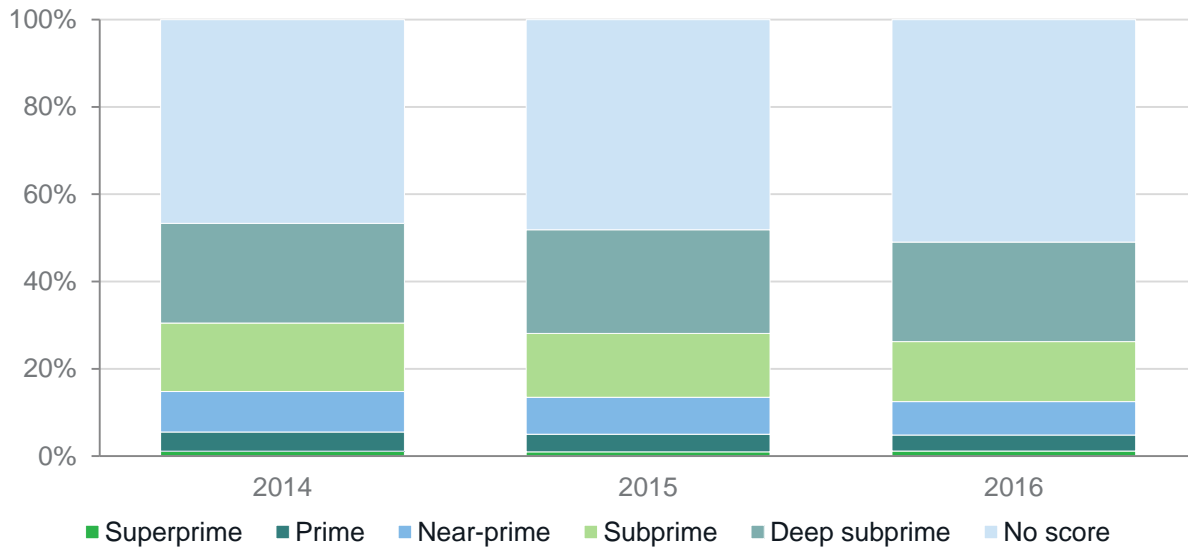
FIGURE 3: SECURED CARD ORIGINATIONS AS A SHARE OF ALL GENERAL PURPOSE ORIGINATIONS (Y-14)²²



Secured credit cards are primarily used by consumers with no credit score or deep subprime credit scores. As reflected in Figure 4, these two populations account for nearly three-quarters of secured card originations in 2016. Secured card originations for consumers with superprime credit scores are virtually nonexistent, and over 90% of all secured card originations are made to consumers lacking prime credit scores.

²² Our MMI data corroborate these findings; we report them below when discussing application volumes and origination rates.

FIGURE 4: SECURED CARD ORIGINATIONS (Y-14)



6.5.2 Market evolution

Secured credit cards have evolved significantly over the past few decades. Secured cards are a newer product than their unsecured counterparts and were first devised in the late 1970s, when a number of savings and loan institutions pioneered a new type of credit card loan that required a deposit be held in an interest-bearing savings or term account.²³ From its inception, the product was geared towards consumers with damaged or thin credit records.

Throughout the 1980s and 1990s, secured credit card products became associated with a prominent form of consumer fraud. Third-party “brokers” would take a security deposit payment but not provide a card in return. This fraud was quite prevalent. In 1988, over one million Americans were victims, paying more than \$50 million to brokers, while only 10% of

²³ Larry Santucci, *The Secured Credit Card Market*, at 6 (Federal Reserve Bank of Philadelphia, Discussion Paper, Payment Cards Ctr., 2016), available at https://www.philadelphiafed.org/-/media/consumer-finance-institute/payment-cards-center/publications/discussion-papers/2016/dp16-03_the-secured-credit-card.pdf?la=en.

these borrowers received a secured card.²⁴ The credit card networks implemented more stringent guidelines around secured card programs to limit this kind of fraud.²⁵ The damage to the overall secured card brand, however, took some time to dissipate.

In recent years, issuers have invested more in marketing secured cards. Consumer groups and various media organizations have also drawn attention to secured cards, focusing on their potential to offer consumers with limited or damaged credit records a way both to access credit and to build or rebuild their credit record. An additional driver of secured credit card popularity may be third-party credit card comparison sites, which frequently highlight secured credit cards as an important channel for consumers unlikely to be approved for an unsecured credit card.

6.5.3 Consumer experience

With the exception of the security deposit, secured credit cards function quite similarly to unsecured cards. Stressing this similarity is a fundamental component of several mass market issuers' product branding efforts. Consumers are able to make purchases and revolve balances, paying monthly interest charges and other common fees when applicable. The reusability of a revolving line of credit and the ability to make purchases directly with a network-branded card distinguishes secured credit cards from other credit-building products such as credit-builder loans.

Mass market issuer secured cards currently offer many of the same credit card features included with unsecured cards. Most secured cards allow free access to commercially-accepted credit scores and access to digital account servicing platforms, among other features.²⁶ However, only 11% of open secured card accounts in the Y-14 were associated with some type of rewards program in 2016, and virtually all of them were cash rewards programs. Recently, more issuers have begun providing secured cards with rewards features similar to those they offer on

²⁴ *Id.*

²⁵ *Id.* at 7.

²⁶ We discuss both of these account features in more detail in Sections 5.1 and 5.2.

unsecured cards, suggesting this share may grow over the next few years. Large bank issuers have also recently made rewards and other mainstream features more prominent in their messaging efforts surrounding secured cards.

Below, we examine the consumer secured credit card experience step by step. We begin with how consumers learn about and apply for the card, discuss terms and processes relating to the security deposit, and move on to discussing issuer practices relating to both positive outcomes, like graduation to an unsecured product, and negative outcomes, like delinquency and charge-off. This analysis highlights differences in practices at several mass market bank issuers but is not intended to describe in full the practices of all issuers of secured cards.

SOLICITATION AND ACQUISITION

Low product awareness is one barrier to secured credit adoption. Outside research has found that many individuals lacking prime credit scores may not be aware that secured credit cards are a potential option for them, or even that the product exists.²⁷ Secured credit cards are generally not featured in marketing campaigns to nearly the same degree as unsecured cards. Secured card offers comprise a very small share of total direct mail credit card offers—only 0.08% in 2016.²⁸

Consumers report that in-person experiences at bank or credit union branches are the most common channel by which they hear about secured credit cards.²⁹ One estimate found almost all secured card originations in 2015 came from either in-branch applications or invitation-to-apply mailings.³⁰ A consumer may first apply for an unsecured account but be declined due to a damaged or thin credit record. Rather than simply reject the consumer, an issuer with a secured card program might attempt to follow up with information about a secured credit card, soliciting the consumer to consider applying for that product. This could happen both in-branch, where a

²⁷ Rob Levy et al., *supra* note 16, at 15.

²⁸ See Mintel Group Ltd., *Credit Card Response Rates*, (Aug. 2017).

²⁹ Rob Levy et al., *supra* note 16, at 16.

³⁰ Larry Santucci, *supra* note 23, at 15-16.

bank employee could follow a rejection with a counter-offer on the spot, or by mail, where a consumer rejected for one card may find a credit card solicitation in their mailbox just a few days later.

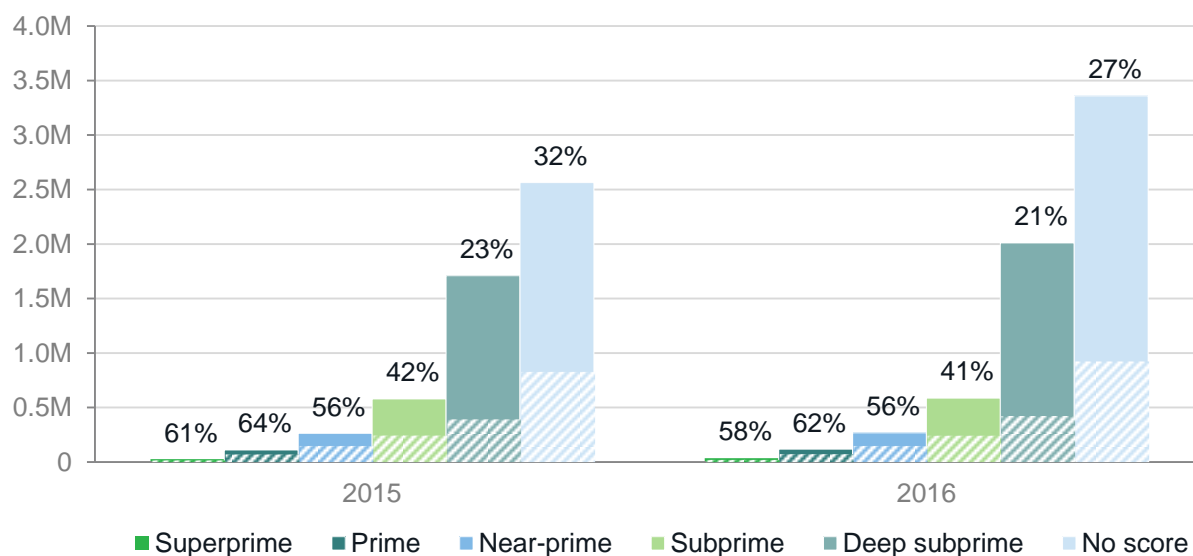
Counter-offers are not guaranteed offers of credit, but remain a significant practice for some issuers. A consumer responding to a counter-offer may still be denied for a secured card product if, for example, the lender determines that the applicant does not meet ability-to-pay requirements.

APPLICATIONS AND APPROVALS

Our surveyed issuers reported 6.4 million secured card applications in 2016, an increase of 21% from 2015. Some 98% of that growth was driven by consumers with no credit score or deep subprime credit scores.

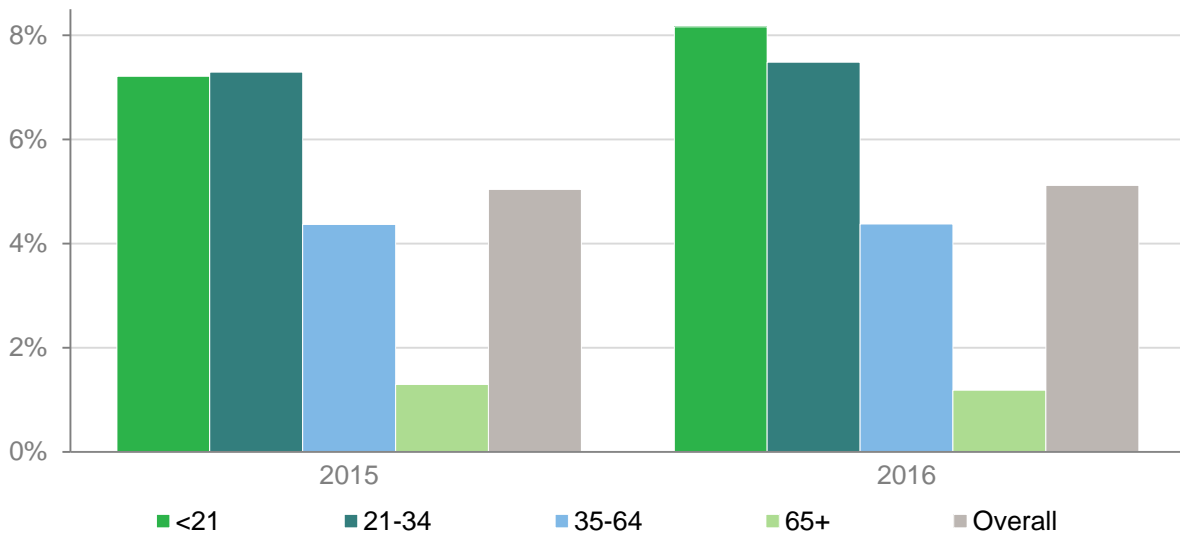
The process of applying for and receiving a secured credit card differs from that of unsecured cards. Consumers could feasibly pass an issuer’s underwriting and ability-to-pay tests but be unable to fund the security deposit. Our data render it difficult to make direct comparisons to approval rates on unsecured credit cards. We therefore do not use the terms “approvals” or “approval rates” here, instead referring to originations and origination rates. Figure 5 shows the numbers of secured card applications and originations in each of the last two years.

FIGURE 5: SECURED CARD APPLICATIONS AND ORIGINATIONS (SHADED AREA REPRESENTS ORIGINATIONS) (MMI)



The number of secured credit cards originated by mass market issuers increased 7% from 2015 to 2016, a slower rate than the 21% growth rate for applications. Virtually all growth in secured card originations is comprised of consumers with no credit score or deep subprime credit scores. As shown below in Figure 6, secured cards were especially common among younger consumers, representing more than 7% of all mass market cards issued to consumers under 35.

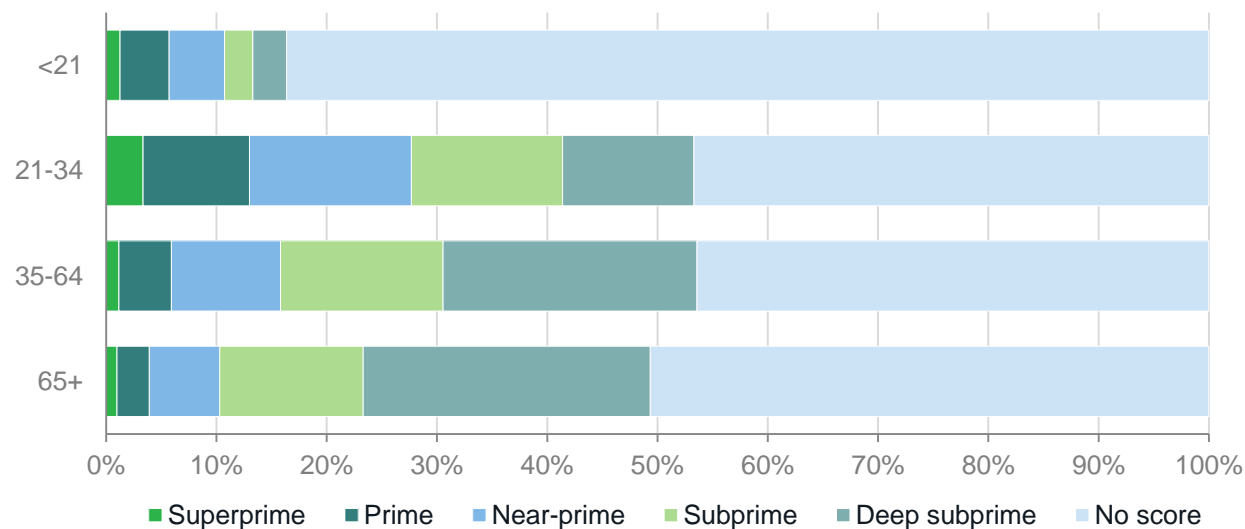
FIGURE 6: SECURED CARD ORIGINATIONS AS A SHARE OF ALL GENERAL PURPOSE ORIGINATIONS, BY AGE (MMI)



As shown below in Figure 7, a majority of secured card applications from consumers under the age of 35 are from consumers without a credit score. That proportion rises to over four-fifths when examining consumers under 21. These proportions are similar for secured card originations. This is unsurprising—younger consumers have not had as many opportunities to establish their credit, making secured cards a potential means for establishing a credit record and eventually a credit score. Bureau research has shown that consumers who transition out of

credit invisibility frequently do so at a young age; our sample found 80% of these transitions occurred before age 25.³¹

FIGURE 7: SHARE OF SECURED CARD ORIGINATIONS BY AGE, 2016 (MMI)



Digital acquisition

As is true for the broader credit card market, the internet is a growing source of secured card applications. Although physical sites like bank branches and financial centers still remain the predominant avenue for customer acquisition, several large bank issuers report that they no longer allow consumers to apply for secured card products in branches. Instead, these issuers require individuals to use their website or call to apply—though a consumer may be assisted in completing that online application at the bank branch.

Third-party comparison sites (“TPC sites”) offer a unique opportunity for secured card issuers. These sites allow issuers to target consumers who may be interested in building or rebuilding their credit score but who may not be aware of secured cards. Many TPC sites have targeted lists

³¹ Kenneth P. Brevoort & Michelle Kambara, Office of Research, Consumer Fin. Prot. Bureau, *CFPB Data Point: Becoming Credit Visible*, at 5 (June 2017), available at https://www.consumerfinance.gov/documents/4822/BecomingCreditVisible_Data_Point_Final.pdf.

and filtering criteria for individuals with lower credit scores or without credit scores, and most TPC sites we reviewed direct such consumers to secured cards as one means of working towards an improved credit score. Some of these sites also produce editorial content that explains how secured cards work and what to consider when researching secured cards. TPC sites list a wide range of secured card offerings, from those offered by mass market issuers to those offered by smaller or more niche issuers. We discuss third-party comparison sites more broadly in Section 7.

Some large bank issuers with robust online origination practices are increasingly investing in TPC sites. These issuers report a substantial minority of secured card originations from this channel. However, other issuers report they do not list their secured card products on TPC sites, electing to maintain their counter-offer practices and more traditional forms of secured card marketing.³²

Ability-to-pay requirements in the application process

Once a consumer has applied for a secured credit card, they must successfully pass through the issuer's underwriting process as well as pass the ability-to-pay ("ATP") requirements instituted pursuant to the CARD Act.³³ Bank issuers report no meaningful differences between their ATP criteria for secured and unsecured products.³⁴ Using our MMI data, we find around 12% of

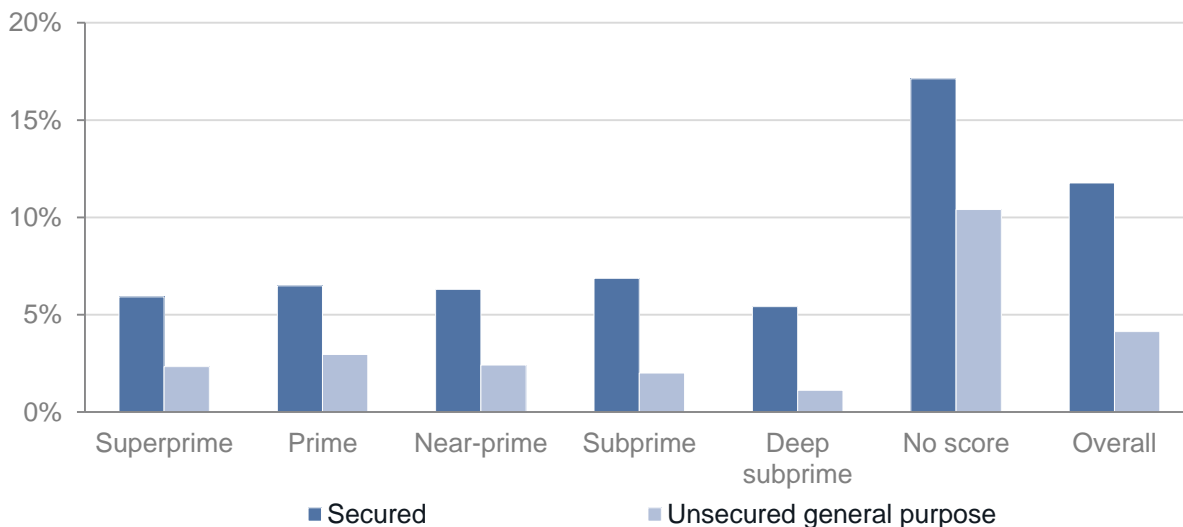
³² Third-party comparison sites have the ability to display card product information regardless of whether an issuer approves of such display on the site. Issuers that do not list their secured card products on these sites may have some type of provision in their agreements with sites specifying this arrangement. Consumers can still apply for these products on issuers' websites.

³³ 15 U.S.C. § 1665e; 12 C.F.R. § 1026.51.

³⁴ Several industry commenters stated that ATP requirements are redundant when applied to secured card applications, as consumers will effectively demonstrate their ability to pay when they fund their security deposits. Commenters therefore questioned the value of the ATP requirements for secured cards, with at least one industry commenter having noted this concern during the initial rulemaking process of the CARD Act. *See* Letter from Odysseas Papadimitriou, C.E.O. of Evolution Finance, to Monica Jackson, Office of the Exec. Sec'y, Consumer Fin. Prot. Bureau, at 1-2 (Dec. 21, 2012) (regarding the Credit Card Act of 2009 ability-to-pay clause), *available at* <https://www.regulations.gov/document?D=CFPB-2012-0039-0008>. Industry commenters have proposed adjusting debt obligation calculations to allow the security deposit to qualify as an ATP qualification, and have claimed that requiring additional ATP analyses increases the time and costs associated with approving secured cards, a process which they believe may be limiting access to secured card products for consumers. Similarly,

secured card applications were denied by issuers solely due to ATP test results. Across all credit score tiers, ATP denial rates for secured card applications are higher than those for general purpose card applications from the same issuers. Similar to ATP denial rates for all general purpose cards, the secured card rate of denial for consumers without credit scores is significantly higher than for other credit tiers. ATP denial rate data are shown in Figure 8 below.

FIGURE 8: ATP DENIAL RATE ON SECURED AND UNSECURED CARDS, 2016 (MMI)³⁵

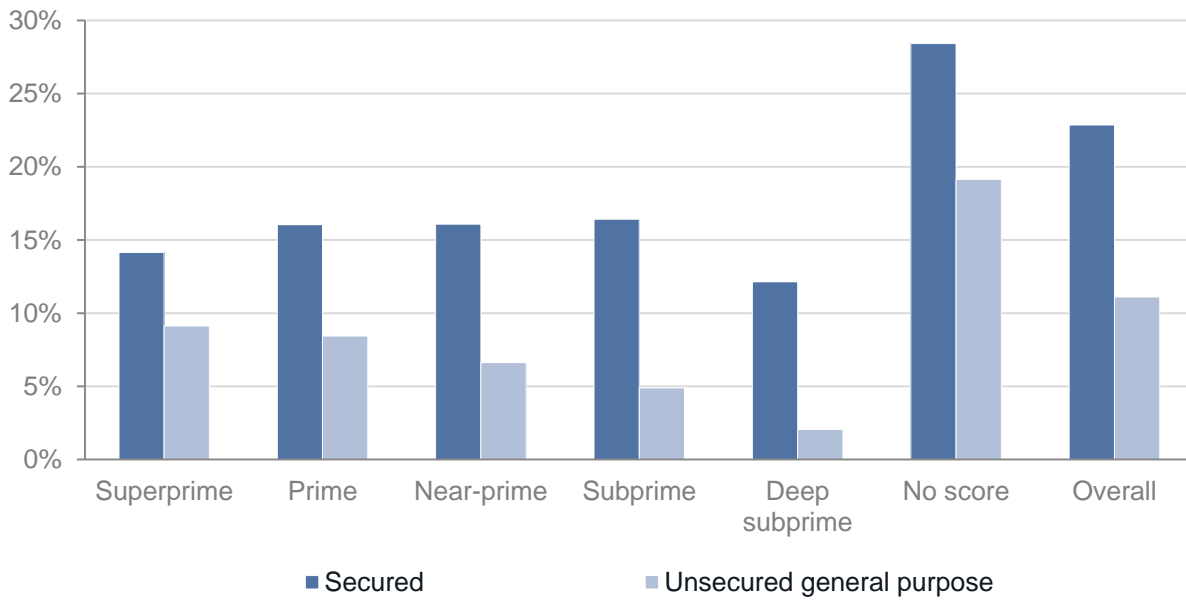


As shown in Figure 9 below, the difference in ATP denial rates between applications for unsecured and secured products persists even restricting our analysis to consumers with incomes of less than \$30,000. This finding is true across all credit score tiers.

NAFCU has commented that a consumer’s ability to pay should be covered by their shares in the credit union. See NAFCU Comment Letter, at 3.

³⁵ To establish a standardized comparison, Figures 8 and 9 only include issuers that issue both secured and unsecured general purpose credit cards.

FIGURE 9: ATP DENIAL RATE ON SECURED AND UNSECURED CARDS, CONSUMERS WITH INCOMES <\$30,000, 2016 (MMI)



SECURITY DEPOSITS

Once consumers have passed an issuer’s underwriting and ATP thresholds, they must fully fund the security deposit.³⁶ For consumers who lack sufficient available funds, this may be the largest hurdle to completing the approval process.³⁷ Recent Bureau research on financial well-being suggests many individuals with limited savings and financial safety nets struggle more broadly

³⁶ Several consumer groups stated that consumers may misunderstand the role of the security deposit. These groups expressed concern that consumers could believe the funds remain accessible once they receive the product or might not know that issuers can access these funds to pay off delinquent balances. *See, e.g.*, Consumer Action Comment Letter, at 5. Issuers we surveyed reported that they had seldom heard this complaint from consumers.

³⁷ This point is frequently highlighted by industry commenters. *See, e.g.*, Visa Comment Letter, at 6-7. *See also* Rob Levy et al., *supra* note 16.

with meeting current and ongoing expenses.³⁸ The very nature of the product, therefore, limits many consumers' ability to procure a secured card.³⁹

Issuer practices meaningfully diverge on several key practices relating to security deposits. No single approach for structuring and funding the security deposit has become standard in the secured card market. We discuss these points in detail below.

Mechanics of funding

The core mechanism underlying the funding of the security deposit is broadly consistent across the market—a consumer permits the issuer to open a new deposit account in the individual's name.⁴⁰ The consumer is then responsible for transferring funds into this new account. All mass market issuers accept payment from a savings or checking account via the Automated Clearing House (“ACH”) network to fund the new account. The deposit account from which that payment is initiated generally does not need to be one held by the secured card issuer. A consumer can initiate the payment online or by phone. Several large bank issuers allow consumers to pay with a money order or by mailing a check, but this practice is not universal.⁴¹ No issuer we surveyed currently permits payment by cash in-branch, or via the major payment card networks.⁴² The

³⁸ See Consumer Fin. Prot. Bureau, *Financial Well-Being in America*, (Sept. 2017), available at https://www.consumerfinance.gov/documents/5606/201709_cfpb_financial-well-being-in-America.pdf.

³⁹ One detailed analysis of secured card origination patterns notes peaks corresponding to the months when most eligible consumers receive their tax refunds, further suggesting that this market would be among those that would benefit from measures that more broadly improve consumer liquidity. See Larry Santucci, *supra* note 23.

⁴⁰ As we noted above, we exclude from this definition of secured cards those credit cards against which an issuer attempts to assert a more general security interest in the consumer's depository account(s). This is a common practice among credit unions, though it is not unknown to banks as well. Practices relating to such products are distinct from those associated with the secured cards we discuss in this section.

⁴¹ The Federal Deposit Insurance Corporation found that, in 2015, 7% of households were “unbanked,” and a further 19.9% of households were “underbanked.” For these consumers, restricting the funding channel to these accounts may introduce an additional barrier to funding the deposit. Federal Deposit Insurance Corp., *FDIC National Survey of Unbanked and Underbanked Households*, at 1 (2015), available at <https://www.fdic.gov/householdsurvey/2015/2015report.pdf>.

⁴² The mechanics of funding a security deposit are a vector for innovative practices. For example, one major prepaid card issuer launched a secured credit card product in late 2016 that allows consumers to fund their security deposit

majority of issuers require consumers to pay their security deposit in one lump sum, though at least one issuer allows for multiple payments over a period of time.

Once the funds are deposited, consumers no longer have access to them, even in an emergency, unless and until the consumer closes the account. This information is conveyed to the consumer in the product's terms and conditions. Currently, no mass market bank issuer places the security deposit in an interest-bearing account.⁴³

The amount of the security deposit is determined by two thresholds. First, all issuers have a standard minimum and maximum security deposit for secured card accounts. Minima range from \$50 to \$300 while maxima range from \$1,000 to \$10,000. No consumer can initially fund deposits outside of that range. Second, most large bank issuers use their underwriting and ability-to-pay processes to determine a consumer-specific maximum security deposit that is generally less than the standard maximum security deposit. Consumers then have the ability to fund their deposit up to any amount between the issuer's standard minimum deposit and the consumer-specific maximum approved amount. Most bank issuers later allow consumers to increase their security deposits beyond the initial consumer-specific maximum security deposit amount through credit line increases, a topic further explored below. Some issuers with lower standard maxima for the initial security deposit eventually allow consumers to increase their security deposit—and thus their credit line—beyond that threshold.

in cash at various retailers. The Bureau is interested in the positive consumer effects that these new approaches to funding security deposits may have.

⁴³ Industry commenters advocating for the broader adoption of secured cards have noted their potential as a savings tool; issuers could encourage consumers to retain their security deposit as a checking or savings account after graduation to an unsecured card, a practice not currently employed in the secured card market to the Bureau's knowledge. Placing the security deposit in an interest-bearing depository account and providing the interest to consumers who retain their accounts has been proposed by the same industry commenters as a method of incentivizing consumers to continue saving.

Most bank issuers require the security deposit to be funded by the individual who has opened the account.⁴⁴ This may present a challenge for consumers unable to fund the security deposit themselves, but who may have willing assistance available from family, friends, or another third party. In most cases, a third party would have to provide funds to the applicant, not the issuer directly. However, some issuers do allow third parties—including non-profit organizations—to fund the deposit directly on behalf of a consumer.

The length of time consumers have to fund their security deposits varies substantially between issuers. Most issuers provide consumers between 21 to 30 days to fund their deposit. However, the range of practices here is wide, from requiring that the security deposit be submitted with the application to allowing a consumer almost three months to fund the deposit.

Available data suggest that funding the deposit remains a major challenge for consumers. Several issuers report more than half of consumers who pass underwriting and ability-to-pay criteria and are informed of their eligibility to fund their security deposit do not ultimately complete this process—and therefore do not receive the card for which they applied.

CREDIT LINE MANAGEMENT

Credit limits on secured cards tend to be lower than those on unsecured credit card products. As examined in the latter half of this section, secured cards originated in the last quarter of 2014 had average credit lines of roughly \$450 at origination. As is true with unsecured general purpose cards, credit limits on secured cards vary according to credit score. Secured cards originated in the last quarter of 2014 to consumers with deep subprime credit scores had lower average initial credit lines.

Credit line increases for secured cards can be separated into two types: those secured by an additional deposit, and those that do not require an additional deposit. For the first type, an increase in credit line requires a commensurate increase in the security deposit. The line remains fully secured, so the higher credit limit does not translate into higher risk for the issuer.

⁴⁴ The overwhelming majority of secured credit card accounts are individual accounts—only 3.5% have any authorized users beyond the accountholder, compared to 18.6% of unsecured accounts. See Larry Santucci, *supra* note 23, at 23.

Bank issuers generally require that security deposit increases come in certain increments. (For example, an issuer may only allow credit line increases which are multiples of \$100.) Most issuers allow consumers to request these credit line increases at any time, though at least one issuer prevents consumers from increasing their credit line in the first 60 days to combat fraud. This is the most common type of credit line increase offered on secured cards. Issuers do not proactively provide this type of credit line increase because doing so would require consumers to increase funding to their security deposit.

The second type of credit line increase does not require an additional deposit. This type of line increase is the only type of proactive credit line increase (“PCLI”) offered by large bank issuers on secured cards. If an account began as fully-secured, this kind of increase would result in a transition to partially-secured status. Only a handful of issuers offer this second type of line increase on secured cards, and they vary in their practices. At least one issuer employs an internal program that automatically rewards customers who satisfy certain repayment conditions. If, for example, consumers make a certain number of on-time payments, they are automatically provided with a credit line increase. Some issuers use marketing materials to inform consumers about which factors trigger PCLIs. Other issuers do not publicize their internal process for granting such increases. Once an account becomes partially secured, however, some issuers limit account eligibility for credit line increases. Issuers offering PCLIs report increasing volumes, at least partially driven by growing portfolios of secured cards.

Secured cards in our vintage analysis did not experience much line growth over the subsequent two years. As we show in the latter half of this section, secured card consumers with below-prime credit scores saw their credit lines increase \$150 on average, and consumers without a score had their credit lines raised \$70.

CREDIT SCORE CHANGES

Increases in credit score are contingent upon the issuer reporting account status to the credit reporting agencies.⁴⁵ Bank issuers generally report secured cards in the same way as unsecured cards. Some issuers will flag the accounts as “secured cards” when submitting information to credit reporting agencies. Others do not. This difference has little consequence in terms of how account information changes a consumer’s credit record, both positively and negatively.

Early evidence on the effectiveness of secured credit cards in improving consumers’ credit records is positive, though mixed. One estimate found consumers who are able to keep their accounts open over a two-year period experienced credit score increases of 24 points on average. However, consumers whose accounts were closed or charged off saw credit score decreases averaging over 40 points.⁴⁶ We analyze additional data on secured card performance below. Notably, we show that relatively few secured card accounts in our vintage were charged off prior to graduation.

GRADUATION

A key feature—and possibly a key selling point—for many secured cards is the prospect that the account may, after a period of the accountholder making regular payments, transition into an unsecured account. The consumer has their deposit returned but still maintains full, now unsecured use of the card. Surveys by outside research groups indicate that a substantial majority of consumers with secured cards intend to continue banking with the issuer of their secured card if they are offered an unsecured product.⁴⁷ Bank issuers have a competitive incentive to graduate consumers who display appropriate repayment behavior because

⁴⁵ As noted, secured cards are issued by banks and credit unions of various sizes. While this report has focused on the practices of large bank issuers, anecdotal evidence and editorial articles have noted that not all secured card issuers report secured card payments to the credit bureaus. Our data do not give us insight into this trend.

⁴⁶ One study found accounts closed with a balance saw their credit score decrease 42 points, accounts closed without a balance saw their credit scores decrease 46 points, and accounts charged off saw their credit score decrease 60 points, respectively. *See* Larry Santucci, *supra* note 23, at 25.

⁴⁷ *See* Rob Levy et al., *supra* note 16.

improved creditworthiness may attract attention from other issuers, which generally use credit bureau data to identify prospects for solicitation.

Most, though not all, issuers have processes and policies to define, allow, and facilitate graduation. Those issuers that do not permit graduation refund the consumer's deposit upon closure (in good standing) of the account, and only extend an unsecured card to that consumer in response to a separate and independent application.

For most issuers, the process of graduation entails returning a consumer's security deposit, leaving other product terms or features unchanged. Once the deposit is refunded, the product is generally treated the same as any unsecured card in that issuer's portfolio. No bank issuer, to the Bureau's knowledge, offers a form of "partial graduation" in which a consumer's security deposit is only partially returned. Issuers that have graduation policies return the entire deposit at once.

The majority of issuers begin automatically reviewing a consumer's account for graduation after the account has been open for a certain prescribed period of time. Bank issuers with internal graduation policies may begin reviewing secured accounts monthly for graduation eligibility anywhere from four months to 12 months after origination. Issuers with internal graduation policies generally review accounts for graduation each month.

Issuers consider numerous criteria when deciding whether to graduate consumers. These relate to the consumer's behavior using the card as well as other information about the consumer. Common factors considered include credit score, payment history, length of payment activity, ability to pay, and payment ratios, as well as other product usage metrics. There are no guarantees any particular consumer will be upgraded within a certain timeframe—or ever, for that matter. However, it appears that most consumers who use the card regularly and stay current eventually see a significant possibility of graduation, assuming the issuer has an internal graduation policy.

Bank issuers either return the security deposit to the consumer's original checking or savings account or, if that account is no longer open or available for an ACH transfer, provide the consumer a check. Depending on the channel used to return the deposit, the process can take several weeks.

Bank issuers with graduation policies convey the process to consumers with varying degrees of specificity. None describe their criteria in great detail, but some issuers do convey the account

age at which reviews start and the kinds of factors considered in the graduation decision through their websites and product materials. Issuers note that these criteria are proprietary and are liable to change, making them hesitant to convey the information to consumers and set specific expectations of when graduation may occur.

ACCOUNT CLOSURE, DELINQUENCY, AND CHARGE-OFF

In many cases a consumer or issuer may wish to close a secured card account, a process that entails more complexity than closing an unsecured account. The initiation of an account closure, whether by a consumer or an issuer, triggers a similar process for most bank issuers. If a consumer has no balance, the full security deposit is returned to the consumer. If the consumer does have an outstanding balance, it is deducted from the security deposit and the surplus is refunded to the consumer. Most issuers will hold the deposit for an extended period, sometimes more than two billing cycles, to ensure no existing pending payments against the account remain. If the balance is greater than the security deposit, the issuer will apply the entirety of the deposit, and the consumer will have to pay the remainder, or potentially be subject to issuer debt collection processes.

Sometimes consumers fail to make timely or adequate payments on their secured cards. Several issuers close an account when it becomes delinquent beyond a certain threshold. For several issuers this threshold is 60 days, but others allow consumers up to 120 days before closing the account. Some, but not all, bank issuers that close the account at 60 days will apply the security deposit against the outstanding balance at this point.

Most issuers will charge off the account once an account is 120 days delinquent, applying the security deposit against the outstanding balance.⁴⁸ Issuer practices for reporting charge-offs to credit bureaus vary. If the security deposit covers the outstanding balance, several issuers will report a closure to the credit reporting agencies, though at least one issuer reports this scenario as a paid charge-off, a practice that mitigates the negative effect of the charge-off on a

⁴⁸ This is less than the 180 days allowed by prevailing regulatory guidance. See Office of the Comptroller of the Currency, *Policy Implementation – The Guidance Attached to this Bulletin Continues to Apply to Federal Savings Associations*, OCC Bulletin 2000-20, (June 20, 2000), available at <https://occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>.

consumer’s credit score. If the balance is not covered by the security deposit, all bank issuers report a charge-off to the credit bureaus.

6.6 Consumer use of these products

6.6.1 Data and methodology

DATA

The results below are drawn from two data sources. The first source is Y-14 data. These data cover products issued by mass market issuers, including unsecured general purpose cards, private label cards, and secured credit cards.

Our second source is Subprime Specialist Vintage data (“SSV”). These data were provided to the Bureau by a group of subprime specialists, comprised both of credit card issuers and non-issuer program managers. SSV data are aggregate data. They contain no account-level information.⁴⁹

METHODOLOGY

To illustrate the consumer experience, we rely here on a vintage analysis, not a portfolio-level analysis. This means that we identify a certain fixed group of accounts and follow only those accounts over time. In this case, we cover accounts originated in the fourth quarter of 2014 to consumers who lack prime credit scores. These accounts span the four product classes we discussed above: unsecured general purpose cards offered by mass market issuers, subprime specialist cards, private label cards, and secured cards. Our data allow us to track them for two

⁴⁹ As noted in this report’s introduction, these data differ in both provider composition and structure from the Subprime Specialist Issuer (“SSI”) data we reported on in our 2015 Report. We also note that there are certain small differences between how the Y-14 and SSV data are structured that could influence certain results on the margins.

full years after their origination.⁵⁰ We divided results for each product class into two credit score tier groups—first, the group of all accounts held by consumers with scores, and second, the group of all accounts held by consumers without scores.

There are three factors that caution against direct comparisons of these product classes. The first is the different credit score tier composition of the vintages. When our comparisons focus on consumers with scores, we re-weight the group of consumers with scores to match that of the subprime specialists. This means that when we report on subprime specialist metrics for consumers with scores, we are reporting the actual observed values for those providers; for the other three product classes, the reported values are weighted. For example, when we report on delinquency rates, the rates shown in the graphs should not be taken to represent the actual delinquency rates for the non-subprime specialist product classes. In some cases we reference the actual values we observe for certain product classes at certain credit score tiers. We consider consumers without scores separately—they are not part of the weighted scored group.

There are two other complicating factors for which we cannot control. One of them is the possibility that credit score composition *within* credit score tiers may differ across product classes. To construct a purely hypothetical example, it may be the case that most unsecured mass market issuer general purpose cards originated to consumers with subprime scores are originated to consumers whose scores are in the 610 to 619 range, while for subprime specialists, most such originations may be to consumers with scores between 580 and 589. If this is the case, our weighting will not fully control for credit score differences in our vintage.

The final factor is the possibility that the consumers who originated accounts of one product class in that period may differ systematically from consumers who originated accounts in other product classes in a number of other ways that are not, or are only partially, correlated with credit score, and are not otherwise detectable or differentiable in our data. It may be, for example, that consumers lacking prime scores self-select in favor of one product class over another based on factors we cannot observe. To the extent issuers can discern such factors, they

⁵⁰ As we discuss below, accounts leave our vintage under some circumstances. These include charge-off and closure. For secured cards, it also includes graduation to unsecured cards. This should be kept in mind when interpreting the findings we report below, especially in later periods.

may also contribute to differences in issuer marketing strategies. These differences should and do temper our readiness to draw comparative conclusions about the products themselves based on differences in certain metrics of use.

Two final caveats should be noted. First, while we have no reason to think the late-2014 vintage we use is unrepresentative of consumers' experiences with the product classes we examine, at least in recent years, there are likely at least some differences, distinctions, and idiosyncrasies in the set of accounts we examine. Second, our data do not cover the full universe of credit card product classes originated to consumers lacking prime scores during the fourth quarter of 2014. All accounts represented in the findings below combined represent only around half of all accounts originated to consumers lacking prime scores in the final three months of 2014 that we observe in our Consumer Credit Panel. It is almost certainly the case that, of the accounts not included in our data, at least some would fall into each of the four product classes we cover. We do not know whether our data are representative of the portion of the market that they do not cover. Our findings should be considered with these caveats in mind.

Given these caveats and concerns, our analysis is not intended to be directly comparative. For purposes of convenience, we present results for each product for the same metric in the same part of our review, and that depiction includes the limited weighting for credit tier size noted above. But our goal is to describe each product on its own terms, mindful of the many ways in which these products, their providers, and the consumers who use them may differ—in ways that the available data cannot fully address.

6.6.2 Findings

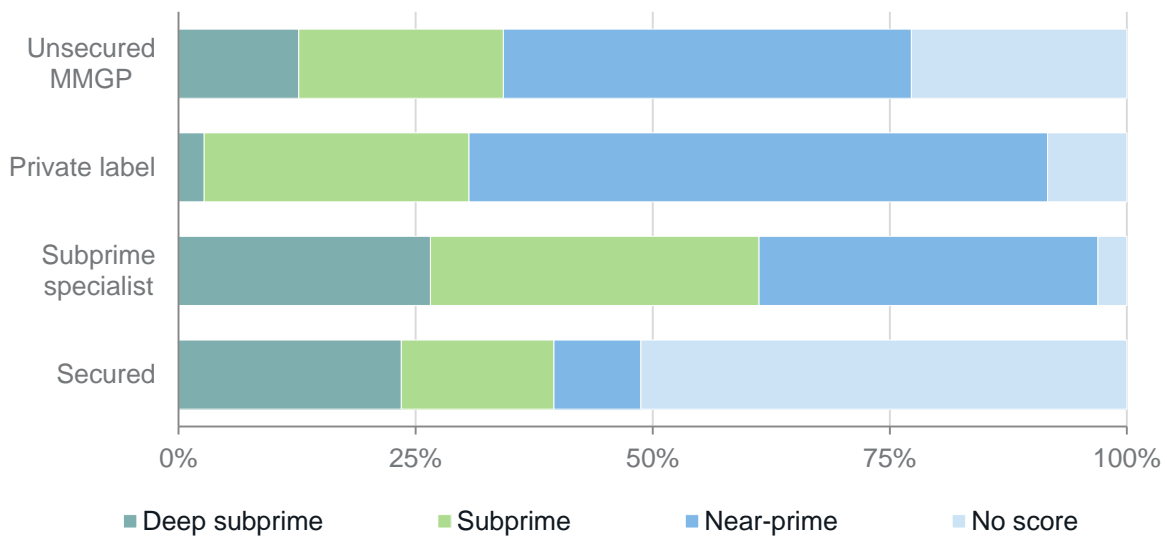
We organize our findings into four stages. First, we describe the product class vintages in detail. Second, we present basic metrics about product usage. Third, we present metrics that focus on consumer cost. Fourth, we present metrics that focus on delinquency and charge-off.

DESCRIPTIVE STATISTICS

The product classes in our vintage differ substantially in their size.⁵¹ Of the four, secured cards represent the smallest share of our overall vintage. They are followed by subprime specialist accounts, which are roughly double the number of secured cards. Private label cards are roughly five times the size of the secured card portfolio. Unsecured mass market general purpose cards (“unsecured MMGP”) are nearly eight times the size.

As shown below in Figure 10, there are also significant differences in credit score composition across the product types. Mass market issuers originated just about half their non-prime unsecured cards, considering both general purpose and private label accounts, to consumers with near-prime scores in our observation period. Compared to unsecured MMGP, private label accounts were also comprised of relatively fewer deep subprime and no-score accounts and relatively more subprime accounts.

FIGURE 10: CREDIT SCORE TIER SHARE OF PRODUCT CLASS VINTAGES (Y-14, SSV)



⁵¹ Figures describing differences in product class composition are, of course, not subject to the weighting scheme we described earlier. Only the subsequent figures describing performance and outcomes are weighted.

By contrast, subprime specialists originated well over half of all of their accounts to consumers with subprime or deep subprime scores, but originated very few accounts to consumers lacking a credit score. Secured cards were dominated by no-score originations, with most of the remainder divided between deep subprime and subprime.

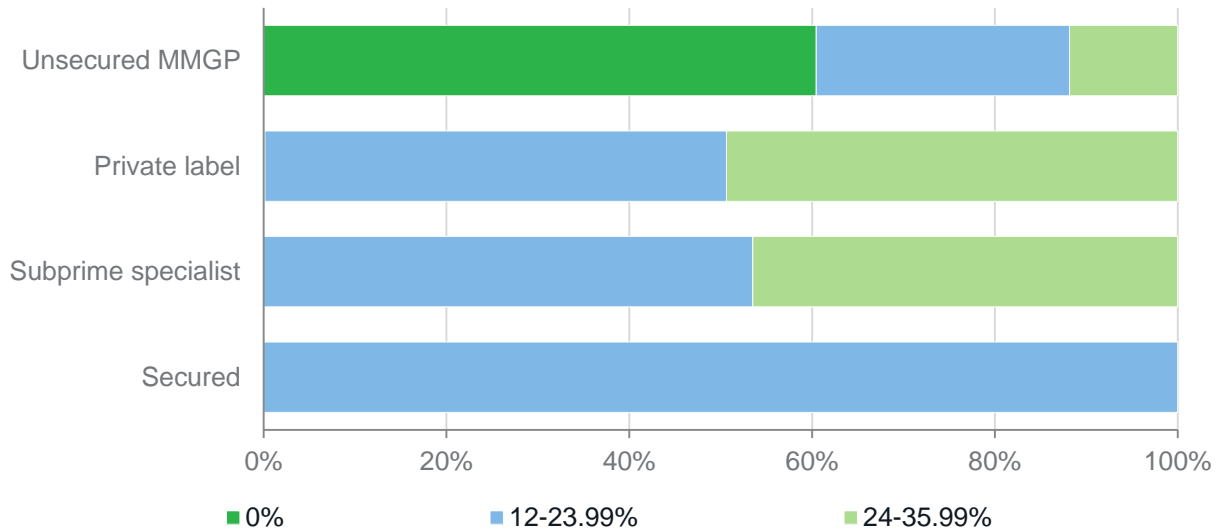
As discussed earlier in this section and in Section 4, the difference in the composition of non-prime accounts is driven substantially by issuer practices, not just in underwriting and approval but also in marketing. In the case of subprime specialists this is particularly stark. As we noted above, these specialists tend to restrict their marketing efforts to targeted mailings, and to restrict or even prohibit applications for their cards to those consumers they have not affirmatively targeted. The flip side to this is the comparatively high approval rate for those applications that do come in. In the fourth quarter of 2014, we found that these providers' approval rates for the deep subprime, subprime, and near-prime credit tiers were 75%, 85%, and 89%, respectively.

These product classes also differ substantially in their initial APRs.⁵² APR data are shown in Figure 11 below. Turning first to products originated to consumers to scores, we find that almost all accounts in our vintage fall into one of three APR “buckets.” For subprime specialist cards and private label cards, only two of those three buckets are necessary to capture the range of account APRs—rates between 12% and 24%, and rates between 24% and 36%. All secured cards in our vintage experienced rates equal to or greater than 24%.

Unsecured MMGP cards are starkly different: three-fifths have an initial interest rate of zero. In all or almost all cases these interest rates are promotional. However, data limitations do not allow us to determine the length of these promotions, or the distribution of post-promotional interest rates. We discuss actual experienced costs on these accounts in detail below.

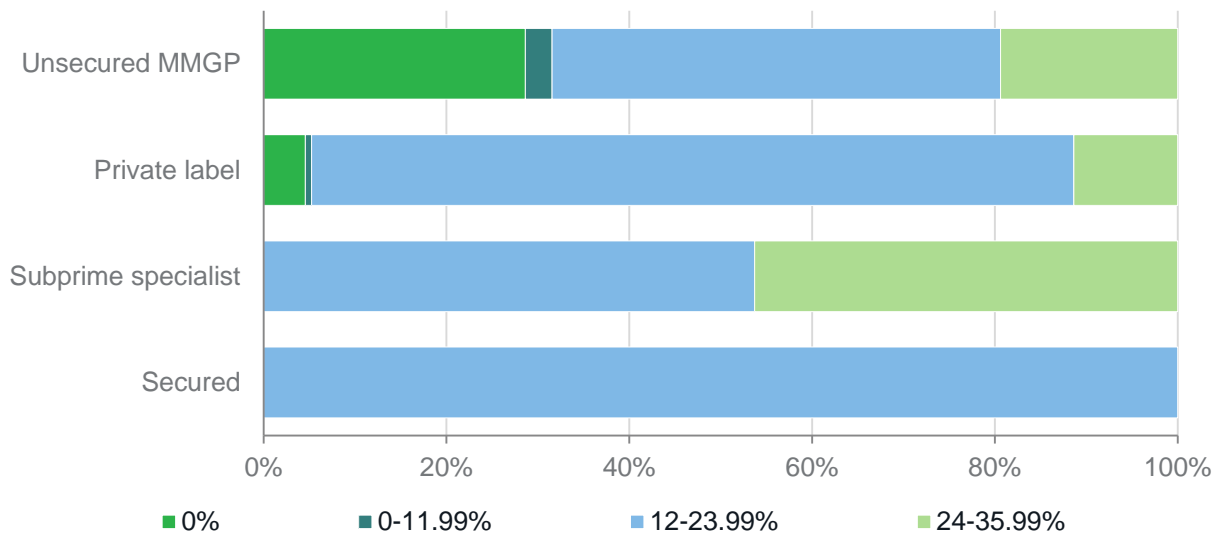
⁵² One place these product classes do not differ substantially is income—at least to the limited extent we can observe this metric. Our data only allow us to compare the share of accounts originated to consumers whose incomes were either more than or less than \$30,000 annually, and for all four product classes, the latter share varied only within a narrow band of 22% to 31%. Whether or not these product classes differ substantially within those two income groups, however, is not visible using our data.

FIGURE 11: INITIAL APR SHARE OF PRODUCT CLASS VINTAGES, ACCOUNTS HELD BY CONSUMERS WITH SCORES (Y-14, SSV)



This picture is different for consumers—but only in the unsecured MMGP and private label product classes. In the former, far fewer consumers seem to receive promotional interest rates; in the latter, a much larger share of accounts are in the lower band. These data are shown in Figure 12 below.

FIGURE 12: INITIAL APR SHARE OF PRODUCT CLASS VINTAGES, ACCOUNTS HELD BY CONSUMERS WITHOUT SCORES (Y-14, SSV)



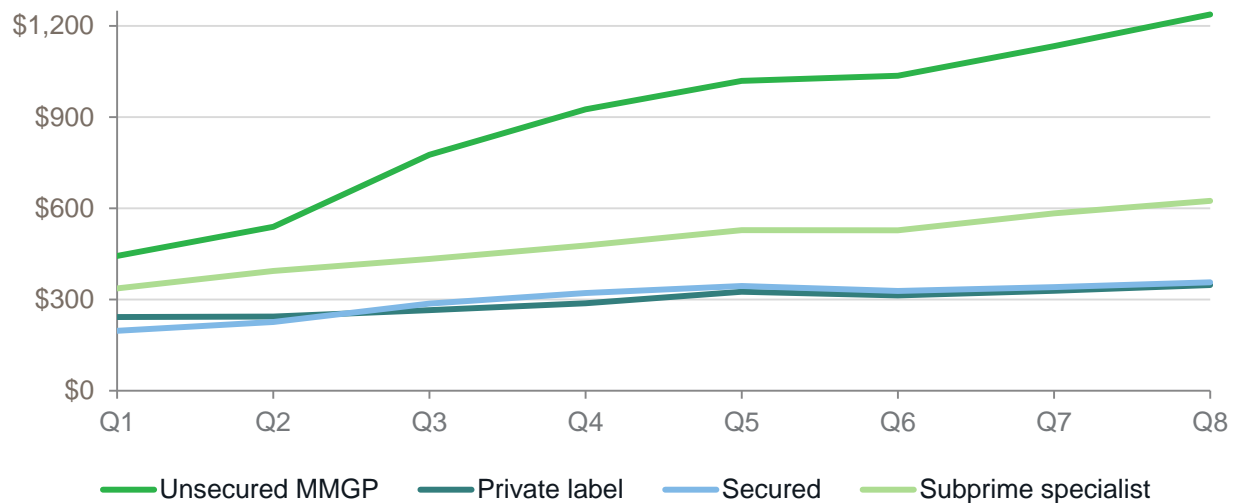
USAGE METRICS

In this subsection, we explore how, and how much, consumers make use of their cards in the different product classes. Note again that all figures for consumers with scores are weighted unless otherwise specified.

Balances

Figure 13 highlights a recurring theme in this analysis, one that touches on the differences between the various product classes as well as to some degree the limitations of our data. Consumers with scores who took up unsecured mass market general purpose products accumulated the highest average balances by far, well outpacing subprime specialist cards, with secured and private label cards experiencing similar and smaller average balances. This disparity only grew with the passing of time, and cut across all credit score tiers.

FIGURE 13: AVERAGE BALANCE PER ACCOUNT, WEIGHTED SCORED (Y-14, SSV)⁵³



The higher unsecured MMGP balances were likely related to the fact that unsecured MMGP products in our vintage are more heterogeneous. As we noted above, our data do not allow us to

⁵³ For the sake of brevity, we shorten “accounts held by consumers with/without scores” in figure titles to simply “scored” and “unscored” from this point forward.

disaggregate those general purpose accounts originated by mass market issuers that featured terms and conditions similar to subprime specialists from those that offered terms and conditions more similar to a broader mass market card.

Figure 14 shows the same metric for consumers without scores. Consumers who lacked scores accumulated smaller average balances over time on all accounts, as compared to consumers with scores. The gap between unsecured MMGP and subprime specialist products was smaller for these accounts, but the gap between secured card and private label was larger.

FIGURE 14: AVERAGE BALANCE PER ACCOUNT, UNSCORED (Y-14, SSV)

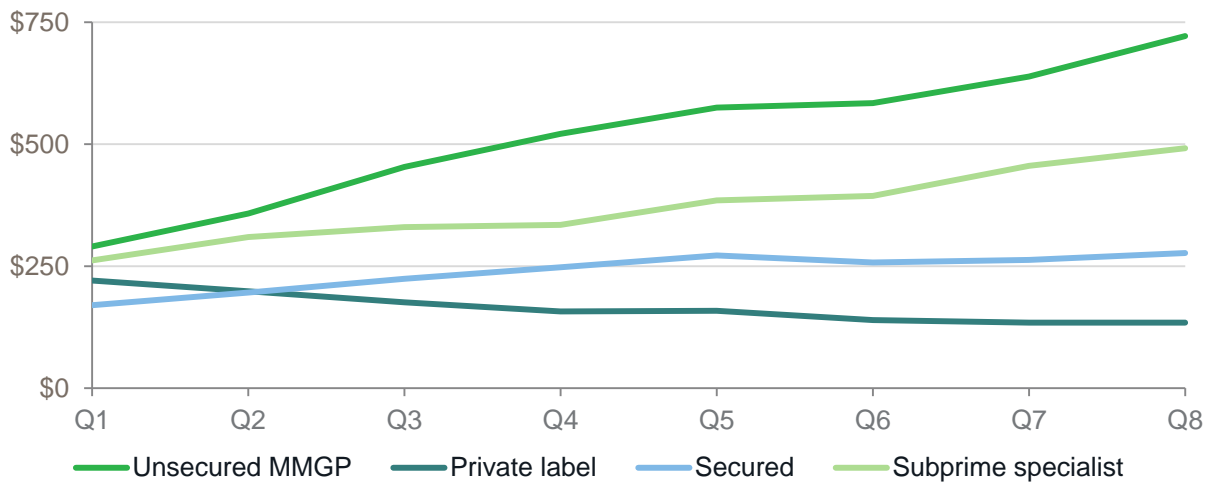
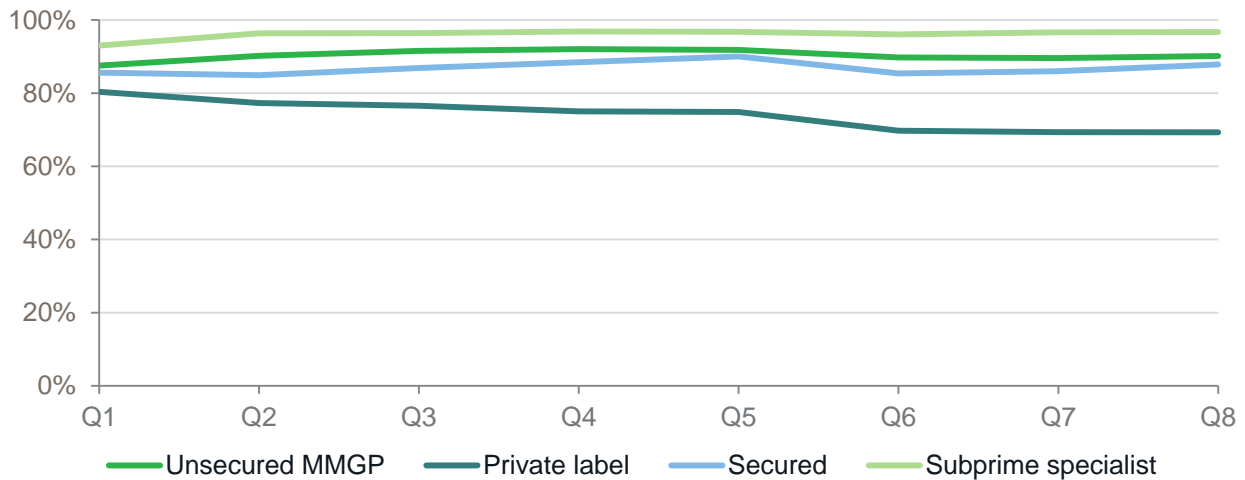
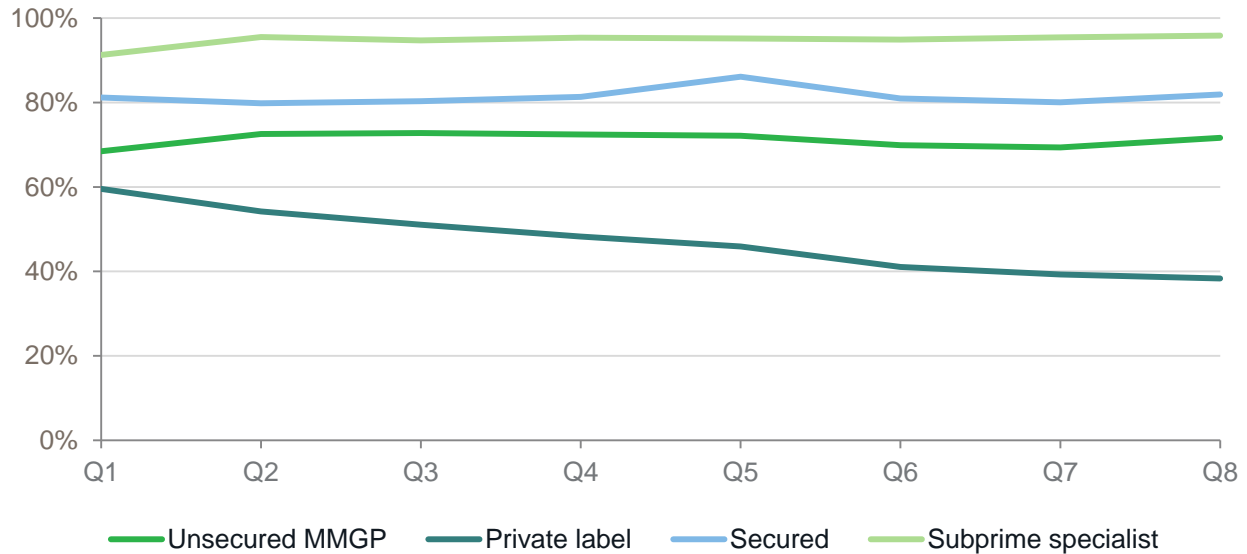


FIGURE 15: SHARE OF ACCOUNTS WITH A BALANCE, WEIGHTED SCORED (Y-14, SSV)



As shown in Figure 15 above and Figure 16 below, inactivity rates are low for the accounts in our vintage. Consumers with scores whose accounts are not charged off or closed overwhelmingly and consistently maintain balances on their accounts throughout our observation period. The exception to this are private label accounts, where we see lower and declining rates of usage among open accounts over the first two years of the accounts' lifespans.

FIGURE 16: SHARE OF ACCOUNTS WITH A BALANCE, UNSCORED (Y-14, SSV)



This dynamic is similar, but not identical, for consumers without scores. These consumers tend to see higher rates of inactivity on all product classes but subprime specialist cards. These inactivity rates are still consistent for all product classes except private label, which sees a somewhat larger decline in activity rates than the other product classes over our observation period.

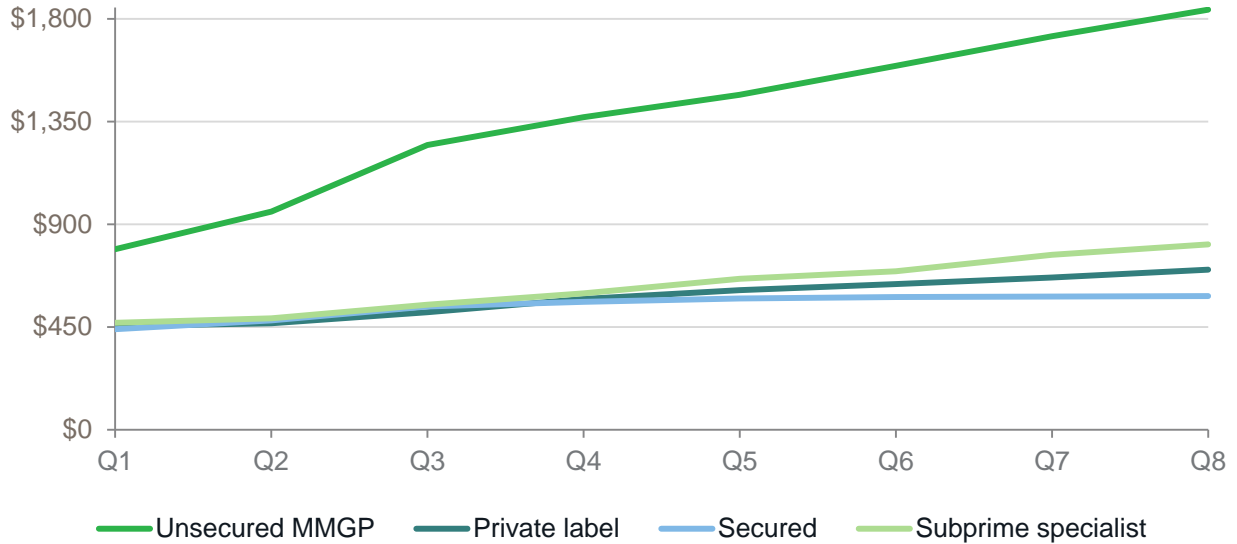
Low and consistent rates of inactivity mean that, as we go forward, few of the results we observe will be explainable by net shifts of accounts into or out of inactive status. Private label is an exception here, but that shift is small enough that it can only explain commensurately small shifts in relevant metrics. This is in contrast to charge-off, which as we noted above is a more important “background” variable across many findings.

Credit line and utilization

Average credit line was substantially higher for scored unsecured MMGP cards than for all other cards, which were originated with similar average lines. Line on accounts held by consumers

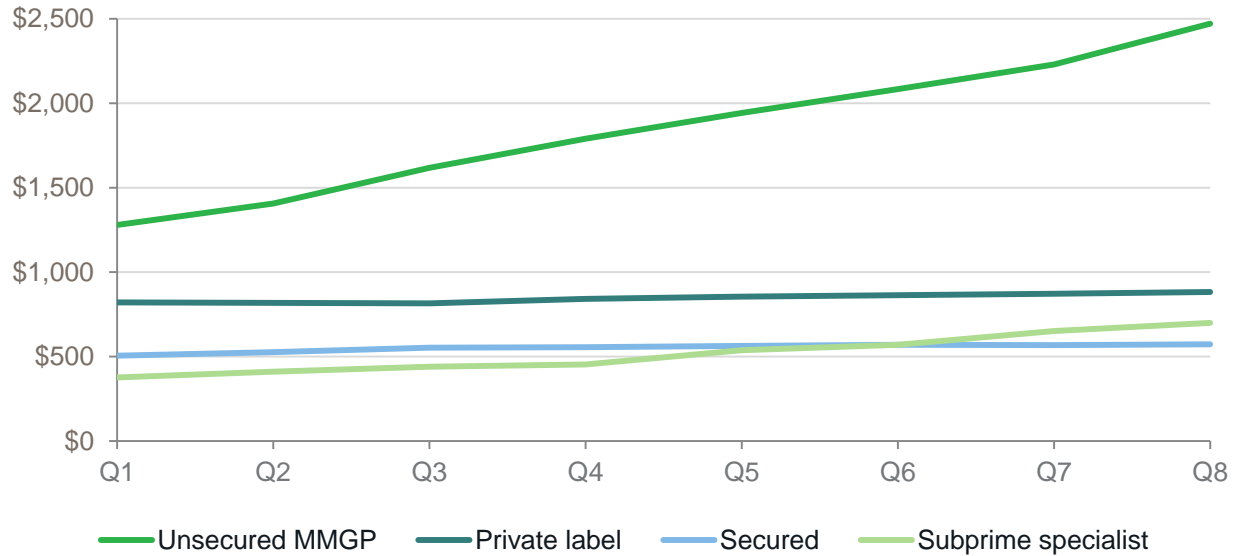
with scores increased for all four product classes—but it increased by far the most on unsecured MMGP accounts, with the differences in the magnitude of increase being noticeable but smaller between the other three product classes. We discuss rates of credit line increase and decrease below in this section.

FIGURE 17: AVERAGE CREDIT LINE PER ACCOUNT, WEIGHTED SCORED (Y-14, SSV)



Results for consumers without scores, shown in Figure 18 below, are different in several respects. While these consumers received the largest average lines on unsecured MMGP accounts, they received substantially larger lines than consumers with scores did on private label accounts—though average line did not increase much over the two-year lifespan. Little increase was also seen in average secured card lines, and average line on these cards was actually surpassed by subprime specialist cards over the course of the observation period.

FIGURE 18: AVERAGE CREDIT LINE PER ACCOUNT, UNSCORED (Y-14, SSV)



Patterns of credit line increases, shown in Figures 19 and 20, are quite different across the product classes.⁵⁴ Secured cards and unsecured MMGP tend to see most of their CLI activity in the earlier periods we observe.⁵⁵ Subprime specialist cards see the highest rates in the second year of our vintage, while private label cards generally have consistently low but non-zero rates of CLI. This analysis is largely the same for consumers without scores, with the exception that subprime specialist customers without scores experience strikingly higher CLI rates than their scored counterparts.

⁵⁴ The numerator in the rates shown in Figures 19 and 20 is the total number of credit line increases awarded, not the total number of accounts receiving one or more credit line increases. It is possible that some accounts received more than one credit line increase during each year. This also applies to the CLD rates shown in Figures 21 and 22.

⁵⁵ This is consistent with an increasing focus by mass market issuers on credit line management as a risk management tool, which we discuss in more detail in Section 4.

FIGURE 19: CLI RATES, WEIGHTED SCORED (Y-14, SSV)

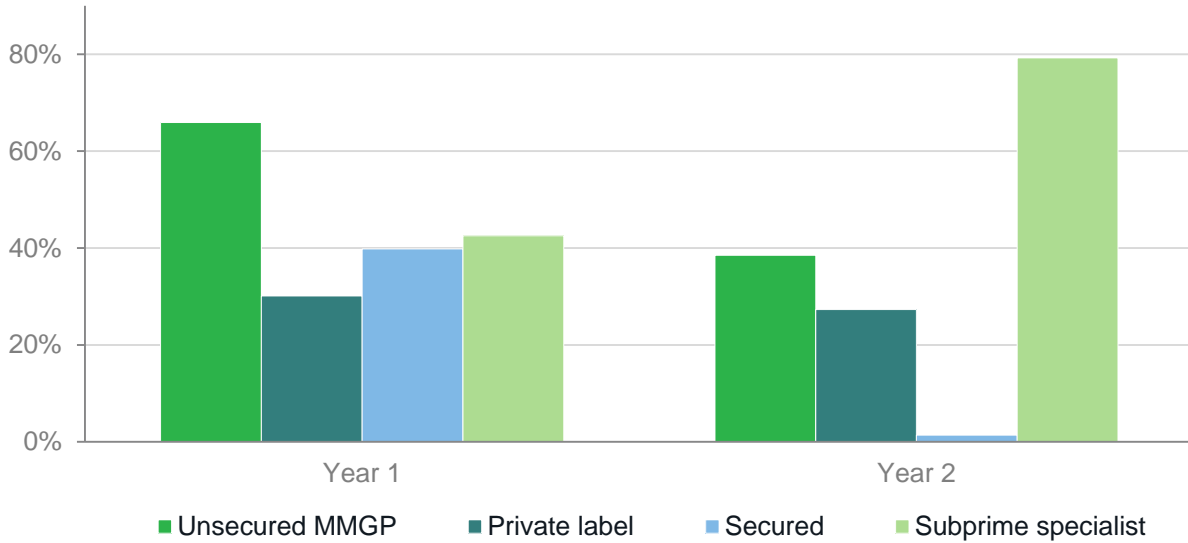
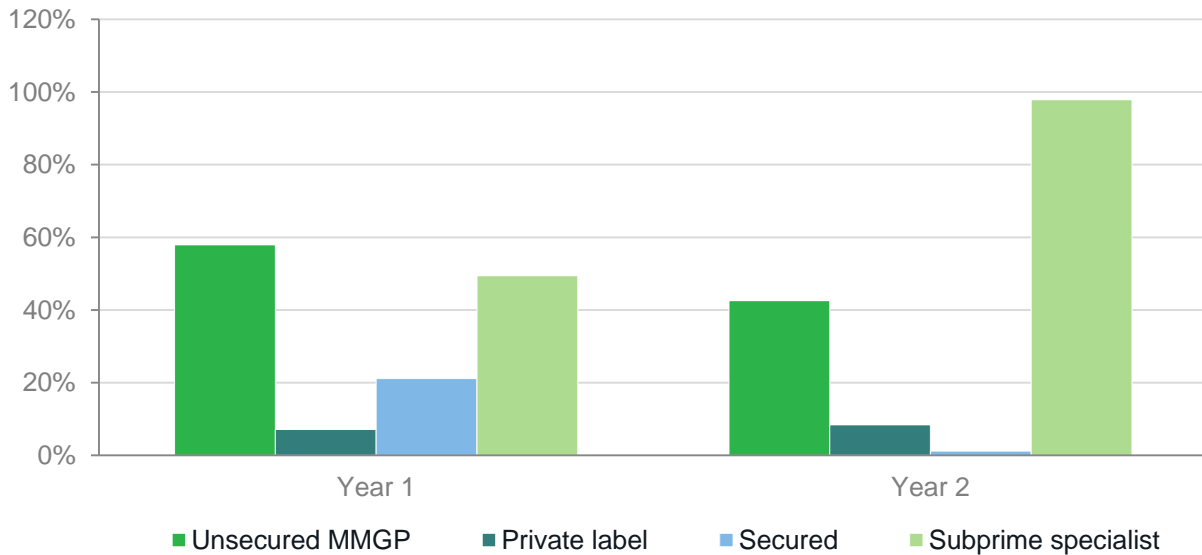


FIGURE 20: CLI RATES, UNSCORED (Y-14, SSV)



Figures 21 and 22 depict credit line decrease (“CLD”) rates. CLD rates are generally very low—and almost nonexistent in the secured card and subprime specialist vintage. Unsecured MMGP and private label cards, however, show consistent CLD activity, suggesting that credit line management in *both* directions is a larger part of the risk management picture for those product

classes. CLD rates are higher for consumers without scores than for consumers with scores, but otherwise a similar pattern holds across the product classes.

FIGURE 21: CLD RATES, WEIGHTED SCORED (Y-14, SSV)

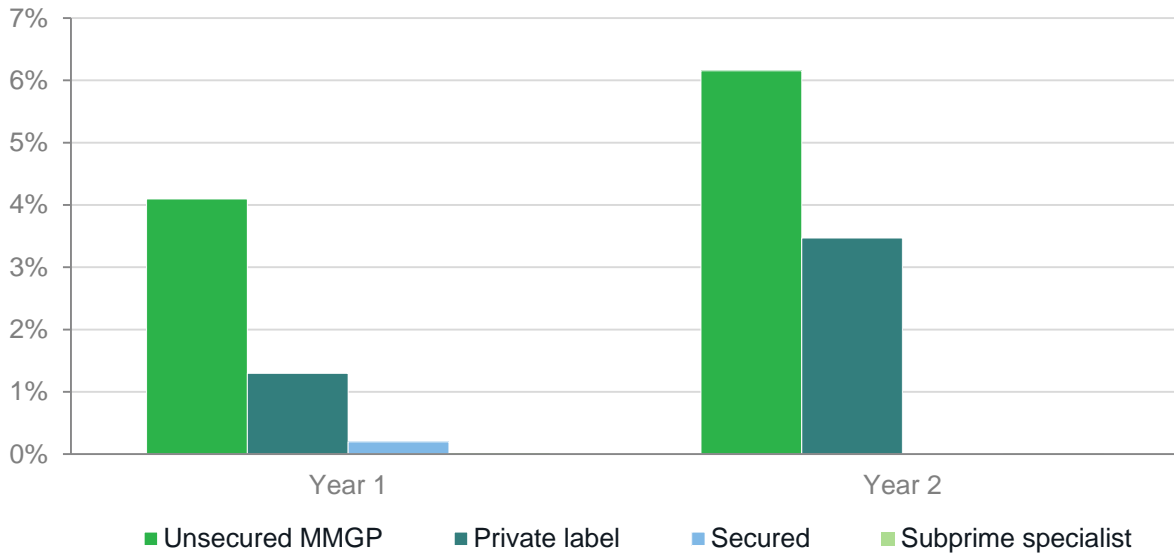
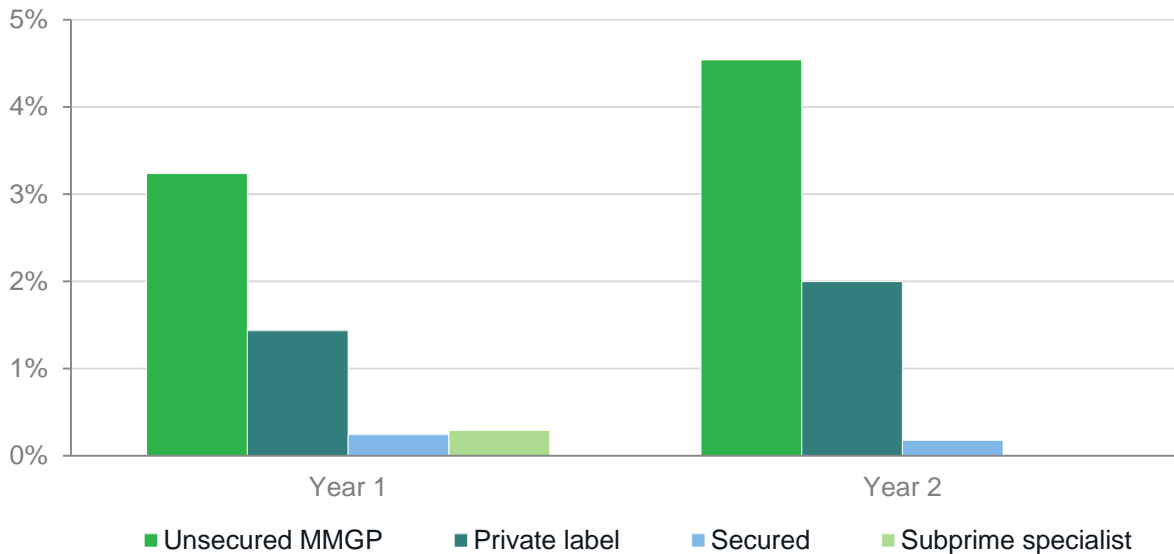


FIGURE 22: CLD RATES, UNSCORED (Y-14, SSV)



Overall, product class utilization rates on accounts originated to consumers with scores were stable over our observation period, with only secured card utilization showing a consistent

upward trend over the period. Utilization data are shown in Figures 23 and 24 below. Consumers without scores registered much lower utilization rates on all of these product classes—except subprime specialist cards, where they were only a notch lower than consumers with scores. Secured cards saw the next-greatest intensity of line usage among this cohort, with most unsecured MMGP and private label line less utilized over the two years.

FIGURE 23: AVERAGE UTILIZATION, WEIGHTED SCORED (Y-14, SSV)

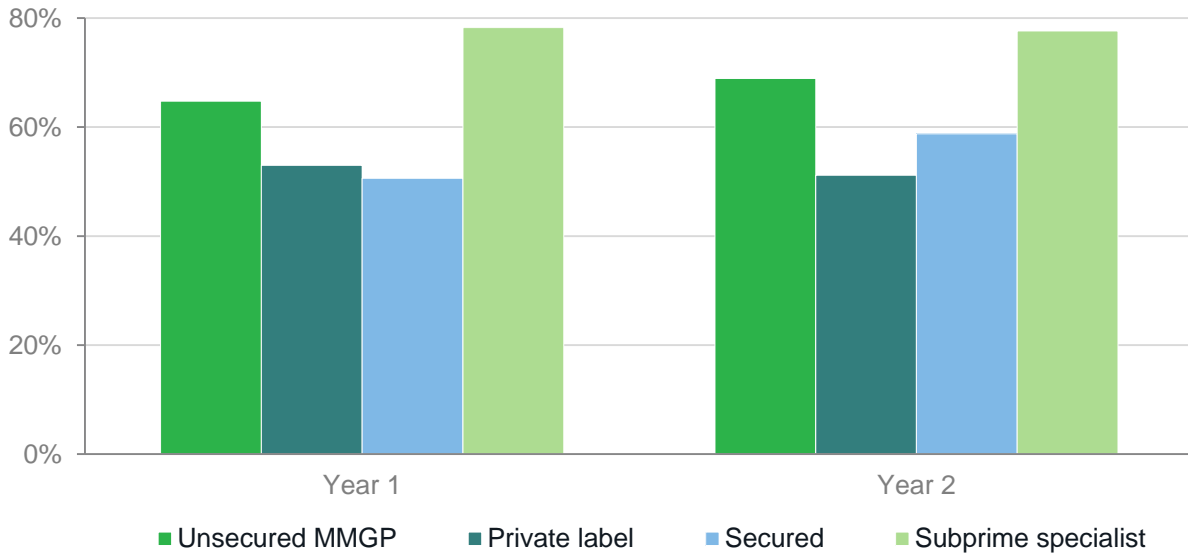
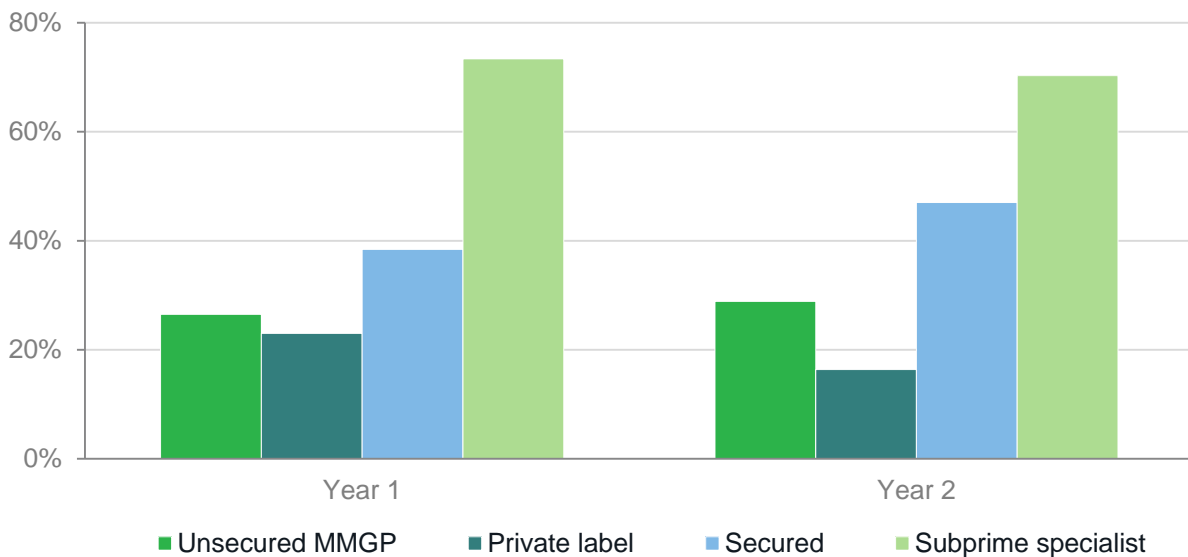


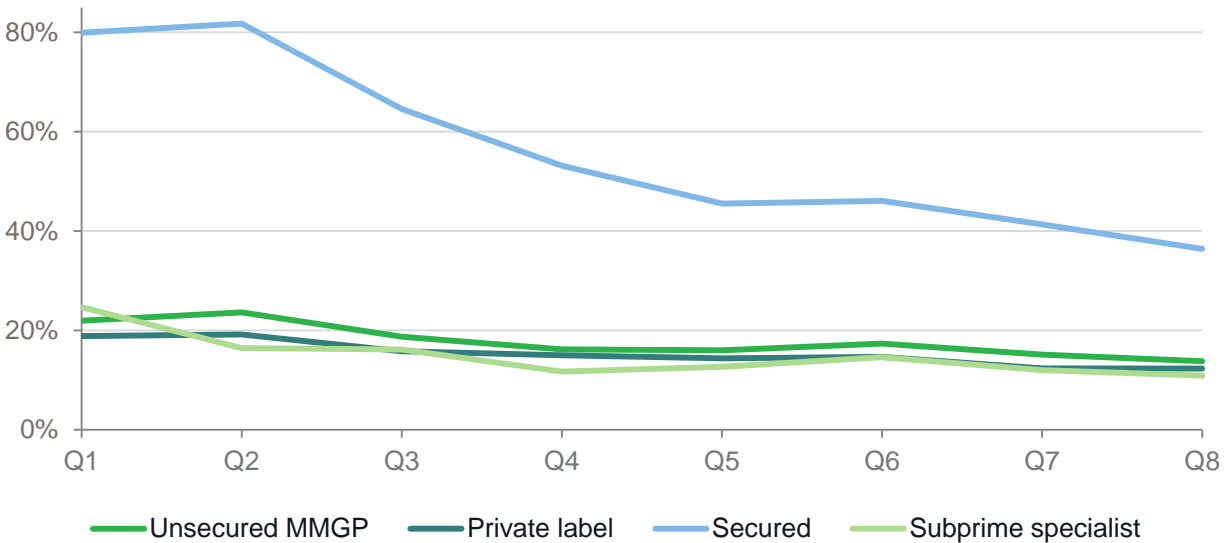
FIGURE 24: AVERAGE UTILIZATION, UNSCORED (Y-14, SSV)



Payment rates

As discussed in Section 2.4.2, payment rates are an important measure of consumer payment behavior. Payment rates are calculated as the ratio between consumers' payments against the accounts and their total balance. Payment rate data are shown in Figures 25 and 26 below.

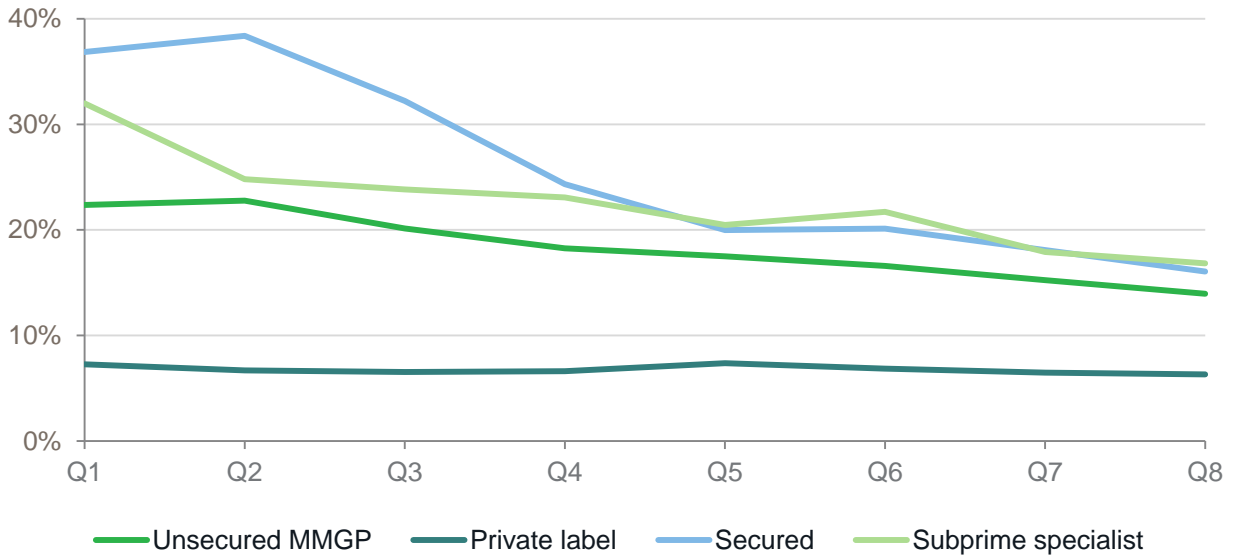
FIGURE 25: PAYMENT RATES, WEIGHTED SCORED (Y-14, SSV)



Secured cards stand out drastically on this metric. While the other three product classes experience similar payment rates, secured cards experience payment rates that are consistently at least double those of the other classes. Secured card payment rates also decline dramatically over our observation period. Payment rates also decline for the other three classes, but the decline is less marked.

Consumers without scores generally register higher payment rates than consumers with scores. Otherwise, three of our four product classes exhibit similar dynamics. Only unsecured MMGP products stand out with *much* higher payment rates among this cohort.

FIGURE 26: PAYMENT RATES, UNSCORED (Y-14, SSV)

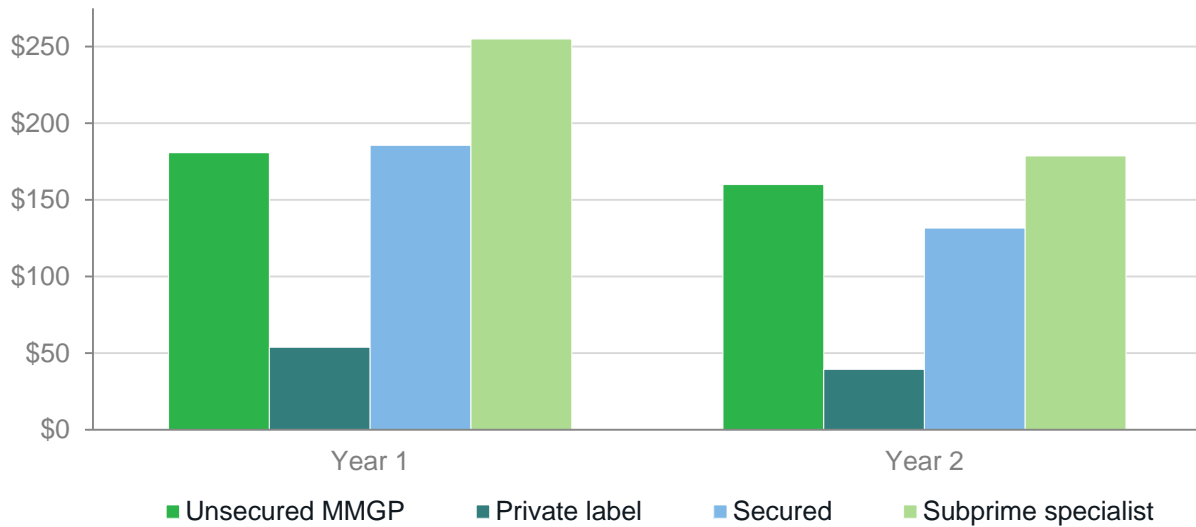


Purchase volume

Purchase volume data are shown in Figure 27 below. Among consumers with scores, all product classes recorded the majority of their purchase volume in the first year of usage, with the *proportionate* drop-off being sharpest among subprime specialist cards and private label cards. Private label cards, however, experienced much lower average purchase volumes than other cards overall.

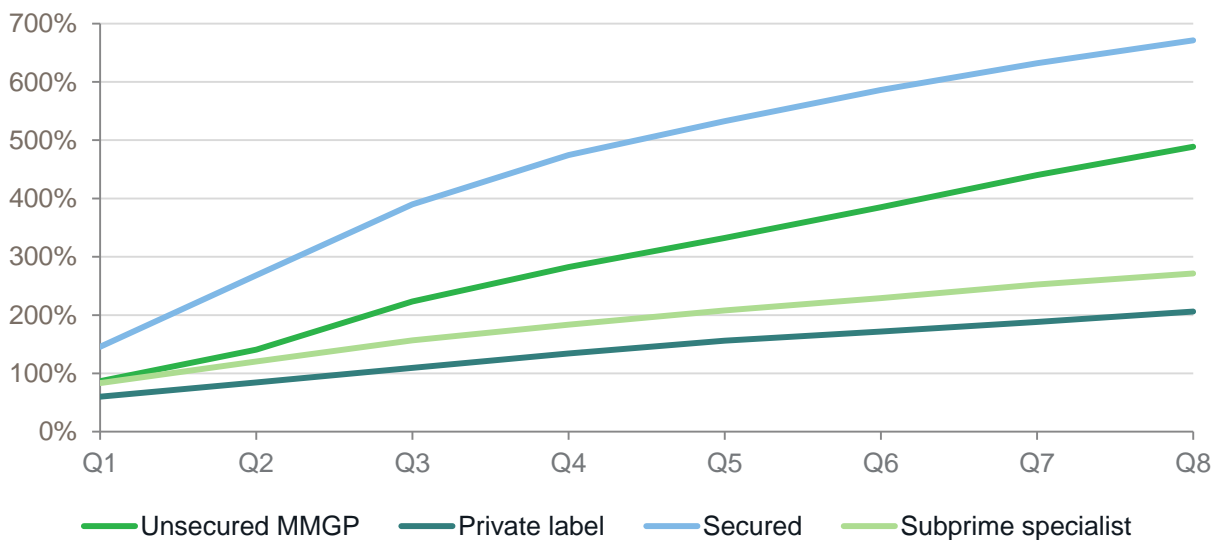
On average, consumers with scores recorded the highest average purchase volumes over the full two years we observe on subprime specialist cards. Private label cards were by far the laggard by this metric, with unsecured MMGP and secured both registering over \$1,500 in average purchase volume over two years. Consumers without scores, on average, spent significantly more than consumers with scores over the lifespan of all product classes except private label, where they spent significantly less.

FIGURE 27: AVERAGE MONTHLY PURCHASE VOLUME PER ACCOUNT, WEIGHTED SCORED (Y-14, SSV)



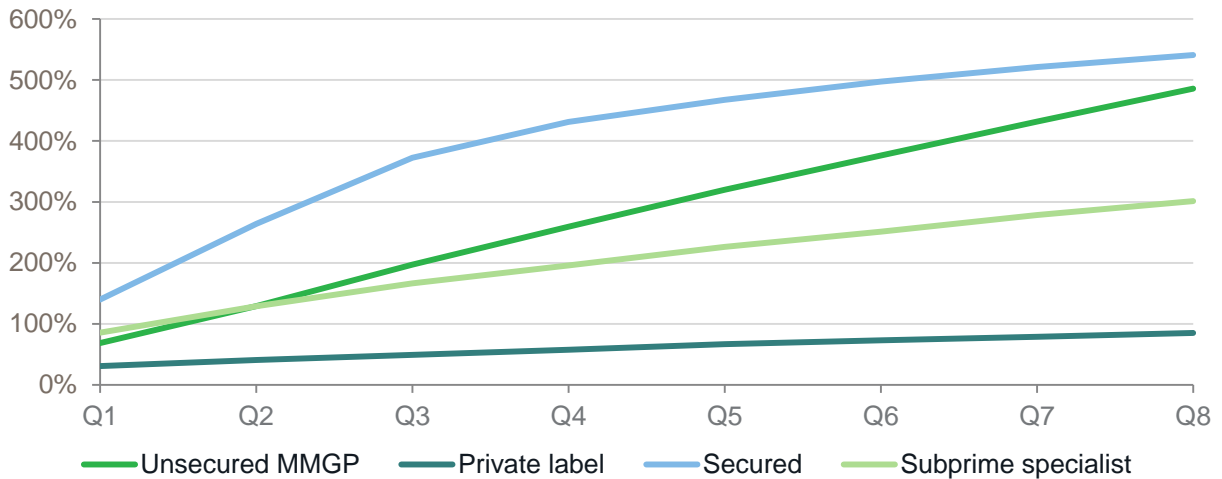
Purchase volume, however, is limited by the credit line of the card—consumers who receive cards with smaller lines may wish to make more purchases but cannot do so unless they make payments to “free up” some of the line. This may influence the absolute average purchase volume figures we show above. To try and view the cumulative utility consumers received from their accounts through a different lens, we measure cumulative purchase volume against original line. The results are shown in Figures 28 and 29 below.

FIGURE 28: CUMULATIVE PURCHASE VOLUME-TO-ORIGINAL LINE RATIO, WEIGHTED SCORED (Y-14, SSV)



Secured card customers make far and away the most purchases relative to their initial line. This finding is in sync with our earlier finding that these accounts experience higher payment rates. However, this does not explain the gap between unsecured MMGP and subprime specialist cards. Instead, this may be one place where differences in cumulative charge-off rates are playing a role. (We discuss those differences at the end of this section.) Results are broadly similar for consumers without scores, but these consumers spend significantly less on both secured and private label cards, bringing the former more in line with unsecured MMGP products.

FIGURE 29: CUMULATIVE PURCHASE VOLUME-TO-ORIGINAL LINE RATIO, UNSCORED (Y-14, SSV)



Other volume

Balance transfer information is shown in Figure 30. Subprime specialist and private label products recorded effectively no balance transfer volume at all in our observation period. Relative to original line, secured cards experienced some but not much balance transfer volume. Unsecured MMGP cards experienced some balance transfer volume that continued to increase

over our observation period.⁵⁶ However, even this volume was very low relative to purchase volume as measured by the same metric.

FIGURE 30: CUMULATIVE BALANCE TRANSFER VOLUME-TO-ORIGINAL LINE RATIO, WEIGHTED SCORED (Y-14, SSV)

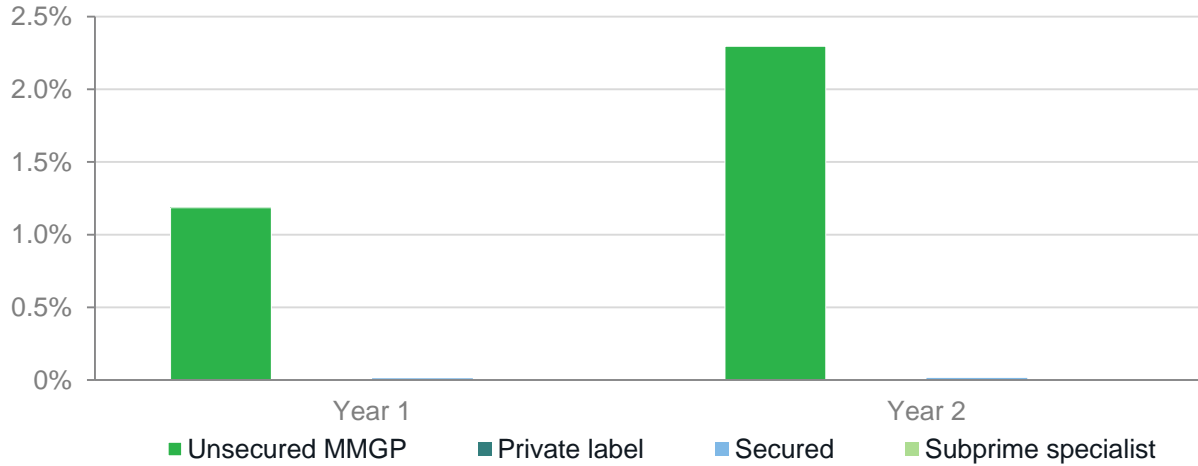
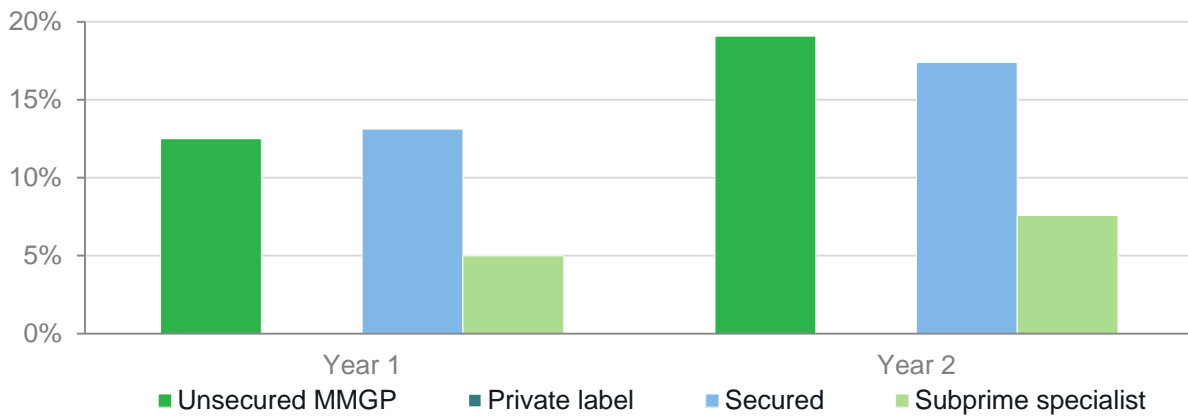


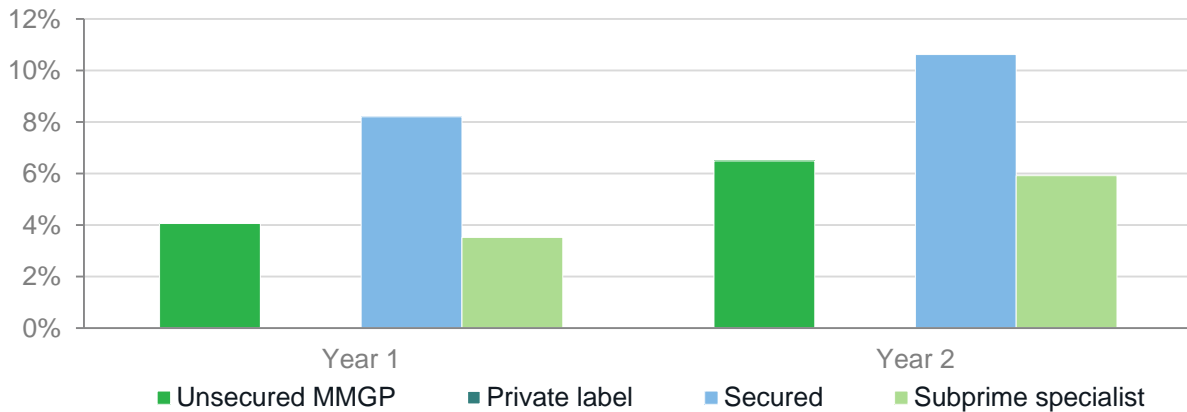
FIGURE 31: CUMULATIVE CASH ADVANCE VOLUME-TO-ORIGINAL LINE RATIO, WEIGHTED SCORED (Y-14, SSV)



⁵⁶ For more on balance transfers, see Section 5; we show there that most balance transfer volume occurs on prime and superprime accounts.

Cash advances were much more voluminous than balance transfers on all product classes except private label cards, which do not generally offer cash advances. As shown in Figure 31, consumers with scores recorded cumulative cash advance volumes equivalent to nearly one-fifth of their original line over our observation period. Subprime specialist customers without scores recorded comparably less cash advance volume, but still much more than any product class recorded in balance transfers. Data for consumers without scores are in Figure 32. These consumers recorded less cash advance volume, especially those using unsecured MMGP products.

FIGURE 32: CUMULATIVE CASH ADVANCE VOLUME-TO-ORIGINAL LINE RATIO, UNSCORED (Y-14, SSV)

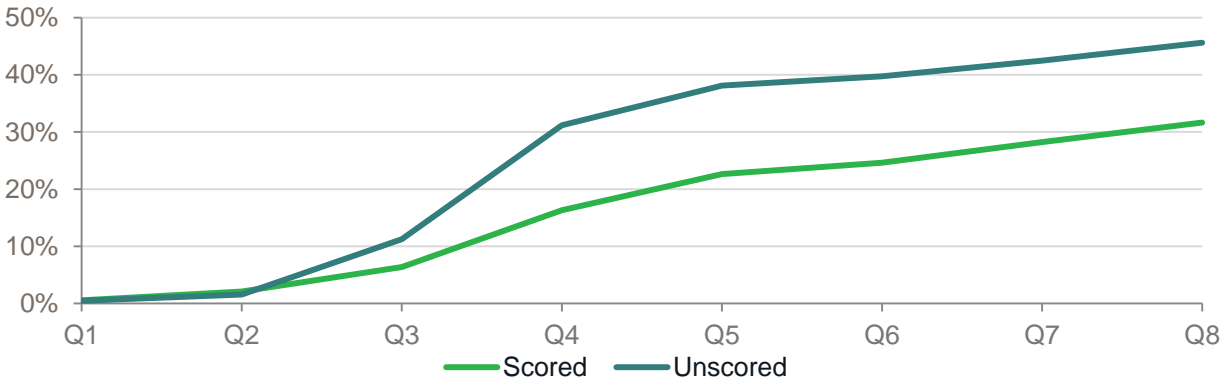


Secured card graduation

As discussed above, most secured card issuers offer their customers the possibility of “graduating” to an unsecured account if they meet certain criteria over the course of using the account for a certain length of time. By observing when accounts are redefined as unsecured by issuers, we can effectively measure the share of accounts in our vintage that graduate. The results are shown below in Figure 33.⁵⁷

⁵⁷ While not precisely commensurate with Y-14 data, other findings from our MMI survey generally corroborate the results shown here.

FIGURE 33: CUMULATIVE SHARE OF SECURED CARDS THAT EXPERIENCE GRADUATION (Y-14)



Graduation was a common experience for our vintage. Around one-third of accounts originated to consumers with scores and nearly half of those originated to consumers without scores graduated by the end of their second year on the books.⁵⁸ This activity is concentrated in the fourth and fifth quarters. Even so, consistent graduation activity in the later periods from a shrinking pool of accounts (that are not graduated, closed, or charged off) suggests that consumers not found eligible for graduation immediately upon eligibility nevertheless still retain meaningful opportunities to graduate thereafter.

COST METRICS

In this subsection, we examine the magnitude and components of costs to consumers in our vintage. Our metrics largely parallel those relied on in Section 3 of this report. As noted in that section, consumers who lack prime scores experience higher costs of credit than consumers with

⁵⁸ Preliminary results indicate that, of those accounts that graduate, including those which were originated to consumers without scores, nearly 98% are held by consumers who had scores at the time of graduation. This strongly implies that consumers without scores who take up a secured credit card succeed in building a credit record. Our analysis has not yet advanced sufficiently to allow us to speculate as to whether consumers succeed in building *positive* credit records. One commenter shared findings that also suggest that secured card ownership tends to result in consumers without scores transitioning into scored status. Their further findings are only suggestive, but indicate that many of those consumers without scores are likely to achieve scores of 660 or greater—but that many may only achieve scores less than 660, at least within two years of origination. See ABA Comment Letter, at 11-12.

prime scores.⁵⁹ The results of our vintage analysis confirm this finding. There are many differences in magnitude and composition across product classes and across different credit score tiers, but in general these consumers pay all-in costs that, depending on product class and credit score, can routinely exceed 30-50% of average outstandings on an annualized basis. Of course, these costs may be lower than some other alternatives available to consumers who lack prime credit scores.

Overall total cost of credit data for accounts held by consumers with scores are shown in Figure 34. We observe relatively high cost figures for subprime specialist products.⁶⁰ This is primarily driven by two intersecting factors. The first is that these accounts have high fees concentrated in the first and fifth quarters of the vintage.⁶¹ The second is high rates of closure, including charge-off.⁶² In combination, these two factors cause any measurement of costs that is expressed relative to balances (like TCC and the other cost metrics we discuss below) to be higher for a given vintage than the same measurement for the portfolio overall.⁶³ In both years of our vintage, subprime specialist accounts experience costs more in line with the other product classes in the second, third, and fourth quarters of both years.

The lowest cost of credit is experienced on unsecured MMGP cards, though these costs increase somewhat in the second year. All other product classes experienced a decline in costs from the first to the second year. Results for consumers without scores, not visualized, were largely similar.

⁵⁹ Section 3.1.1.

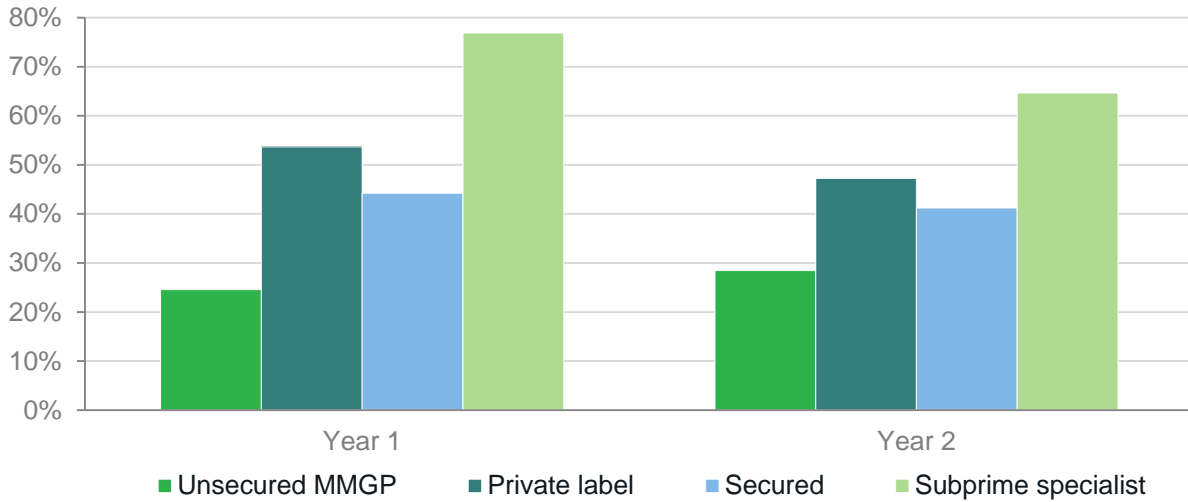
⁶⁰ As noted, Section 3.1.1 contains a general comparison of the total cost of credit for general purpose and private label accounts held by consumers in each credit score tier.

⁶¹ For a comparison of the fee burden on accounts held by consumers in each credit score tier, see Section 3.3.1.

⁶² Section 6.6.2 (see “Delinquency and Charge-Off”) contains data on charge-off rates for these four product types. Charge-off information for general purpose and private label cards overall is discussed at Section 2.6.2.

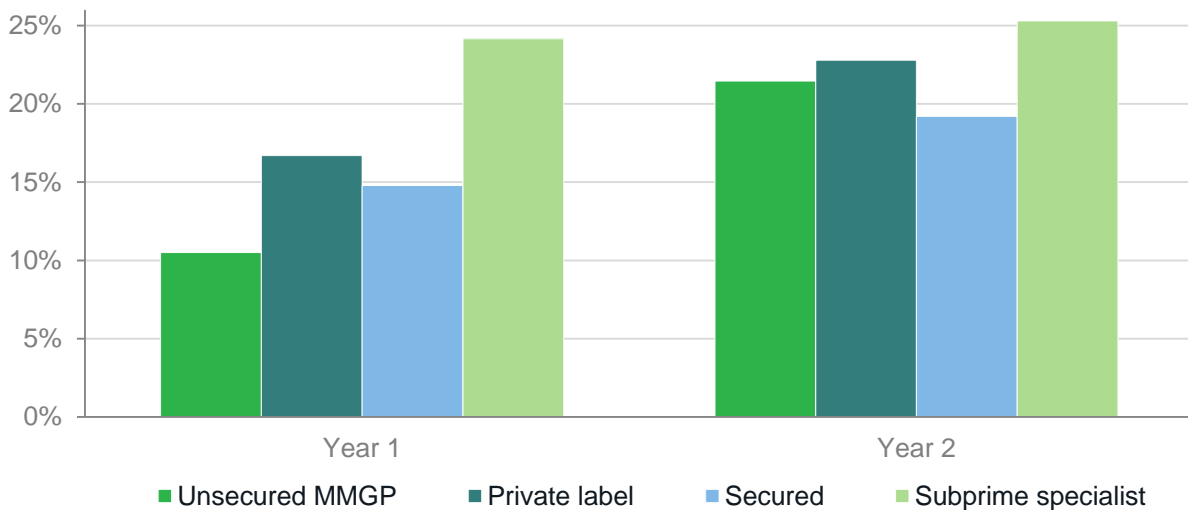
⁶³ Thus, our 2015 Report notes that TCC for subprime specialist issuer accounts for 2014 was 41%, which is lower than shown in Figure 34. See 2015 Report, at 79. That number covers all credit tiers, but, as noted in that report, subprime specialists overwhelmingly serve consumers with non-prime scores. See *id.* at 14.

FIGURE 34: TOTAL COST OF CREDIT, WEIGHTED SCORED (Y-14, SSV)



Examining effective interest rates (“EIRs”) demonstrates that one significant driver of lower unsecured MMGP costs may be promotional APRs. These cards feature very low EIRs over their first year; as we noted above, three-fifths of the accounts in this product class vintage received an initial APR of 0%, which was likely promotional. Our market monitoring suggests these rates tend to expire on or before the twelve-month mark. After that expiration, these cards feature effective interest rates broadly similar to the other product classes. EIR data are shown in Figure 35.

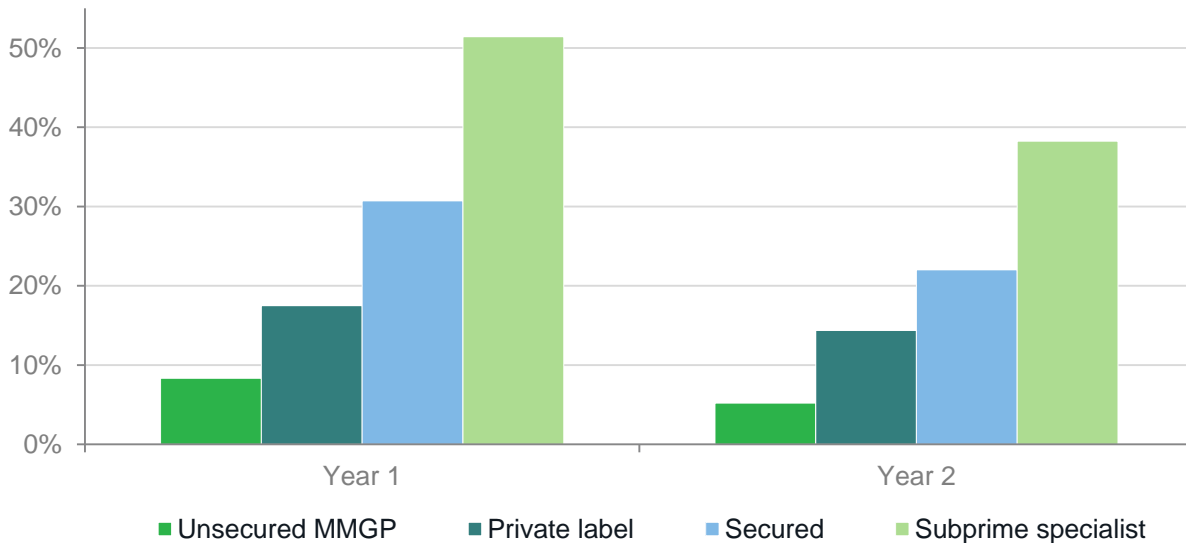
FIGURE 35: EFFECTIVE INTEREST RATE, WEIGHTED SCORED (Y-14, SSV)



More generally, the product classes experience a wide spread of effective interest rates earlier in our observation period, and then converge at a higher level. The reasons for this are likely particular to each product class. We have already discussed the incidence of promotional APRs on unsecured MMGP cards. As we noted in the previous subsection, secured cards tend to feature very high payment rates earlier in their lifespan. If this is because many consumers are transacting on these cards, they are likely reaping the benefits of their cards' grace period and paying no interest on their balances. As for private label, many of the balances on these cards are likely subject to deferred interest promotions. Given that consumers with lower scores have the highest propensity to eventually incur deferred interest, these consumers may experience lower EIRs in early periods when interest is being deferred, but experience higher rates when that interest is assessed. Subprime specialist products consistently feature the highest EIRs. Effective interest rates for consumers without scores in our vintage, not visualized here, are similar to those for consumers with scores across all product classes.

Figure 36 shows the fees component of the overall cost of credit experienced by accounts in our vintage held by consumers with scores. Subprime specialists stand out as charging the most in fees relative to balances. Other findings here may be more surprising. Private label is the only product class which does not use annual fees, which we discuss in more detail below. However, private label cards are still more expensive in terms of fees-to-balances than unsecured MMGP cards. This appears to be driven by two factors. The first factor is the exceptionally high prevalence of late fees on these accounts. Even when comparing within each credit score tier, private label cards see more frequent late fees than general purpose cards, a finding we reported in Section 3. The second factor is smaller average balances. Since average late fees are especially high for private label accounts, as we show below, these accounts pay a high fee bill relative to their balances even in the almost complete absence of any other fees.

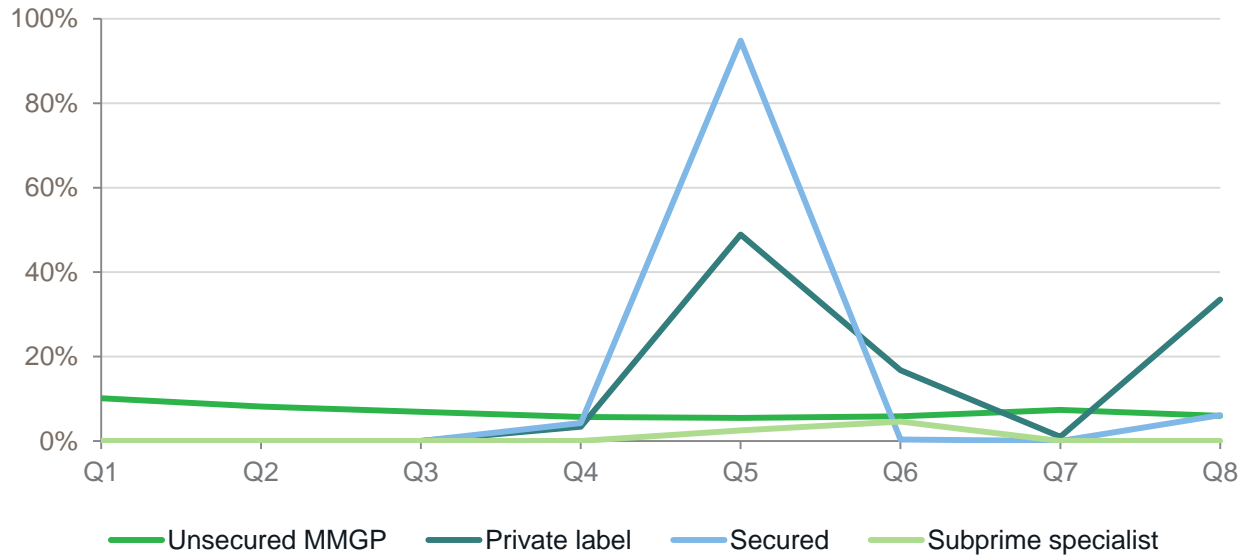
FIGURE 36: TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, WEIGHTED SCORED (Y-14, SSV)



Repricing activity, shown for consumers with scores in Figure 37 below, plays out very differently across product classes.⁶⁴ Secured cards and private label accounts show very little repricing activity, with the exception of periods proximate to increases in background interest rates that trigger the variable rate repricing exception. In those quarters, repricing rates are very high. Unsecured MMGP cards in our vintage do *not* seem to use the variable rate exception at high rates. They do, however, feature the highest repricing rates in other quarters, suggesting some combination of the expiration of promotional rates or issuers applying rate increases pursuant to other exceptions. Subprime specialist accounts see by far the lowest repricing rates, and our SSV data allow us to definitively say that most such providers forego repricing to any significant degree.

⁶⁴ The CARD Act and its implementing rules restrict when issuers can reprice existing accounts; these rules are discussed in more detail in Section 3.2.2.

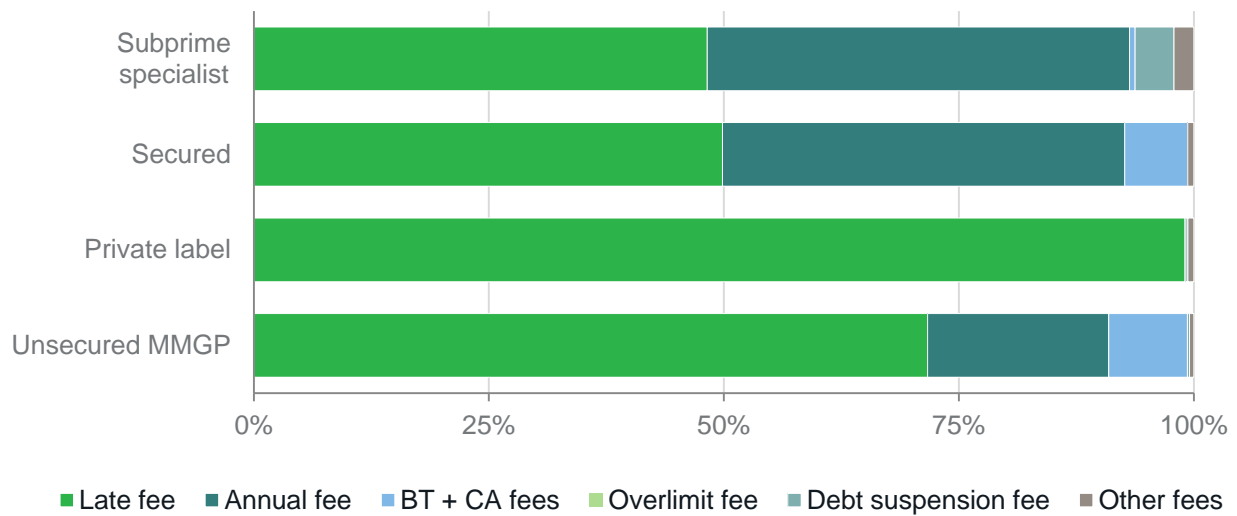
FIGURE 37: QUARTERLY INCIDENCE OF UPWARDS APR REPRICING, WEIGHTED SCORED (Y-14, SSV)



Fee composition data are shown in Figure 38 below. Consumers face a mix of fees in each product class. All products feature annual fees except private label cards. All non-private label cards offer balance transfer and cash advances in theory, but as we observed above, usage of these features was most intense on unsecured MMGP and secured cards, and therefore those consumers paid fees to access them most frequently. Subprime specialists assess a mix of fees similar to secured cards, but with more variety.⁶⁵ Fee composition is largely the same for consumers without scores.

⁶⁵ Some consumers who apply for subprime specialist cards are assessed a fee as a precondition of the account being originated. This fee must be paid by the consumer prior to the date on which the account may first be used by the consumer to engage in transactions. We do not incorporate such fees into any cost metrics in this section; however, we note that the subset of consumers in the SSV data subject to pre-account opening fees were assessed over \$10 million in such fees.

FIGURE 38: FEE COMPOSITION, SCORED (Y-14, SSV)⁶⁶

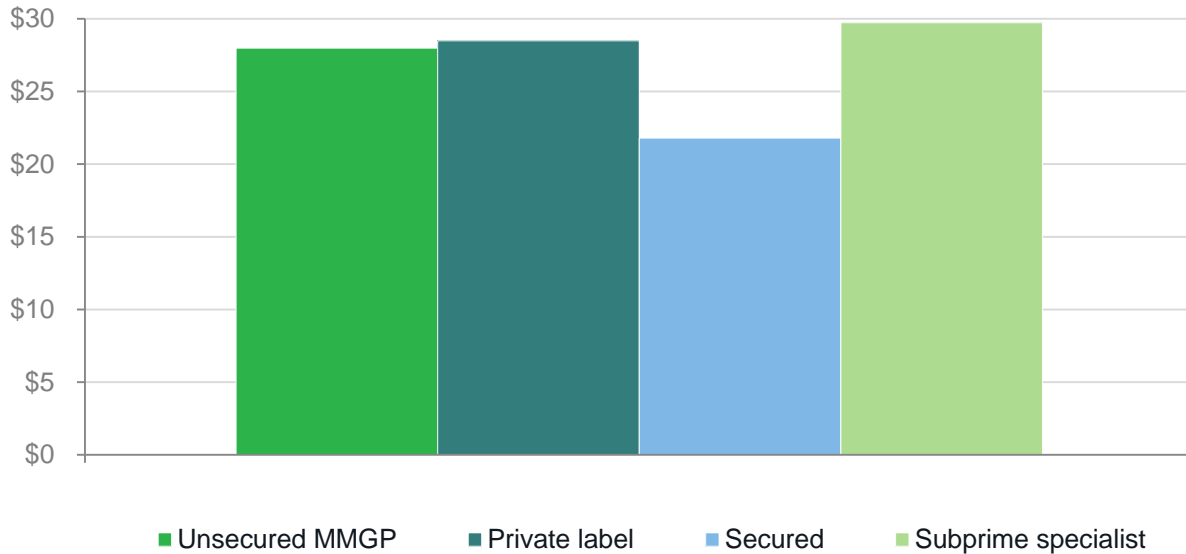


For consumers with scores, average late fees on unsecured MMGP, private label, and subprime specialist products generally appear to reflect issuers charging the maximum amounts allowable under the safe harbors in regulations implementing the CARD Act.⁶⁷ This is not the case for secured cards, where at least some issuers are charging significantly less.

⁶⁶ The Y-14 data report each fee individually as net of any reversals, whereas our SSV data only allow us to rely on net fee figures when examining the total fee bill assessed to accounts. If some fees are reversed at higher rates than others, this may mean the subprime specialist schedule shown in Figure 39 only approximates the composition of the final consumer fee bill.

⁶⁷ See 12 C.F.R. § 1026.52(b)(1)(ii).

FIGURE 39: AVERAGE LATE FEE, WEIGHTED SCORED (Y-14, SSV)

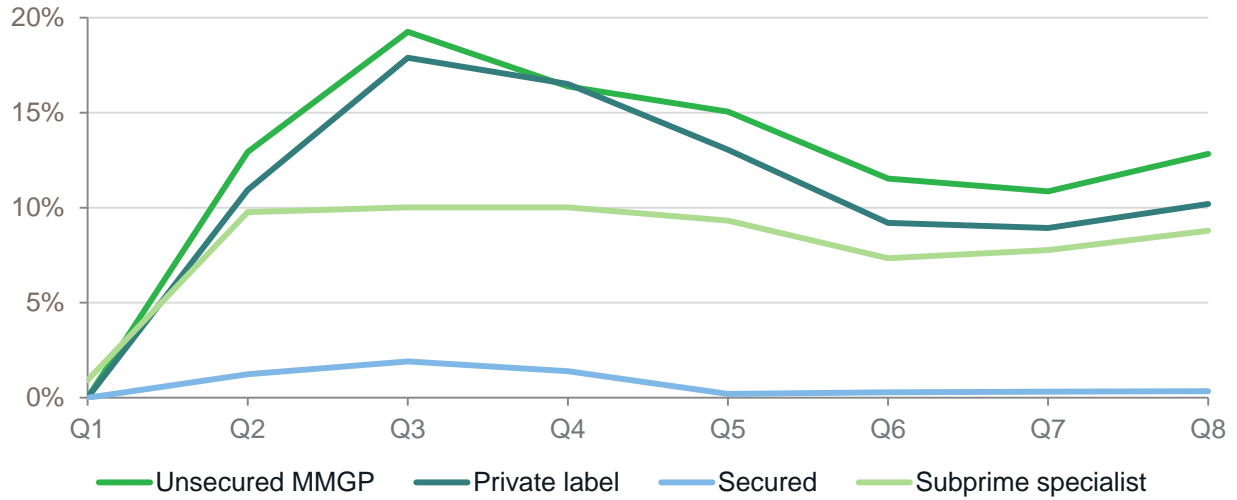


DELINQUENCY AND CHARGE-OFF

Rates of what we term “severe” delinquency—delinquencies with a length equals to or exceeding three billing cycles, or 60 days—are high for all product classes for consumers with scores except secured cards, where they are very low.⁶⁸ This is unsurprising—these consumers have distinguished themselves as having both the ability and the desire to post a significant sum as collateral before procuring the card. They therefore have the most incentive to stay current, and, if being able to fund the deposit is correlated more broadly with consumer liquidity, perhaps the most means to do so as well. Severe delinquency data are shown in Figures 40 and 41 below.

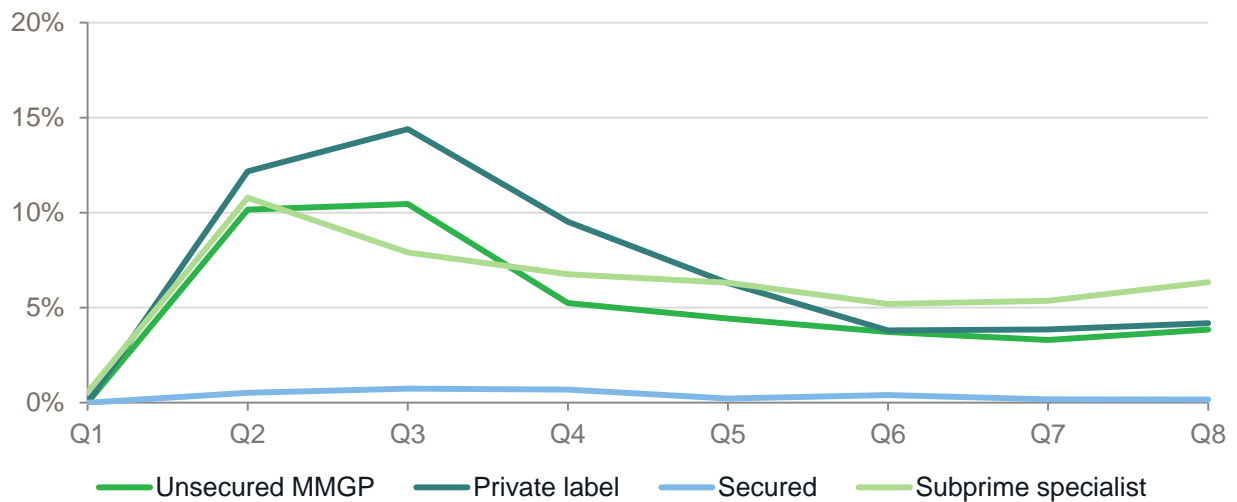
⁶⁸ For historical delinquency data for general purpose and private label card accounts, see Section 2.6.1.

FIGURE 40: SHARE OF ACCOUNTS SIXTY OR MORE DAYS DELINQUENT, WEIGHTED SCORED (Y-14, SSV)



Perhaps more surprisingly, subprime specialist accounts in this vintage experience lower delinquency rates than unsecured MMGP and private label. However, this is due in large part to a bias in how this metric is conventionally calculated—namely, it excludes accounts that have been charged off. As we will show later, charge-off rates differ significantly between the product classes in our vintage.

FIGURE 41: SHARE OF ACCOUNTS SIXTY OR MORE DAYS DELINQUENT, UNSCORED (Y-14, SSV)



Consumers without scores also experience by far the lowest rates of delinquency on secured cards. However, subprime specialist consumers do end up experiencing the highest rates of delinquency towards the end of our observation period, though they lag private label earlier.

To best assess charge-off outcomes in the context of our vintage analysis, we look at the cumulative share of all accounts in the vintage that are charged off. These data are shown in Figures 42 and 43.

The cumulative share of accounts charged off for consumers with scores are significant for all four product classes, but they are nevertheless quite low for secured cards and only somewhat higher for private label cards.⁶⁹ Unsecured MMGP cumulative charge-off rates are substantial—but nowhere near subprime specialist accounts. Nearly two-fifths of the subprime specialist accounts originated to consumers with scores in our vintage were charged off during our observation period.

These results are even more striking for consumers without scores. Only a small share of secured card accounts were charged off during our observation period, and private label and unsecured MMGP performance by this metric was better for consumers without scores than for consumers with scores. However, consumers without scores who had subprime specialist accounts in our vintage experienced an even higher propensity to charge off during our observation period than did consumers with scores, with nearly half of such accounts being charged off within two years of origination.

⁶⁹ For a comparison of the share of consumers who have experienced at least one charge-off in the last year for general purpose and private label cards, see Section 2.6.2.

FIGURE 42: CUMULATIVE SHARE OF ACCOUNTS CHARGED OFF, WEIGHTED SCORED (Y-14, SSV)

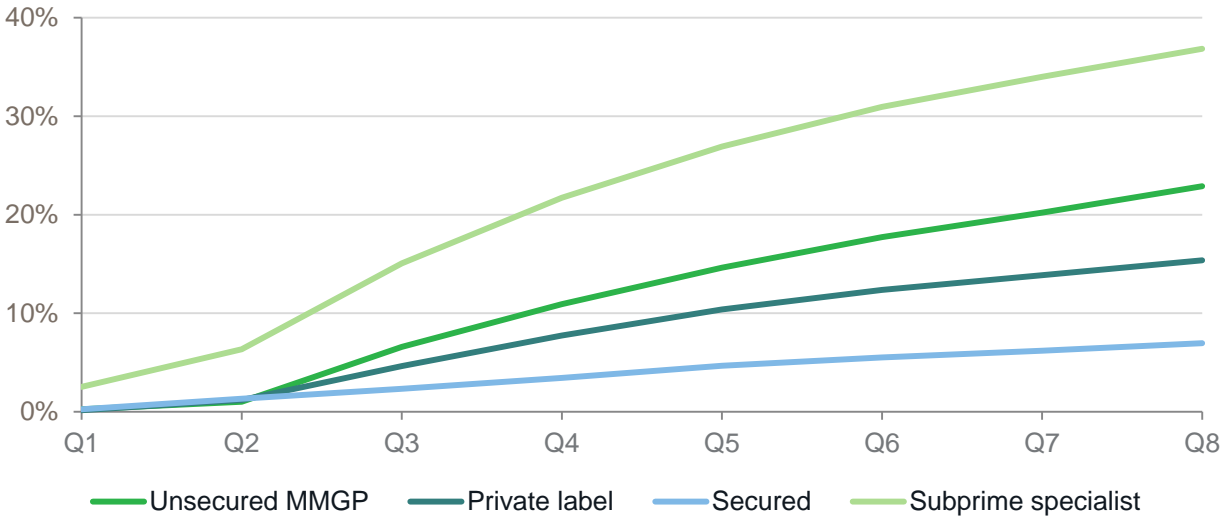
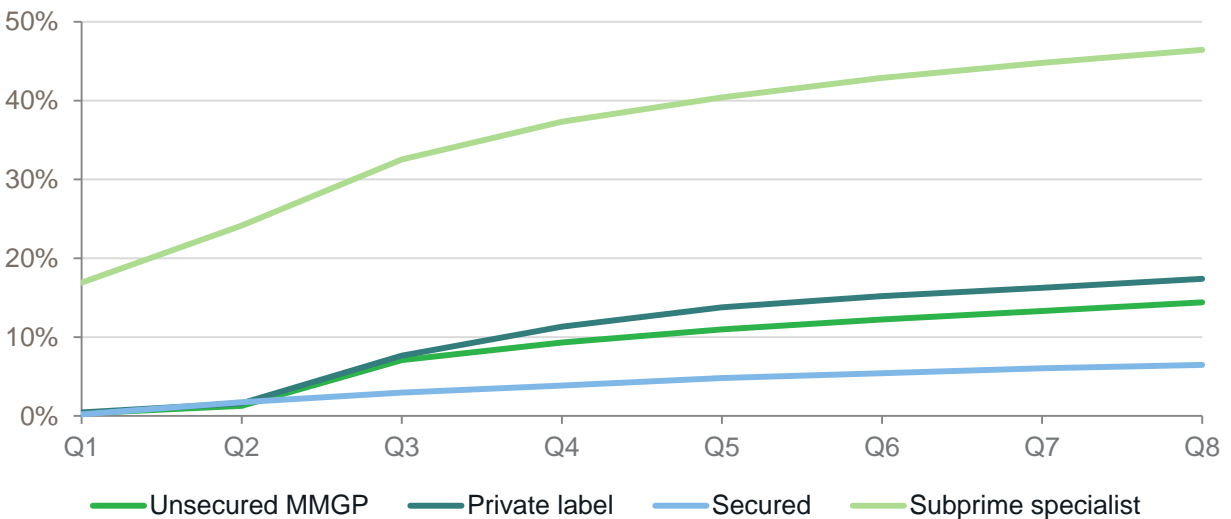


FIGURE 43: CUMULATIVE SHARE OF ACCOUNTS CHARGED OFF, UNSCORED (Y-14, SSV)



As we noted at the outset of this analysis, the available data do not allow us to attribute differences between product classes to any one cause. Indeed, the data show significant differences across the product classes in the composition of consumers being served and the behavior of those consumers. Therefore, it is unclear to what degree the differences we observe in cumulative charge-off rates are a result of product structure or provider practices—if indeed they are related at all.

7. Third-party comparison sites

Digital technologies have significantly changed the way that some consumers obtain credit card products. Among the primary vectors of this transformation are third-party credit card comparison websites (“TPC sites”). These sites, which are not owned and operated by issuers, allow consumers to obtain information about multiple cards in a manner responsive to their input. In this section we describe this part of the credit card market and its growing effect, qualitatively analyze TPC site practices and how consumers experience TPC sites, and explore the dynamic between TPC sites and credit card issuers.

7.1 Introduction

7.1.1 Background

The internet has transformed how consumers buy and shop for all types of goods and services—a transformation that is still ongoing. A recent survey by the Pew Research Center found that four-fifths of Americans have made an online purchase.¹ A similar proportion consults online ratings and reviews before buying something for the first time.² Younger consumers report integrating the internet into their commercial lives at higher rates than older consumers.³ This transformation has occurred entirely within the lifetimes of even the youngest U.S. adults.⁴

¹ Aaron Smith & Monica Anderson, *Online Shopping and E-Commerce*, at 5, Pew Research Center (Dec. 19, 2016), available at <http://www.pewinternet.org/2016/12/19/online-shopping-and-e-commerce>.

² *Id.* at 3.

³ *Id.* at 6.

⁴ In 1996 Amazon.com recorded net sales of \$15.7 million, comprised entirely of online books. A child born that year turns 21 this year, a year in which Amazon.com is expected to recognize nearly \$169 billion in revenue generated by

This rapid transformation poses opportunities and challenges to consumers, market participants, and regulators. This is in part because this transformation entails transposing existing elements and patterns of shopping and purchasing to a novel environment—but it is also because internet technologies allow for new elements and patterns that have no analogue in the “brick and mortar” world. Some of the consequences of this transformation are obvious: in the second quarter of 2017, \$111 billion, or nearly 9% of all U.S. retail sales volume, was classified as “e-commerce,” a share two-and-a-half times greater than the share reported just a decade ago.⁵ Other consequences, perhaps just as important, may not be as obvious, or may be more difficult to identify or quantify.

The internet’s effect goes beyond digitizing the point of sale. New tools and business models have already had a revolutionary impact on how consumers shop in certain markets. The travel industry, for example, has been notably altered by the rise of “aggregators,” which allow consumers to compare hotels, airline fares, rental car rates, and other travel services in order to find offers that best meet their specifications and budget. Just one American company that operates a number of such sites reported facilitating the booking of over half-a-billion nights of accommodation in 2016.⁶

This same kind of model is already beginning to have a substantial effect on how consumers procure and use financial products. Consumers who query a search engine seeking information regarding a wide range of financial services will receive results directly linking to such products’ providers, but also results linking to a myriad of intermediary websites which advertise that they can help consumers learn more about products and find those best suited to their needs.

These intermediaries have already had a major effect on the consumer credit card market. Emerging relatively recently, third-party websites that position themselves as helping

selling a wide variety of physical and digital goods. See Mike Preuss, *Investor Letters: Jeff Bezos’ 1997 Letter to Amazon Shareholders*, Visible (Feb. 23, 2016), available at <https://visible.vc/blog/investor-letters-amazon-1997>.

⁵ U.S. Dept. of Commerce, *Quarterly Retail E-Commerce Sales, 2nd Quarter 2017*, U.S. Census Bureau News (Aug. 17, 2017), available at <https://www2.census.gov/retail/releases/historical/ecom/17q2.pdf>.

⁶ Priceline Group Inc., Annual Report (Form 10-K), at 41 (Feb. 27, 2017), available at <http://files.shareholder.com/downloads/PCLN/5681067909x0xS1075531-17-9/1075531/filing.pdf>.

consumers select credit cards to meet their personal needs have grown into large companies. These “TPC sites” generate substantial internet traffic and media attention, and in many cases earn substantial revenues.

7.1.2 Data and methodology

We rely on three broad sources of information in this section. First, we use data provided directly by market participants. We use our MMI data, from a survey of mass market issuers, as well as another survey specifically directed at TPC sites. In these surveys, respondents provided a range of information relevant to these sites. Second, we use commercially available market data, such as information on credit card marketing provided by Mintel Comperemedia. Third, we draw on our own qualitative review of TPC sites. There are more sites within our qualitative review than our quantitative survey.

Each of these sources has limitations. The data provided by respondent TPC sites do not encompass all existing sites. At this point, we cannot estimate what share of TPC sites currently active in the market are included in respondents’ data, or determine how representative that share is of all providers. The MMI data cover all TPC sites doing business with the surveyed issuers, but these issuers may not be representative of the market as a whole. Additionally, those two data sources combined do not cover identical sets of TPC sites—issuers likely do business with TPC sites not included in our survey of sites, and vice-versa. In addition, almost none of these data are at the consumer level, meaning both our qualitative and quantitative findings for now can only suggest certain dynamics of the consumer experience in this market. Throughout this section, we pose our results as precisely as we can, but in all cases we should be seen as attempting to illustrate a market sector about which there is relatively little public information. As throughout the rest of this report, we focus on reporting findings that illuminate the state of the credit card market.

7.2 Product and market overview

7.2.1 What are third-party comparison sites?

Despite their rapid rise to an important position in the market, defining TPC sites is not straightforward. A wealth of more traditional editorial material covering or comparing credit

cards—published by both general-interest media publications and online sites specializing in analyzing financial products—is available to consumers.⁷ In fact, a good deal of this kind of content is available on websites that we would also classify as TPC sites. In our view, not all websites with content aiming at assisting consumers in selecting a credit card qualify as TPC sites. We identify four criteria to help determine which sites we consider to be TPC sites for the purposes of this section:

- **Operated by a third party:** we exclude from this analysis sites operated directly by credit card issuers. TPC sites invest substantially in their own brand, a signal that they intend to build consumer recognition and trust and distinguish themselves from any particular issuer or issuers whose products they are recommending or reviewing at a given point in time;
- **Dynamic:** TPC site content is updated quickly and routinely to respond to new product information. Sites are built around a queryable database of credit card products that is regularly and frequently updated to incorporate new products, eliminate obsolescent products, and refresh card terms and conditions as they change. This contrasts with static or manually-updated content such as editorial articles;
- **Responsive to user input:** generally speaking, TPC sites display different information to different consumers based on information solicited by the TPC sites about a particular consumer’s characteristics and preferences. We discuss how this plays out in practice below, but a TPC site should be distinguished from a website that presents a static list of credit cards or even a set of static lists; and

⁷ One good example of this is the online review website Wirecutter, which offers a vast number of in-depth reviews of a broad array of products, including everything from cable modems to infant car seats to sleeping bags for car camping. It also includes assessments of the “The Best Cash-Back Credit Cards” and “The Best Travel Rewards Credit Cards”—but these assessments alone do not make Wirecutter a TPC site. Wirecutter is illustrative, however, of how a wide variety of digital tools, platforms, and publications is having a rapidly-increasing effect on consumers’ shopping patterns. Last year the company was purchased by The New York Times Company for \$30 million. Sydney Ember, *New York Times Company Buys The Wirecutter*, N.Y. Times (Oct. 24, 2016), available at <https://www.nytimes.com/2016/10/25/business/media/new-york-times-company-buys-the-wirecutter.html>.

- **Direct application referring:** TPC sites all link directly to the product application sites of issuers. Links to issuers' application sites are integrated into nearly all types of site content, including and, for these purposes, especially the “comparison engine” output we discuss in more detail below.

These criteria are intended solely to help us draw boundaries for the purpose of this analysis. As online tools grow more sophisticated, there may be an increasing number of “borderline” cases that match these and other potential criteria but nonetheless differ from present-day TPC sites in important ways.

7.2.2 Market evolution

To the Bureau's knowledge, the first third-party comparison sites launched in the 2000s, and gained notable presence in the credit card marketplace in the subsequent decade.⁸ These sites deployed cutting-edge branding and marketing techniques at a time when the market as a whole was still recovering from the recession. Many mass market issuers soon began compensating a large number of such sites in exchange for referring applications. (We discuss the structure of presently prevailing issuer compensation of TPC sites in Section 7.4.1 below.) Collectively, TPC site referrals quickly grew to comprise a substantial share of credit card originations, with consumers reporting 8% of their most recent credit card applications coming via these sites by 2014.⁹ For some large issuers, moreover, this share was markedly higher. The last few years have brought signs of industry maturation, with the largest TPC sites entrenching their brands in

⁸ At least one TPC site had an online presence before the 2000s. Bankrate.com was founded as a print publication in 1976 and brought its content online in 1996; however it was not until 2004 that their online comparative credit card tools debuted.

⁹ Mintel Q2 2014 Response Rates.

consumer and media consciousness, increasingly concentrating consumer traffic and issuer compensation in a smaller number of sites.¹⁰

Most recently, these larger TPC sites have seen a convergence in their practices. A few of the largest TPC sites were built on models centered on providing consumers with regular, free credit bureau information, which was then used as an input into the sites’ “comparison engines.” (We define this term in more detail below.) Within the last few years, most TPC sites within the scope of our qualitative review—particularly the larger sites—have integrated credit record information into their offerings in some form. Additionally, most of them currently offer at least some editorial content. To distinguish themselves from competitors (or to prevent competitors from overly distinguishing themselves), TPC sites also offer a variety of services in addition to credit card product comparison tools. Comparison services may also extend to other financial products and markets and, in some cases, even into non-financial goods and services. While emphasis on these different elements varies across sites, TPC sites appear to be settling on a common foundational model.

7.2.3 Market dynamics

A number of websites meet the credit card TPC site criteria outlined above. These sites vary in size, resources, target consumer audience, and breadth of credit card product coverage. Some sites focus on a niche category of consumers with specific financial goals, while others endeavor to be a one-stop resource for as broad a swathe of consumers as possible. The TPC site market exists in a broader financial ecosystem in which financial institutions, affiliate marketers, and lead generators endeavor to connect consumers with financial products.

AFFILIATE MARKETING

TPC sites in many ways mirror broader trends in online financial marketing and online commerce, where the role of third-party “lead generation” and “affiliate marketing” firms in

¹⁰ Contributing to this process may have been a recent shift in issuer practices, in which certain issuers with a significant presence in this area stopped compensating sites with practices that did not meet certain issuer standards.

connecting businesses to consumers has grown. Working with these kinds of third parties reduces businesses' risks when investing in marketing. The third party commits resources up front to attract consumers, and is only compensated when its attempts to connect those consumers to the businesses that compensate it cross some threshold, such as the consummation of a sale.

This model can benefit both providers and third parties. A company that specializes in this form of marketing may have more effective and efficient strategies and tactics for customer acquisition than many of the businesses it services. Providers can structure their arrangements with the third party so that their marketing budgets are paying only for success. TPC sites fundamentally operate in this way: their revenue is overwhelmingly generated by issuer compensation for referring approved applications. We discuss revenue and other dynamics between TPC sites and issuers in further detail in Section 7.4 below.

TPC SITES AND LEAD GENERATION

The term “lead generator” describes several business models in which market players have varied roles. In one common model, lead generators identify consumers who have indicated interest in credit products through clicking on a search result or a banner ad. They then sell this consumer's information to companies that may provide the consumer with relevant products. Lead generators often use a reverse auction or similar process to sell consumers' information to lenders.

TPC sites share similarities with this model but differ in meaningful ways. As with loan providers in the lead generator model, credit card issuers increase the likelihood that a consumer sees their product by paying TPC sites. Unlike the lead generation model, however, consumers are able to view multiple products at once, meaning that they potentially have fuller information before they make the decision to apply for a particular credit card. Consumers are also often able to filter results by the issuing company or other criteria, avoiding financial institutions or product types that they do not prefer, a practice that does not occur in the lead generation space. Most fundamentally, consumers using TPC sites are making the decision about whether to connect directly to an issuer and submit an application. With lead generation,

providers are purchasing the consumer's contact information, and then directly contacting the consumer to solicit an application. Though both models connect consumers with products, there are significant differences between the two models.¹¹

SITE BRANDING

Branding is valuable to sites, helping differentiate TPC sites from competitors and deepening relationships with consumers. Though varying to a degree, large TPC sites display similar products. (To the Bureau's knowledge, no site has exclusive rights to market any one issuer's products.¹²) Because large sites generally present products from similar pools of credit cards, it is necessary for the sites to build, maintain, and promote their own brand independent of the cards they feature. Some sites target different consumer bases, a core business decision which informs a site's design and presentation of credit card products. Therefore, sites with underlying databases that include a similar set of products may nevertheless emphasize different products or different kinds of products.

In recent years, most large, established TPC sites have revised their website designs, employing elements consistent with broader trends in web design and signaling ongoing investment in site branding and presentation. Smaller, more targeted TPC sites vary more widely in their designs, which may reflect more limited resources or a more loyal consumer base.

Most sites have built brands by marketing themselves as consumer allies that want to help users through the complicated process of selecting a credit card. Sites also frequently highlight their other services and features in marketing materials, often stating that they benefit a consumer's overall financial health.

¹¹ However, based on our review of site disclosures, it appears that at least some TPC sites also gather information that may be used for lead generation. As discussed further below, some sites encourage users to become members, a process that requires the input of some personally identifiable information. That information may be used to help deliver a more valuable TPC service, but in some cases—at least based on disclosures reviewed—information then enables more standard lead generation activity as well. It should be noted, however, that some sites explicitly disavow this kind of activity in their terms of service and privacy policies.

¹² A recent lawsuit addressed the right of a TPC site to include an issuer's products in their comparison engine even without that issuer's permission or consent. *First Premier v. Odysseas Papadimitriou*, No. 14-4055 (D.S.D. Jan. 7, 2015).

7.2.4 Market effect

Consumers are increasingly shifting their time and attention into digital channels, and issuers are following them. As a result, the importance of TPC sites as drivers of credit card applications and originations has increased dramatically in recent years. Respondent sites report that “unique visitors” to credit card-related pages totaled more than 200 million in 2016.¹³ (This number includes some double-counting of visits from the same IP address and the same consumer.¹⁴) This represents more than 60% growth year-over-year. These unique visits produced over 50 million clicks on links to credit card application pages.¹⁵ As shown in Figure 1, TPC sites accounted for about one-fifth of all general purpose credit card applications in 2016, 2.7 percentage points more than in 2015.¹⁶

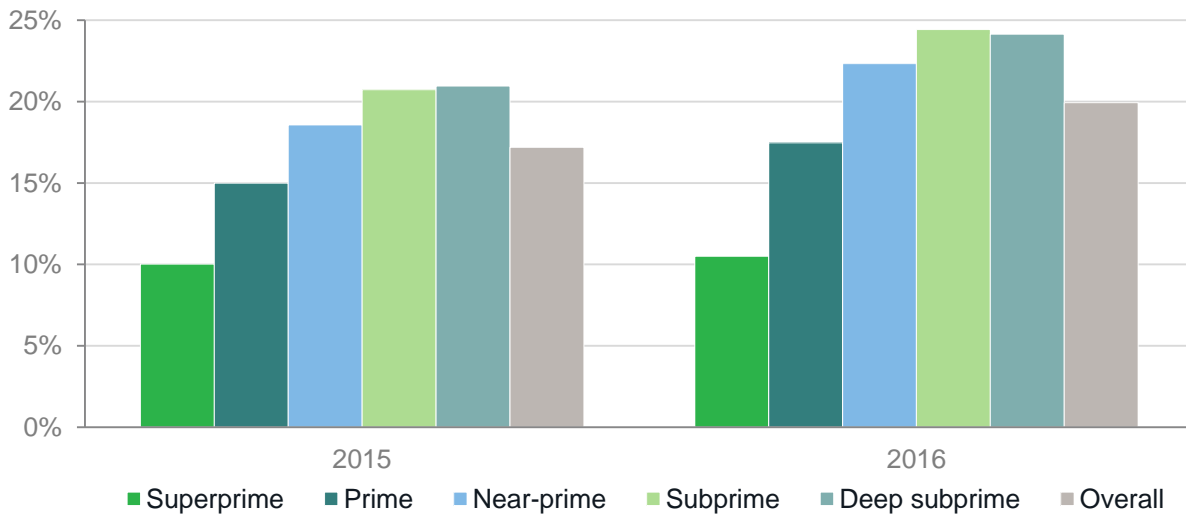
¹³ Unique visits total considerably more than this at almost 1 billion, which represents growth of nearly 65% over 2015.

¹⁴ There are two forms of double-counting involved here. First, a given website may be unable to determine whether visits from multiple IP addresses are from the same person using different devices. Second, our data aggregate unique visitors across multiple websites without de-duping on the basis even of IP address. Even with these limitations, however, we believe that the total number of U.S. consumers who have accessed TPC sites can conservatively be estimated at more than 100 million.

¹⁵ Not all clicks on application links result in applications. TPC sites generally do not have visibility into whether referrals to application pages actually result in completed applications. (As discussed further below, however, they do know the total number of approvals by issuer and by product.) The absolute number of TPC site-sourced applications reported by mass market issuers is substantially smaller than the number of click-throughs reported by these sites. Even accounting for issuers not included in our survey, it is likely that many of these application clicks do not convert into applications.

¹⁶ TPC sites generally feature few, if any, retail co-brand or private label cards from mass market issuers, and mass market issuers reported almost no applications for such cards sourced from TPC sites. Some TPC sites do feature private label cards issued by non-mass market issuers targeted at consumers with lower scores.

FIGURE 1: SHARE OF GENERAL PURPOSE CREDIT CARD APPLICATIONS SUBMITTED VIA TPC SITES (MMI)

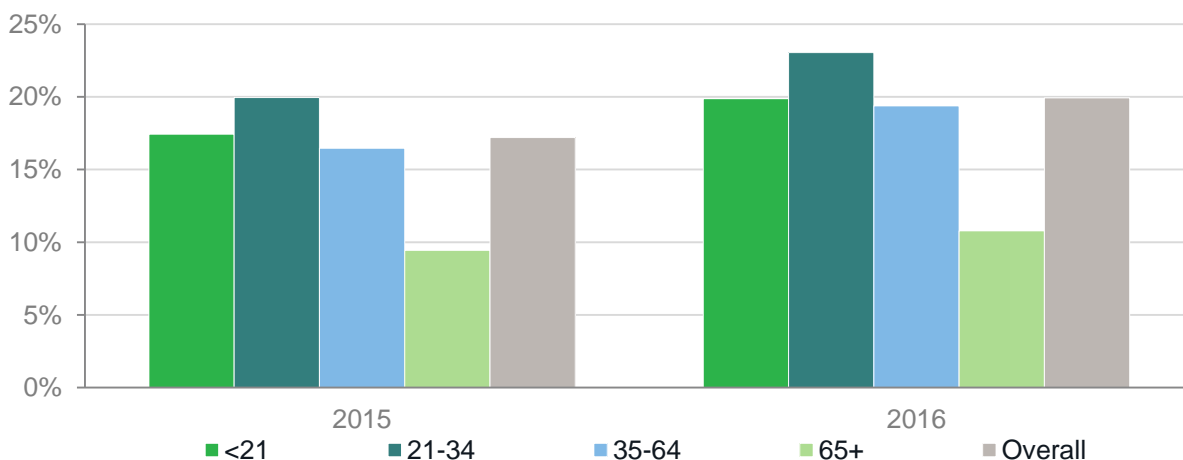


TPC sites are increasingly popular for consumers at all credit score tiers, but have become an especially important application channel for consumers with subprime credit scores. As shown in Figure 1, nearly 25% of applications for mass market general purpose cards from consumers with subprime and deep subprime credit scores came via TPC sites in 2016.¹⁷

TPC sites garner applications from users of all ages, and we observe growth in TPC site application share in every age cohort. Age-related application data are shown in Figure 2. Consumers over 65 years of age are less likely than others to have their applications referred directly by TPC sites. We observe little variation in TPC site use across other age groups.

¹⁷ These figures are a floor on TPC site effect, because consumers may use these sites to browse and compare, but only later submit an application directly via the issuer’s website without clicking the site’s application link.

FIGURE 2: SHARE OF GENERAL PURPOSE CREDIT CARD APPLICATIONS SUBMITTED VIA TPC SITES (MMI)

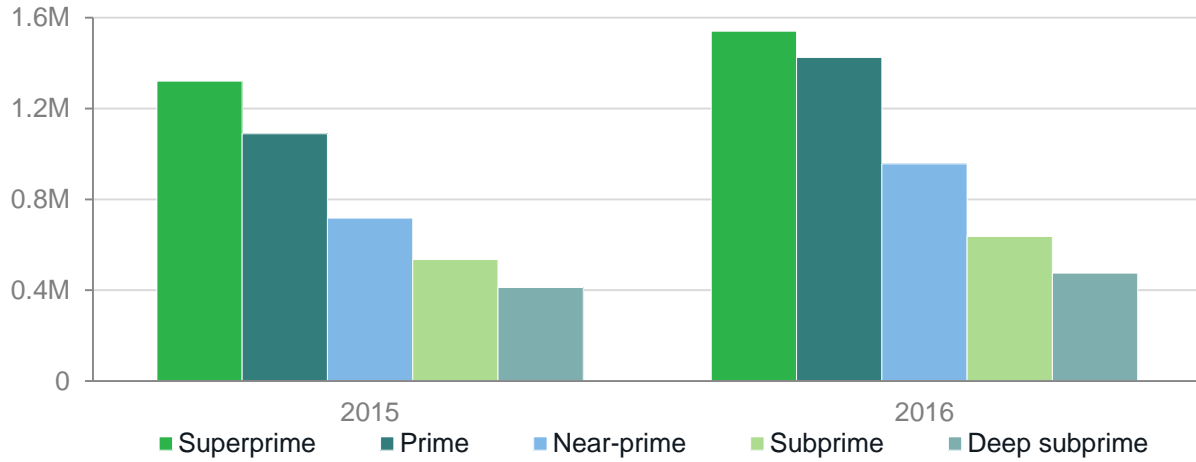


Given the number of applications that they source, TPC sites are increasingly important to issuers as an acquisition channel. In 2016, mass market issuers approved more than 5 million general purpose credit card applications sourced from TPC sites, which represents about 15% of all mass market general purpose approvals for that year. This volume of TPC site-sourced general purpose approvals represents a 24% increase over 2015 levels.¹⁸ By comparison, the total number of all other approved general purpose applications for these same issuers increased only 3% over the same period.

As shown in Figure 3, TPC site-sourced approvals for mass market issuers are distributed across credit tiers in opposite fashion to the distribution of the TPC site-sourced share of applications. This reflects higher approval rates at higher credit tiers. Roughly three-fifths of TPC site-sourced approval volume came from consumers with prime and superprime credit scores. That said, near-prime and prime tiers experienced the largest growth in approvals from 2015 to 2016, even as all tiers show growth in approved accounts over the period.

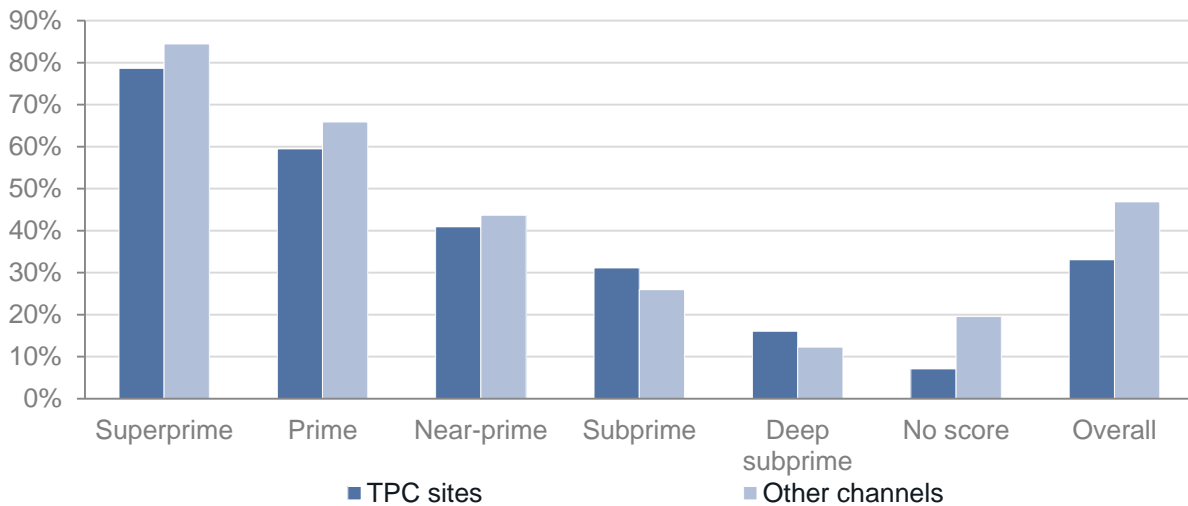
¹⁸ Our TPC site survey and our MMI survey reported comparable numbers of site-referred approvals. This fact was true both in 2015 and 2016. As noted above, however, our MMI survey effectively covers TPC sites not included in our TPC site survey, and our TPC site survey includes issuers not included in our MMI survey. It is likely, therefore, that the total number of approved applications sourced from TPC sites is larger than either data source reports.

FIGURE 3: GENERAL PURPOSE CREDIT CARD APPROVALS FACILITATED BY TPC SITES (MMI)



Compared to all other general purpose applications, approval rates for TPC site-sourced applications are lower. This is not consistent across credit tiers. TPC site-sourced approval rates are slightly lower for consumers within superprime, prime, and near-prime credit tiers, as well as for scoreless consumers. But they are slightly higher for applications from consumers with subprime or deep subprime credit scores. These data are shown in Figure 4.

FIGURE 4: APPROVAL RATES ON GENERAL PURPOSE CARDS, 2016 (MMI)



The aggregate numbers shown in Figure 4 mask an intriguing phenomenon. When looking at any single mass market issuer individually, the TPC site-sourced applications within a given credit tier always have approval rates lower than applications from other channels. Nevertheless,

across all mass market issuers consumers in the two lowest credit score tiers *overall* have higher approval rates when applying through TPC sites.¹⁹ This is because mass market issuers that approve consumers with non-prime scores at higher rates receive a large share of non-prime applications through TPC sites. This share is much larger than the share of applications they receive from other channels. This suggests that TPC sites may be effective both at identifying which cards consumers with lower scores are likelier to be approved for and at persuading consumers to apply for those cards.²⁰

TPC sites we surveyed reported almost \$1 billion in payments from issuers for approvals resulting from applications they referred to issuers in 2016. In 2013, the Bureau found that financial service providers spent \$17 billion on marketing annually.²¹ Financial service provider spending on marketing has likely grown since that point, and it is difficult to determine what share of that spending is on credit card marketing; those caveats notwithstanding, credit card TPC sites likely represent a substantial share of not just all credit card marketing spend, but *all* consumer financial product and service marketing spend.²²

7.3 Consumer experience

This section describes the consumer experience of TPC sites, summarizing aspects of sites that are visible to users. In other words, we seek to capture what a consumer sees when engaging

¹⁹ This is an example of what statisticians refer to as “Simpson’s paradox.”

²⁰ Per our MMI data, applications sourced from more traditional forms of digital advertising do not show the same pattern. That suggests that such advertisements may not be as effectively targeted to maximize a consumer’s odds of approval.

²¹ Consumer Fin. Prot. Bureau, *Navigating the Market: A Comparison of Spending on Financial Education and Financial Marketing*, at 17 (Nov. 18, 2013), available at http://files.consumerfinance.gov/f/201311_cfpb_navigating-the-market-final.pdf.

²² The Bureau identified \$2.1 billion of the \$5.5 billion in “awareness” marketing as being credit card-centric, but was unable to determine with confidence the share of the \$12 billion in “direct” marketing spent on credit cards.

with a TPC site. Behind-the-scenes dynamics and factors are occasionally referenced, and are discussed in greater detail in Section 7.4.

TPC sites frequently offer three types of content: comparison engines, which allow consumers to compare financial products in response to consumer input; editorial content; and personal financial management (“PFM”) tools. We discuss each type of content below using each of our three sources of data, but primarily our own experiential review of TPC sites.

The range of content offered by TPC sites varies, and not all sites offer all three types of content. As of this writing, however, most TPC sites, especially the largest ones, offer some combination of all these services. That has not always been the case. In the earlier days of TPC sites, many sites were solely comparison engines. Other sites began by offering primarily editorial content or PFM tools, and later evolved into offering comparison engines as well. As noted earlier in this section, it is only in the last couple of years that these models have to a substantial degree converged. Regardless of whether they met TPC site criteria from inception or incorporated TPC features later in their evolution, almost all major TPC sites that we reviewed now offer some blend of all three of the aforementioned content types, with varying degrees of emphasis. If this represents the emergence of a model that proves naturally dominant given current market conditions, it may be a strong signal that this part of the credit card market is beginning to mature.

7.3.1 Homepages and entry points

A consumer’s initial interaction with a TPC site may be at its “landing page” or “homepage.” These pages generally communicate the breadth of the sites’ comparison services. They also seek to establish a site’s brand by describing the site’s claimed consumer benefits. Larger sites that also offer wider-ranging comparisons of other financial products (such as auto loans, student loans, or mortgages) do not always display their credit card market comparison engine as prominently as smaller, more targeted credit card TPC sites do.

TPC sites also have credit card-specific landing pages that are often linked to from a drop-down menu or a link on the broader website homepage. TPC sites use their credit card landing pages most frequently in three ways: highlighting products, featuring editorial content, or displaying some version of their comparison engine. Some sites may do more than one of the above or a combination of all three. Overall, the amount of information on each TPC site homepage varies significantly.

Many TPC sites highlight specific credit card products on their homepage, which sites select based on a variety of criteria. Some use click-through rates or consumer satisfaction ratings to measure a product's popularity, displaying cards that consumers find interesting or report as valuable. Others consider the degree to which issuers compensate the site for approvals. A less common practice is to allow issuers to pay directly for placement on the homepage. Sites have advertiser disclosures that may encompass homepage practices, but they do not expressly address how cards are selected for the homepage.

Other TPC sites use their credit card landing page to display editorial content, often featuring popular articles about credit card products or market dynamics. Highlighted subjects often include travel rewards maximization or balance transfer use.

Almost all TPC sites' credit card landing pages have a link to their comparison engines, and many directly enter consumers into the comparison process. For these sites, the credit card landing page is a starting point for a consumer to begin comparing products. Consumers may either be prompted to input information, or have the option to select from a list of search criteria such as cards with low interest, balance transfer options, or cashback rewards. If consumers provide input, they are then routed to the comparison engine process, which we explore in greater detail below.

Large TPC sites offering wider-ranging comparison products have several entry points to their credit card-specific landing pages, and some even have multiple versions of their basic landing pages. Homepages are not static. Several respondent sites report changing their homepages frequently and, if they feature credit cards, cycling through different credit card products on their homepages.

7.3.2 Comparison engines

At the heart of any third-party comparison site is the “comparison engine”—our term for the dynamic and responsive portion of the website that allows consumers to compare credit cards and, by our criteria, distinguishes TPC sites from other websites.

Not all consumers who visit a TPC site will necessarily encounter or use the engine. As we discuss further below, TPC sites increasingly offer a diverse array of content and features to consumers. Many of these are, from the perspective of the TPC sites, supplemental to the comparison engine, the core offering that generates a substantial bulk of many sites' revenue. Note that these may not be supplemental to the *consumer*. For some site users, these may be the primary draw.

SEARCH CRITERIA

Much of the comparison engine experience is centered on search criteria, a term we use to describe the consumer characteristics or product features that sites allow consumers to enter or select. Search criteria are described in more detail below, but frequently include key price points such as APRs, rewards features, or the availability and price of other features, such as balance transfers. Search criteria are instrumental to initiating the search process and TPC sites employ them in several distinct ways.

Below, we begin by examining the ways sites can initiate searches based on the comparison engine, then we discuss the two general categories of input on which most comparison engines rely: first, card features and consumer goals; and second, credit scores.

Search initiation

Large, established TPC sites generally allow consumers to initiate the search process using the three methods we describe below. Smaller sites generally only offer one of these methods. As we discuss below, consumers can generally revise or refine the criteria iteratively to generate refreshed results.

First, many TPC sites prompt a user to select from a pre-set list of search criteria to begin the comparison process. The selection of a criterion then leads directly into the initial set of results.

Second, some TPC sites offer a more guided initiation process, prompting a consumer to complete a broader questionnaire, often framed with a consultative tone, pertaining to their credit card preferences and personal financial situation. A few of the questionnaires require a consumer to create an account with the website in order to view the site's comparison engine results.

A final method is to present consumers with credit card recommendations for a default set of search criteria prior to any consumer input. In such cases, once a consumer navigates to the comparison engine, a TPC site will display cards meeting some search criterion, such as "low APRs," before the consumer expresses any preferences. A consumer can then provide input, entering information from a series of options listed alongside the initial recommendations, and the list of recommended products updates accordingly.

Card features and consumer goals

This category, the most common, includes the specific product features a consumer desires, or the personal financial objectives a consumer wants to achieve with a credit card. Common features or goals include cards with low purchase or promotional balance transfer APRs,

cashback rewards, and travel rewards. Many sites also include broader groupings of product features as search criterion, such as secured cards or cards for students. Certain categories of features and goals appear frequently on TPC sites, suggesting their importance in the hierarchy of TPC sites' search criteria. In particular, rewards cards play a substantial role in most TPC site comparison engines. Our respondent sites report that around 50% of approved applications are for rewards products.

Many sites also offer a second tier of more granular goals beyond these high-level categories. Consumers encounter these additional categories in the comparison engine results page, generally after they have already initiated a search. These categories often include 0% promotional rates on purchases or balance transfers, no foreign transaction fees, no annual fees, guaranteed approval, or sign-up bonuses. Some TPC sites allow for a combination of these subcategories as well as other more specific goals. For example, they might allow a consumer to search for credit cards with low APRs, no annual fees, *and* no foreign transaction fees. Sites vary significantly in their breakdown between large categories and additional categories of features and goals.

Several TPC sites offer issuer or network preference as a subcategory, allowing a consumer to select a specific card network or issuing financial institution. These criteria, while common, are nevertheless offered on fewer sites than other aforementioned categories.

Credit score

The majority of sites allow consumers to provide credit score-related information as a search criterion; they generally do so in one or both of two ways.

First, almost all sites allow a consumer to self-report their credit score by selecting from a site-provided range. Sites that use this method present four or five score tiers, generally described in colloquial terms such as “poor,” “fair,” “average,” and “excellent.” This approach allows a consumer to self-report their rough credit score range as a search criterion without inputting their personally identifiable information.

Second, several sites will procure a consumer's credit score from a credit reporting agency if a consumer provides consent and inputs certain personally identifiable information. Some sites prompt users to input their information when initiating a search, especially when that initiation takes the “questionnaire” form. (For example, some sites do this if consumers inform the site that they are unaware of their score.) This approach does not allow consumers to use credit

score information as a search criterion unless they input the personally identifiable information necessary to procure a score from the credit reporting agency.

Procuring a consumer's credit score is less common than the self-reported approach to credit score information, though some sites offer consumers both methods. Sites that procure credit score information may then use those scores as an input for generating comparison engine results, as we discuss in more detail in Section 7.4.3 below. Sites that obtain credit scores for consumers will often do so as part of a process of signing a consumer up as a site "member," eligible for a range of member-only services. We discuss membership further in Section 7.3.4 below.

Overall, there is substantial variability in the sophistication, complexity, and granularity of site comparison criteria. As noted, some TPC sites allow a consumer to filter on multiple criteria, tailoring their recommendations to reflect the consumer's current credit score, goals, and preferred credit card product information. Several sites, however, do not allow for multiple criteria to be selected, limiting a consumer's search criteria to credit score range and one type of goal.

RESULTS

Once consumers have initiated the comparison process and selected their search criteria, TPC sites display cards in response. The total number of cards a consumer is shown depends on the number and variety of products in a particular site's database and on the subsequent processes for selecting which cards to present to the consumer. Some sites introduce results with text highlighting the subcategory of consumer goals the user has selected. For example, a search for cashback rewards cards might include a brief note about the consumer benefits of cashback rewards.

Results are most often displayed in lists, though a few sites structure their output in tables or grids. Sites that use lists display between five and ten cards on a desktop page, providing additional pages of results that a consumer can manually access if the total number of results exceeds the per-page limit. What ends up on the first page of results, or among the first few results, may be of exceptional importance, as consumers incur ongoing costs in time and effort to continue surfacing and examining options further down the list, or on second and subsequent pages of results. It is also possible that some consumers assume that products atop the list are deemed more suitable based on their personal inputs than lower-ordered products.

Output display depends on the method used to start the comparison engine. If consumers use a questionnaire to guide their results, the list of presented cards will only load once, applying all filters. If consumers select a subcategory of consumer goals or jump into the default recommendations and started personalizing their filters, the results may refresh after every filter change. Most TPC sites allow consumers to change their earlier selected criteria and display filters on the side of the results page, iteratively providing new results to match the changing criteria.

Though sites display their recommendations vertically, the lists or tables generally are not numbered. In that sense, a consumer does not receive an *explicitly* ranked list of recommended cards. TPC sites' internal considerations for displaying cards are explored in more detail below.

Some sites include one or more “featured” cards with their listed results. When this occurs, the site uses the top one or two slots of its list or table for a card that, based on our review, fits the consumer’s selected category. For example, if a consumer selects “no annual fee” as a search criterion, the featured card, reflecting that input, will not have an annual fee. TPC sites that list featured cards do not necessarily highlight a card in this manner for all search criteria. Generally, only one or two featured cards are listed per category.

Although sites do not number lists, card “featuring” does formally differentiate cards in the list. Some cards are “featured.” Others are not. Sites presenting featured cards denote them in various ways, with the size and emphasis on the “featured” label varying significantly. Sites generally do not define specifically what makes a card “featured” or indicate what information this label should impart about a product. Beyond a site-wide advertiser policy disclosure, sites that utilize featured cards generally do not include additional disclosures highlighting the site’s commercial relationships with the issuers. We discuss disclosures in more detail in Section 7.3.5 below.

List or table content

When TPC sites results are presented, each credit card product receives a slot on the list or table where, to varying degrees, its features are explained. Each site includes a unique combination of details about the products, but two broad categories of content are pervasive—product-specific details and site-specific metrics.

Product-specific details list the particulars of each credit card using common measures. These usually include introductory purchase APR, the APR range disclosed by the issuer, rewards details such as cashback percentage or spending-to-points conversion rates, and annual fee

amounts. The vast majority of sites also include a picture of the credit card product, varying in size.

Site-specific content consists of additional summaries or context provided by the TPC site. For several sites, the results include some written summary of card benefits or bottom-line analysis of the site's opinion on the product. The summaries are generally no longer than two sentences. Other sites provide summary-level information in a list of product pros and cons. A handful of sites only list the positives of a product but do not detail any potential drawbacks. Some sites also present the minimum credit level they believe is necessary to qualify for a card.

A few TPC sites also introduce novel measures of consumer benefit as a means of comparing products. These measures include estimations of all-in rewards benefits based on consumer spending, or of the true interest cost experienced by consumers. Site-specific content represents an opportunity for the TPC sites to exercise editorial discretion.

Several TPC sites include ratings for cards in their results. The most common scale is from one to five, usually denominated in "stars," with these ratings usually based off of consumer reviews. Fewer sites employ their own ratings scores, and those sites that do generally do not explain how their rating was developed. Sites generally do not allow a consumer to filter or order results based on user or site ratings. (To the best of our knowledge, most sites do not include ratings as a factor in their ordering decision. Ordering is covered in more detail in Section 7.4.3 below.) When a user rating is selected, the site generally links to a separate page or automatically scrolls to an area of the page, usually in the bottom section, where consumers can post commentary about the product, in a format similar to most online retail and service reviews. Some TPC sites require a consumer to have a site-specific account to post reviews. Others leverage tools that allow consumers to post by providing their pre-existing credentials to one of several major social media platforms.

Some sites vary in what information they show for a particular card based on the search terms used by the consumer. For example, the results for a consumer seeking balance transfer cards may have a certain product's balance transfer rate displayed, but that same information may not be included if the card is produced in response to a different search, such as one for travel rewards cards. However, *within* each set of results, information shown is generally consistent from card-to-card, facilitating comparison.

Most sites have some type of "show more" option attached to each card's display that, if clicked by a consumer, provides more detailed information via a drop-down menu. This additional

information can include more conventional product details and sometimes more site-specific content. The detail mix between what is shown automatically and what is displayed in a drop-down box varies by site. This drop down often includes the same information available in the “Schumer box” required on credit card solicitations.

Many TPC sites also provide the same additional product information found in the drop-down menus in a product-specific page that is accessed from the product description. These individual card pages are frequently supplemented with the TPC site’s editorial team’s review of a product, providing commentary on a credit card’s perceived strengths and weaknesses. Individual credit card reviews are further discussed in Section 7.3.3.

Sites generally include application links for products.²³ Links are often bolded and brightly colored. Sites generally prompt the user with “Apply Now” language that directs to the issuer’s application page. None of the TPC sites we reviewed allow the customers to fill out applications on their own site—application links always led to issuer websites.

Additional content

Beyond listed outputs, some results pages include additional content with their comparison engine result lists or tables. Several sites provide editorial content that either explores a consumer’s selected search criteria or the credit card market more broadly. For example, if a user has searched for travel rewards cards, a TPC site may list additional information about travel rewards and offer advice regarding what the consumer should seek in rewards cards generally. Other sites may list foundational information about responsible credit use or credit scores. Sites that produce editorial articles often provide links to those articles on results pages.

Some type of disclosure appears in connection with the comparison engine results. The disclosure varies in placement and prominence. Most frequently, the disclosure is a hyperlink (with wording like “Ad disclosure”) placed near the top of the relevant webpage. Selecting that link leads to a pop-up or to the bottom of the web page. In both cases, the site then states its advertiser disclosure. We describe these and other disclosures in Section 7.3.5.

²³ At least one case has raised, but not resolved, the question of whether sites are entitled to include an issuer’s trademarks and application links. *See First Premier v. Odysseas Papadimitriou*, No. 14-4055 (D.S.D. Jan. 7, 2015).

A few sites also provide an opportunity for consumers to engage with other site users via comments and discussion threads. Posts on these threads can include product-specific questions about a card's features. Other consumers describe their personal financial circumstances and goals and seek general advice on how to decide which card meets their needs. Some threads concern broad, credit card market topics—for example, how does an issuer decide on a credit limit? Questions are often addressed both by consumers who frequent the site and by site staff.

7.3.3 Editorial content

Many sites invest in editorial content, a decision that helps build their brand and drive traffic to the site. As they grow over time, editorial libraries help differentiate larger TPC sites from less-resourced competitors, and helps TPC sites compete for web traffic with non-TPC sites that offer similar content. Editorial content ranges from lists highlighting “best of” cards, individual product reviews, and broader explanations and explorations of financial products and concepts covering the credit card market and beyond.

“BEST OF” LISTS

TPC sites produce one-off or recurring “best of” lists, recommending cards within various categories or that meet certain criteria. Users will generally find these lists from a drop-down menu at the top of a site's homepage, though some sites also provide additional links to the pages throughout the website. These lists link to issuer application sites, but differ from comparison engine results in several ways. First, they are generally not dynamic in the way comparison engines are; the selected cards on a given “best of” list rarely change. Some sites do create dynamic “best of” lists in which the results refresh daily; in general, however, they refresh less often than this. Second, unlike comparison engine lists or tables, these lists generally do not allow users to select additional search criteria.

Many sites not only put forward a general “best credit cards” list but also narrower lists highlighting certain credit cards for travel rewards, balance transfers, low interest rates, and other search criteria categories. The number of lists created varies between sites. Some offer only a handful of broad categories. Others offer more than ten lists spanning various criteria. As with featured card information, sites do not always provide context to explain how these lists are generated. Those that do so often limit their descriptions to boilerplate language that provides the site's guidelines for editorial independence.

CREDIT CARD REVIEWS

Some sites also provide more detailed reviews of specific credit card products, particularly those from mass market issuers that experience high volumes of TPC site-referred applications. Users generally see these reviews by selecting a credit card in the comparison list or table that then links to an additional page where the site’s full editorial review is published. Other sites provide pieces of their editorial review in the “show more” drop down in a product’s comparison list entry. Review length varies by site, from a few paragraphs to several times that length.

Sites generally note that individual credit card reviews contain opinions representing the site and not the issuer. This information is frequently found either in a header or footer to the article or in the site’s editorial disclosure.

These reviews are more qualitative and subjective than product information displayed on comparison engine results, or even “best of” lists. Most sites provide both “pros” and “cons” of a product, though some sites do not list any negatives for products. These reviews also occasionally provide direct comparisons to similarly-structured cards from other issuers; much more common is the practice of providing several “related” cards for user consideration. At this point, we have only limited knowledge of how these cards are selected.

Consumers can generally leave their own reviews and comments on these pages. When comments exist, some sites will lay out guidelines for appropriate content.

FINANCIAL EDUCATION MATERIALS

Beyond reviews of individual products and highlighted lists, many TPC sites also produce content exploring and explaining other financial topics, both in the credit card market and beyond. Much of this content examines how certain products operate and the situations in which a consumer might wish to use them. For example, a TPC site might publish an article about how cashback credit cards work. This content is generally written in plain language. For several sites, these articles go beyond direct credit card issues to include topics that intersect with personal finance more generally, such as how depository banking works, factors to consider in obtaining a mortgage, and how to pay off domestic debt while living abroad.

In addition, some TPC sites have started publishing more detailed studies, assessments, and surveys of the credit card market or various other market segments, expanding into forms of editorial content that convey more rigor and depth, and generally exploring more technical detail than readers would generally find from mass market publication or non-specialists. These

studies include commissioned consumer surveys, in-depth analysis of various sources of public data, or interviews with market experts, often in conjunction with major press outlets or industry media partners. While we cannot comment on the average quality or rigor of such materials, the Bureau has found several such studies useful. Some are cited for specific points in this report.

“Best of” lists and individual product reviews have a specific point of contrast with comparison engine results. When sites ask for and receive information from consumers about their preferences and financial situations, they tend to avoid explicitly responding that a certain product is the best product for the inputting consumer. In editorial content, however, they often express which products they think are best in general. This contrast may be linked to the potential risks associated with presenting comparison search results that are driven in part (both in content and in ordering) by issuer compensation, which we discuss in more detail in Sections 7.4.1 through 7.4.4.

7.3.4 Credit score access and other member services

In addition to offering content to all site users, some—mostly larger—TPC sites offer additional functionality to site “members.” Membership is generally free-of-cost to the consumer, though some sites also offer some premium content which is only accessible to consumers who pay some fee.

To obtain access to member services, TPC sites request that a consenting consumer create an account by inputting personal information, including personally identifiable information. Specific fields vary by site. Some sites permit memberships based only on name and email. Others require more extensive inputs, such as the consumer’s social security number. Generally, consumers must input name, email address, date of birth, a password, and the last four digits of their social security number. Exactly when sites ask for which fields varies. Some sites require consumers to input their social security number before accessing any member services. Others only require social security numbers for specific services. When personally identifiable information is requested, sites request consumers’ consent to the use of that information. Sites almost always have language reassuring a consumer of their cybersecurity efforts.

The most common member service offered by TPC sites is a free credit score. Several TPC sites began providing consumers free access to a credit score before issuers generally adopted similar practices. In fact, several prominent TPC sites began life as sites primarily oriented around this

feature, and only fully developed credit card comparison engines as they grew and evolved. Providing a free score—and some additional credit report-related information—is now standard for all large, established TPC sites, and for some smaller players as well.²⁴ Sites most frequently offer monthly updates, though several offer weekly reports, and at least one site we examined advertises a daily report. To our knowledge, all TPC sites we examined that offered free credit scores used the VantageScore 3.0 model. As noted above, some sites then use credit scores in generating comparison engine results. The provision of free credit scores by credit card issuers is discussed at greater length in Section 5.2.

Beyond free access to this credit score information, TPC sites offer a variety of personal financial management (“PFM”) tools. These services use financial data about the consumer’s accounts to track finances, credit use, and overall financial health. PFM tools vary across sites. Several sites offer a credit score simulator that lets consumers estimate how different financial events (such as a hard credit check, an increase in overall credit limit, an increase or decrease in the consumer’s debt-to-credit ratio, or a missed payment) would likely affect their overall score. Payment calculators help consumers understand the full costs of borrowing on different types of credit cards over time. For those consumers specifically focusing on refinancing credit card debt, several TPC sites host balance transfer calculators, allowing users to model and compare how the various balance transfer fees and APRs affect the total amount paid under different offers.

Several sites offer services commonly powered by data aggregators. These allow users to track their spending habits and set up alerts for certain kinds of account activity. To enable this, TPC sites need consumer-permissioned access to transaction data only available from a consumer’s transaction accounts.

Almost all TPC sites have explanatory information about PFM tools. Most often, the sites explain these services in broad overview, highlighting ways consumers may benefit and providing reassurances on internal safeguards to protect personally identifiable information.

²⁴ Public reports note that the practice of TPC sites in offering free credit scores exerted a degree of pressure on other market participants to do the same. See AnnaMaria Andriotis, *FICO, Experian Join Forces to Expand Free Credit Scores*, Wall St. J. Blog (Mar. 8, 2017), available at <https://blogs.wsj.com/moneybeat/2017/03/08/fico-experian-join-forces-to-expand-free-credit-scores>.

Several sites, however, go far beyond simple explanations, providing lengthy articles detailing what a credit score is, how it is created, and what factors contribute to its creation and change. These TPC sites clarify exactly which credit score is offered, explaining that their credit score is not identical to the score issuers may use in their underwriting models.

7.3.5 Disclosures

All TPC sites contain some form of general advertiser disclosure.²⁵ The content of this disclosure varies by site. The most common way this disclosure is made available is via a hyperlink in the header of certain pages reading, *e.g.*, “advertiser disclosure” or “ad disclosure.” When selected, this either causes the browser to leap directly to disclosure text at the bottom of the page, or it generates a pop-out box containing disclosure text. These links are usually placed in prominent positions on the page, but are also often in smaller font than other material. Some sites do write out their disclosure in full at the top of certain pages instead of providing a link. Disclosure display practices can also vary within a site, with a single site displaying different disclosure styles on different pages.

Sites generally display their advertiser disclosure, or its hyperlink, on all comparison engine pages. Within a comparison engine page, most sites do not break out any additional disclosures. Featured cards, as described above, do not generally have a unique disclosure.

Advertiser disclosure content shows little variation across the sites we surveyed. Site disclosures generally include an acknowledgement that the site is compensated by issuers, and note that decisions regarding how, where, and in what order credit card offers are displayed on the site may be influenced by commercial relationships between the site and issuers. Sites also state they

²⁵ We have not reviewed the sufficiency of any disclosure under applicable federal law. That legal question is not the subject of this review, and the discussion below is not an opinion or official position of the Bureau on any compliance issue. We note, however, that relevant legal authority here may include certain FTC guidance. *See, e.g.*, Press Release, Federal Trade Commission, *FTC Consumer Protection Staff Updates Agency's Guidance to Search Engine Industry on the Need to Distinguish Between Advertisements and Search Results* (June 25, 2013), available at <https://www.ftc.gov/news-events/press-releases/2013/06/ftc-consumer-protection-staff-updates-agencys-guidance-search>.

are not displaying the “entire universe” of credit card offers available on the market for comparison, but they do not further explicate this point.

Sites generally do not go as far as noting which issuers compensate them for approvals and which do not. There are exceptions. At least one site labels all products that earn per-approval compensation for the site as “sponsored.” To see what “sponsored” means, the user needs to click through to the product where the advertising disclosure is available. It is not available directly from the list of comparison engine results. Another site uses its disclosure to list all issuers that compensate it for approvals, which are all the issuers covered by the site’s comparison engine. It does not say whether all of these issuers’ products entail compensation.

Some sites use as few as three or four sentences to cover their advertiser disclosure. Others use ten or more sentences. Some sites also feature a plain language disclosure that communicates essentially the same content as the more formal disclosure but in a more readable format. Several sites disparage their more formal disclosures—“The lawyers made us do it!”—even as they include them.

Sites with editorial content sometimes have disclosures that are specific to that content. Some of these state that product reviews are not influenced by compensation arrangements with issuers. Others state that the products they review may be chosen based on compensation or at the request of an issuer, but that the content of that review is still independent. Sites do not go into detail as to how they wall off editorial teams. Some sites do not have a separate editorial disclosure, electing to cover this information in their general advertiser disclosure. More information on editorial independence is provided in Section 7.4.4.

7.3.6 Branding

Consumers will experience a TPC site’s brand at virtually every stage of using the site. Often, a homepage will offer a statement of the site’s value proposition. Sites then build out their brand through content in their comparison engines, editorial content, and sometimes even their disclosures. They include phrases, sentences, and short paragraphs throughout each type of page that signal to the user how the site wishes to be perceived.

Most TPC sites explicitly brand themselves as a helpful resource for consumers. Comparison engines are described not only as a means of helping the consumer compare cards but as tools to help “find the right card for you.” Common language includes phrases describing how a site can

“help you today” to “achieve your financial goals” and “master” various financial concepts. This kind of aspirational language is common throughout the consumer experience that TPC sites offer. In particular, member-only services and PFM tools are heavily used as a branding tool for larger, established TPC sites. Sites highlight the collection of tools available to users as part of a holistic experience that will help a consumer “take control” of their financial life. TPC sites offering personal financial management tools brand themselves as go-to resources for personal financial advice and assistance.

Whether these branding efforts create consumer expectations that are not fully matched by some of the revenue practices of sites remains an important open question. We explore revenue and other “behind the scenes” dynamics in the next section.

7.4 Behind the scenes

This section summarizes some of the practices and policies of TPC sites that are less visible to consumers but that help to shape the consumer experience of these sites. First, we discuss the core revenue model that TPC sites use. Then we describe how sites select, present, and order cards shown to consumers, and how revenue models play a role in these practices. We note which practices are more consistent across sites and which are more variable. This section generally relies on market data submitted by industry participants, but also on additional market monitoring work.

7.4.1 Revenue agreements and models

TPC sites have revenue agreements with a number of issuers. These agreements lay out the terms of issuer compensation to sites. The agreements are often facilitated by a third-party “affiliate network” that, for some sites, manages a master agreement setting terms and conditions. A handful of large affiliate marketing companies perform this role for issuers in other markets as well. They serve as the administrators of the contract and facilitate changes to the agreement as they may arise. Some TPC sites employ multiple affiliate networks to manage their numerous relationships with issuers.

TPC sites earn virtually all their revenue from two distinct channels. The main source of site income is payment by credit card issuers in exchange for approved applications sourced from

the site. The second main source is revenue from self-evident advertisements—like banner ads—on the site.²⁶ We discuss each source of revenue in turn.

Approved applications produce the bulk of revenue for TPC sites. Sites within the scope of our survey reported nearly \$1 billion in revenue from this source in 2016. Sites generally are paid under one of two per-approval fee structures: flat rate and tiered volume. The most common compensation arrangement is a flat rate per-approval. The dollar amount varies for different credit card products, but our review of site practices shows per-approval compensation rates ranging from below \$100 to above \$300 in 2016. Certain card types that generate more revenue for issuers—such as higher-value rewards cards—pay more per-approval. Arrangements can be and are updated to reflect evolving approval trends for specific products.

Tiered volume structures are less common. Respondent sites report that less than one-quarter of their compensation deals have tiered volume structures, while others report only using a handful of such arrangements. Tiered volume arrangements increase a product's per-approval fee after certain volume thresholds are met. For example, approvals past a certain threshold might earn some multiple of approvals below that threshold. TPC sites report that issuers agree to tiered revenue agreements when they are trying to drive a product's volume. Popular cards may not need tiered agreements if an issuer is satisfied with the volume of approvals. These agreements also vary widely, both in terms of the fee per-approval and the applicable thresholds, depending on the popularity of the card and web traffic of the TPC sites.

Per-approval fees are the primary source of TPC site revenue. Our survey respondent report that they do not receive any additional flat-fee or lump-sum compensation besides per-approval fees, and other Bureau market monitoring information strongly suggests that this is a broadly

²⁶ In drawing this distinction, we do not express any legal view about whether or not card listings generated by a comparison engine in which card issuer payments play a role also count as advertising. In addition, we are not stating that such listings are not in certain respects functionally similar or identical to standard advertising material. We mean only that items like banner ads are self-evidently advertising, whereas there is a more open question about how listings are perceived by the consumer. (To take an obvious example of this difference, listings are accompanied by a very specific form of advertiser disclosure. Banner ads may simply note that they are advertising.)

prevalent practice for comparison engines and the results they generate.²⁷ The per-approval fee, as we discuss further below, can and does alter the order or featuring of cards on at least some TPC sites. Product ordering is more fully explored below in Section 7.4.3.

It is worth noting that per-approval revenue arrangements clearly create an incentive for TPC sites to put cards in front of consumers for which they are likely to be approved. As we discuss below, however, specific payment structures between issuers and TPC sites provide a wide array of incentives to these sites.

Issuers may prefer consumers to come directly to their own websites or through other direct acquisition channels, but they currently appear willing to pay significant amounts for TPC site-sourced applications. Respondent sites report that issuer revenue from approvals increased 49% from 2015 to 2016, outpacing the 24% growth in the number approved accounts sourced by those TPC sites. Respondent sites have confirmed that this difference means that per-approval compensation rates have been increasing, although a shift to higher compensation products may also play a role. (Approval rates did not increase over the same period.) Sites believe that increased rates may reflect several factors, including competition for millennial consumers and consumers who use high-value rewards cards. It may also reflect a shift in bargaining power as some sites increase in size.²⁸ To this point, our monitoring indicates that other revenue streams are very much secondary to per-approval fees. Respondent sites say as much. Our direct market survey found banner advertisements to be quite rare for large, established sites. In fact, these sites tend to use the spaces traditionally used for banner advertising to promote editorial content on the site, content that presumably reinforces the brand and thereby helps drive the perceived value of the comparison engine. Several smaller TPC sites, however, do appear to use banner or pop-up advertising more frequently.

²⁷ At least one site does accept an additional flat fee from issuers for inclusion on “special offers” pages while another site accepts additional payments for a product’s inclusion on the home page.

²⁸ At least one issuer has claimed that the rising cost of revenue agreements with TPC sites could eventually affect the total cost of credit to consumers. *See* Discover Comment Letter, at 4-5. One industry earnings call has also surfaced the possibility of issuers cutting back the usage of such sites because of increased acquisition costs. *See* Discover Financial Services, *Q1 2017 Results – Earnings Call Transcript*, (Apr. 23, 2017), available at <https://seekingalpha.com/article/4065279-discover-financial-services-dfs-q1-2017-results-earnings-call-transcript?part=single>.

7.4.2 Product selection

Each TPC site maintains a database of credit cards from which it pulls comparison engine results in list or tabular form. Respondent sites report maintaining databases that include from 200 to 1,200 credit card products, and our broader survey of TPC sites found that many sites assert their database size falls somewhere in this range. (Our qualitative review, however, suggests that some sites may have markedly fewer cards to draw on for presentment and ordering to consumers.) TPC sites have some branding incentive to enter into agreements with issuers that will cover the market broadly. Larger, more established sites report employing staff to identify and list products that would not otherwise be on the site. Smaller, more targeted TPC sites may not have the capacity or incentive to expand their underlying database of products to the same degree.

Respondent sites have financial relationships with many mass market issuers. Given the heavy concentration of the consumer credit card market, TPC site revenue depends on including products from a core set of large issuers. If issuers that have a revenue relationship with sites come out with new products or make changes to terms and conditions, sites will update their databases accordingly. It is worth noting, however, that at least some large issuers appear to be largely absent from these sites.

The criteria that TPC sites use to decide which products are included in their databases are fairly subjective. Most respondent sites state that they seek offers that provide consumer benefit but do not explain how that assessment is made. Some sites note they vet an issuer's ability to track activity associated with commissions, though they also note that this is not a mandatory feature for database inclusion. Sites will reach out to issuers with whom they have no relationship. Respondent sites report vetting new products and issuers for possible inclusion as a source of revenue. Nevertheless, respondent sites report that they include products in their databases even in the absence of a compensation agreement with the issuer of those products. Some sites with larger databases report that as few as 10% of the products in the databases are subject to per-approval or other fee arrangements. In addition, as we discuss further below, there are good reasons to expect that the share of compensated products in underlying databases will be significantly lower than the share of compensated applications.

Based on our broader qualitative review, including of results presented on comparison engine result lists, many TPC site databases do not comprehensively cover the breadth of products in the credit card market. While we do not have insight into which cards are in a site's database but

are not presented to consumers, comparison engine results for several sites yielded fewer cards than one would expect based on search criteria. As noted above, sites also appear not to include cards from certain larger issuers.

Sites report that issuers may occasionally request the removal of a credit card from all site content because the issuer has received too many applications. When this occurs, the parties attempt to negotiate a solution. One possible outcome is that the site continues to include the product, but the issuer at least temporarily curtails compensation for additional approvals.

7.4.3 Product presentation and ordering

TPC sites have to choose which cards their comparison engines will present to consumers in list or tabular form. For a given card, this is a binary decision. The product is either in the presented list or it is not. At this point, we have limited information from sites about this presentment step. Observation suggests that this process may be relatively mechanical. It is possible, however, that revenue may also play a role.²⁹

Once cards have been selected to present to consumers in a comparison engine, they must be ordered for that presentment. Some cards will not be visible at all unless the user scrolls down through one or more results pages. Even those few cards that are visible without scrolling must be presented in some order.

TPC sites employ proprietary algorithms to order cards in comparison engine results. Each site has built a unique algorithm. These algorithms vary in which factors they consider, the weights these factors are given, and the complexity of the factors and the algorithm as a whole. Several

²⁹ At least for sites with relatively detailed search criteria, cards on the list do appear to be responsive to the stated criteria. If a consumer selects cashback rewards as a relevant search criterion, most sites will restrict the products presented to cards with cashback rewards. (We are not able to tell, however, whether the sites list all such cards that are in the database.) In addition, testing shows that the number of cards listed varies by search on a given site, which again suggests that the contents of the list presented to the consumer may be driven by the search criteria. Some sites, however, have less specific search or filtering criteria so it is hard to assess how directly responsive the set of presented cards is to the requested search. That raises the possibility that other factors, such as revenue, may play a role in choosing which cards to present.

respondent sites report employing unique algorithms for different searches. A comparison list of balance transfer cards will not weigh the same criteria as a cashback rewards card list.

Although we are still early in our analysis, our review to this point indicates that sites employ four main inputs to their algorithms. Each site may use several of these inputs and may weigh them in a range of different ways. Note that TPC site business models “behind the scenes” may vary more widely than their similar or overlapping upfront appearance to consumers would suggest. Even as the general consumer experience appears to be converging for these sites, the algorithms they use show considerable variation.

The first input considered by some sites is per-approval revenue. As noted earlier, respondent sites do not generally consider any additional payment streams for ordering or placement on a comparison engine list. It appears that issuers cannot *directly* pay *a la carte* for higher placement on a list of cards or to be the “featured card” at the front of the list. This revenue structure likely creates a degree of competition for issuers to structure higher compensation agreements with TPC sites if they want their products to receive a higher placement, including “featured” status. While this practice is common, not all respondent sites consider compensation in their ordering.³⁰ In addition, some sites do not consider per-approval revenue when ordering products to members that provide personalized information, even as they do consider it when ordering products to other users.

A second input used by some sites is some assessment of quantitative consumer benefit. Several sites construct a range of quantitative metrics for these purposes, such as estimated dollar values of rewards credit cards or of balance transfer cost savings. Sites that employ these measures often prompt individuals with questions to help personalize estimates of consumer

³⁰ It is unclear why issuers would compensate a site that does not consider per-approval revenue in its ordering decisions, at least so far as the site does not otherwise charge for being included in product presentation. Any individual issuer may benefit from the site’s existence because it generates applications that lead to approvals. In fact, issuers may collectively benefit from the site’s existence for this reason, and realize costs should the site fail. But if per-approval revenue plays no role in ordering, no one issuer has an incentive to pay compensation. If all issuers “free ride” on others, the site would lose its revenue stream completely. Clearly, in practice this has not occurred, suggesting other countervailing factors must be at work. We note the point here to indicate the ongoing nature of our efforts to understand the dynamics of this emerging space.

benefit. For example, a site may ask a consumer how long they plan to have a card and common spending volume to estimate their interest costs.

A third input is the likelihood that a consumer will be approved for a product. Sites may attempt to recreate an issuer's approval criteria, using an iterative process based on which consumers they refer are actually approved for specific products.

A fourth input is card popularity. There are two broad approaches here. Sites that adjust search results based on member profiles may take account of the individual member's usage of the site over time to discern what products and searches are popular with that consumer. Other sites may assess popularity by looking to metrics based on general usage of the site by a wider group of consumers, focusing on factors like click-through rates, approval rates, and average time spent viewing a page.

These inputs are not exhaustive. For example, some sites will boost products with time-sensitive offers or will reweigh cards to reflect seasonal interest in different aspects of a card, such as travel rewards during summer vacation months. If a user is a site member, some TPC sites will use a consumer's member profile to inform one or more of the inputs above. For example, a site may use a member's credit score to assess the likelihood the consumer will be approved for certain cards. Or a site may use member data to adjust estimates of consumer benefit, presenting consumers with a more in-depth analysis of their financial outcome with a card. (One TPC site will ask several additional qualitative questions about a consumer's finances and product preferences and present a shorter list of two or three cards for a consumer to consider.)

Respondent TPC sites state that, in general, any one input, including financial considerations, will not negate other inputs to the algorithm. Some sites primarily seem to rely on only one non-revenue factor while others appear to balance several more equally. At this point, however, our understanding of the relative weighting for different inputs to these algorithms remains limited.

Ordering is not just unavoidable. It is also valuable for TPC sites and issuers. Available data suggest that ordering is a major factor in driving consumer application volume. We asked TPC sites what share of their approved applications, and what share of their overall revenue, came from the five card products that accounted for the most approvals in a given year. For 2016, respondent sites reported that, in aggregate, these top-five products comprised 52% of all the approvals that they sourced in a given year, and 46% of their overall credit card-related revenue. Our market monitoring suggests that at least some of these products were the same across sites, and that many of those products were associated with the most lucrative issuer commissions. If

a small number of products play a dominant role in approvals and site compensation, this suggests sites may be ordering products in such a way that consumers are at least in part nudged or persuaded to apply for these products.

Using per-approval revenue as a factor in ordering cards may create a mismatch with consumer expectations given that sites are branded, implicitly and explicitly, as helping consumers to identify products based on their needs, interests, and inputs.³¹ Site disclosures may help mitigate this problem.

Non-revenue inputs may raise similar issues. Because consumers do not always have full information on what assumptions a site algorithm is making on their behalf, they may not be able to interpret ordering in a consistent manner. To take just one hypothetical, two sites may offer the same consumer a list of the same five cards in dramatically different order even though the consumer used the same search criteria on both sites. That may be because one site prioritizes some measure of consumer benefit, while the other prioritizes the likelihood of approval.

7.4.4 Editorial independence

TPC sites derive substantial value from their editorial content. It generates traffic; it generates positive, brand-enhancing press; and in some cases can directly boost revenue, if pages including such content include banner ads or links to apply for products that will result in compensation. Editorial content, however, often contains *explicit* judgments about the relative superiority of certain products, at least for certain types of consumers.

Respondent TPC sites employ teams tasked specifically with producing editorial content. These sites all state that they maintain institutional separation between their revenue-producing units, which manage the site-issuer financial relationships, and their editorial teams, which write reviews and create editorial content. This practice appears to be standard, at least for larger,

³¹ At least one issuer has expressed concern that consumers may view TPC sites as “independent watchdogs,” and, disclosures notwithstanding, fail to understand the monetary relationship between issuers and sites. *See* Discover Comment Letter, at 4-5.

more established sites. Most TPC sites we surveyed state that they do not consider monetization when producing their editorial content. As noted earlier, however, what a site considers editorial content varies.

7.5 Future developments

The dynamics that have led to the emergence and growth of TPC sites may continue over the coming years. We expect that such sites will continue to play a prominent role in the market, with the caveat that the same technological innovations that produced these sites could easily produce compelling competitors or as yet unforeseen alternatives to their model. More generally, new digital tools and intermediaries are clearly having a major effect on the credit card market, among other consumer financial markets, and that effect is unlikely to diminish going forward. We plan to continue our monitoring of trends and developments in this part of the credit card market.

8. Credit card debt collection

When consumers fail to make contractually required payments on their credit cards, they may become subject to debt collection activity. Debt collection is vital to an efficient credit market, but it can also present significant risks to consumers. From January 1, 2015, through December 31, 2016, the Bureau handled over 170,000 debt collection complaints. Approximately one in eight debt collection complaints identified a credit card as the source of the debt. In addition to evidence of harm from consumer complaints, the Bureau’s enforcement and supervision activities have also cited areas where consumers may be harmed by practices of credit card debt collectors.¹

In exercising its market monitoring authority, the Bureau surveyed a number of large credit card issuers in order to better understand current practices and trends, as well as to identify changes to internal policies in the credit card debt collection and recovery arena. The resulting data are part of the Mass Market Issuer (“MMI”) dataset. These MMI data cover a variety of subjects spanning the entire life cycle of delinquent debt, both before and after charge-off.

To put our survey results in context, we first define various terms that are regularly used to describe debt collection practices in the credit card market. Next, we place the consumer credit card debt collection market in the context of the overall market for consumer debt collection. We then describe the range of current core practices that may be used in credit card debt collection and recovery before laying out additional findings from our survey.

¹ See, e.g., Press Release, Consumer Fin. Prot. Bureau, *CFPB Orders Citibank to Provide Relief to Consumers for Illegal Debt Sales and Collection Practices* (Feb. 23, 2016), available at <https://www.consumerfinance.gov/about-us/newsroom/cfpb-orders-citibank-to-provide-relief-to-consumers-for-illegal-debt-sales-and-collection-practices>; see also Consumer Fin. Prot. Bureau, *Supervisory Highlights, Issue No. 12 Summer 2016*, (June 2016), available at <https://www.consumerfinance.gov/data-research/research-reports/supervisory-highlights-issue-no-12-summer-2016>.

8.1 Definitions

The following debt collection terms are commonly used in the industry currently. The following definitions do not reflect any Bureau interpretations with respect to any statute or regulation.

DELINQUENCY

A consumer credit card account may be considered “delinquent” once the consumer has failed to make all or part of at least one obligated payment on that debt by the due date.² The collection industry tends to classify delinquent accounts based on the length of the delinquency. For credit cards, the typical time periods used are billing cycles or equivalent multiples of 30 days.

CHARGE-OFF

When credit card accounts become 180 days delinquent, Federal guidance generally requires issuers to declare them as losses.³ Lenders may also choose or be required to declare an account as a loss before that point for other reasons. (For example, the account holder dies or declares bankruptcy.) These loans are termed “charged off.” Charge-off does not absolve the consumer of the obligation to repay the amount owed. Nor does it limit issuers in their ability to pursue repayment. Instead, it requires the issuer to account for the debt as a loss rather than as a receivable. However, it may affect how or whether the issuer chooses to pursue repayment. Across accounts, rates of charge-off are most often expressed as a share of the balances on all accounts in a given group. The effect of charge-offs on issuers’ recovery efforts is discussed in Section 8.4.3.

COLLECTION AND RECOVERY

Both “collection” and “recovery” are terms used to describe the spectrum of practices applied by issuers and their agents to secure repayment of debt. The distinction between the two terms is

² Credit card agreements typically use the term “default,” which is defined the same as “delinquent” here.

³ See Office of the Comptroller of the Currency, *Uniform Retail Credit Classification and Account Management Policy*, OCC Bulletin 2000-20, (June 20, 2000), available at <http://www.occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>.

not always clear and may depend on context. For the purposes of this report only, efforts to secure payments prior to charge-off are “collections,” and steps taken after charge-off are “recovery.”

FIRST- AND THIRD-PARTY COLLECTION AND RECOVERY

Issuers often make the first efforts to collect on debts themselves, either through their own in-house collectors or other parties collecting in the name of the issuer. Industry participants generally refer to firms other than the issuer engaged in such activities as “first-party collectors.” If efforts by the issuer or first-party collector are unsuccessful, creditors often engage a firm to try to recover on the debt in the collector’s own name rather than in the name of the issuer. Firms engaged in such activities generally are known in the industry as “third-party collectors.” These firms could be collection agencies or collection attorneys. Before or after engaging a third-party collector to try to collect on a debt, creditors sometimes sell the debt to another type of firm generally known in the industry as a “debt buyer” that will either try to collect on the debt itself, engage a third-party debt collector, or resell the debt to another debt buyer.

8.2 Debt collection markets

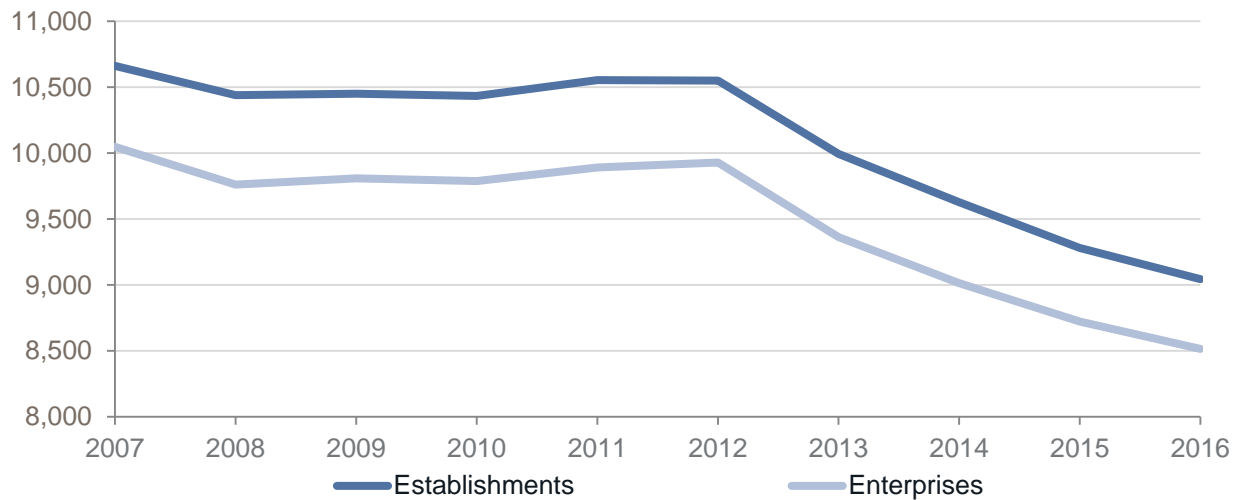
8.2.1 Overall

Most large credit card issuers use their own employees and resources to collect some portion of debt from their delinquent accounts. Creditors, including credit card issuers, employ nearly 300,000 employees as bill and account collectors.⁴ Many creditors also engage third parties to collect debts on their behalf or sell uncollected debts to third-party debt buyers, which then collect the debts internally or through a third party. Debt collection industry revenue has been declining steadily in recent years, falling from about \$13.3 billion in 2012 to \$11.4 billion in

⁴ See Bureau of Labor Statistics, *Occupational Employment and Wages, May 2016: 43-3011 Bill and Account Collectors*, (2016), available at <https://www.bls.gov/oes/current/oes433011.htm>.

2016.⁵ The third-party debt collection industry employs just under 125,000 workers, which represents an overall reduction of nearly 10,000 jobs in the past two years.⁶ The number of debt collection firms has also continued to decline as the result of industry consolidation, largely driven by a need to create economies of scale to generate greater efficiency and wider profit margins.⁷

FIGURE 1: DEBT COLLECTION INDUSTRY SHRINKAGE BY ENTERPRISES AND ESTABLISHMENTS, 2007-2016 (IBISWORLD)⁸



According to a survey conducted by the Bureau between December 2014 and March 2015, roughly 32% of consumers with a credit record had been contacted by a debt collector or

⁵ See Edward Rivera, *Debt Collection Agencies in the US*, IBISWorld (Dec. 2016).

⁶ *Id.*

⁷ *Id.*

⁸ “Enterprises” refers to the number of debt collection businesses in operation. Each enterprise may have multiple locations, which explains why “establishments” is a larger figure.

creditor about a past due debt in the preceding year.⁹ Among Americans with a credit file, just over 21% have a debt collection “trade line” on their report.¹⁰ Such debt may be reported by creditors or by third-party debt collectors. None of the surveyed issuers allow third-party collection agencies to report to credit reporting agencies and instead reserve credit reporting as a function to be carried out internally by the issuer.

The total number of consumers with accounts in collection may be undercounted based on consumer credit reports because many collection accounts for rent, utilities, retail, and other debts are not reported to the three large credit reporting agencies.¹¹ In addition, because many lenders report on the status of loans, including delinquent loans, these delinquencies may not appear as “collections” trade lines. According to the Bureau’s Consumer Credit Panel (“CCP”) data, collection trade lines can range from less than \$25 to more than \$125,000, with an average balance of \$1,507 for consumers with at least one collection trade line. While many of these consumers will be subject to active collection attempts by a debt collector, some consumers may not experience any contact from a debt collector and thus may be unaware that they have debts in collections until they access their credit reports or are contacted by a debt collector.¹²

Figure 2 breaks down the \$11.4 billion in third-party debt collection revenue by type of debt. According to industry analysis, financial services debt, which includes credit card debt, constitutes the largest single share of revenue, 34.5%, to third-party debt collectors.

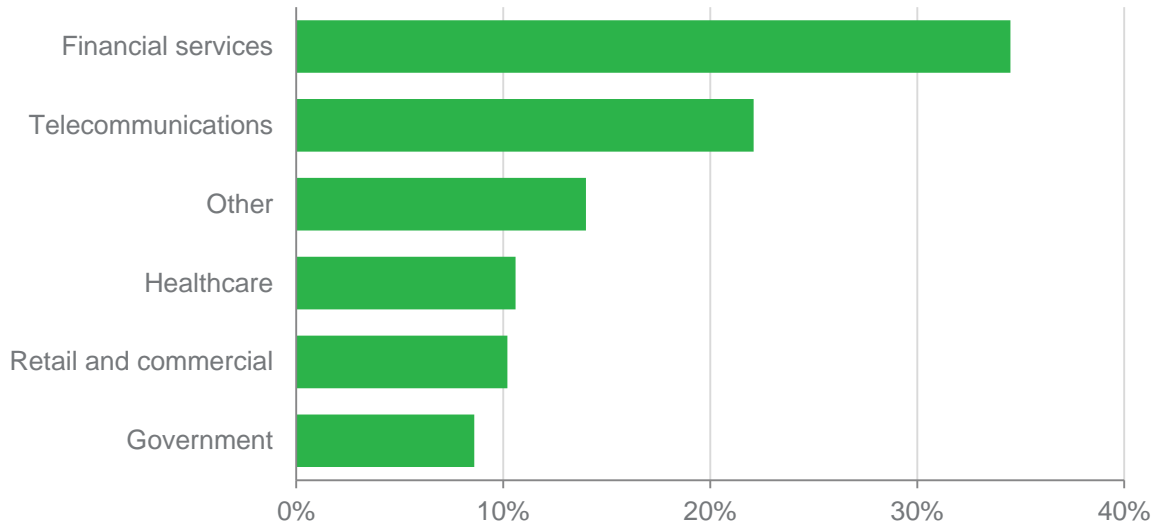
⁹ Consumer Fin. Prot. Bureau, *Consumer Experiences with Debt Collection: Findings from the CFPB’s Survey on Consumer Views on Debt*, (Jan. 2017), available at <https://www.consumerfinance.gov/data-research/research-reports/consumer-experiences-debt-collection-findings-cfpbs-survey-consumer-views-debt>.

¹⁰ A collection “trade line” is a term used to describe an account that appears on a consumer’s credit report as an account in collection.

¹¹ See Consumer Fin. Prot. Bureau, *Key Dimensions and Processes in the U.S. Credit Reporting System: A Review of How the Nation’s Largest Credit Bureaus Manage Consumer Data*, (Dec. 2012), available at <https://www.consumerfinance.gov/data-research/research-reports/key-dimensions-and-processes-in-the-u-s-credit-reporting-system>.

¹² See Press Release, Consumer Fin. Prot. Bureau, *CFPB Considers Debt Collection Rules* (Nov. 6, 2013), available at <http://www.consumerfinance.gov/newsroom/cfpb-considers-debt-collection-rules>.

FIGURE 2: DEBT COLLECTION MARKET SEGMENTS BY SHARE OF REVENUE, 2016 (IBISWORLD)



8.2.2 Credit card

As the fourth-largest source of consumer indebtedness, most of which is unsecured, credit card debt is a key driver of revenue and activity in the debt collection industry.¹³ At any given moment, examining the rate of credit card charge-offs against the size of outstanding revolving consumer debt can shed light on recent and emerging trends in the market for credit card debt collection.

As shown in Section 2.6.2, the net credit card charge-off rate for all commercial banks rose from 3.8% in the second quarter of 2015 to 4.9% in the second quarter of 2017. Charge-off rates declined from an all-time high of 16.3% in 2010 to 4.3% in 2016. Similarly, in the second quarter of 2015, the “30+” delinquency rate, which represents the share of outstanding credit card balances 30 or more days delinquent,¹⁴ was 2.1% across all commercial banks.¹⁵ That is the

¹³ Not all credit card debt is unsecured; we discuss secured credit cards in more detail in Section 6.

¹⁴ Note that this measure is not the same as the measure of “severe” delinquency we rely on in Sections 2 and 6; that measure counts delinquencies as severe only when they are 60 or more days in length.

lowest level since the Federal Reserve Board began tracking this metric in 1991. As of the second quarter of 2017, it has risen to nearly 2.5%.¹⁶ High charge-off rates in 2009 and 2010 produced a substantial stock of credit card debt potentially subject to future collection activity—even as the flow of new debt into the system was declining.

Although revolving consumer credit balances have grown substantially since the recession, the amount of debt sold by card issuers has decreased. Debt sold by credit card issuers declined from \$68.2 billion in 2007 to \$18.9 billion in 2013.¹⁷ Currently, fewer than half of the major credit card issuers we surveyed sell debt. Among those that sold debt in 2015 and 2016, total debt sales were approximately \$8.3 billion and \$8.9 billion respectively. We discuss our survey findings regarding credit card debt sales in more detail in Section 8.4.5 below.

In August 2014, the Office of the Comptroller of the Currency (“OCC”) issued a bulletin outlining supervisory expectations for structuring debt-sale arrangements in a manner that is consistent with safety and soundness and that promotes fair treatment of customers.¹⁸ The OCC provided guidance regarding the types of debt that could be sold, made suggestions regarding account information that should be made available to buyers, and highlighted potential risks generated by debt sales. Around the same time the OCC was developing its guidance, the Federal Trade Commission (“FTC”) and the Bureau were discussing consumer data in debt collection, with particular regard to the debt buying industry.¹⁹

¹⁵ Board of Governors of the Federal Reserve System, *Charge-Off and Delinquency Rates on Loans and Leases at Commercial Banks (1985 to 2017)*, <https://www.federalreserve.gov/releases/chargeoff/chgallsa.htm> (last updated Nov. 20, 2017).

¹⁶ *Id.*

¹⁷ See HSN Consultants, Inc., *The Nilson Report*, Issue 901, 7 (Apr. 2008); see also HSN Consultants, Inc., *The Nilson Report*, Issue 1041, 5 (May 2014), available at http://www.nilsonreport.com/publication_newsletter_archive.php.

¹⁸ See Office of the Comptroller of the Currency, *Consumer Debt Sales - Risk Management Guidance*, OCC Bulletin 2014-37, (Aug. 4, 2014), available at <http://www.occ.gov/news-issuances/bulletins/2014/bulletin-2014-37.html>.

¹⁹ See Federal Reserve Bank of Philadelphia, *Understanding the Model: The Life Cycle of a Debt*, (June 6, 2013), available at http://www.ftc.gov/sites/default/files/documents/public_events/life-debt-data-integrity-debt-collection/understandingthemodel.pdf (presented at the FTC-CFPB Roundtable); see also Federal Trade

8.3 Debt collection and recovery practices

As previously noted, creditors may implement a variety of tactics and strategies to recover a debt that a consumer has failed to pay according to agreed-upon terms. Creditors may use their own in-house collectors as well as first- or third-party debt collectors. This section describes collection and recovery activities generally.

8.3.1 Internal collection and recovery

IN-HOUSE COLLECTION AND RECOVERY

After charge-off, issuers may continue attempts to collect internally without contracting a third party. An issuer's internal collection and recovery efforts may include such methods as calling and sending letters to the consumer. Many issuers contact consumers via email at this phase, and a few also send text messages to delinquent consumers.

There are certain advantages to issuers from using in-house collection and recovery. To the extent that the borrower repays the debt, the issuer will receive the payment without having to pay a collection agency, contract with a law firm, or sell the debt at a discount. The issuer also maintains a higher degree of control over its in-house collection and recovery activities than it would if it outsourced these functions. There is also a cost to the issuer for building and maintaining this capability. Depending on the circumstances, legal responsibility for violations may lie with the issuer as well as with the third-party service provider.²⁰

Commission, *The Structure and Practices of the Debt Buying Industry*, (Jan. 2013), available at https://www.ftc.gov/sites/default/files/documents/public_events/life-debt-data-integrity-debt-collection/debtbuyingreport.pdf (presented at the FTC-CFPB Roundtable) ; see Press Release, Federal Trade Commission, *Life of a Debt: Integrity in Debt Collection* (June 6, 2013), available at <http://www.ftc.gov/news-events/events-calendar/2013/06/life-debt-data-integrity-debt-collection>.

²⁰ See Consumer Fin. Prot. Bureau, *Compliance Bulletin and Policy Guidance; 2016-02, Service Providers*, (Oct. 31, 2016), available at https://www.consumerfinance.gov/documents/1385/102016_cfpb_OfficialGuidanceServiceProviderBulletin.pdf.

FIRST-PARTY COLLECTION AND RECOVERY

As described above, creditors often make initial efforts to collect on debts themselves, either through in-house collectors or others working under the name of the creditor. First-party collection and recovery can be as simple as mailing the consumer a reminder to pay a bill or placing a phone call a few days into delinquency. First-party agencies are typically paid on a “per-full-time-employee” (“FTE”) basis, while third-party agencies are typically paid on a contingency basis, keeping a percentage of whatever dollars they collect and remitting the difference to the creditor.

8.3.2 Third-party contingency collection and recovery

As an alternative to internal collection and recovery, an issuer may turn to a third-party agency to collect in the agency’s own name. Contingency agency compensation is a function of the amount collected on a debt. Using third-party contingency agencies is the most common method for recovering charged-off credit card accounts. Just over half of the broader debt collection industry’s revenue is generated by collection companies operating under the contingency collections model.²¹

The most common tactic used by third-party agencies is to contact debtors by phone and mail to remind them that a debt is owed and ask them to repay. Third-party contingency agencies are generally assigned debt for a specified duration of time, which may range from several weeks to several years.²² During this period, they may contract with attorneys to litigate against the consumer to recover outstanding debts.

If the company cannot collect during the specified time period, its agreement with creditors generally requires that any uncollected accounts be returned to the current creditor. The

²¹ See Edward Rivera, *Debt Collection Agencies in the US*, IBISWorld (Dec. 2016). The following products and services account for the remaining revenue generated the Debt Collection Industry: portfolio acquisition (32.0%), fixed-fee servicing (5.9%), collateral recovery and repossession services (3.6%), and other (4.0%).

²² See Consumer Fin. Prot. Bureau, *Consumer Experiences with Debt Collection: Findings from the CFPB’s Survey of Consumer Views on Debt*, (Jan. 2017), available at <https://www.consumerfinance.gov/data-research/research-reports/consumer-experiences-debt-collection-findings-cfpbs-survey-consumer-views-debt>.

creditor may then contract the accounts out to a different company. This process creates what are known in the industry as “tiers” of debt placements based on the number of contingency companies that have attempted to collect on a given account. At first placement, an account is called “primary.” At second placement, it is “secondary.” At third placement, it is “tertiary.” At fourth placement, it is “quaternary.” The length of a placement is determined by the creditor, and placement periods tend to lengthen as debt ages.

Expected repayment decreases steadily and substantially as an account ages and passes through increasing numbers of tier placements.²³ Each failed attempt to collect is predictive of a lower likelihood that the consumer in question will repay. Consequently, the contingency fee received by the debt collector generally increases with a debt’s age. Contingency fees are the most common fee structure, but third-party collectors utilize other fee structures, such as a fixed fee per account worked, wherein revenue is not contingent on recovery. Collectors are also often given authority by issuers or creditors to offer consumers a larger discount in negotiating a settlement of older debt.

Issuers may use more than one collector, which results in competition in the collection market. Issuers may engage multiple agencies concurrently in what is called a “champion-challenger” model, placing different accounts within the same tier with different collectors. Issuers give the most accounts to a “champion” agency that has demonstrated the best collection record to date through some combination of its collection performance, compliance practices, and consumer satisfaction. The other agencies, or “challengers,” attempt to outperform the champion in order to receive a larger share of the issuer’s future collection business.²⁴

8.3.3 Litigation

Some issuers sue consumers to compel repayment. In deciding whether to initiate litigation, issuers or creditors typically review a wide variety of sources, including internal account records,

²³ See 2015 Report, at 243-247.

²⁴ *Id.*

credit reports, and public records to assess their chance of collection.²⁵ Issuers generally consider the cost of litigating, which may make litigation a less viable approach for smaller amounts of debt. Issuers often weigh a wide range of factors in evaluating the costs and benefits of filing a suit, including reputational risk, state-specific filing costs, and consumers' ability to repay. Issuers may engage a network of internal or external attorneys in their litigation strategy. Collection litigation comprises a significant share of state court activity. The National Center for State Courts reported that debt collection actions constitute nearly a quarter of all civil cases in state courts.²⁶ Along similar lines, the Bureau's Arbitration Study found that in one jurisdiction, all but one out of 2,245 claims filed in 2012 by the ten largest credit card companies in small claims court were debt collection claims against consumers.²⁷

8.3.4 Debt sales

An issuer may also elect to sell debt. Large-scale sale of charged-off debt began with the savings and loan crisis of the late 1980s.²⁸ It grew alongside the increase in consumer use of revolving debt, primarily credit cards, over the subsequent decades.

"Debt buyers" purchase accounts at a discount on the face value of the debt owed. The discount is largely determined by the age of the debt but can also be influenced by the status of the account, such as a contractual charge-off, bankruptcy, or accounts with requests to cease

²⁵ *Id.*

²⁶ Hannah E.M. Lieberman & Paula Hannaford-Agor, *Trends in State Courts: Special Focus on Family Law and Court Communications*, National Center for State Courts, (2016), available at <http://www.ncsc.org/~/.media/Microsites/Files/Trends%202016/Meeting-the-Challenges.ashx>.

²⁷ Consumer Fin. Prot. Bureau, *Arbitration Study: Report to Congress, Pursuant to Dodd-Frank Wall Street Reform and Consumer Protection Act § 1028(a)*, Section 7, at 9 (Mar. 2015), available at http://files.consumerfinance.gov/f/201503_cfpb_arbitration-study-report-to-congress-2015.pdf.

²⁸ See Federal Trade Commission, *The Structure and Practices of the Debt Buying Industry*, (Jan. 2013), available at <https://www.ftc.gov/reports/structure-practices-debt-buying-industry>.

communications.²⁹ By selling debt, issuers benefit from immediate cash in place of delayed and uncertain repayment and the costs of accounting for and servicing the accounts. As owners of the debt, buyers keep everything they collect internally, but also assume all risks of collection.

8.3.5 Warehousing

Issuers may cease all attempts to collect on certain debts. In general, issuers warehouse accounts when the probability of collection is outweighed by the expected cost of collection or risk of legal infraction. Depending on the issuer's business model, an issuer may decide to sell such accounts rather than warehouse them. Some debt, such as decedent accounts, is warehoused because it is unlikely to be repaid. Issuers may also warehouse time-barred debt, which is debt that has aged beyond the applicable statute of limitations. Issuers reported that they tend not to sell or litigate such time-barred debt.

8.4 Survey findings

8.4.1 Collections prior to charge-off

We begin with a review of surveyed issuers' policies, procedures, and practices with respect to resolving delinquent debt prior to charge-off. The issuers provided information regarding restrictions on contacting consumers, technology and software used as part of their collection strategies, use of first-party collectors, and the engagement of third-party collectors for collection activities prior to charge-off.³⁰

²⁹ Consumer Fin. Prot. Bureau, *Consumer Experiences with Debt Collection: Findings from the CFPB's Survey of Consumer Views on Debt*, (Jan. 2017), available at <https://www.consumerfinance.gov/data-research/research-reports/consumer-experiences-debt-collection-findings-cfpbs-survey-consumer-views-debt>.

³⁰ Most issuers use proprietary case management software for their internal collections. Issuers rely on a small number of vendors for their dialer software and hardware, mainly Avaya and Aspect dialers.

IN-HOUSE COLLECTIONS

All respondents conducted some collections activity in-house prior to charge-off. Issuers also established policies that define the frequency with which their collectors can call, text, leave voicemails, email, and otherwise contact a customer with regard to a delinquent account. We provide greater specificity on the ranges of issuer limits on consumer contact and average attempts in Table 1 below. In general, issuers' actual average contact attempts tended to fall well below policy maximums.

All issuers in our survey enforced daily caps per account on phone calls. Daily contact attempt limits ranged from three calls to as many as 15 per account. While the high end of this range remained unchanged from the 2015 survey responses, some issuers reported lowering their daily limits within the past two years.

No issuer allowed calls to continue within a given day once "right party contact" has been made. Right party contact occurs when the issuer or collector is able to reach and speak with the consumer the issuer believes is responsible for the debt via telephone. Right party contact rates typically fell between 3% and 7% for in-house and first-party collections and between 0.5% and 2.0% for third-party collections over a three month period.³¹ In general, issuers' average daily number of contact attempts via telephone fell between 1.5 and 3.5.

Only one of the issuers surveyed set a weekly cap on telephone calls, which was 17 calls per week. Without a weekly cap, a consumer could potentially be called anywhere from 21 to 105 times per account in a given week. A few issuers set monthly caps, in addition to daily or weekly caps, which ranged from 50 to 90 calls per month.

³¹ The right party contact rate is defined as the number of times live contact with primary or joint account holder or power of attorney of the debt was made during the quarter (numerator) divided by the number of dialer attempts made in the quarter (denominator).

TABLE 1: RANGES OF CONSUMER CONTACT POLICY LIMITS AND ACTUAL AVERAGE ATTEMPTS

Policy limit or actual attempts	Phone calls per day	Phone calls after right party contact	Voicemails per day	Mobile text messages per month	Emails per month	Postal letters per month
Policy limit	3 to 15 per account	No additional calls on contact date	1 to 2 per phone number	2 to 3 per account	2 to 5 per account	2 to 4 per account
Actual average attempts ³²	1.49 to 3.51 per account	0 per account	0.05 to 0.83 per account	0.002 to 0.05 per account	0.006 to 0.3 per account	0.07 to 0.19 per account

The majority of issuers restricted the number of voicemails that can be left for a consumer each day, and among those that do so, nearly all allowed no more than one voicemail per day. Nearly all of the issuers surveyed also used email as a part of their credit card collection strategy. Conversely, less than one-third of issuers surveyed sent mobile text messages to communicate with delinquent consumers.

All surveyed credit card issuers had the capacity to accommodate some consumers with Limited English Proficiency (“LEP”) or those who express the desire to communicate in a language other than English. Some issuers had a special unit of multilingual collectors to communicate with these consumers in their preferred language. Those without a special unit outsourced their translation services. Among those that tracked consumer language preferences, the overall average share of pre-charge-off delinquent balances owed by consumers that expressed a preference for a language other than English was 3.5% in 2016.

³² Average attempts via the telephone channel were defined as the number of calls made to all accounts that were called divided by the number of unique delinquent accounts that were called in a given period of time. For all other channels, average contact attempts were defined as the number of contact attempts made through that channel divided by the total number of unique delinquent accounts that were contacted via any channel of communication during a given time frame. The time frames were daily, weekly, or monthly, depending on common practices in that channel.

FIRST-PARTY COLLECTIONS

The majority of issuers supplemented the activities of their in-house agents with the resources of first-party collectors. Nearly all of the issuers that use first-party collectors prior to charge-off noted that they do not “place” specific accounts with first-party agencies. Instead, they allocated work between in-house and first-party collectors throughout a given day. Therefore, if available resources have shifted, a single consumer account could be handled by both in-house and first-party agents within the same week, day, or hour.

A majority of the issuers surveyed required that first-party agents place, receive, and document calls to consumers using the issuer’s own case management system and dialers. In general, first-party collection agents were contractually bound to abide by the issuers’ consumer contact limit policies.

From 2015 to 2017, the surveyed issuers increased the total number of unique first-party agencies by 36% to 15 total agencies. Those issuers that used first-party agencies used three different agencies on average. Overall, the issuers exhibited a shift toward collecting more accounts internally rather than outsourcing to third-party agencies.

First-party collection companies were typically paid on a FTE basis. Therefore, compensation to first-party agencies was derived from the number of FTEs from each agency that the issuer used per month on their collection team. In addition, several issuers offered additional monetary incentives tied to first-party agent performance. These ad hoc incentive programs were typically designed to reward performance against set financial goals as well as adherence to issuer procedures.

THIRD-PARTY CONTINGENCY COLLECTIONS

More than half of the surveyed issuers worked with third-party contingency collectors prior to charge-off, which remained the same compared to our 2015 survey. The share of accounts placed with third-party agencies varied among issuers, but some placed a significant proportion of pre-charge-off accounts with third-party contingency companies. In 2015, about 8.3% of delinquent accounts were placed with third-party agencies prior to charge-off across all issuers.

By 2016, this proportion had declined to 7.9%. The number of unique collection agencies used across issuers remained steady between 2015 and 2017, with 30 unique agencies in 2015 and 31 in 2017.³³ The average number of third-party agencies used by each issuer was seven in 2015 and eight in 2017.³⁴

Agency compensation

Most issuers that contracted with third-party agencies paid a contingency fee based on the amount of debt collected. These fees ranged from 6.4% to 24% in 2015 and 7.2% to 24% in 2016. Survey responses indicated that the variation is attributable to the risk profile of the accounts being placed, with highly collectible accounts commanding lower fees than accounts with a high risk of being difficult to collect. Among those issuers that used third-party agencies, a small number paid pre-charge-off third-party servicers on an FTE basis, with most paying a contingency fee for collection of pre-charge-off accounts.

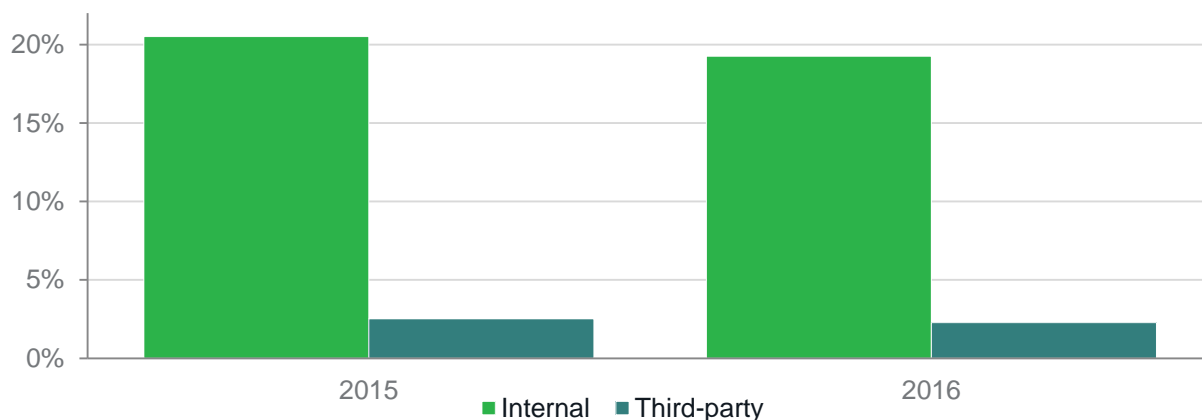
Liquidation rates

The amount collected relative to the delinquent balance is known as the liquidation rate or cumulative recovery rate. Issuers often attempted in-house or first-party collections in the early stages of delinquency, and only began placing accounts with third-party contingency collectors after 60 or 90 days of delinquency. Alternatively, several issuers assigned particularly high-risk accounts or those with special circumstances to third-party agencies, such as those accounts where the consumers were engaging with debt settlement firms, the accountholder was deceased, or bankruptcy applications were pending at any stage of pre-charge-off delinquency. As a result, average liquidation rates, as seen in Figure 3, tended to be significantly lower for third-party agencies than for internal collectors.

³³ These numbers were driven by one outlying issuer, which doubled the number of third-party collectors it used from six in 2015 to 12 in 2017. Without the outlying issuer, the number of unique third-party collection agencies used across the surveyed issuers was 24 in 2015 and 18 in 2017.

³⁴ Without the outlying issuer, the number of third-party collection agencies used by each surveyed issuer was eight in 2015 and seven in 2017.

FIGURE 3: AVERAGE QUARTERLY LIQUIDATION RATES FOR INTERNAL AND THIRD-PARTY COLLECTIONS, 2015-2016³⁵



8.4.2 Loss mitigation and re-aging

Credit card account management strategies included the use of various loss mitigation practices, including re-aging, short- and long-term forbearance programs, debt settlement, and debt management plans offered by consumer credit counseling agencies. OCC Bulletins 2000-20 and 2003-1 provide guidance on the use of these collections tools.³⁶

RE-AGING

Re-aging returns a delinquent, open-end credit card account to current status without collecting the total amount of principal, interest, and fees that are contractually due. A re-age can occur in

³⁵ The quarterly liquidation rate is defined as total pre-charge-off delinquent dollars collected in a given quarter as a percent of total pre-charge-off delinquent dollars in that same quarter. These quarterly rates are averaged for each issuer for each year. Then, an unweighted yearly average was calculated for each year across all issuers.

³⁶ See generally Office of the Comptroller of the Currency, *Uniform Retail Credit Classification and Account Management Policy: Policy Implementation*, OCC Bulletin 2000-20, (June 20, 2000), available at <http://www.occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>; Office of the Comptroller of the Currency, *Credit Card Lending: Account Management and Loss Allowance Guidance*, OCC Bulletin 2003-1, (Jan. 8, 2003), available at <https://occ.gov/news-issuances/bulletins/2003/bulletin-2003-1.html>.

collections departments, as well as in customer service departments. Re-ages are often performed by collections departments to assist customers who have temporary cash flow issues.

Per OCC Bulletin 2000-20, banks can re-age open-end accounts when a borrower makes at least three consecutive minimum monthly payments or an equivalent amount in a lump-sum payment.³⁷ The Federal Financial Institutions Examination Council policy described in the OCC Bulletin provides that an account must be on the books for at least nine months to be eligible for re-aging. Additionally, the number of re-ages on an account is limited to one in 12 months and two in five years. Issuers we surveyed reported that they followed the OCC guidance with respect to re-age programs.

While the re-age trend for the issuers we surveyed followed a quarterly seasonal pattern, re-aged balances as a percent of total delinquent dollars remained below 2% for each quarter during the survey period. However, there was considerable variation among the card issuers in terms of the re-age balances. The quarterly average ranged from as low as 0.6% of total delinquent dollars to a maximum of 4.5%. Average re-aged balance was \$660 million per quarter, with an uptick noted in the fourth quarter of 2016 due to the recent increase in credit card delinquencies.

FORBEARANCE PROGRAMS

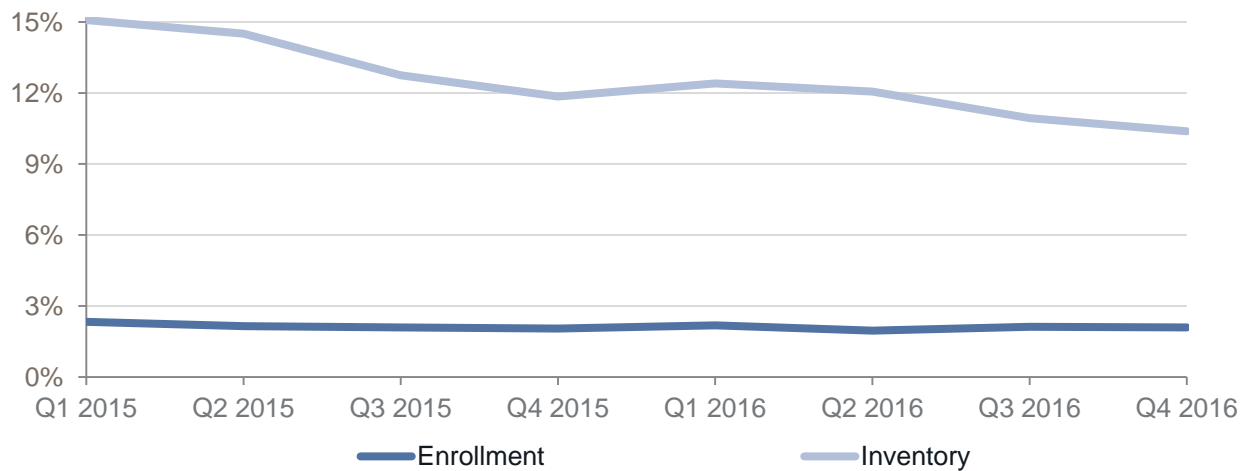
Forbearance programs are designed to assist borrowers with prolonged financial hardship. These programs can be “temporary” or “short-term,” which can last up to 12 months when the account reverts back to its original terms, or “permanent” or “long-term,” where the account is closed permanently and the balance is fully amortized over a period that is not to exceed 60 months. Issuers generally assess and document the reason, severity, and duration of the cardholder’s financial difficulty when placing them in a forbearance program. If a significant number of borrowers are placed in a temporary hardship program when their financial problems are long-term in nature, it may mask the true condition of the portfolio.

³⁷ See Office of the Comptroller of the Currency, *Uniform Retail Credit Classification and Account Management Policy: Policy Implementation*, OCC Bulletin 2000-20, (June 20, 2000), available at <http://www.occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>.

Most issuers offered one or more of these payment programs, typically consisting of a fixed payment amount over a specified period of time, and often at a reduced interest rate. New enrollments in forbearance programs and debt management plans (“DMPs”) offered by credit counselors, discussed in greater detail later in this section, remained relatively flat at 2% of total delinquent dollars. In terms of absolute dollars, approximately \$875 million was enrolled in each quarter. New enrollment rates among the individual issuers ranged from low of 0.6% to a high of 5.3%. Forbearance inventory showed a 30% reduction from the first quarter of 2015 to the first quarter of 2016. Over that same period, forbearance inventory declined by \$1 billion overall.

Survey results showed that many issuers have discontinued offering short-term hardship programs. Issuers that did not offer short-term programs evaluated customers with short-term financial hardship and offered them long-term programs as an alternative.

FIGURE 4: QUARTERLY FORBEARANCE ENROLLMENT AND INVENTORY AS A PERCENT OF DELINQUENT BALANCES (MMI)



DEBT SETTLEMENT

Debt settlement programs are those in which an issuer agrees to accept less than the full balance owed by the borrower as full satisfaction of the balance owed. Generally, pre-charge-off loans are settled with a single lump-sum payment or multiple installments. The installments typically consist of three payments, but the total duration is not to exceed 90 days. The portion of the balance that is forgiven should generally be charged off when the settlement agreement is

fulfilled.³⁸ These guidelines do not apply to post-charge-off settlements, which can be structured over any length of time.

8.4.3 Recovery following charge-off

Once an account charges off, it is placed into one of a variety of channels. Accounts may be placed multiple times in different channels depending upon recovery performance within each channel. Across the respondents, nearly \$28 billion in debt charged off in 2016, an increase of \$3 billion from the amount that charged off in 2015. While over two-fifths of the debt that charged off in 2015 or 2016 was placed with third-party collectors and approximately 22% was placed in internal recovery, there was substantial variation in issuer practices with respect to litigation, debt sale, and warehousing. In general, the survey found that:

- the majority of issuers used third-party agencies throughout the entire review period;³⁹
- the majority of issuers engaged in internal recovery;
- the majority of issuers engaged in post-charge-off litigation;
- the minority of the issuers sold debt; and
- all issuers warehoused a portion of their account balances.⁴⁰

³⁸ See Office of the Comptroller of the Currency, *Uniform Retail Credit Classification and Account Management Policy: Policy Implementation*, OCC Bulletin 2000-20, (June 20, 2000), available at <http://www.occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>; Office of the Comptroller of the Currency, *Credit Card Lending: Account Management and Loss Allowance Guidance*, OCC Bulletin 2003-1, (Jan. 8, 2003), available at <https://occ.gov/news-issuances/bulletins/2003/bulletin-2003-1.html>.

³⁹ One issuer recalled all accounts placed with contingency collectors and worked the accounts in-house in the review period from the first quarter of 2015 through the fourth quarter of 2016.

⁴⁰ Warehoused balances include accounts issuers considered to be uncollectible or unlikely to be repaid.

FIGURE 5: SHARE OF CHARGED-OFF BALANCES BY RECOVERY CHANNEL IN 2015 AND 2016 (MMI)⁴¹

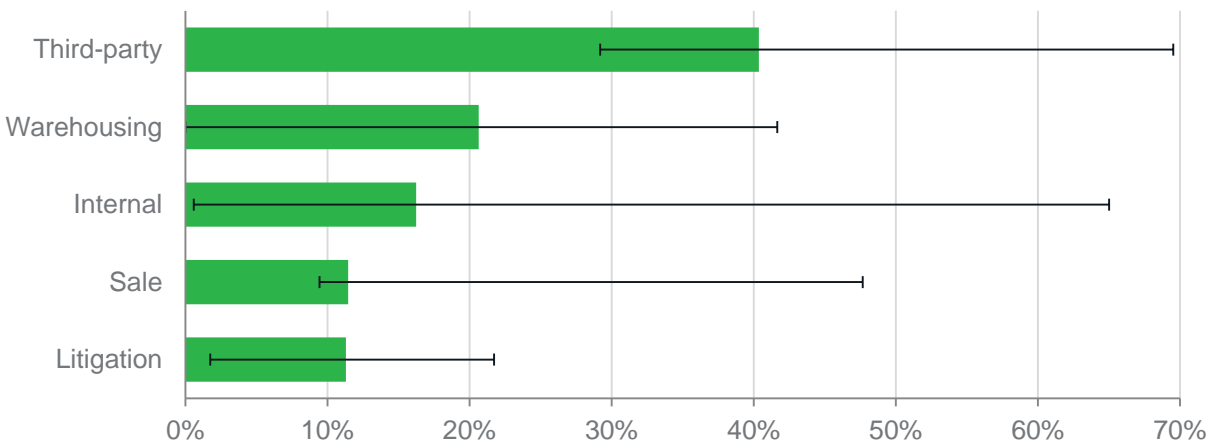


Figure 5 provides an overview of the post-charge-off placement strategy for the major credit card issuers across the five main recovery channels. Issuers that used third-party agencies generally placed the largest share of their charged-off balances with such agencies, but placement distribution ranged from more than 29% to nearly 70% of an issuer’s debt that charged off in 2015 or 2016. The range of internal recovery was more varied, with a minimum of 0.6% and a maximum of 65% across the issuers that used in-house or first-party recovery strategies.

Below we describe our findings relating to internal and third-party recovery in detail. Section 8.4.4 explores issuers’ litigation strategy for both pre- and post-charge-off, and Section 8.4.5 provides a full description of debt sale practices.

⁴¹ Green bars represent the average share of charged-off balances in each of the five recovery channels. The issuers provided the status of balances that charged off at any point in 2015 as of the end of 2015, and likewise for 2016. For example, if an account charged off in March 2015, was placed with a third-party collector in April 2015, and was recalled to be worked in-house in October 2015, the issuer would report the balance in the internal recovery channel for 2015. The distributions for 2015 and 2016 were averaged by issuer, and then averaged across issuers. Black lines running through each bar represent the range of the share of charged-off balances only for issuers that used that channel. In other words, the ranges do not include zero values, even though some issuers did not use that particular channel. The minimum value of the black bar for warehousing is 0.003%.

INTERNAL RECOVERY

Issuers may pursue internal recovery efforts directly after charge-off, or they may first place accounts with third-party contingency agencies. Depending on the issuer's overall placement strategy and the performance of individual accounts, a single account may be placed and recalled multiple times. A minority of the issuers used internal recovery as a significant piece of their overall recovery strategy, while the majority generally retained accounts that were ineligible for third-party placement, uncollectable, or awaiting placement in another channel. While on average about 16% of an issuer's debt that charged off in 2015 or 2016 was pursued through internal recovery, one issuer chose to retain and internally recover more than 65% of its debt that charged off in 2015 or 2016.

Comparison testing

Some issuers benchmarked internal recovery performance against that of third-party collectors in order to establish recovery standards or to determine debt sale prices. At least one issuer engaged in champion-challenger testing, where an issuer maintains a control group of accounts and compares its recovery performance to a test group placed in the third-party network.

Statutes of limitations

Most surveyed issuers report that they do not pursue accounts that have exceeded an applicable statute of limitation, which is the limited period of time that creditors and debt collectors have to file a lawsuit to recover a debt. In most states, a statute of limitations generally does not bar other collection attempts. Statutes of limitations vary across states. The statute of limitations is determined by state law, and can vary from three to 15 years depending on the state. Only one issuer reported that they attempt to recover debt from accounts on which the statutes of limitations has expired.

THIRD-PARTY RECOVERY

The majority of issuers employed third-party contingency agencies to recover post-charge-off debt. Most surveyed issuers placed between a third and a half of their charged-off balances from 2015 and 2016 with third-party collectors. One issuer did not place any charged-off debt with third-party contingency companies for a portion of the review period, while one issuer placed more than half of its balances that charged off in 2015 and 2016 externally.

Third-party networks

Since 2015, most issuers have decreased the size of their post-charge-off third-party vendor networks, which include both contingency agencies and law firms. The overall number of vendors used by issuers decreased by 17.3%, from 127 in 2015 to 105 in 2017. Of the issuers that

downsized their networks, the maximum reduction was by 43.5% and the minimum reduction by 9.1%. In 2017, all but one of the issuers' post-charge-off networks consisted of at least nine third-party vendors. Between 2015 and 2017, the largest single network employed by any issuer we surveyed included 71 separate companies. No single vendor was used by all issuers, but two were used by the majority.

Contingency fees

All issuers that used third-party collectors paid a contingency fee based on the amount of debt collected. Unlike third-party placement prior to charge-off, third-party placement post-charge-off occurs in cascading tiers. Contingency fees are based on the level of placement, ranging from 15% to 27% for primary placement to 30% to 53% for tertiary placement in 2016. Many issuers had higher contingency fees for tertiary placement than quaternary placement. Contingency fees for quaternary placement were 38% on average in 2016, while contingency fees for tertiary placement were 39% on average in the same year.

Vendor management

Issuers manage the compliance and performance of their third-party vendors using a variety of methods. Most issuers had specialized business units dedicated to auditing, testing, and evaluating third parties.

Regarding compliance, all issuers have limits on consumer contact attempts that they extend to their third-party contingency companies and monitor through quality assurance testing, routine audits, call sampling. The limits were very similar to those in pre-charge-off, ranging from three to 15 calls per account per day.

Surveyed issuers closely followed their third-party networks' recovery performance in order to determine compensation rates, contract renewals, and, for issuers that sold debt, debt sale prices. Liquidation rates, discussed in detail below, often played a significant role in recovery performance evaluations, as they measure a vendor's ability to collect charged-off balances. A minority of issuers offered incentives beyond the contingency fees discussed above in order to incentivize agents to reach liquidation rate and gross collection targets.

Liquidation rates

Recovery on charged-off debt can occur over several months or years. As described in Section 8.3.2, creditors contract with third-party agencies to pursue a portfolio of accounts for a certain amount of time. If an agency cannot recover money on an account in the specified period or the consumer stops paying, the creditor will usually transfer the account to a different agency. Depending on the issuer's recovery strategy, the issuer may sell the account or recall it and work

it internally rather than place with another agency. As an account moves from one agency to another, the amount of money the issuer expects to recover from that account decreases. The amount recovered relative to the balance charged off is known as the liquidation rate or cumulative recovery rate.

The age of a debt is often the single largest determinant of its liquidation rate. Other factors that affect liquidation rates include the scope and nature of pre-charge-off collection activity and the composition of the issuers' debt portfolios. Background conditions that change from year to year, including macroeconomic factors, underwriting standards, and many others, can also be determinants of these rates.⁴²

Figure 6 shows the average liquidation rates for the balances of new tier placements between the first quarter of 2015 and the fourth quarter of 2016. It also shows the average rates for internal recovery. To calculate the liquidation rates for each quarter, issuers identified the set of portfolios it placed in each of the tiers in a quarter. Issuers then calculated the liquidation rates on each set of portfolios by dividing the amount of money recovered as of March 2017, regardless of its subsequent tier placement or recovery channel, by the balance at placement. The liquidation rates for each tier were averaged across the issuers by quarter.

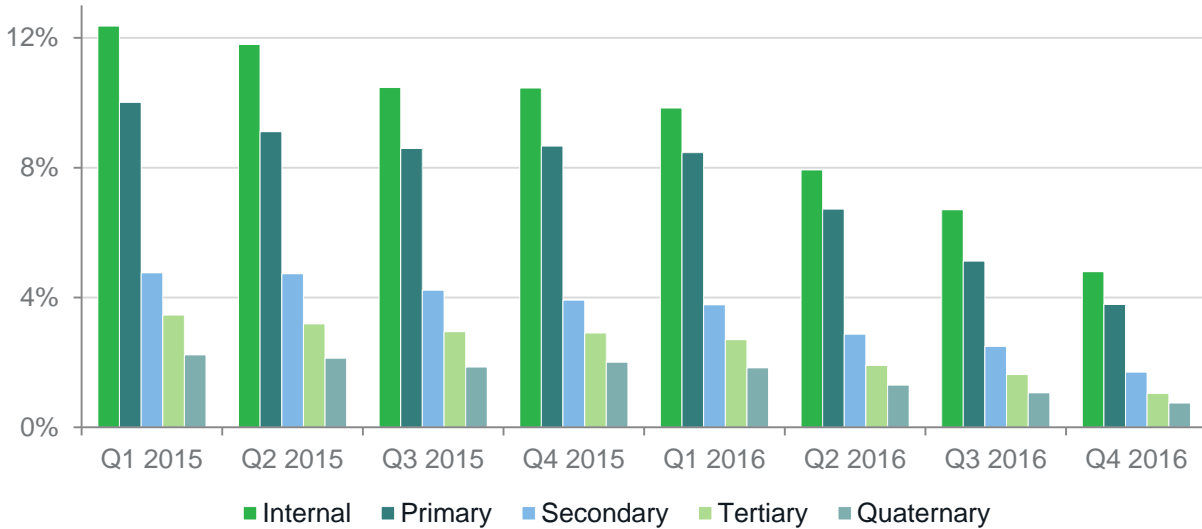
A longer period of recovery activity is associated with a higher liquidation rate. For example, the data for the first quarter of 2016 suggest that, in the course of a year, issuers expect to recover between 8% and 10% of the face value of debt in its primary placement. The parallel 2015 data suggest that with another year of recovery activity, they can expect to recover an additional 2% of the face value. Compared to the liquidation rates reported in our previous survey, issuers can expect to collect 5% to 10% less of the face value of debt in its primary placement over two years than they anticipated in 2015.

Within a quarter, fresh or recently charged-off debt has a higher liquidation rate than older debt. Taking the first quarter 2016 as an example, issuers reported that they recover nearly 7% more of the face value of a debt in its primary placement than in its quaternary placement. Debt

⁴² 2015 Report, at 255 n.26.

in internal recovery had higher liquidation rates than debt placed with third-party agencies. That quarter, internally-recovered debt yielded an additional 1.3% on average compared to debt in its primary placement.

FIGURE 6: AVERAGE LIQUIDATION RATES OF NEW TIER PLACEMENTS PER QUARTER AS OF MARCH 2017 (MMI)⁴³



8.4.4 Litigation

Card issuers may sue a borrower in certain situations to recover outstanding debts. Issuers use litigation strategies for both the pre- and post-charge-off accounts. All issuers in the survey that litigated delinquent credit card debt exclusively used an external network of attorneys to execute their litigation strategies. A few issuers also noted that relatively few accounts are litigated in pre-charge-off status. This practice has not changed since the prior survey in 2015. However, a

⁴³ The averages are unweighted. Issuers that did not use internal recovery post-charge-off were not included in the averages for internal recovery. Likewise, issuers that did not use third-party agencies were also not included in the averages for third-party recovery.

few issuers have either completely stopped using litigation for recovery purposes or have significantly reduced the volume of new assignments.

In most circumstances, surveyed issuers generally use segmentation techniques to identify litigation-eligible accounts, especially in the later stages of delinquency. The segmentation approach evaluates the economics of recovery via litigation channels, taking into account various factors including account balance, delinquency level, likelihood of payment, and state-specific cost of litigation. These accounts are then searched for assets, employment, and other income as indicators of borrowers' ability to repay upon filing a lawsuit.

Pre-litigation strategy generally involves the issuer or attorney sending a collection letter, sometimes including a settlement offer, before initiating the legal process. Survey respondents noted that account balances and likelihood of repayment are critical determinants of whether an issuer deploys its litigation strategy. Some issuers reported that they sold accounts or placed them with an attorney to pursue legal action when a consumer requested that they cease communication.

Survey respondents stated that they generally selected a limited number of high-balance accounts for litigation. The percent of delinquent debt assigned to the litigation channel ranged from a low of 0.3% to nearly 5% among the survey respondents. Average litigated account balances ranged from \$3,000 to \$11,000 among the survey participants with the average at \$6,700 in the fourth quarter of 2016. This average remained steady during the survey period. The total amount paid out in attorney fees, including court filing fees, contingency fees, and any other fees, as a percent of litigated balances ranged from 13% to 24%.⁴⁴

A default judgment is a ruling in favor of the collector when the consumer has failed to respond to a summons or to appear in court. More than half of the issuers that use litigation as a strategy did not report default judgment separately. However, those that do track default judgments separately report that more than two-thirds of all judgments are default judgments, ranging from 64% to 73% as of year-end 2016.

⁴⁴ The survey asked issuers to provide litigated balances rather than balances collected through the litigation channel to calculate the litigation cost rates.

8.4.5 Debt sales

As part of their recovery efforts, some issuers chose to sell credit card debt, receiving a fraction of the outstanding account balances from pre-selected debt buyers. Issuers typically enter into a “forward flow” contract with debt buyers, by which they sell pools of accounts that meet a set of pre-determined characteristics (*e.g.*, at charge-off or post primary placement) to debt buyers on an ongoing (*e.g.*, monthly) basis. Occasionally, issuers may identify additional segments of accounts and sell them on an ad hoc basis as well, sometimes known as a spot sale. Issuers also leverage debt sale strategies for special segments like bankruptcy or decedent debt, where specialized expertise is required to recover the amount owed. Issuers may also sell contractually charged-off accounts when they believe further recovery efforts, either by the issuer or its third-party agencies, may not provide adequate returns compared to the sales proceeds. Debt buyers typically enter into contracts for the right to collect the entire balance, and they either do so themselves or employ third-party agencies to collect on their behalf.

MARKET STRUCTURE

The debt buying market is highly concentrated among a few dominant buyers that purchase debt from many of the same issuers. Most of the surveyed issuers that sold debt in 2016 had a similar number of buyers year-over-year. However, one issuer reported that the number of buyers had reduced by 50% between 2014 and 2017. In 2014, 16 unique debt buyers bought debt from the surveyed issuers that sold debt, while there were 20 unique buyers in 2016. Seven buyers purchased debt from two or more issuers and four buyers bought debt from all issuers that sold debt.

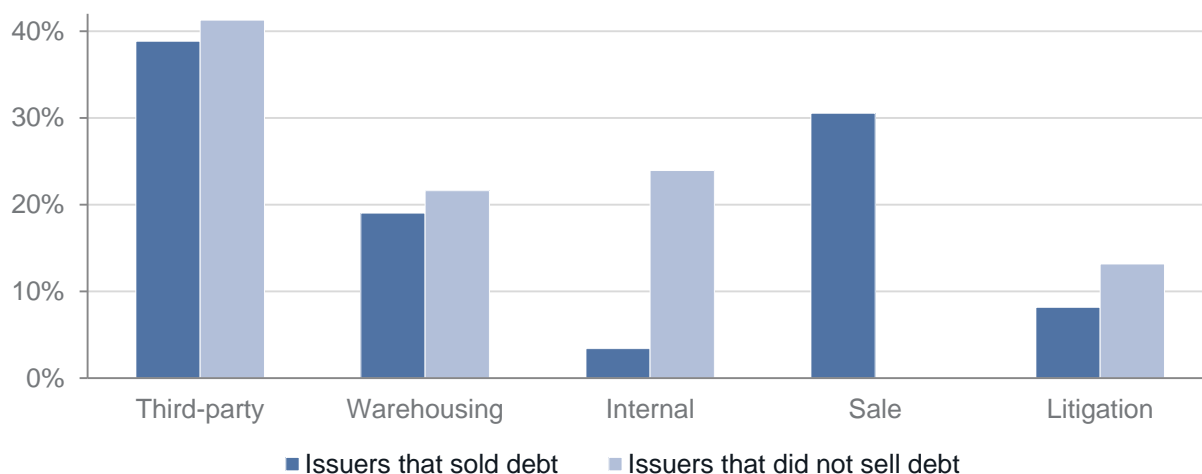
DEBT SALE VOLUME

Our prior survey, conducted in 2015, showed that only half of the issuers employed debt sale strategies in 2013 and 2014. Current survey results show that even fewer issuers sold debt in 2015 and 2016. All issuers that sold debt in the review period reported that they planned to sell a higher percentage of the debt that charged off in 2017 compared to 2016. This is a reversal from the results of our prior survey, in which no issuer reported plans to increase debt sales in the following year.

Figure 7 compares issuers that did and did not sell debt in 2015 and 2016 by their use of post-charge-off recovery channels. Of the total debt charged off in 2015 and 2016 for issuers that sold debt in that period, roughly 28% was sold to debt buyers. Both issuers that sold debt and issuers that did not sell debt relied on third-party contingency agencies for the largest share of their

charged-off balances. Issuers that did not sell debt used internal recovery and litigation for the remaining charged-off debts.

FIGURE 7: SHARE OF CHARGED-OFF BALANCES BY RECOVERY CHANNEL FOR ISSUERS THAT DID AND DID NOT SELL DEBT (MMI)⁴⁵



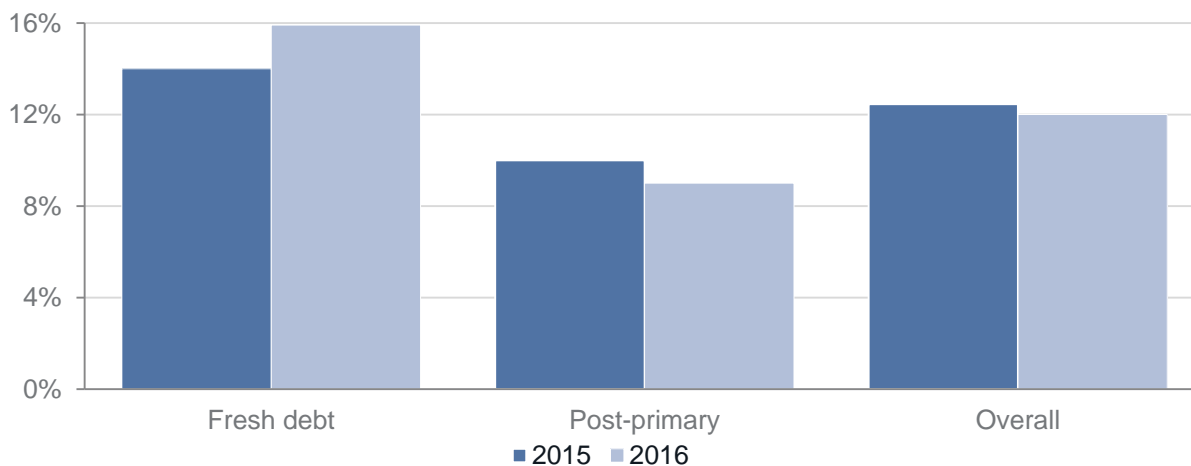
DEBT PRICE

Generally, charged-off debt sells for a fraction of the account balance at a price dependent upon the age of the debt. For example, if the debt is sold immediately after charge-off (“fresh debt”), it generally garners a higher price than if the debt had been placed with third-party agencies and then sold after recall from these agencies for non-payment. Figure 8 shows the average price of debt by type.

⁴⁵ Bars represent the average share of charged-off balances in each of the five recovery channels. The issuers provided the status of balances that charged off at any point in 2015 as of the end of 2015, and likewise for 2016. For example, if an account charged off in March 2015, was placed with a third-party collector in April 2015, and was recalled to be worked in-house in October 2015, the issuer would report the balance in the internal recovery channel for 2015. The distributions for 2015 and 2016 were averaged by issuer, and then averaged across issuers that sold debt and issuers that did not sell debt.

The average price of debt remained relatively flat year-over-year. However, the price of fresh debt, which was significantly higher than that of older debt, increased during the same period.

FIGURE 8: AVERAGE PRICE OF DEBT SOLD AS A PERCENTAGE OF ACCOUNT BALANCE (MMI)



The number of buyers to which issuers sold debt declined year-over-year. One issuer cut its number of buyers from 14 in 2015 to seven in 2017. With fewer issuers selling than in prior years, the demand for debt among the remaining buyers is pushing up expected prices. Several issuers that sold debt planned to increase their sales volume in 2017 due to heightened delinquency and charge-off in recent quarters. The survey respondents that sold debt in 2016 indicated that they planned to sell more of their charged-off debt in 2017 at an expected average price ranging from \$0.10 to \$0.14 per dollar of debt balances.

DEBT SALE CONTRACTS

All survey respondents that sold debt reported that they provide several key documents and account information, including:

- a copy of the signed contract that provides evidence of the borrower's liability for the debt;
- the account's last 12 statements;
- itemized account of all amounts claimed;
- special status indicators (*e.g.*, unresolved dispute); and

- information relating to prior collection efforts.

All surveyed issuers that sold debt also reported that they send out “goodbye” letters to the borrowers. These letters informed borrowers of the sale and provided the name and contact information of the buyer.

Restrictions imposed on buyers by all surveyed issuers that sold debt include:

- resale of the debt, which is limited to special circumstances (*e.g.*, a buyer exiting the market);
- restrictions on buyers’ ability to assess interest on the purchased debt;
- prohibitions on litigation of time-barred debt by buyers; and
- conditions under which the issuer will repurchase the debt.

While there is no explicit restriction on reporting to credit reporting agencies, the contracts require that the buyer adhere to all Fair Credit Reporting Act requirements.

8.4.6 Special topics in credit card collections

DEBT MANAGEMENT PLANS

As another facet of their collection efforts, issuers work with consumer credit counseling service (“CCCS”) organizations to help borrowers resolve their financial hardships. CCCS organizations are generally non-profit third-party agencies, although issuers may also work with for-profit credit counseling agencies.

These organizations work with borrowers to develop a budget and a debt management plan (“DMP”) that generally involves a fixed-payment amount at a reduced interest rate. These DMPs, if accepted by the creditors, generally require that consumers close all credit cards and other open unsecured lines of credit, adhere to a budget, and make payments as agreed. After acceptance into a CCCS program, borrowers generally make their payments to the CCCS organization, which in turn distributes the payments to their creditors.

Based on a review of the policy documents submitted by surveyed issuers, the terms of DMPs were generally similar to the internal long-term programs offered by issuers, where the duration to amortize the balance did not exceed 60 months. Similar to the internal long-term program,

issuers also re-aged accounts on DMPs upon receiving three consecutive fixed payments (or the lump-sum equivalent). The non-profit CCCS organizations were generally paid a fair share⁴⁶ or grant contribution from issuers for their services in addition to the monthly service charge that they collected from borrowers who were enrolled in DMPs.

The surveyed issuers generally waived late and over-limit fees, if any, and ceased all active collection efforts on accounts that were enrolled in any internal forbearance payment plan or DMP, as long as the accounts met the renegotiated payment terms.

DEBT SETTLEMENT COMPANIES

Borrowers sometimes work with debt settlement companies (“DSCs”), which are different from CCCS organizations. Most of the surveyed issuers maintained policies of not working with DSCs. Accounts associated with DSCs were litigated, placed with special third-party agencies, or sold to debt buyers at charge-off.

As a general matter, DSCs are typically for-profit entities with the primary objective of enrolling qualified borrowers in a debt settlement program.⁴⁷ These firms do not receive any compensation from issuers in the form of fair share contributions or grants. Instead, they typically assess the borrower a fee based on the original debt balance and contingent upon completing the settlement with the creditor. Debt settlement programs state that they are intended to build up clients’ funds over time in borrower-controlled accounts, which are then used to fund negotiated settlements. Unlike the DMPs, borrowers who work with the DSCs typically find their accounts continuing to grow in delinquency and reported to the credit reporting agencies. Collection activities by issuers usually continue on these accounts, unless the borrower has requested that the issuer cease communication, in which case the issuer may still

⁴⁶ See Mark Furletti, *Consumer Credit Counseling: Credit Card Issuers’ Perspectives*, Federal Reserve Bank of Philadelphia, (Sept. 2003), available at https://www.phil.frb.org/-/media/consumer-finance-institute/payment-cards-center/publications/discussion-papers/2003/ConsumerCreditCounseling_092003.pdf.

⁴⁷ See Greg J. Regan, *Options for Consumers in Crisis: An Updated Economic Analysis of The Debt Settlement Industry (Data as of March 31, 2015)*, American Fair Credit Council, (Aug. 15, 2015), available at <https://americanfaircreditcouncil.org/press/report-findings-validate-economic-benefits-of-debt-settlement-programs-for-consumers>.

pursue adverse credit reporting and legal collections, or the settlement plan is accepted by the issuer.

DECEDENT DEBT

In general, upon notification that a consumer is deceased, the account is either routed to a special unit in-house or a third-party agency that specializes in verifying the date of death, filing proofs of claim, and recovering the amount owed from the decedent's estate.

All issuers, upon verification of the date of death, claimed to charge off the accounts in a timely manner, usually within 60 days from the date of death or confirmation of the death. No issuer reported selling decedent debt. Given the sensitivity required with decedent debt collections, most issuers reported that they wait 14 to 28 days from the date of notification before initiating any contact with the decedent's estate regarding the debt.

CONSUMER COMMUNICATION

All surveyed issuers reported that they ceased communication when they received written requests from borrowers.⁴⁸ Most reported that they also ceased communications when the requests were made verbally. However, none of the survey participants tracked the volume of verbal requests separately from written requests.

Most issuers reported that they also accommodated special requests for limited cease communication requests, such as stopping communications at a particular time of the day or day of the week. A few issuers accepted requests to cease communications in certain channels (*e.g.*, requesting the issuer cease making phone calls but permitting emails, letters, and text messages). Total balances in pre- and post-charge-off inventory with requests to cease communication grew significantly in recent quarters for most issuers. The year-over-year growth in account balances with these requests ranged from 5% to 44% among the surveyed issuers.

⁴⁸ 15 U.S.C. § 1692c, 805(c).

CONSUMER-LEVEL COLLECTIONS

Issuers can collect or recover debt at an account level, where each consumer's delinquent accounts are managed separately, or at a consumer level, where each consumer's delinquent accounts are managed together. Three-fourths of the surveyed issuers indicated that they employed some degree of a consumer-level pre-charge-off collections strategy for consumers with multiple delinquent accounts with a single issuer. These issuers generally reported that the oldest delinquent account with the highest balance in the relationship was the lead account, and all of a consumer's delinquent accounts were handled during a single call to the consumer. The other one-fourth of surveyed issuers engaged in account-level pre-charge-off collections. The percent of total pre-charge-off delinquent dollars belonging to consumers with multiple accounts from the same issuer ranged from 10% to 67% in 2016.

Most of the surveyed issuers did not have a consumer-level approach for recovering post-charge-off debt. Only one-quarter of the issuers placed all of a consumer's charged-off accounts with the same third-party agency for collections at the consumer-level.

9. Product innovation

The pace and nature of innovation in consumer financial services markets is accelerating and shifting. The change is evident in language. For example, the term “fintech” appears to have first emerged in the general-interest media in 2013 as an umbrella term for a wave of technology and technology companies focused on using the tools and approach of Silicon Valley in the world of finance. In the third quarter of 2017, the *Wall Street Journal* used the term over 70 times. The change is also evident in economic terms, with tens of billions of dollars invested in fintech firms in recent years.¹ The Bureau’s research and ongoing engagement with market participants through a number of channels confirms the exponential growth of interest in financial innovation.

Our Congressional mandate to review the credit card marketplace specifically instructs us to assess “credit card product innovation.”² In the past, we have done this in two ways.³ First, we have looked at innovation that is specific to the credit card market. Second, we have addressed broader innovations in consumer financial markets that have included or otherwise affected the credit card market—such as payments innovations relating to security and form factor.

To build off our previous work, we proceed as follows.

First, in other sections of this report we have noted areas of credit card innovation related to the subjects covered there. In many respects, this is the main way in which we address credit card innovation in this report. As a result, we briefly summarize, below, where this report has discussed trends, products, or developments that reflect credit card innovation.

¹ See, e.g., KPMG *The Pulse of Fintech Q3 2017: Global Analysis of Investment in Fintech*, (Nov. 7, 2017), available at <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/11/pulse-of-fintech-q3-17.pdf>; Peter Lischick, *U.S. Payments Venture Capital Investment Five Year Recap*, First Annapolis Consulting, (Aug. - Sept, 2017), available at <http://www.firstannapolis.com/articles/u-s-payments-venture-capital-investment-five-year-recap>.

² 15 U.S.C. § 1616(a)(4)(D).

³ See generally 2015 Report, at 263-288.

Second, we revisit some of the specific topics discussed in the innovation chapter of our 2015 Report—adoption of the Europay, Mastercard, and Visa (“EMV”) standard in the U.S., mobile payments, and certain emerging lending products.

Finally, we note some additional recent innovative developments or trends in the credit card market not otherwise covered elsewhere in this report. Overall, the available evidence is consistent with an increasing pace of innovative activity, both specific to credit card markets and in overlapping consumer finance markets more generally.

9.1 Innovations discussed above

Throughout this report, we have referred to a number of developments and trends relating to innovation in the credit card lifecycle—many, but not all, directly facilitated by digitization.

Section 4 notes the continuing growth of digital origination channels at the expense of analog ones. It also reviews evidence that issuers are increasing their reliance on line management as a risk management tool.

Section 5.1 examines how evolutions in digital account servicing have changed the cardholder experience, and Section 5.2 quantifies the recent trend of issuers providing consumers with their current credit scores. Section 5.3, which outlines several metrics relating to balance transfer volumes and outcomes, also notes recent product innovations in that part of the market.

Section 6 discusses how increased issuer and consumer interest in secured credit cards is attracting new participants and renewed market energy.

Section 7 takes a deeper look at how one group of innovative entities—third-party comparison sites—is facilitating a shift in consumer behavior and expectations in shopping for credit card accounts.

9.2 Topics from the 2015 Report

Our 2015 Report identified three developments that we believed were especially likely to have a substantial effect on the consumer credit card market going forward. These were: first, the

transition to cards compliant with the EMV security standard, colloquially referred to as “chip” cards; second, breakthroughs in tokenization, which unlocked the possibility of mass adoption of mobile payments; and third, the emergence of a wave of new firms specializing in personal loans or point-of-sale financing.

We discuss recent developments in each of these areas. With regard to security innovations, we examine how adoption of the EMV standard has progressed in the United States. The 2015 Report contains additional analysis and context of the state of payment card security, as well as the effect of EMV adoption and tokenization on payment card fraud in both the card-present and card-not-present transaction environments. With regard to mobile payments, we discuss the different types of mobile wallets that have seen growth over the past several years, as well as mobile payments more generally. Last, we review developments in the personal installment loan and point-of-sale lending industries and discuss their effect on the credit card market.

We do not revisit those topics in the same depth in this report. This does not necessarily reflect a shift in the weight the Bureau gives these topics generally. Instead, we intend to build off the 2015 Report’s framing and snapshot of the market dynamics at that point, discussing only notable shifts in those dynamics that we have observed over the past two years.

9.2.1 EMV adoption

In October 2015, the major payment card networks instituted their planned “liability shift.” With certain exceptions, the shift moved liability for losses resulting from fraudulent card-present transactions to whichever party had not implemented the EMV standard—either the card issuer or the merchant acquirer.⁴ This policy change was designed to accelerate the adoption of EMV-compliant chip cards and point-of-sale terminals in the United States so as to reduce fraud. In particular, EMV technology is designed to limit counterfeit card fraud, and it appears to have a successful record in that respect in other countries where it has been

⁴ There are many ways to categorize payment card fraud. Among the most commonly used categories are fraud related to transactions in which a physical card is presented to a merchant (“card-present” fraud) and transactions in which credentials are transmitted remotely to the merchant (“card-not-present” fraud). The latter includes telephone and online transactions.

implemented. As the Bureau's 2015 Report was published only a few weeks after the shift occurred, we were able to summarize the run-up to the transition, but not the consequences.

Since we published our 2015 Report, the transition to EMV has proceeded apace. While the Bureau lacks a single source of systematic data on the subject, sufficient information exists to paint an approximate depiction of progress to date. By mid-2017, total U.S. Visa debit and credit chip cards in circulation neared 450 million, representing 62% of all U.S.-issued Visa cards.⁵ Visa's June 2017 "chip-on-chip" payment volume—payments made using chip cards, on chip-enabled terminals, and processed according to the EMV standards—was more than double June 2016's chip-on-chip volume by both the number and dollar value of transactions.⁶ Four-fifths of consumer Mastercard credit cards were chip cards by the summer of 2016.⁷ Overall, nine-tenths of credit cardholders now report holding at least one chip credit card, and four-fifths of chip credit or debit cardholders report having made EMV-compliant transactions more than ten times.⁸ Both networks report merchant adoption of EMV-compliant terminals is widespread, though lagging the adoption rates achieved on the issuer side. EMVCo (the entity responsible for promulgating the EMV standards) reports that overall EMV card adoption in the U.S. exceeded 52% by the end of 2016, a vast leap from the 7.3% adoption reported just two years prior.⁹ Overall, EMVCo reports that just shy of one-fifth of all U.S. card-present transactions in 2016 were EMV transactions, up from under 2% in 2015.¹⁰ These data are commensurate with industry analyst projections, such as those published by the Aite Group in 2016, which projected

⁵ Visa, *Chip-Enabled Merchants Up; Counterfeit Fraud Down*, <https://usa.visa.com/visa-everywhere/security/visa-chip-card-stats-june-2017.html> (last visited Dec. 7, 2017).

⁶ *Id.*

⁷ Press Release, Mastercard, *Eighty Percent of Mastercard U.S. Consumer Credit Cards Have Chips* (Aug. 3, 2016), available at <https://newsroom.mastercard.com/press-releases/eighty-percent-of-mastercard-u-s-consumer-credit-cards-have-chips>.

⁸ Auriemma Consulting Group, *Trend Database, Cardbeat U.S. Edition, Q2 2017*, at 8 (July 2017).

⁹ EMVCo, *EMV Card-Present Transaction Percentage*, <https://www.emvco.com/about/deployment-statistics> (last visited Dec. 7, 2017).

¹⁰ *Id.*

the transition of consumers' cards would be all-but-complete by the end of the decade, with merchant terminal adoption only nearing two-thirds.¹¹ Small businesses seem slower to adopt the new technology than larger ones, potentially concentrating liability risk on individual proprietors.¹²

Data also suggest that EMV adoption is having its intended effect on card-present fraud. Visa reports that counterfeit fraud (measured by dollar volume) dropped 58% year-over-year in March 2017 for those merchants that had upgraded their terminals. Mastercard reported a similar figure.¹³ A substantial decline in counterfeit card fraud would be commensurate with the declines seen in other countries that have adopted EMV.¹⁴

To the extent that the EMV shift catalyzes the trend of fraudsters to target card-not-present (“CNP”) channels (particularly online), fraud risks could shift to a large degree without experiencing a corresponding decline in net magnitude.¹⁵

Indeed, CNP fraud appears to have increased. According to one index, the online fraud attack rate—the percentage of transactions at risk out of the total number of sales recorded on a retailer’s online commerce system—more than tripled between the second quarter of 2015 and

¹¹ Julie Conroy, *EMV: Issuance Trajectory and Impact on Account Takeover and CNP*, Aite (May 5, 2016), available at <https://aitegroup.com/report/emv-issuance-trajectory-and-impact-account-takeover-and-cnp>; Thad Peterson, *Mobile Wallets: News From the Front*, Aite (Aug. 15, 2017), available at <https://www.aitegroup.com/report/mobile-wallets-news-front>.

¹² See 2015 Report, at 272-273.

¹³ Visa, *Chip-Enabled Merchants Up; Counterfeit Fraud Down*, <https://usa.visa.com/visa-everywhere/security/visa-chip-card-stats-june-2017.html> (last visited Dec. 7, 2017); Press Release, Mastercard, *Eighty Percent of Mastercard U.S. Consumer Credit Cards Have Chips* (Aug. 3, 2016), available at <https://newsroom.mastercard.com/press-releases/eighty-percent-of-mastercard-u-s-consumer-credit-cards-have-chips>.

¹⁴ Julie Conroy, *EMV: Lessons Learned and the U.S. Outlook*, Aite, (June 10, 2014), available at <http://aitegroup.com/report/emv-lessons-learned-and-us-outlook>.

¹⁵ While consumers are generally protected from the pecuniary costs of card fraud by both Federal regulation and network rules, the time cost and aggravation of dealing with a compromised card are still a significant consumer cost. In addition, fraud costs that hit providers may indirectly affect consumer costs. Conversely, fraud cost savings may be passed through to consumers in the form of lower prices or other benefits.

the second quarter of 2016, from 0.73% to 2.58%, before declining to 1.81% in the second quarter of 2017.¹⁶ This increase, which matches that experienced by other countries following EMV migration, likely reflects fraudsters moving their attacks online as EMV adoption has made card-present fraud more difficult.¹⁷

9.2.2 Mobile wallets and payments

Over the last several years, the number of products available to consumers that allow them to store payment information and make payments via their smartphones has grown significantly. The competitive landscape for mobile wallets is comprised of often overlapping and still consolidating entities including banks, card networks, retail stores, software developers, social networks, and phone manufacturers.¹⁸ Mobile wallets differ on a variety of dimensions, which include:

- **Access:** Can the wallet be loaded on any mobile device, or is it limited to a defined type of device? Some mobile wallets, particularly those offered by phone manufacturers, can only be used on particular mobile devices. Others can be downloaded and run on a variety of different devices and operating systems. A variant on this dimension is funding source acceptance—many mobile wallets provided by banks only allow consumers to add funding sources from that particular bank to the wallet.
- **Funding:** Can the wallet store funds itself, or does it rely on the use of an underlying funding source at the time of each transaction? Some wallets, particularly those offered by retail stores and social networks, include a stored-value component that allows

¹⁶ Forter, *The Forter/MRC Fraud Attack Index: There's Good News, and There's Bad News. How has Online Fraud Changed Q1-Q3 2017? Find Out*, <https://www.forter.com/resources> (last visited Dec. 7, 2017).

¹⁷ See Aite, *Card-Not-Present Fraud in a Post-EMV Environment: Combating the Fraud Spike*, (White Paper prepared for RSA, 2014), available at <https://www.emc.com/collateral/white-papers/card-not-present-fraud-post-emv-eny-wp.pdf>.

¹⁸ For purposes of this section, a “mobile wallet” is any digital wallet accessed on a mobile device, such as a smartphone, smartwatch, or tablet. A “digital wallet” is a means of electronically storing and transmitting funds or payment credentials and related information.

consumers to pre-load funds into the wallet. Others require a linked funding source, such as a credit or debit card, that is drawn upon for each transaction. Increasingly, wallets that previously relied on an underlying funding source for each transaction are moving to also provide a stored-value function.¹⁹

- **Acceptance:** Where can the mobile wallet be used to transact and with whom? There are three main types of transactions that a mobile wallet can facilitate: peer-to-peer (“P2P”), in-store (“mobile point-of-sale” or “mPOS”), and in-app or in-browser (“mobile commerce”). Increasingly, wallets are moving to provide all three of these functions.
- **Rewards and related functions:** Does the mobile wallet allow consumers to add rewards card or program membership information, or to add and use coupons? Some mobile wallets, particularly those offered by retail stores, allow consumers to add loyalty program information to the wallet alongside payment credentials. These also often allow consumers to “clip” coupons to the wallet by scanning the coupon code with their phone, which can then be applied seamlessly when the consumer is using the mobile wallet to make a qualifying purchase.
- **Consumer data collected:** How much consumer and transaction data does the mobile wallet collect? When a mobile wallet is used to make a payment, a variety of data traditionally unavailable to card-based payment providers may be collected, such as what specific items are purchased or where the consumer traveled before the purchase was made. Different mobile wallets collect varying amounts of consumer information to use for identity verification and fraud detection, as well as for research and marketing.

One prominent mobile wallet type is the “Pay” wallets, which includes Apple Pay, Google’s Android Pay, and Samsung Pay. Apple Pay and Samsung Pay are available to consumers that use an eligible mobile device manufactured by Apple or by Samsung, respectively. Android Pay is available to consumers with an eligible mobile device running Google’s Android operating system. Prior to making a payment, users of a Pay wallet must add a payment card issued by a

¹⁹ In addition, many wallets with stored-value functionality are beginning to offer consumers more ways to access and use that stored value. See, e.g., David Lumb, *Venmo Invites Users to Try Physical Debit cards*, Engadget (Sept. 11, 2017), available at <https://www.engadget.com/2017/09/11/venmo-invites-users-to-try-physical-debit-cards>; Saqib Shah, *Square’s Personalized Prepaid Card is Available to Everyone*, Engadget (June 30, 2017), available at <https://www.engadget.com/2017/06/30/square-cash-card-available>.

participating institution to the wallet. This process follows a payment tokenization specification, which requires the consumer to first provide their payment card information and to satisfy an identification and verification process with the issuer. Once that process is satisfied, a payment token representing the consumer's card is stored on the consumer's mobile device and may be used to initiate transactions both in-store and online. All three Pay wallets support the use of near field communication ("NFC") technology to make mobile point-of-sale ("mPOS") payments, meaning they can be used to purchase goods and services at any business that has a NFC-enabled point-of-sale terminal. Samsung Pay wallets can also make mPOS payments at non-NFC terminals using a technology called magnetic secure transmission. The Pay wallets also support in-browser and in-app payments at participating merchants. Consumer usage of Pay wallets is somewhat small, but growing. A survey by First Annapolis in the first quarter of 2017 found that 27% of consumers with an Apple Pay-compatible iPhone had used Apple Pay, but only 8% used Apple Pay more than once a week.²⁰ The same figures were 10% and 3% for Android Pay, and 15% and 6% for Samsung Pay.²¹

Some financial institutions have developed their own mobile wallets, to which their customers can add payment cards issued by the financial institution. Other than being restricted to only using payment cards issued by one financial institution, these wallets generally perform similarly to the Pay wallets. Some, like the Capital One Wallet, can be used in-store via NFC-enabled terminals. Others use different technology to enable mPOS payments. Chase Pay, for example, uses "QR codes," a type of two-dimensional barcode.

Similarly, some retailers have released mobile wallets. These apps are often QR-code based, and allow consumers to add payment cards as well as coupons and reward program cards. Two of the most successful retailer mobile wallets to date are those of Starbucks and Dunkin' Donuts.²²

²⁰ First Annapolis Consulting, *Study of Mobile Banking & Payments – Mobile Wallet Report*, at 9 (Mar. 2017), available at http://www.firstannapolis.com/wp-content/uploads/2016/08/First-Annapolis-Consulting_Mobile-Wallet-Report_March-2017.pdf.

²¹ *Id.*

²² BI Intelligence, *Starbucks Tackles Order-Ahead Issues*, Business Insider (Apr. 3, 2017), available at <http://www.businessinsider.com/starbucks-tackles-order-ahead-issues-2017-4>; Kate Fitzgerald & Nick Holland,

On top of the convenience of being able to combine payment credentials and rewards programs in one mobile wallet, consumers of both retailers have made significant use of the ability to order-ahead. Starbucks reported that, in the third quarter of 2017, mobile payments using the Starbucks mobile wallet accounted for 30% of all U.S. transactions, and that mobile order-ahead made up 9% of all U.S. transactions.²³

According to the Board's Consumers and Mobile Financial Services survey, between 28% and 38% of U.S. consumers with a smartphone made a mobile payment in 2015. The most common types of mobile payments that these consumers reported making were paying bills (65%), purchasing a physical item or digital content remotely (42%), paying for something in a store (33%), and sending money to friends or relatives within the United States (25%).²⁴ However, the Board's survey does not distinguish between mobile payments consumers make by manually entering card payment details, payments made by leveraging payment credentials on file with a merchant or payment recipient information on file with their depository institution, and payments made using a mobile wallet.

Recent activity in the mobile payments market has also focused on improving the consumer experience with mobile commerce. The fourth quarter of 2016 saw \$22.7 billion of mobile spending, accounting for 21% of all online spending.²⁵ As mobile commerce becomes more

Data: What Lures Consumers to Retail Mobile Apps?, PaymentsSource (Dec. 6, 2017), available at <http://www.paymentsource.com/slideshow/data-what-lures-consumers-to-retail-mobile-apps#slide-1>.

²³ Press Release, Starbucks, *Starbucks Reports Q3 Financial and Operating Results; Company Announces Strategic Actions to Advance Growth Agenda and Increase Returns* (July 27, 2017), available at <https://investor.starbucks.com/press-releases/financial-releases/press-release-details/2017/Starbucks-Reports-Record-Q3-Financial-and-Operating-Results-Company-Announces-Strategic-Actions-to-Advance-Growth-Agenda-and-Increase-Returns/default.aspx>.

²⁴ Sam Dodini et al., *Consumers and Mobile Financial Services 2016*, Board of Governors of the Federal Reserve System, (Mar. 2016), available at https://www.federalreserve.gov/consumerscommunities/mobile_finance_publications.htm.

²⁵ Press Release, comScore, *comScore Reports \$109 Billion in Q4 2016 Total Digital U.S. Retail E-Commerce Spending, Up 18 Percent v. Year Ago* (Feb. 13, 2017), available at <http://www.comscore.com/Insights/Press-Releases/2017/2/comScore-Reports-109-Billion-in-Q4-2016-Total-Digital-US-Retail-E-Commerce-Spending-Up-18-Percent-vs-Year-Ago>.

prevalent, the industry is finding more convenient ways to facilitate mobile purchases. One way to facilitate purchases is through “buy buttons,” which can be used for purchases in apps, mobile browsers, or non-mobile browsers. Buy buttons are clickable “buttons” on a website or in an app that effectively function as digital wallets because they allow consumers to input their payment credentials once, store them, and then access those credentials in the future using a simpler interface, usually a username and password. As of the second quarter of 2017, the most common buy button is PayPal, which is accepted on over 700 websites. The three major mobile wallets are not commonly-accepted buy buttons: less than 1% of merchants accept Samsung, Apple, and Android Pay through that feature.²⁶ By comparison, taken together, buy buttons offered by Visa, Mastercard, and American Express are accepted by just over 90 merchants. Other large companies, such as Google and Amazon, have also begun leveraging the large number of consumers that have a card on file with them to join the buy button fray.

9.2.3 Emerging lending products

Our 2015 Report identified two emerging categories of lending products with the potential to alter the evolution of the credit card market. The first was unsecured personal loans from fintech lenders that are marketed to consumers as a means of paying off revolving credit card balances. The second was non-card loans offered to consumers at the point of sale as an alternative credit-based payment option. Since our 2015 Report, the penetration and prominence of products in both categories have grown. Evidence is emerging that both sets of products are beginning to have notable effects on the broader credit card market.

FINTECH PERSONAL LOANS

The personal loan market is not new. What is new is that the market is experiencing substantial growth largely as a result of fintech lenders. According to data from Experian’s Market Intelligence Report (“MIR”), annual “personal loan” originations in 2015 and 2016 exceeded each of the preceding eight years both in number of accounts and dollar volume, up more than

²⁶ See PYMTS.com, *The State Of The “Buy Button,”* (Oct. 20, 2017), available at <https://www.pymnts.com/news/ecommerce/2017/buy-button-penetration>.

50% and 90%, respectively, from their low point of 2010.²⁷ According to MIR, the number of outstanding personal loan accounts was, as of the second quarter of 2017, higher than any number recorded since 2007, and total balances of such loans exceeded \$244 billion, compared to \$159 billion in early 2012. The second quarter of 2017 also saw the origination of over 5.3 million personal loans totaling over \$40 billion in personal loan originations, the highest single quarter by both metrics we can observe in the decade-long period for which we have data.

This recent growth can, in significant part, be attributed to non-traditional entrants to the market. Per MIR, “non-bank finance companies” are responsible for two-thirds of the growth in personal loan outstandings. According to a recent report by TransUnion, which uses a narrower definition of “personal loan” than Experian, fintech lenders made just 0.9% of the nearly \$30 billion in personal loan originations in 2010, but made 30% of the nearly \$80 billion in personal loan originations in 2016.²⁸ Some of these companies have grown rapidly. A single such lender originated over \$8 billion in loans in each of 2015 and 2016.²⁹

POINT-OF-SALE LOANS

Lenders offering new point-of-sale lending products also have the potential to change how consumers view and use their credit cards.³⁰ Generally, these lenders offer closed-end, fully-amortized installment loans to consumers at the time they are making a purchase with a participating merchant, generally by means of a branded “pay with” button as a payment option during checkout. If the consumer selects the payment option, automated underwriting generally

²⁷ MIR defines such loans broadly to include unsecured non-credit card loans. The definition used here should not be taken to represent the Bureau’s perspective on what should and should not be considered a “personal loan” under all circumstances.

²⁸ TransUnion Consumer Credit Database, *Fact or Fiction: Are FinTechs Different from Other Lenders?*, at 2, TransUnion LLC (2017), available at <https://transunioninsights.com/factorfiction>.

²⁹ See Lending Club, Annual Report (Form 10-K) (Feb. 23, 2017).

³⁰ This may be especially true for providers that also process payments. For example, Swedish firm Klarna leverages its significant position as a processor—it reports a 10% share of all Northern European online commerce—to offer point-of-sale financing options to consumers in Europe and the United States. See Klarna, *Klarna Statistics*, <https://www.klarna.com/us/about-us/klarna-statistics> (last visited Dec. 7, 2017).

occurs on the spot and the loan proceeds are remitted directly to the merchant once the consumer accepts the loan. Unlike other loans for which the proceeds can only be used to make purchases indirectly, these loans can be used to fund a purchase directly—making them more similar to credit cards, and inherently more likely to pose competition to credit cards.

Players in this market have continued to broaden their offerings, striking new consumer- and industry-facing partnerships and procuring more funding.³¹ One fintech company offering point-of-sale loans recently moved outside of the merchant-partnership model, expanding its consumer use case beyond just those retailers that have opted to present it as a payment option to consumers. Using the company’s mobile app, a consumer can apply for financing of up to \$10,000 to purchase goods from virtually any retailer. If approved, the consumer is provided with a one-time-use virtual card that they use like any other payment card to purchase the goods. The virtual card then expires, and the consumer pays off the loan in fixed installments.³²

BROADER MARKET REACTION

A recurring pattern in markets seeing many fintech entrants is that, after those entrants demonstrate the potential of a certain product or strategy, incumbent market participants move to acquire, partner with, or outcompete them. That pattern holds true here. Sensing untapped opportunity, one major bank entered the personal loan market by building a branded product that launched last year, and has already crossed the \$1 billion milestone in cumulative

³¹ For example, Klarna received an undisclosed investment from Visa earlier this year, and has also struck a deal with payment processor Stripe which could allow Klarna’s lending products to be offered in parallel to traditional payment options at a wide variety of merchants. See Tom Turula, *Klarna is Reportedly Partnering with Online Payment Giant Stripe to Fuel U.S. Expansion*, Business Insider Nordic (Aug. 24, 2017), available at <http://nordic.businessinsider.com/klarna-is-reportedly-partnering-with-online-payment-giant-stripe-to-fuel-us-expansion-2017-8>. American startup Bread, which offers white-label installment loans at point-of-sale, recently raised \$126 million. See Lauren Gensler, *Fintech Startup Bread Raises \$126 Million in Bid to Finance Big Online Purchases*, Forbes (Aug. 2, 2017), available at <https://www.forbes.com/sites/laurengensler/2017/08/02/bread-series-b-menlo-ventures-online-financing/#2faefaa006d12>.

³² See Nick Statt, *Affirm’s New Mobile App Lets You Borrow Money for Almost Any Online Purchase*, The Verge, (Oct. 23, 2017), available at <https://www.theverge.com/2017/10/23/16516792/affirm-mobile-app-lending-money-launch-virtual-credit-card>.

originations.³³ Other banks have opted to partner with fintech firms, leveraging the fintech’s platform and technology to lower the fixed costs of originating loans.³⁴

Major credit card issuers have also begun to invest more heavily in this area, offering installment loans to their own customers who might otherwise go to another lender to consolidate their outstanding credit card debt. One major issuer with an existing personal loan portfolio has engaged in what it described as “product enhancements and strong execution” in its offerings, and has seen its personal loan balances triple over the past six years.³⁵ Several other large issuers have entered the personal installment loan market since 2016.³⁶ One of those issuers has begun offering its cardholders a product that allows them to convert larger purchases made on their card into fixed-term installment loans, like those offered by the point-of-sale lenders discussed above.³⁷ If this market continues to grow, and if credit card issuers continue to

³³ Jim Cramer, CNBC Exclusive: CNBC Transcript: Goldman Sachs Chairman & CEO Lloyd Blankfein Speaks with CNBC’s Jim Cramer on ‘Mad Money’ Today, CNBC (June 19, 2017), available at <https://www.cnbc.com/2017/06/19/cnbc-exclusive-cnbc-transcript-goldman-sachs-chairman-ceo-lloyd-blankfein-speaks-with-cnbc-jim-cramer-on-mad-money-today.html>. The interviewee projects that his firm’s product will cross the \$2 billion milestone before the end of 2017.

³⁴ See, e.g., Telis Demos, *GreenSky Scores \$3.6 Billion Valuation From Fifth Third Bancorp*, Wall St. J. (Sept. 12, 2016), available at <https://www.wsj.com/articles/greensky-scores-3-6-billion-valuation-from-fifth-third-bancorp-1473716194>.

³⁵ See Discover Financial Services (2Q 2012 Earnings Statement, Financial Supplement) (July 19, 2012); Discover Financial Services (4Q 2014 Earnings Statement, Financial Supplement) (Jan. 21, 2015); Discover Financial Services (2Q 2016 Earnings Statement, Financial Supplement) (July 26, 2017).

³⁶ See e.g., AnnaMaria Andriotis, *AmEx’s Lending Push Goes Beyond Cards*, Wall St. J. (Mar. 9, 2017), available at <https://www.wsj.com/articles/amexs-lending-push-goes-beyond-cards-1489084412>; Laura Alix, *Seeking Bigger U.S. Presence Barclays Joins Crowded Online Market Lending*, Am. Banker (Nov. 21, 2017), available at <https://www.americanbanker.com/news/seeking-bigger-us-presence-barclays-joins-crowded-online-lending-market>; Penny Crosman, *Onur Genç’s (somewhat) Offbeat Growth Plan for BBVA Compass*, Am. Banker (Nov. 8, 2017), available at <https://www.americanbanker.com/news/onur-grencs-somewhat-offbeat-growth-plan-for-bbva-compass>.

³⁷ See David Henry, *American Express Targets Debt-Leery Consumers with New Card Features*, Reuters (Aug. 29, 2017), available at <https://www.reuters.com/article/us-american-express-cards-loans/american-express-targets-debt-leery-consumers-with-new-card-features-idUSKCN1B92TW>. Notably, this product would allow consumers to potentially maintain their grace period on purchases even as they carried one or more installment balances. As we

broaden and deepen their offerings, consumer expectations regarding the types and terms of credit available to them may shift permanently.

9.3 Other developments

This section reviews two additional areas of innovation in or encompassing the credit card market. First, we review the growing availability of consumer payment card controls. Second, we discuss developments in the credit card rewards space.

9.3.1 Card controls

The ability to set parameters for when, where, and how a credit card is used has long been a feature offered to, and valued by, business card customers. The ability to set, for example, a maximum single purchase amount, a weekly spending limit, or merchant category restrictions can help a business control expenses and limit fraud exposure. These same tools can help consumers manage spending and lower the likelihood of fraudulent transactions appearing on their account; however, they have not generally been available on consumer credit cards. Recently, however, some issuers have provided on/off functionality, which we discuss further below.

In 2015, one large issuer introduced into the portal offered to their customers an on/off “freeze account” toggle that, when activated, causes all new purchases, cash advances, and balance transfers on the account to be declined. Recurring transactions would continue to be processed, and the consumer can unfreeze their account at any time to resume normal use.³⁸ Other issuers have followed in offering an on/off account control toggle to their cardholders. One fintech company offers a product that allows consumers to use a unique credit card number with each merchant they transact with, and to set individual limits on how much can be spent at each

mentioned both in Section 5.3 and earlier in this chapter, this stands in contrast to the prevailing practice in the balance transfer space, though several major issuers are revising their policies in this regard.

³⁸ Discover, *Freeze Your Account*, <https://www.discover.com/credit-cards/help-center/faqs/freeze-account.html> (last visited Dec. 7, 2017).

merchant.³⁹ Another fintech company has worked to create a “remote control for your credit card” in the form of an app that issuers can integrate into their mobile banking app.⁴⁰

The card networks have recently taken action to enable greater consumer control over card use. In February of 2016, Visa released its Consumer Transaction Controls, which are available to Visa card issuers and “enables account holders to set simple, convenient, and effective spending controls, receive transaction alerts, or even temporarily suspend their accounts using a simple on/off feature.”⁴¹ Mastercard’s In Control product can grant “greater convenience, security and control to consumers, small businesses and corporations,” and “parents, employers and other customers can set parameters for when, where and how cards are used, giving them more control over their accounts.”⁴²

There is evidence suggesting that consumers would value such controls. In a 2016 study of consumer payments in the U.S., TSYS found that four out of the top six mobile phone financial app features that consumers were most interested in related to card controls, beating out the ability to transfer money to friends, split a bill at a restaurant, and keep loyalty or rewards cards on the mobile phone.⁴³

³⁹ Final, *The Credit Card was Broken. We Fixed It*, <https://getfinal.com> (last visited Dec. 7, 2017).

⁴⁰ Issie Lapowsky, *Remote Control for Your Credit Card Protects You From Theft*, *Wired* (Apr. 4, 2014), available at <https://www.wired.com/2014/04/card-control>.

⁴¹ Press Release, Visa, *Visa Puts Consumers in Charge of Security* (Feb. 9, 2016), available at <http://www.businesswire.com/news/home/20160209005812/en/Visa-Puts-Consumers-Charge-Security>.

⁴² Mastercard, *Empower Your Customers with Mastercard In Control*, <https://www.mastercard.us/en-us/issuers/products-and-solutions/grow-manage-your-business/payment-innovations/mastercard-in-control.html> (last visited Dec. 7, 2017).

⁴³ TSYS, *2016 U.S. Consumer Payments Study*, at 33 (2016), available at https://www.tsys.com/Assets/TSYS/downloads/rs_2016-us-consumer-payment-study.pdf (“Use your phone to immediately stop a transaction that was not made by you” ranked first with 69% interest; “The ability to use your phone to turn your payment card on or off” based on location, type of store, or time of day ranked fourth, fifth, and sixth, with 53%, 50%, and 50% interest, respectively.) *Id.* at 26.

9.3.2 Rewards

Recent years have seen intensifying consumer usage and issuer competition in the rewards space, as we documented in the 2015 Report. That has continued over the past two years. Issuer competition has intensified on both sign-up incentives and on-going reward structures.

According to one study, the annual rewards spending among the six largest credit card issuers grew from \$10.6 billion in 2010 to \$22.6 billion in 2016. The same study found that in the first quarter of 2017, these issuers spent \$6.2 billion on rewards, up 22% from the \$5.1 billion spent in the first quarter of 2016.⁴⁴ The sign-up incentive that one large issuer offered during the launch of a new premium card was so large that employees were reported to be “questioning whether the card would make money and when.”⁴⁵

We note two additional rewards developments here.

First, one major issuer has debuted a rewards product that departs from an important prior norm of rewards products. Almost all existing and new rewards products are variations on a similar set of foundational elements. One such element is that rewards products are generally tied directly to spending—and only to spending, whether overall or within specific categories. In other words, rewards are not tied to payment behavior, other than the requirement that the consumer stay current so that rewards are not forfeited. But a new rewards product now incentivizes consumers not just to spend on the card but also to pay down existing balances—rewards are earned for each of these two activities.⁴⁶ While paying more than the minimum payment on the account may not be the best choice for all consumers at all times, certain CARD Act provisions appear to reflect a Congressional judgment that many consumers would benefit

⁴⁴ Magnify Money, *Credit Card Rewards More Than Doubled Since the Recession, New Study Shows*, (May 4, 2017), available at <http://www.magnifymoney.com/blog/news/credit-card-issuers-doubled-spending-rewards840948580>.

⁴⁵ Emily Glazer, *Sapphire Reserve Cards Aren't Very Rewarding for J.P. Morgan*, Wall St. J. (July 28, 2017), available at <https://www.wsj.com/articles/sapphire-reserve-cards-arent-very-rewarding-for-j-p-morgan-1501239601>.

⁴⁶ Citi, *Double Cash Credit Card*, <http://www.citi.com/doublecash> (last visited Dec. 7, 2017).

from increasing the pace at which they pay down credit card balances.⁴⁷ To the extent that rewards incentivize payment on a credit card account, they may come to support that same goal.

Second, issuers have begun launching rewards programs that incentivize the use of mobile wallets to make payments, likely in an attempt to establish themselves as the top-of-wallet card in consumers' mobile wallets.⁴⁸ One issuer now allows cardholders to redeem cashback rewards instantly, by using them to make purchases using a mobile wallet.⁴⁹ A different, but related, trend is mobile wallets themselves providing rewards to consumers in order to drive mobile wallet adoption.⁵⁰ These two additional types of reward incentives, on top of the rewards program already paired with the underlying card, are evidence that both issuers and wallet providers are optimistic about the future growth of mobile wallet usage, and are willing to pay to be in position to take advantage of it.

⁴⁷ See 15 U.S.C. § 1637(b)(11); 12 C.F.R. § 1026.7(b)(12).

⁴⁸ See, e.g., Claire Tsosie, *Limited Time: More Chase Sapphire Rewards via Digital Wallet*, NerdWallet Blog (Oct. 4, 2017), <https://www.nerdwallet.com/blog/credit-cards/chase-sapphire-digital-wallet-purchases-bonus-rewards-limited-time>; Brian Acton, *3 Credit Cards That Offer Special Incentives for Mobile Wallets*, credit.com Blog (Aug. 25, 2017), <http://blog.credit.com/2017/08/3-credit-cards-that-offer-special-incentives-for-mobile-wallets-178166> (U.S. Bank Altitude Reserve, Wells Fargo Cash Wise Visa Card, PayPal Extras Mastercard).

⁴⁹ Mariella Moon, *Discover Card Users Can Redeem Their Points on Apple Pay*, Engadget (Oct. 11, 2017), available at <https://www.engadget.com/2017/10/11/discover-card-apple-pay-cashback-rewards>.

⁵⁰ See, e.g., Press Release, Dunkin' Donuts, *Dunkin' Donuts' Perks Week Presented by Masterpass Begins Today, Bringing Early Holiday Presents to DD Perks Rewards Program Members* (Nov. 13, 2017), available at <https://www.prnewswire.com/news-releases/dunkin-donuts-perks-week-presented-by-masterpass-begins-today-bringing-early-holiday-presents-to-dd-perks-rewards-program-members-300554689.html>; Rachel Green, *Samsung Rewards Sees Success at One-Year Mark*, Business Insider (Nov. 16, 2017), available at <http://www.businessinsider.com/samsung-rewards-sees-success-at-one-year-mark-2017-11>. In a related development, PayPal recently announced a new cash-back credit card offering in partnership with Synchrony. The card provides 2% in cashback, which is automatically added to the consumer's PayPal wallet. See Sarah Perez, *PayPal Launches its First Cash Back Credit Card to Boost PayPal Usage in Stores*, Techcrunch (Aug. 30, 2017), available at <https://techcrunch.com/2017/08/30/paypal-launches-its-first-cash-back-credit-card-to-boost-paypal-usage-in-stores>.

APPENDIX: BALANCE TRANSFER PAYOFF METHODOLOGY

We do not have direct data on the distribution of promotion length for accepted balance transfers. In addition, though Y-14 data allow us to quantify the number and dollar volume of balance transfers in the cycle they were initiated, they often do not allow us to distinguish reliably between transferred balances and other balances in subsequent billing cycles. Therefore, we can only examine total account balances to see whether consumers appear to be making progress in paying transferred balances over time.

To assess potential payment progress on transferred balances, we place an upper and lower bound on the share of accounts that pay off their transfer balance in full over time. To do this, we first identify all accounts that had only one balance transfer over the period we observe, in order to avoid the possibility of overlap. (As noted above, this captures the majority of accounts that have balance transfers.) In the first cycle we are able to observe the amount of the transfer and the amount of any other balances on the account. We can then see all volume, interest charges, and fees on the account going forward, as well as the amount paid by the consumer each month. Using these data we can model the change in balances generated by balance transfers over time.

We first apply payments to any fees and interest charges that the account owed. At this point, we use different methods to set the upper and lower bounds. To calculate the upper bound, we apply 100% of the remaining payment amount to the modeled transfer balance. To compute the lower bound, we apply the remaining payment amount to all other balances on the account, only applying any of the payment to the modeled transfer balance if any is left over after completely extinguishing other balances. We then carry the modeled transfer balance (and the modeled other balances) into the next cycle and repeat the analysis. We do this for 24 cycles.¹

¹ We therefore limit our sample of accounts to those whose sole balance transfer occurred before the midpoint of 2015 to ensure we can observe the full observation period for all accounts.

Our upper bound, therefore, assumes that each account is paying off its balance transfer as fast as possible. The lower bound assumes each account is paying that balance off as slowly as possible. Neither assumption is necessarily realistic at a given point in time. Collectively, however, they bound the set of possible outcomes for transfer paydown.²

² The upper bound is less realistic if the account has non-promotional balances as well. When that is true, the CARD Act rules and implementing regulations would require payments be allocated in a manner closer to the lower bound. See 15 U.S.C. § 1666c(b); 12 C.F.R. § 1026.53.