

December 2015

# The Consumer Credit Card Market



# Message from Richard Cordray



Director of the CFPB

Credit cards are unique consumer financial products. Other products offer credit or provide a means to make payment. Credit cards do both. With that unique profile, they serve as the means by which Americans spend trillions of dollars every year and revolve hundreds of billions of dollars in balances every month. It is critical, therefore, that the Bureau does its part to help ensure this vital market is fair, transparent, and efficient.

In 2009, after the onset of the Great Recession, Congress passed the Credit Card Accountability Responsibility and Disclosure Act of 2009. Congress took this step before it turned to reforming financial services markets more broadly with the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010. In the midst of one of the greatest financial and economic crises to confront our nation, Congress made sure that addressing this particular market was a top priority.

It is not hard to understand why Congress made this choice. The pre-2009 credit card market was one in which huge numbers of consumers were at needless risk due in large part to inconsistent billing practices, pricing changes, and the proliferation of back-end fees, among other issues.

This picture changed dramatically in the wake of the CARD Act. Pricing became more transparent upfront. Fees and interest fell as a share of balances. And the Act's discernable impacts on credit availability were ones that Congress intended—like restrictions on issuing cards to consumers without the ability to make payments.

This report details how over the last few years, conditions for consumers have either remained stable or further improved—even as credit card companies have been able to achieve significant rates of return in line with historic norms. The view expressed by Congress in 2009—that smart and thoughtful guardrails could bring positive change to this market that would benefit all participants—has been thoroughly ratified.

The report, however, also highlights areas of the market that still create risks to consumers. Deferred interest products offer significant benefit to some consumers. But as the main surviving exception to the general shift towards upfront and transparent credit card pricing, they impose significant costs on many consumers. In addition, the total cost of credit on cards issued by subprime specialist credit card companies is significantly higher than on cards offered by their mass market competitors, even after controlling for consumers' credit risk. And for consumers who have struggled to pay their bills, the debt collection market remains challenging and intimidating.

More broadly, this is also a market in rapid flux. The entire credit card lifecycle is moving online. Consumers increasingly use digital channels to apply for cards, to manage their accounts, and to make payments. Rewards programs have gone from commonplace to ubiquitous. Major security innovations are underway. Digital technology is bringing new forms of competition to an already competitive market. The Bureau intends to monitor the market carefully as these developments unfold. Even as technology changes, our mission remains constant.

Our biennial credit card market report is intended to bring a foundation of common knowledge and insight into this critical and complex market. That foundation will enable consumers and their advocates, industry participants, and regulators alike to move forward toward our common goal of better serving the needs of consumers.

Sincerely,



Richard Cordray

# Table of contents

<b>Message from Richard Cordray .....</b>	<b>2</b>
<b>Table of contents.....</b>	<b>4</b>
<b>Executive summary.....</b>	<b>7</b>
<b>1. Introduction.....</b>	<b>20</b>
1.1 Review mandate.....	20
1.2 Scope and methodology.....	21
1.3 Limitations.....	27
<b>2. Consumer credit card use .....</b>	<b>28</b>
2.1 Market size .....	28
2.2 Card holdings.....	36
2.3 Card payment behavior.....	45
2.4 Credit score changes over time.....	53
2.5 Delinquency and charge-off rates.....	55
<b>3. Cost of credit.....</b>	<b>59</b>
3.1 Fees . .....	60
3.2 Interest rates .....	72
3.3 Total cost of credit .....	76

3.4	Comparative costs.....	80
3.5	Variable APRs .....	82
3.6	Conclusion and areas for future study.....	84
<b>4.</b>	<b>Availability of credit.....</b>	<b>85</b>
4.1	New accounts .....	86
4.2	Credit lines .....	106
<b>5.</b>	<b>Credit card issuer practices.....</b>	<b>119</b>
5.1	Cardholder agreement readability.....	119
5.2	Issuer pricing and disclosure practices .....	124
5.3	Online access to account information and disclosures .....	133
5.4	Open credit score initiative.....	136
5.5	Ability to pay practices.....	139
<b>6.</b>	<b>Deferred interest promotions .....</b>	<b>147</b>
6.1	Product use .....	154
6.2	Payoff rates.....	162
6.3	Repeat use .....	180
6.4	Multiple balances.....	185
6.5	Post-promotion costs.....	194
6.6	Ability to pay .....	204
6.7	Availability of alternatives .....	206
<b>7.</b>	<b>Credit card rewards .....</b>	<b>208</b>
7.1	Overview.....	209
7.2	Rewards practices .....	226
<b>8.</b>	<b>Credit card debt collection .....</b>	<b>237</b>

8.1	Definitions.....	238
8.2	Debt collection markets .....	239
8.3	Debt collection and recovery practices generally.....	243
8.4	Survey findings .....	247
<b>9.</b>	<b>Product innovation .....</b>	<b>263</b>
9.1	Security innovations .....	264
9.2	Mobile payments.....	277
9.3	New competitors.....	283
	<b>Appendices .....</b>	<b>289</b>
	Appendix A: Additional figures.....	289
	Appendix B: CARD Act timeline .....	297

# Executive summary

Credit cards are central to the financial lives of most American consumers. Credit cards represent a key medium for U.S. consumer spending. In the first six months of 2015 alone, there were some 14.5 billion U.S. general purpose credit card transactions accounting for more than \$1.4 trillion in purchase volume.<sup>1</sup> Credit cards are also a major driver of consumer indebtedness. As of the end of the second quarter of 2015, there were some \$703 billion in credit card loans outstanding, behind only housing debt, automobile debt, and education debt as a component of overall household liability.<sup>2</sup> The credit card marketplace is among the largest, most diverse, and most complex market of any consumer financial product. How and why consumers acquire and use credit cards, and the myriad of benefits and risks they pose to consumers, is a central market monitoring focus for the Consumer Financial Protection Bureau (“CFPB” or “Bureau”).

Overall, the credit card market is a success story for consumers. Since the recession, by almost all metrics, the market has recovered for consumers across the credit spectrum. Costs are lower than they were, and many of the most prominent forms of back-end pricing have declined in prominence or vanished altogether. Approval rates and credit lines are both increasing. However, there are still risks for consumers in this market. Deferred interest, in particular, is not working equally for all consumers. Below, we discuss the background of this report and our major findings in more detail.

---

<sup>1</sup> See HSN Consultants, Inc., *The Nilson Report*, Issue 1069 7 (Aug. 2015), [http://www.nilsonreport.com/publication\\_newsletter\\_archive\\_issue.php?issue=1069](http://www.nilsonreport.com/publication_newsletter_archive_issue.php?issue=1069).

<sup>2</sup> See New York Federal Reserve Bank, *Quarterly Report on Household Debt and Credit* (Aug. 2015), [https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC\\_2015Q2.pdf](https://www.newyorkfed.org/medialibrary/interactives/householdcredit/data/pdf/HHDC_2015Q2.pdf).

## **BACKGROUND**

As the 2008 financial crisis unfolded, and even before the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”) introduced major reforms into consumer financial markets generally, the credit card market specifically was the subject of regulatory reform. Together with the Office of Thrift Supervision (“OTS”) and the National Credit Union Administration (“NCUA”), the Board of Governors of the Federal Reserve System (“Board”) announced significant reforms in December 2008.<sup>3</sup> Congress then superseded many of these changes in the Credit Card Accountability Responsibility and Disclosure Act of 2009 (“CARD Act”).<sup>4</sup> Together with its implementing regulations, the CARD Act imposed major changes and restrictions on practices in the consumer credit card market. The Act limited the circumstances in which interest rates can be raised on existing balances and curbed a variety of fees. It also mandated new disclosures, “ability to pay” standards, and practices in payment timing and allocation, and provided additional protections for consumers under the age of 21.

The impact of these protections was a major focus of the Bureau’s 2013 CARD Act report. Among the provisions of the CARD Act was a requirement that the Board, within the limits of its existing resources available for reporting purposes, conduct a review of the credit card market on a biennial basis. That responsibility passed from the Board to the Bureau in 2011. In 2013, the Bureau published its first report pursuant to that obligation, making this the second such report.

The inaugural report found that the CARD Act greatly increased transparency in the consumer credit card market. Certain repricing practices were eliminated. Some fees were capped, and still others declined in incidence and aggregate amount. These changes meant that consumers faced a much simpler environment in which to shop for credit cards and compare prices across products. Consistent with the shift towards transparent upfront pricing, the Bureau found that while certain upfront prices increased following the CARD Act’s passage, other “back-end” costs

---

<sup>3</sup> The rules that were published by the OTS, NCUA and Board were to take effect on July 1, 2010. In the interim, however, the CARD Act became law on May 22, 2009. Unfair or Deceptive Acts or Practices, 74 Fed. Reg. 5498 (Jan. 29, 2009) (to be codified at 12 C.F.R. pt. 226).

<sup>4</sup> Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734.



fell. Overall, the Bureau found that cardholders faced lower all-in costs for using their credit cards in the wake of the Act. For the card issuers represented in the Bureau’s credit card database, which account for between 85% and 90% of credit card industry balances, the “Total Cost of Credit” declined by 194 basis points between the fourth quarter of 2008 and the fourth quarter of 2012.<sup>5</sup>

The 2013 report also found that prior to the enactment of the CARD Act, but after the onset of the recession, credit of all kinds became less available to consumers—including in the credit card market. In that market, credit availability picked up again from 2009, although by the end of 2012, it had not returned to pre-recession levels. Even at that point, however, consumers had nearly \$2 trillion in unused consumer credit card line. The CARD Act was discernibly responsible for some limits on credit availability, particularly with respect to younger consumers and those who lacked the income to satisfy the Act’s ability to pay requirements. As the Bureau noted, at least some of these impacts on credit availability appear to have been specifically intended by Congress.

#### **OUR 2015 REPORT**

Although the primary focus of the 2013 report was the impact of the CARD Act, the Bureau’s standing obligation is to review the credit card market more generally. This report examines the same core metrics as the 2013 report, but our review now has a broader overall focus. The Bureau has also relied on a wider array of data and qualitative sources than in 2013, as well as—in at least some cases—a more granular review of that information. The Bureau also solicited the input of outside stakeholders via a March 2015 Request for Information (“RFI”).<sup>6</sup> The present study reflects comments from many responding entities.

In this report we review a range of baseline metrics related to consumer credit cards under several broad headings: first, card holdings and usage; second, the cost of credit; third, credit availability; and fourth, credit card issuer practices. We also discuss product innovation over the past two years. In addition, the present report presents more detailed information in a number

---

<sup>5</sup> “Total Cost of Credit” (or “TCC”) is the Bureau’s index of the annualized sum of consumer costs, including interest charges and fees, divided by the average of outstanding balances.

<sup>6</sup> Request for Information Regarding Credit Card Market, 80 Fed. Reg. 14365 (Mar. 19, 2015).

of specific research areas: first, deferred interest; second, credit card rewards; and third, debt collection.

We summarize below the findings of the different sections of our report. Overall, however, we find that in most respects conditions for consumers in the credit card market have either remained steady or improved since our prior report. Specifically:

- The all-in costs of using credit cards—which, as previously noted, declined substantially following enactment of the CARD Act—have remained steady since our prior report. This is true for consumers in all credit score ranges;
- The shift towards upfront pricing in the wake of the CARD Act remains resilient. Fees remain lower relative to balances than they did before implementation of the Act, again both overall and for consumers in different risk tiers. Had fees impacted by CARD Act rules continued at pre-CARD Act levels, consumers would have paid an additional \$16 billion in such fees from the beginning of 2011 through the end of 2014;
- Consumers are not only paying less for using credit cards than they did before the CARD Act, but that cost is more predictable and transparent; and
- There are indications that card credit is increasingly available to consumers. New account volume has grown every year since implementation of the CARD Act, and approval rates are increasing. Average new general purpose credit lines are growing for consumers with lower credit scores and are steady for other consumers, overall utilization is relatively unchanged, and the rate of credit line increases is growing.

There remain, however, areas of concern for consumers. This report addresses a number of these, but three stand out:

- Deferred interest products are popular and provide many consumers with valuable interest-free loans on larger purchases, but they remain the most glaring exception to the general post-CARD Act trend towards upfront credit card pricing. Consumers with worse credit scores generally pay more for these products than consumers with higher scores. But they do so at the “back-end” of the transaction, and not pursuant to upfront transparent pricing differences. As we describe, moreover, there are significant indications that the lack of transparency in this market contributes to avoidable consumer costs. These costs can be substantial—and may have longer-term consequences;

- Subprime specialist credit card issuers offer products significantly more expensive than their mass market counterparts. Fees and interest assessed to their consumers exceeded 40% of those consumers' year-end balances in 2013 and 2014. In addition, given that these issuers place much greater reliance on origination and maintenance fees, and that these fees are charged against relatively small lines, their products create the risk that a significant share of consumer monthly payments go to cover fees and interest on fees—and not to paying off the principal balance created by spending on the card. These issuers tend to solicit applications using targeted direct mail. Despite offering longer and more complex credit card terms than mass market issuers, they send those mailings disproportionately to consumers with lower levels of formal education; and
- Most credit cards now have variable interest rates. These credit card rates will rise—even on existing balances—when background interest rates in the economy increase. This is not an argument against variable rate pricing. Such pricing is the norm for open-end products where the consumer can continue to draw on a credit line and borrow for an indefinite period of time so long as the account remains open and the full line has not been utilized. The concern here is that, in the wake of a historical long period of stable and low interest rates, consumers may be accumulating and revolving balances without an understanding that the price of doing so—even on existing balances—may well increase in the future. Given CARD Act restrictions on most other retroactive rate increases, consumers may not be expecting any increase on the rates they pay to borrow on credit cards.

### **CONSUMER CREDIT CARD USE**

The credit card market is vast and multifaceted. Interrupted by a steep decline coinciding with the Great Recession, the credit card market has resumed growing by every measure. Most adult Americans hold at least one credit card, even without counting consumers who are authorized users on another consumer's credit card account.

Almost half of consumers have multiple credit cards. In fact, the average holder of a consumer credit card has nearly four such cards. At any given point in time most cardholders have a balance on at least one card, which can either be a revolving balance—one that was not paid in full during the prior billing period and has been carried over to the next billing period—or a balance that reflects only transactions since the last bill was paid. Excluding balances on private label cards, the median cardholder carries at least 90% of their balances on a single card. These patterns of usage vary with credit score.

## **COST OF CREDIT**

Continuing a trend identified in our prior report, the overall ratio of fees to balances remains significantly below pre-CARD Act levels for consumers in all credit score ranges.<sup>7</sup> Consumers continue to pay less in fees, both absolutely and relative to their balances, than before the implementation of the CARD Act. Late fee incidence remains flat and overlimit fees are essentially extinct. The same shift away from back-end pricing towards transparent, upfront pricing is evident in the continued low rate of upwards repricing on interest rates. Retail APRs and effective interest rates on consumer credit card accounts have remained essentially unchanged over the last few years. Effective interest rates remain slightly below their level at the point that CARD Act implementation started in the first quarter of 2010.

The total cost of credit (or “TCC”) for credit card holders has also remained unchanged over the last few years, preserving the significant decline from pre-CARD Act levels that our 2013 study reported. This TCC trend was true of the consumer credit card market overall, and for consumers in all credit score segments. Not only has the TCC on consumer credit cards fallen in absolute terms since the CARD Act, it has also fallen relative to the TCC on small business credit cards, which are not subject to the regulatory requirements of the CARD Act. This suggests that CARD Act reforms, in restricting certain kinds of practices, did not result in net increased cost to consumers.

For consumers of cards issued by subprime specialist issuers, however, the present cost of credit picture appears substantially different. These issuers represent a minority share of the market serving cardholders with subprime scores, so their pricing should not be thought to typify credit cardholding for consumers with weaker credit scores. But for customers of these subprime specialists, TCC is almost twice the level experienced by consumers with weaker credit scores who have credit card products from larger, mass market issuers.<sup>8</sup> These costs are also structured in a substantially different way, which creates certain additional risks for the consumer.

---

<sup>7</sup> Consistent with our prior report, we place cardholders in one of four credit score ranges based upon their credit score at a particular point in time.

<sup>8</sup> As we discuss, there are certain limitations on our data from subprime specialist issuers that limit the precision of any comparisons we can make. For example, it is possible that within any given credit score range, customers of subprime specialist issuers have lower scores than mass market issuer customers.

The penetration of variable rate products in the consumer credit card market creates a significant likelihood that consumers will see existing balances repriced if background interest rates increase. Since retroactive rate increases were otherwise generally prohibited in CARD Act rules, background rates have remained unchanged. The potential for variable rate-based cost increases on revolving existing balances, therefore, may not be fully anticipated by consumers.

#### **AVAILABILITY OF CREDIT**

Answering questions about the availability of credit is systematically more challenging than answering questions about its cost. Disaggregating changes in credit demand from changes in credit supply is challenging. There are practical difficulties, too, in differentiating changes that result from background economic conditions and those traceable to regulatory shifts.

Even so, we identify major trends. While direct mail to consumers remains a central feature of the credit card landscape, solicitation, advertising, and application are rapidly moving to mobile and other digital channels.<sup>9</sup> Even private label solicitation and origination, traditionally done at point of sale or otherwise within partnering retail establishments' brick-and-mortar locations, have increasingly moved in this direction.

Consumers continue to apply for, and receive, credit cards in substantial numbers. Compared to 2009 lows for almost all major credit products, both general purpose and private label credit cards have seen some of the strongest rebounds in origination volume. This holds true, too, when looking only at originations of cards to consumers with subprime credit scores. The average new line has changed little since our last report, but overall amounts of total and unused line, both general purpose and private label, continue to grow. Even consumers with deep subprime credit scores, despite generally utilizing most of their available card credit, collectively have over \$20 billion in total unused line available.

Some credit availability impacts were intended by the CARD Act. The Act's ability to pay (or "ATP") rules caused issuers to adopt a series of ATP requirements. About 4.5% of credit card

---

<sup>9</sup> Because digital media further blur the boundaries of general marketing and targeted solicitation, we use the term "solicitation" to cover all forms of digital marketing. While email solicitations remain responsible for only a small share of applications, other digital media—such as targeted banner ads, placement on third-party websites, and direct access to the issuer's website—are collectively responsible for a significant and growing share of applications.

applications are denied solely because they fail to meet these requirements. About 3% of consumer-initiated applications for credit line increases are denied solely due to these same requirements. The outcomes of issuer-initiated credit line increase programs are harder to quantify, but were critically impacted by whether the issuer was able to use “modeled income”—which is derived from statistical models based on a consumer’s other observable qualities—rather than self-reported income.

Whereas the previous report focused on large issuers and their respective consumer base, we have included in this report some analysis of subprime specialist issuers. These issuers specifically market to and provide credit for consumers whose credit scores tend to be core and deep subprime. They also have a different channel marketing strategy than mass market issuers, relying much more heavily on pre-approved mail offers to specific consumers. Their approval rates for consumers with subprime scores are much higher than the approval rates for consumers with comparable scores at mass market issuers.

## **ISSUER PRACTICES**

In the prior report, the Bureau found that credit card agreements had become simpler and shorter. Although that improvement continues, these agreements continue to be complex documents. Working from a larger sample of agreements than in the prior report, we are able to measure more precisely the variance in agreement readability and length across the market. Specifically, agreements for credit card products marketed primarily by subprime specialist issuers are particularly difficult to read. That may be especially problematic because these same products are disproportionately marketed to consumers with less formal education.

We also examine a number of cardholder agreements in detail to assess the state of issuer practices. We found that nearly all issuers offered grace periods, although how grace periods interact with other features of credit cards—for example, promotional periods—is not always clear. We also examine late fees, finding that most issuers remained within the safe harbors set by CARD Act regulations, though there was some variation in the precision and clarity of language describing late fees. We found more variation in minimum finance charges. Credit unions largely declined to assess minimum finance charges, while large and subprime issuers generally did. We also found that minimum payment formulae varied widely across issuers, both in terms of the amount of the payment itself as well as the complexity in its calculation and description. We make no broad determination regarding whether a given minimum payment formula benefited consumers, however, noting only that potential benefits seemed to be largely informed by related issuer practices, such as the interest rate assessed on balances.

Substantial and growing numbers of consumers are managing their financial lives electronically and online, and credit cards are no exception to this development. A majority of active credit card accounts are now enrolled in online service portals, and a growing number are enrolled in issuers' mobile applications. A significant minority have now elected not to receive paper statements. The Bureau's data suggest that many of these consumers are likely not accessing their statements online either, in which case they would never see mandatory disclosures, including certain CARD Act disclosures intended to provide important information to consumers. This includes disclosures related to deferred interest promotions.

Many issuers are now providing credit score information to their customers free of charge, though the practice is not yet universal. Some issuers include more comprehensive tools that allow consumers to simulate the impact to their credit score from particular credit and payment decisions. As a result of these changes, tens of millions of consumers now benefit from increased transparency on credit scores. The Bureau will continue to monitor this space so that progress across issuers can be tracked and best practices identified by market participants.

Finally, we identified significant variations in how issuers assess "ability to pay" at origination and in considering credit line increases. In particular, the use of statistical models to estimate income is not consistent across issuers. This is a matter of significant concern to many stakeholders who responded to the Bureau's Request for Information on the state of the credit card market.

## **PRODUCT INNOVATION**

From the consumer perspective, the innovation with perhaps the most impact over the last few years is issuer provision of regular, updated, and free credit score information to their credit cardholders. Because that has gone from pilot projects to being an established industry norm, however, we have covered it under "Issuer Practices," as noted above. With this core exception, credit card products, features, pricing structures, and functionality remain largely unchanged since our prior report.

As a result, therefore, we examine innovations that are designed to improve security and prevent fraud. These innovations—including the adoption of Europay, MasterCard, and Visa ("EMV") 'chip' cards and the tokenization of payment card credentials on digital platforms—may entail substantial change for the credit card market, as well as other consumer financial markets. In addition, they are not simply "back-room" innovations with little or no practical meaning for consumers. They are impacting—or have the potential to impact—consumer experience in the

credit card market. For example, we review consumer adoption of mobile payments applications for credit cards—which in part have been enabled by innovations in payments security.

Digital technology is also opening up certain aspects of the credit card market to competition from non-traditional market players. Some of these innovations are not limited in their reach to the credit card market. Some affect payments or credit markets much more generally. But because they have potential significance for credit card use, we include them in the scope of our review of market innovations.

### **DEFERRED INTEREST**

Many consumers are offered and accept “deferred interest” promotional financing on private label cards. These programs offer “0% interest if paid in full” during a defined promotional period, which is generally six or 12 months. Consumers who repay the full promotional purchase in this window obtain free financing on what is often a large purchase. Those consumers who do not fully pay off the promotional balance by the end of the promotion, however, are subject to the same interest rate they would have paid in the absence of the promotion. Given that the interest rate on these cards is generally around 25%, the magnitude of the interest charge—if and when it is assessed—can be substantial.

Data available to the Bureau indicate that nearly 90% of deferred interest promotional spending is made by consumers with prime or superprime credit scores. Consumers with deep subprime scores and core subprime scores account for 3% and 8% of deferred interest promotional spending, respectively. That is less than their share of private label spending generally, but more than their share of spending on general purpose cards.

Payoff rates have declined slightly in recent years. (Payoff rates capture the share of accounts or of promotional balances that are paid in full before the expiration of the promotional period.) For six and 12 month promotions accepted in 2013, about three quarters—by incidence and balance volume—were paid in full during the promotional period. That compares to nearly four-fifths for similar promotions originated in 2010. Payoff rates vary significantly according to the credit score of the consumer holding the account. Promotions taken by consumers with superprime scores consistently pay off at rates well in excess of 80%. Those taken by consumers with deep subprime scores fall below 50% on some payoff measures. Those consumers are not getting the “no interest” benefit that they may have expected when they accepted the promotion.



Some data suggest that error or confusion may be playing a part in non-payment. Consumers who fail to pay off their promotion in the promotional period tend to repay the full remaining balance, including the deferred finance charge, quite rapidly. Almost a third do so within two months and almost half within four months. That rapid repayment does not prove consumer error. But it appears to be in some tension with the behavior that might be expected of a consumer who understood that interest would be assessed retroactively if the balance was not paid in full by the end of the promotional period and who nonetheless chose to revolve that balance beyond the promotional period. We were able to discern little if any evidence that consumers improve their payoff rates by “learning” from repeated use of the product.

Across credit score levels, consumers who have a regular balance and a promotional balance are less likely to pay off the promotional balance than those who owe only on the promotional balance. In half the cases in which there is an overlapping non-promotional balance and the consumer fails to pay the promotional balance in full during the promotional period, consumers make total payments in excess—and often well in excess—of the full promotional balance during the promotional period.

Non-payment in the promotional period can be costly. The longer the promotional period, the higher the cost. Upfront, there is little variation in pricing by risk tier for private label cards. But that masks significant risk-based effects at the back-end. While the aggregate costs assessed to all deferred interest users are comparable, or even less expensive, than revolving the same balances on general purpose cards, the costs are almost all concentrated on a small share of promotions. These promotions are taken, disproportionately, by consumers with lower credit scores. As a result, consumers with subprime scores comprise only 11% of total promotional spending in our dataset, but incur 24% of the aggregate deferred interest charges. Consumers with prime scores also incur a share of deferred interest charges greater than their share of promotional spending. Consumers with superprime scores, however, have a share of promotional spending that is nearly double their share of deferred interest charges.

Preliminary results show that accounts with promotions that are not paid in full during the promotional period experience significantly higher delinquency rates after the promotion ends than accounts that pay in full during the promotion. They also experience delinquency well above background rates for private label balances generally. These same results hold across all credit score ranges.

## **REWARDS**

Credit card rewards programs have rapidly increased in prevalence over the past decade. As of 2014, accounts with rewards programs represent nearly two-thirds of all credit card balances and four-fifths of all credit card spending. Rewards accounts are even more predominant in the general purpose card market. Issuers are offering a greater diversity of rewards programs—and in many cases more compelling value propositions—to match the increasing popularity of these products with consumers. For many consumers, rewards have become central to the decision of which credit cards to acquire and how to use them.

There are also areas for potential concern in this market. It is not always clear when, where, and from whom consumers can expect to find or receive key program terms and conditions. Seemingly simple programs may have caveats or complexities glossed over by marketing materials. Consumers may not understand when and why rewards might expire or be forfeited, or what their options are when they do. Many rewards cards are based on partnerships between issuers and other companies, such as airlines and hotels, and it may not always be clear to consumers which institutions determine and control certain aspects of the product that they are using. The less that consumers can evaluate the value proposition associated with different rewards programs, the less able they are to select between cards on a rational basis—especially if they are likely to carry a balance on the card at some point in the future.

## **DEBT COLLECTION**

When consumers fail to pay their credit card bills when due, issuers engage in a range of practices to collect the debt. During the early stages of delinquency, issuers will generally engage in collection activities using collectors they directly employ. The issuers' policies and practices regarding such collection activity vary widely. For example, among the large issuers surveyed, some permit collectors to make no more than four attempts to reach a consumer on a given day while others will allow up to 15 attempts.

The majority of issuers which are unsuccessful in collecting a debt will, after a period of time, turn the debt over to third-party debt collectors who collect in their own name and are paid a portion of the debts they collect. In some cases, issuers turn substantial amounts of debt over to third-party collectors before it is charged off. After charge-off, all of the issuers use such contingency debt collectors. The extent of such usage ranges from a low of 10% of charged-off debt to a high of over 60%. So, too, does the number of debt collectors the issuers deploy. Some use only three while others use as many as 21.

In addition to placing debt with debt collectors, half of large issuers we surveyed also sell charged-off debt to debt buyers. Sold debt constituted 15% of all debt charged off by large issuers in 2014; within issuers that sold debt, that share ranged from less than 15% to greater than 50%. Debt sellers vary in terms of the warranties they provide to the debt buyer. Given that these warranties certify the accuracy and completeness of the information provided to the debt buyer, as well as the debt buyer's ability to access documents validating the debt, limiting or omitting such warranties can impact the consumer debt collection experience. The price that debt buyers pay for charged-off debt increased in 2014 by over 25% as compared to 2013. The total amount of debt sold declined by 26% over the same period.

#### **A FINAL NOTE**

In the wake of the CARD Act's reforms, independent surveys and reports on consumer satisfaction reflect the generally positive state of the credit card market from the consumer perspective. J.D. Power's U.S. Credit Card Satisfaction Study for 2015 reports that its "satisfaction index" has reached a new high—over and above the prior high that we noted in our 2013 study.<sup>10</sup>

What may be most notable about this consumer protection success story, however, is that it has been accompanied by rates of return for credit card issuers that are generally in line with historic norms.<sup>11</sup> Indeed, the credit card business continues to be the most profitable bank lending business, with returns more than four times higher than the average return on assets. This calls seriously into question the notion that regulatory effectiveness must come at the cost of diminished returns to providers. What it instead suggests is that markets in which consumer protection is generally effective and robust can function competitively and efficiently for the benefit of *all* participants.

---

<sup>10</sup> See Appendix Figure 1. For more about the survey, see Press Release, J.D. Power, Attractive Rewards and Benefits Drive Credit Card Selection, Satisfaction and Spend (Aug. 20, 2015), [http://www.jdpower.com/sites/default/files/2015137\\_U.S.\\_Credit\\_Card\\_Study\\_PR\\_Final.pdf](http://www.jdpower.com/sites/default/files/2015137_U.S._Credit_Card_Study_PR_Final.pdf).

<sup>11</sup> See Board of Governors of the Federal Reserve System, *Report to the Congress on the Profitability of Credit Card Operations of Depository Institutions* (June 2015), <http://www.federalreserve.gov/publications/other-reports/files/ccprofit2015.pdf>.

# 1. Introduction

## 1.1 Review mandate

From July 21, 2011, the Dodd–Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”) entrusted the Bureau with implementing and enforcing the Credit Card Accountability Responsibility and Disclosure Act (“CARD Act,” or simply “Act”). Congress intended the CARD Act to “establish fair and transparent practices related to the extension of credit” in the credit card marketplace.<sup>1</sup> The Act requires periodic reviews of the consumer credit card market. In 2012, the Board of Governors of the Federal Reserve (“Board”) and the Bureau agreed that responsibility for the review passed to the Bureau under the terms of the Dodd-Frank Act. The Bureau then conducted its first review in 2013.

---

<sup>1</sup> Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734. A full summary of CARD Act rules implemented by the Board is at pages 11 through 13 of the 2013 report. The Bureau subsequently reissued these rules in December 2011. The Bureau later revised one CARD Act rule 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 impacts 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. 78 Fed. Reg. 25818 (May 3, 2013). The ability-to-pay rules, including this revision, are discussed in section 5.5 of this report.

The present report constitutes the Bureau’s second review of the consumer credit card market. As set forth by the Act, our review examines developments in the consumer credit card marketplace, including:<sup>2</sup>

1. Credit card agreement terms;
2. Credit card issuer practices;
3. Disclosure effectiveness, with respect to terms, fees, and other consumer costs associated with credit cards;
4. Adequacy of protections against unfair or deceptive acts or practices relating to credit cards; and
5. Whether, and to what extent, CARD Act provisions and their implementation have affected the cost and availability of credit, particularly with respect to non-prime borrowers; the use of risk-based pricing; or credit card product innovation.

## 1.2 Scope and methodology

The scope and methodology of the current report are intended to reflect the Act’s directive to conduct a broad review of the credit card market within the reasonable limits of the “resources available for reporting purposes.”<sup>3</sup>

### **DATA SOURCES**

To that end, this report seeks to leverage a number of different data sources. We place most emphasis on sources already held by the Bureau, its regulatory partners, or industry stakeholders.

---

<sup>2</sup> See 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. The Bureau therefore does not have detailed data on specific safety and soundness issues.

<sup>3</sup> Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, § 502, 123 Stat. 1755.

Sources include the following:<sup>4</sup>

1. De-identified loan-level information from a sample of large banks' credit card portfolios, which is compiled in the CFPB's Credit Card Database ("CCDB"). Overall, these data cover between 85% and 90% of credit card industry balances.<sup>5</sup> Some of the issuers reporting data do so solely pursuant to CFPB mandate, but others provide these data to other regulators that share the data with the Bureau. The data are updated monthly and cover the period from the beginning of 2008 to mid-2015.<sup>6</sup> They are assembled by a contractor who receives de-identified data from credit card issuers. Information in the database cannot be tied to any particular individual. Additionally, accounts associated with the same consumer are not linked, whether within or across issuers. The data do not encompass individual transactions;
2. Data from the CFPB'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 representative of the population of consumers with credit records. This dataset contains information on almost five million consumer credit records, including a commercially-available credit score for the consumer. These data contain no direct identifying information, such as name, address, or Social Security number. As with data in the CCDB, the Bureau cannot tie any of the information in the CCP to any particular individual. Like the CCDB, the CCP contains no transaction-level data;
3. The CFPB's Credit Card Agreement Database, which is an online database available to the public at <http://www.consumerfinance.gov/credit-cards/agreements>. This database, created pursuant to the CARD Act, contains all the credit card agreements available to

---

<sup>4</sup> All of the data we report throughout this report aggregates data across multiple issuers. None of the results we provide can be used to identify the outcomes or practices of individual entities. Furthermore, the general patterns that we observe in the market may not be true—or may not be as true—for every issuer.

<sup>5</sup> The Bureau recognizes that the issuers that supply data to the CCDB constitute a non-random sample because they are larger issuers. The practices and experiences of these issuers are not necessarily representative of the practices and experiences of many small credit card issuers. Thus, we do not attempt in this report to extrapolate from the CCDB data to make projections for the entire market. However, because the participating issuers represent 85% to 90% of credit card industry balances, the Bureau is confident that the findings reported here would not materially change if data from the entire universe of card issuers were available.

<sup>6</sup> Issuers sometimes correct data submissions made to the CCDB. As a result, the data in the CCDB are not fully static.

consumers as of quarter's end for each quarter from the third quarter of 2011 to the fourth quarter of 2014;

4. Information provided in response to a series of market monitoring requests made to a number of large and some smaller credit card issuers.<sup>7</sup> In this report, we refer generally to these data, which supplement the monitoring we are able to do using the CCDB, as Mass Market Issuer (or "MMI") data.<sup>8</sup> The MMI data cover a variety of subjects including application, approval, ability to pay, online engagement, and debt collection practices. In addition, the Bureau made two sets of more specific market monitoring requests. One of these sets focused on deferred interest promotions, which are analyzed in more detail in section 6 below. We refer to these as the deferred interest (or "DI") data. The second of these sets sought aggregate information on a range of subjects from a group of issuers that specialize in issuing consumer credit cards to consumers with subprime credit scores.<sup>9</sup> We refer to these issuers as subprime specialist issuers (or "SSIs") and to the associated information as the SSI data;
5. Responses to a Request for Information ("RFI"), published in the Federal Register in March 2015, wherein the Bureau sought comment on all aspects of the review described in section 1.1 above, as well as the following additional topics: online disclosures, rewards products, grace periods, add-on products, fee harvester cards, deferred interest products, debt collection, and ability to pay. The RFI generated 42 comments.<sup>10</sup> That total includes responses from 15 trade associations representing credit card issuers and other market participants, six individual issuers, three other industry-side market participants, five consumer advocacy groups, and seven individual consumers;

---

<sup>7</sup> In some cases, the information provided in response to these requests was supplemented with information already obtained in response to examination-related requests made by the Bureau's Office of Supervision.

<sup>8</sup> The issuers covered by the MMI data are not completely identical to the issuers that responded to the Credit Card Practices Inquiry (CCPI) used as a source of data for the Bureau's 2013 credit card market report. However, they represent an almost identical share of the credit card market and accordingly we use MMI data and CCPI data to present time series that extend beyond the data period covered by the MMI data alone.

<sup>9</sup> We define the term "subprime" in the next subsection of the present section.

<sup>10</sup> Comments are summarized in relevant sections of this report.

6. Credit card complaints that consumers have submitted to the Bureau's Office of Consumer Response. To date, the Bureau has handled approximately 80,000 credit card complaints.<sup>11</sup>
7. A series of focus groups concentrated on either credit card rewards or deferred interest products. These focus groups were conducted in June 2015. The groups allowed for some exploration of consumer beliefs about and attitudes towards these areas of the consumer credit card market. However, given the number of consumers involved and the method of recruitment, the groups cannot be seen as representative of the broader cardholding population;
8. 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, Experian and Oliver Wyman collaborate to produce the quarterly "Market Intelligence Report," which covers product trends in consumer finance, including those in credit card, mortgage, and auto lending markets. In addition, Mintel provides data on card solicitations and other marketing materials, via a range of channels; and
9. Numerous public sources, including but not limited to Securities and Exchange Commission filings, analyst reports, studies by other regulators, academic scholarship, and the trade press.

### **FICO SCORE RANGES**

Throughout this report, we refer to consumer credit scores. These scores are used 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. Most of the data sources that we rely on in this report, including the CCDB, MMI data, and CCP use "FICO" credit scores developed by the Fair Isaac Corporation. These scores are based on scoring models applied to data in a consumer's credit report. Different issuers may use different sets of FICO scoring models. Some issuers may obtain credit scores from other credit reporting companies.

---

<sup>11</sup> See Monthly Complaint Report Vol. 4 (Oct. 2015) 11, [http://files.consumerfinance.gov/f/201510\\_cfpb\\_monthly-complaint-report-vol-4.pdf](http://files.consumerfinance.gov/f/201510_cfpb_monthly-complaint-report-vol-4.pdf).



The FICO scores in the CCDB rely on the FICO scoring model in use by an institution at the time the data is generated by that institution. These scores reflect the FICO score associated with the consumer holding the relevant credit card account. All FICO scores in the CCP are based on the scoring model used by the credit reporting company that provides the data. Not all CCP records contain associated credit scores because some consumers have credit records that cannot be scored on that model. Inability to score a consumer's record could be because the record contains too few accounts, because the record's accounts are too new to contain sufficient payment history to calculate a reliable credit score, or because there is no recent account activity reflected on the credit record. Recent Bureau research has highlighted the number of unscored consumers in the U.S., and all credit score-related metrics should be considered in this light.<sup>12</sup>

In this report, we use four FICO score ranges: superprime, prime, core subprime, and deep subprime. (We use the term "subprime" to cover both core and deep subprime.) To define these ranges, we use the same definitions as our prior report, which are reflected in Table 1 below.<sup>13</sup> The table also shows the share of the U.S. population with a credit record, and the share of the U.S. credit cardholding population, in different FICO ranges. As can be seen, credit scores skew higher among credit card holders than among the broader population with a credit record, indicating that consumers with lower credit scores are less likely to have credit cards. The table also shows the share of unscored consumers. Although the share of unscored consumers is relatively significant among consumers with a credit record, almost no credit card holders lack a score. Neither column accounts for consumers without a credit record at all. (Recent Bureau research estimates that there were 26 million "credit invisible" consumers as of the end of 2010 and another 19 million with unscorable credit records.<sup>14</sup>)

---

<sup>12</sup> See Kenneth P. Brevoort, Philipp Grimm & Michelle Kambara, Consumer Financial Protection Bureau Office of Research, *Data Point: Credit Invisibles* (May 2015), [http://files.consumerfinance.gov/f/201505\\_cfpb\\_data-point-credit-invisibles.pdf](http://files.consumerfinance.gov/f/201505_cfpb_data-point-credit-invisibles.pdf).

<sup>13</sup> These definitions correspond to one set of industry standard ranges. There is no single industry standard. The one we use here, however, is among the most commonly used.

<sup>14</sup> See *supra* n. 12.

**TABLE 1: FICO SCORE RANGE SHARES AS OF Q1 2015 (CCP)**

<b>FICO score ranges</b>	<b>% of U.S. population with a credit record</b>	<b>% of U.S. credit cardholding population</b>
Superprime (FICO scores $\geq$ 720)	43%	62%
Prime (FICO scores 660-719)	14%	17%
Core subprime (FICO scores 620-659)	7%	9%
Deep subprime (FICO scores $<$ 620)	21%	11%
No score	14%	1%

FICO scores in the CCDB and CCP are refreshed regularly. Refreshed scores are used throughout this report to place accounts into score ranges for the analyses presented here, with the exception of analyses performed on account-origination data, which use the FICO score at origination. As a result, when analyzing trends over time within a particular FICO score range, we are not analyzing a constant set of accounts or consumers, but rather accounts or consumers that fall within that range at each point in time under analysis, unless specifically noted otherwise. This clarification is especially important to note in light of the substantial propensity of consumers to experience changes in their credit score sufficiently large to move between the categories delineated above. For example, as explained in section 2 below, over a quarter of those consumers with a credit score in one FICO range in the first quarter of 2012 had a score in a different range by the fourth quarter of 2014, and a substantial additional share had become unscorable over that period.

## 1.3 Limitations

The data sources on which the Bureau has relied in the present report reveal certain correlations. Readers should bear in mind, however, that correlation does not denote causation. In certain cases, the weight of evidence may point strongly towards a particular narrative about credit card consumers, issuers, and markets, or rule out many otherwise-possible interpretations, but the Bureau cautions against assuming that causation necessarily underlies the different correlations published in this report.

Beyond that, each individual source of data has its own specific limitations. Some data are at the loan level, others at the consumer level; some data are quantitative, others qualitative; some data have broader coverage but less depth, others narrower but more detailed. While many of these data sources can be used to illuminate certain portions of the large and complex credit card market, even viewing them all in concert may have only an additive, not multiplicative, effect. Additionally, many data sources vary to differing extents in how they define certain industry terms of art (such as “private label”) or draw boundaries between categories (such as between “deep” and “core” subprime credit scores). Wherever possible, we try to correct for these differences, but some undetected variations may still exist.

There are also certain limitations to the Bureau’s division of certain facets of the market into distinct areas for study. While these facets may be conceptually distinct, in practice some will intertwine throughout the lifecycle of accounts and the ongoing consumer process of acquiring and using credit cards. To give just one example, our analyses of rewards products and deferred interest products are separate in this report. In practice, however, some products offer consumers either a choice between (or a combination of) rewards and deferred interest on a single card account. Examining components of an ecosystem in isolation, rather than in concert, may be necessary to make a subject as complex as the credit card market manageable, but it may make the resulting analysis to some degree incomplete.

## 2. Consumer credit card use

This section reviews five main aspects of the credit card market. First, we describe the overall size of the consumer credit card market using a number of different metrics. As part of this review, we also look at the size of the market accounted for by certain groups of cardholders, such as those in different credit score and age ranges. Second, we look at cardholding, both overall and segmented in various respects. Third, we analyze consumer payment patterns on credit card accounts. For example, we examine how accounts divide into those used primarily as a transaction device and those used to revolve debt from one month to another. Fourth, we review how cardholder credit scores have changed over time. Finally, we report on delinquency and charge-off rates in the consumer credit card market.

### 2.1 Market size

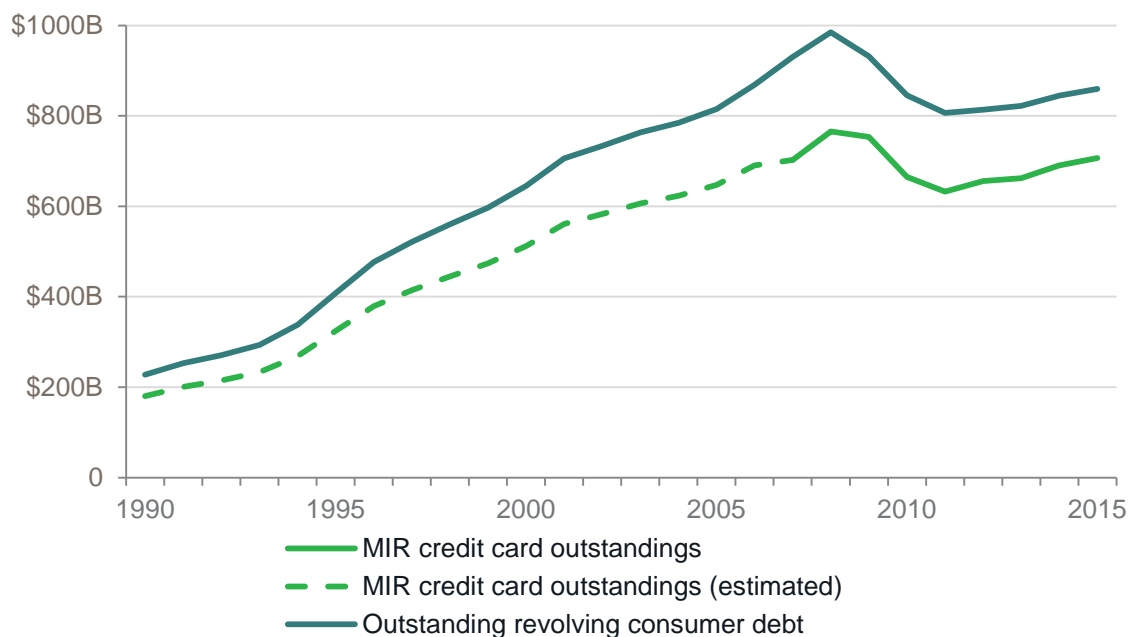
#### 2.1.1 Card use overall

The credit card market is one of the largest consumer credit markets in the nation. Figure 1 uses “G.19” data from the Board of Governors of the Federal Reserve System to show the long-term trend in consumers’ revolving credit balances.<sup>1</sup> After peaking at just over one trillion dollars, revolving credit balances dropped dramatically during the Great Recession to below \$800 billion, and have been steadily rebounding ever since. According to the latest such data, those balances currently exceed \$925 billion.

---

<sup>1</sup> See Federal Reserve Bank, *G.19 Consumer Credit September 2015* (Nov. 6, 2015), <http://www.federalreserve.gov/releases/g19/current/g19.pdf>.

**FIGURE 1:** OUTSTANDING REVOLVING CONSUMER CREDIT AND OUTSTANDING CREDIT CARD DEBT, ANNUAL AVERAGE (EXPERIAN MIR, FRB G19)



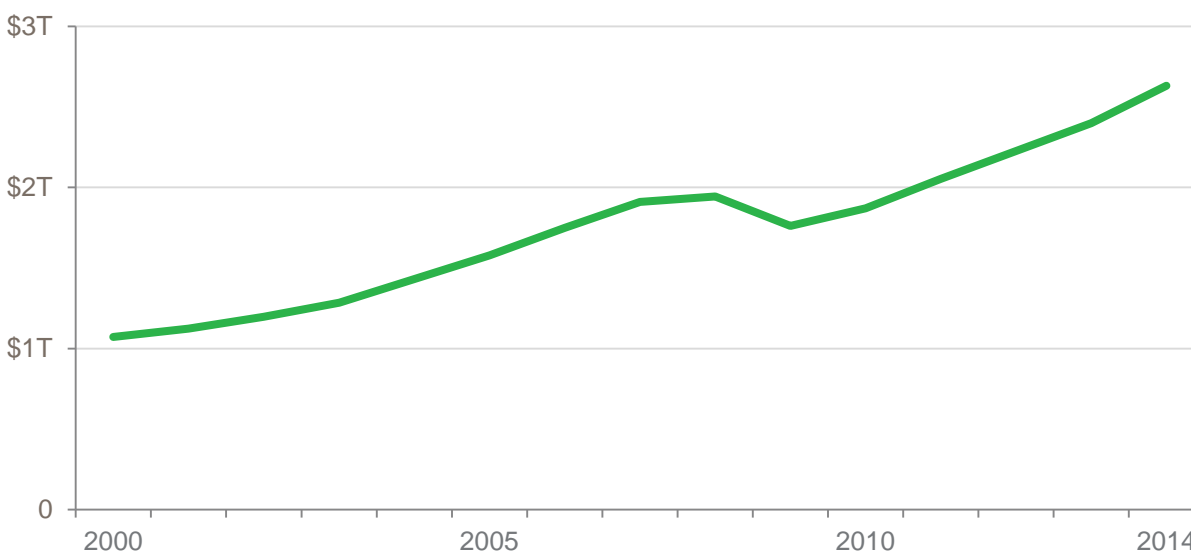
Revolving consumer debt, however, includes non-credit card debt, such as pre-arranged overdraft plans. Nevertheless, credit card debt comprises the overwhelming share of G.19 revolving consumer debt. To illustrate this, Figure 1 also includes a separate schedule of outstanding credit card debt (often referred to simply as “outstandings”) drawn from the Experian Market Intelligence Report.<sup>2</sup> The Bureau only has access to these data from 2007. Using the relationship between the MIR and G.19 data for the period for which both are available, we can offer an approximate depiction of credit card outstandings from 1990 to the present.

To obtain a longer time series on purchase volume than the CCDB permits, we use data from *The Nilson Report*, an industry standard source of credit card data. Figure 2 shows trends in

<sup>2</sup> The G.19 data use 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 Bank, *Consumer Credit Data, G. 19 September 2015*, <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.

annual purchase volume on general purpose cards from 2000 onwards.<sup>3</sup> The growth in annual purchase volume slows with the onset of the Great Recession and then drops in 2009. Thereafter, the growth in annual purchase volume resumes its prior trend, regaining pre-recession levels by the end of 2011.<sup>4</sup> General purpose credit card spending has also risen as a share of gross domestic product, increasing from 10% in 2000 to 15% by 2014.<sup>5</sup>

**FIGURE 2:** ANNUAL GENERAL PURPOSE CREDIT CARD PURCHASE VOLUME (THE NILSON REPORT)



<sup>3</sup> The distinction between general purpose and other credit cards is explained in detail in the following subsection.

<sup>4</sup> Note that Figure 2 shows purchase volume aggregated across one year periods. In contrast, Figure 1 shows averages, across a year, of monthly outstanding balances, so it does not reflect any aggregation from month to month.

<sup>5</sup> According to the U.S. Bureau of Economic Analysis, which publishes these data, gross domestic product, “the featured measure of U.S. output, is the market value of the goods and services produced by labor and property located in the United States.” See U.S. Bureau of Economic Analysis, *A Guide to the National Income and Product Accounts of the United States*, <http://www.bea.gov/national/pdf/nipaguid.pdf> (last visited Nov. 19, 2015) 5; see also U.S. Bureau of Economic Analysis, gross domestic product data, <http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=1&isuri=1> (last visited Nov. 19, 2015).

## 2.1.2 Card use by card type

Consumer credit cards generally break down into two types: general purpose cards and private label cards. General purpose cards can be used to purchase goods and services at a wide range of merchants. These cards display one of the main network brands: American Express, Discover, MasterCard, or Visa. These cards will be accepted at any merchant that has contracted to accept that network brand. Credit card issuers, which are banks or credit unions, pay card networks for the right to transact over their networks and subsequently place the network's brand on their cards.

In contrast, private label cards—sometimes called “store cards” or “retail cards”—do not carry a network brand. Consumers can use these cards only at a particular merchant or affiliated group of merchants. Private label cards carry branding from the relevant merchant.<sup>6</sup> Like general purpose credit card accounts, private label credit card accounts are originated and serviced by credit card issuers. A credit card issuer will contract with a specific merchant to offer private label cards to that merchant's customers. Consumers often apply for—and are issued—private label cards in a merchant's store or via its website. These cards typically provide consumers with lower credit lines than general purpose cards, and credit underwriting is generally less stringent on private label cards. Both as consequence and further cause, private label cards at a given merchant are not generally underwritten at different interest rates because merchants do not want—or at least do not want to be seen—to offer different prices to different customers.<sup>7</sup>

Figure 3 lays out recent trends in the amount of outstandings on these two types of cards. While outstandings on general purpose cards show a more-or-less steady increase—albeit with seasonal variation—since the end of 2010, they are not yet back to their pre-recession levels. Private label

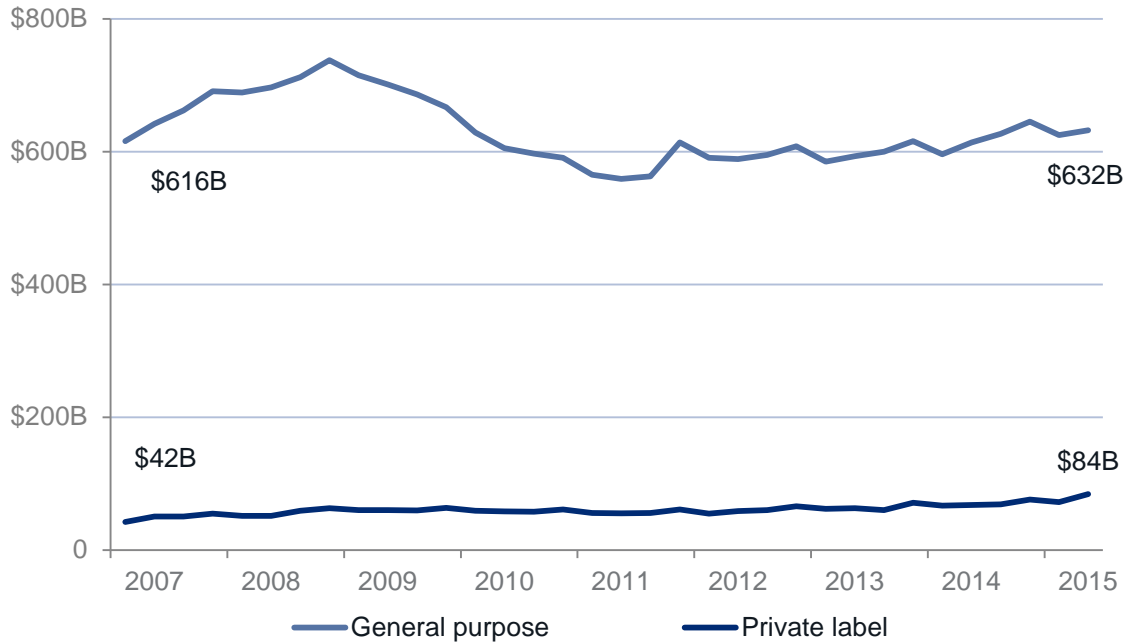
---

<sup>6</sup> “Co-brand” or “affiliate cards” may carry branding from a specific merchant, but they are not generally considered private label cards because they carry a network brand and can therefore be used at any merchant that accepts that card brand, and are therefore classified as general purpose cards. Airline cards are typically co-brand cards. Some merchants will have their branding on both private label cards and co-brand cards.

<sup>7</sup> Section 6 on deferred interest products describes pricing practices on private label accounts in more detail.

balances have grown more steadily, roughly doubling since 2007.<sup>8</sup> Private label balances, however, still account for only a fraction of the overall balances incurred on credit cards.

**FIGURE 3:** CREDIT CARD OUTSTANDINGS (EXPERIAN MIR)



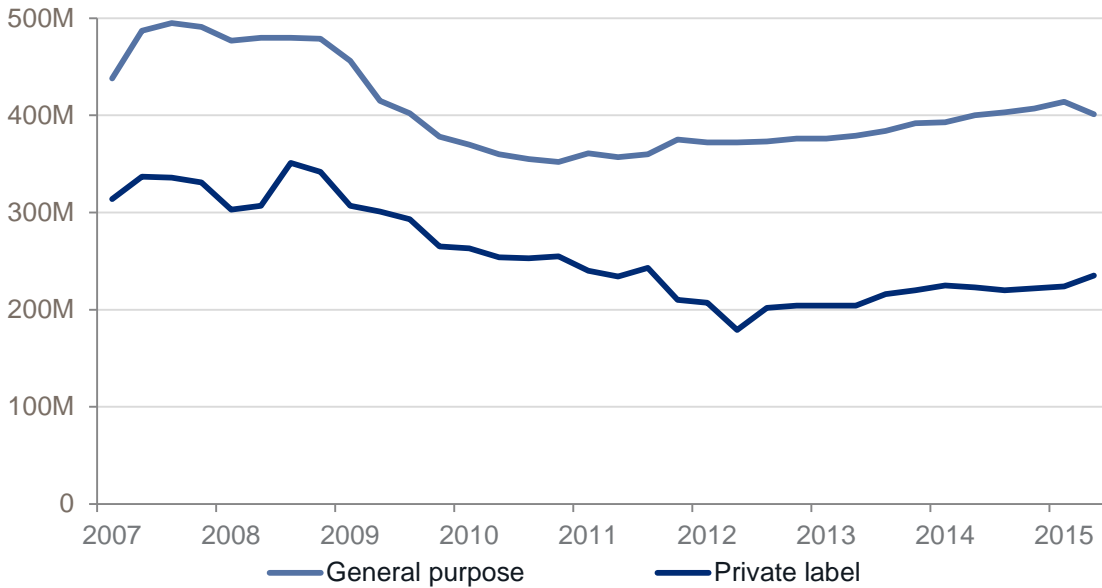
After falling during the recession, the number of open accounts in each category has increased more slowly than balances over the last few years. There is a marked discrepancy in the number of general purpose accounts relative to the number of private label accounts; as Figure 3 reflects, however, the discrepancy between the volume of balances on the two types of accounts is much larger, reflecting the lower credit lines typical of private label cards. Figure 4 shows the trends in the total number of open accounts for each type. Since the beginning of 2012, the number of general purpose cards has increased slightly. There has been some growth in the number of private label cards over the same period, but it has been more limited.

<sup>8</sup> Due to the scale on the figure, the seasonal variation in private label outstandings is not evident; that variation, however, actually exceeds the variation on general purpose cards.

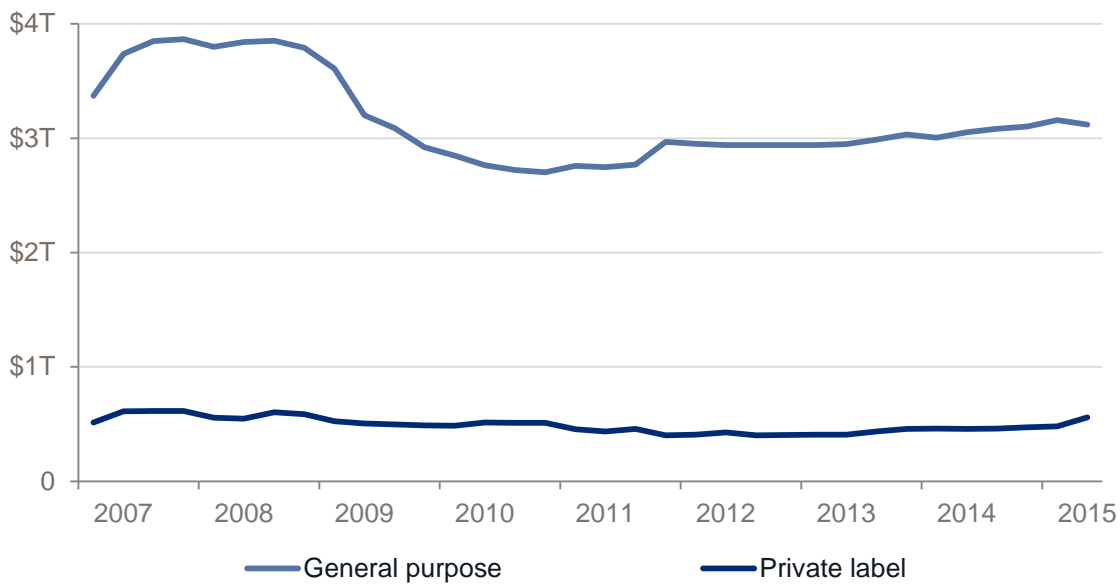


The trend in total credit line on each kind of card is shown in Figure 5. The growth in total line for general purpose cards roughly parallels the growth in general purpose accounts, but total private label line has grown more slowly than the number of private label accounts.

**FIGURE 4:** OPEN CREDIT CARD ACCOUNTS (EXPERIAN MIR)



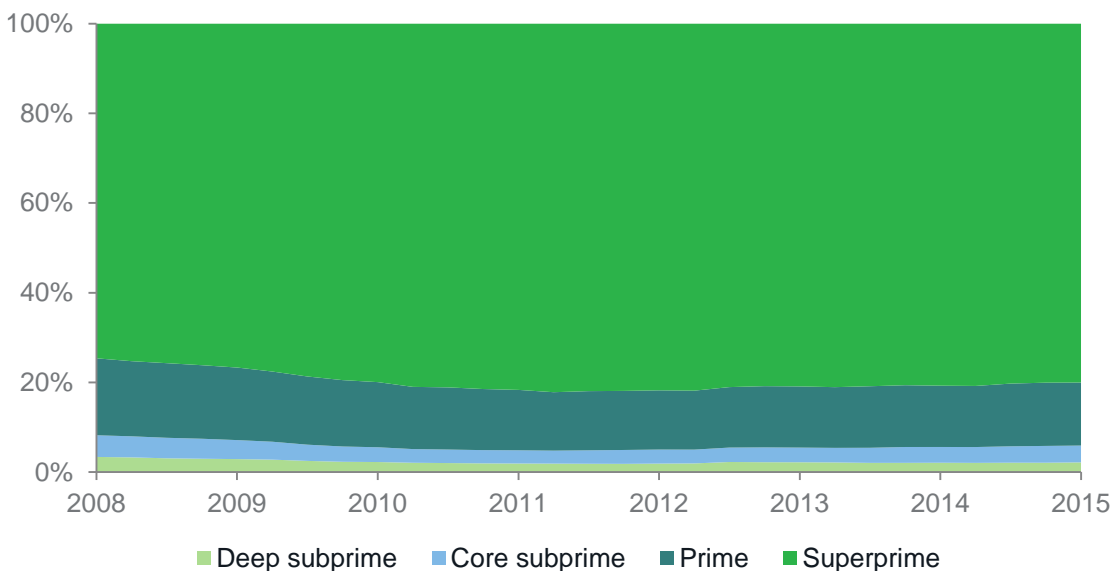
**FIGURE 5:** TOTAL LINE ON OPEN ACCOUNTS (EXPERIAN MIR)



### 2.1.3 Card use by credit score and age

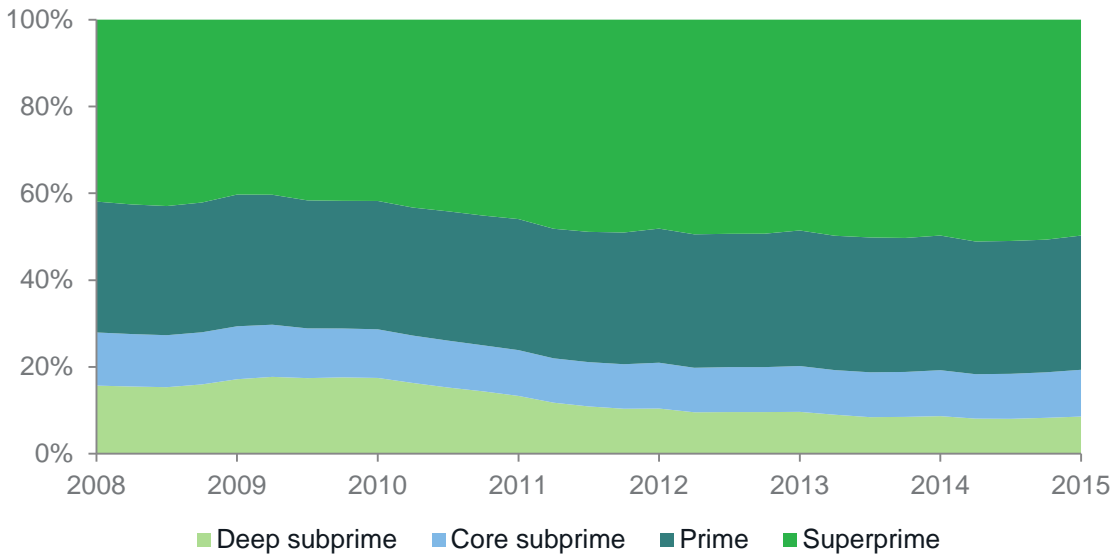
As of mid-2015, consumers with superprime credit scores account for a predominant 80% share of the amount spent using credit cards, just under double their share of accounts. Consumers with prime scores account for the next largest share of spend at only 14%, which is roughly proportional to their share of accounts. Consumers with subprime scores, both core and deep subprime combined, account for only 6% of the amount spent on cards, although these consumers hold 28% of all accounts. Figure 6 shows these shares over time in more detail. There have been no marked changes in the relative shares of different credit score groups over the last few years.

**FIGURE 6:** SHARE OF PURCHASE VOLUME BY CONSUMER CREDIT SCORE, OPEN ACCOUNTS IN THE CCDB



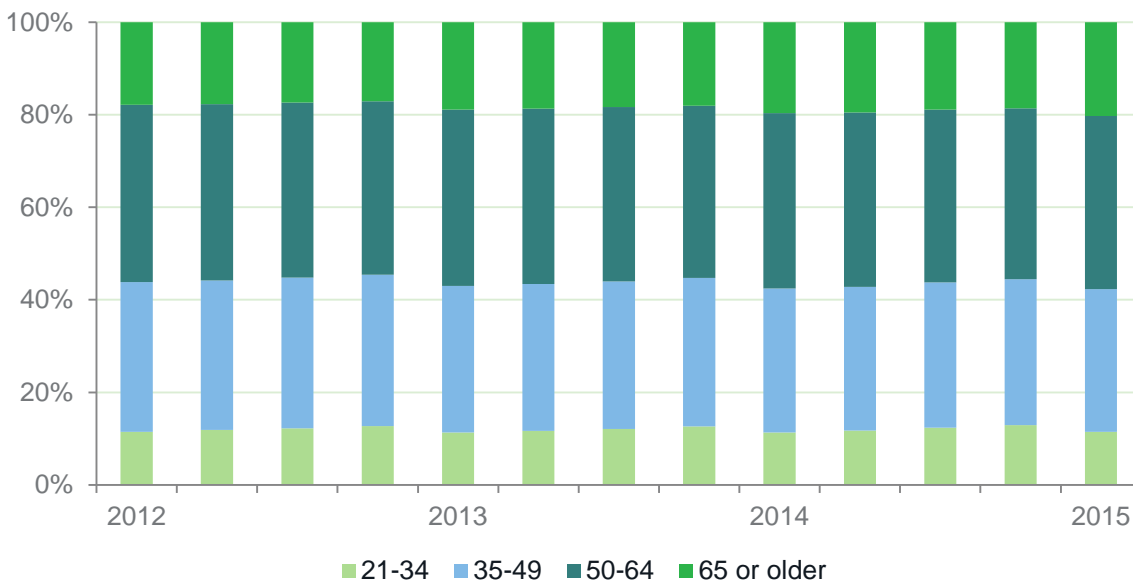
Outstanding credit card balances, in contrast, are spread more proportionately across borrowers with different credit scores. Outstandings are still dominated by consumers with superprime and prime credit scores, but the combined 19% share of outstandings represented by consumers with subprime scores as of mid-2015 is significantly higher than this group's share of spending on credit cards at any given point in the same time frame. This difference reflects the higher rate at which consumers with lower scores revolve credit card debt from one monthly billing cycle to the next. Figure 7 provides more detail on the distribution of outstandings over time by the credit score of the consumer.

**FIGURE 7:** SHARE OF CYCLE-ENDING BALANCE BY CONSUMER CREDIT SCORE, OPEN ACCOUNTS IN THE CCDB



Our prior report found that the share of adult consumers under age 21 with an open credit card declined from 2007 through 2012. Consistent with a number of CARD Act restrictions that targeted marketing and issuing practices with respect to young consumers, the number of new accounts issued to young consumers fell in absolute terms and as a share of total originations. Figure 8 shows that the age distribution of outstanding card balances has remained essentially unchanged since at least 2012. Outstandings held by consumers under the age of 21 are not shown; they consistently represent well below 1% of credit card balances.

**FIGURE 8:** SHARE OF CYCLE-ENDING BALANCE BY CONSUMER AGE (CCP)



## 2.2 Card holdings

### 2.2.1 Overall and by card type

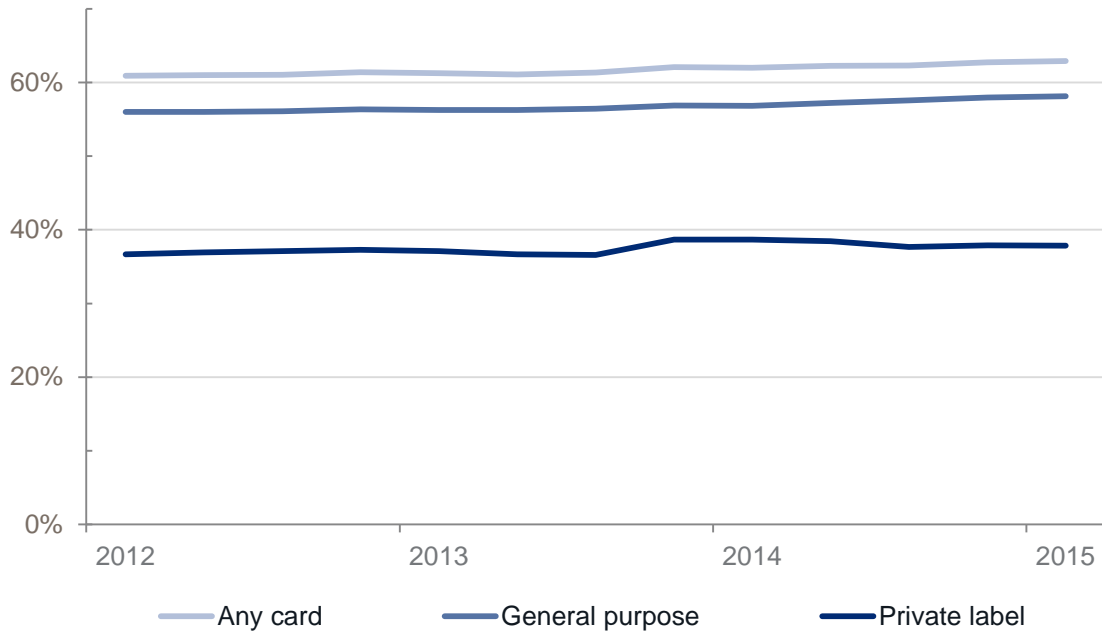
Most adult Americans—about 63%—have an open credit card. A similar share, 57%, has an open general purpose card, but only a minority of consumers holds private label cards. These shares are shown in Figure 9.<sup>9</sup>

Figure 9 also reflects that credit ownership has become marginally more common over the last few years. Although the increase is slight, it holds true for cardholding generally, for general purpose cardholding, and for private label cardholding.

---

<sup>9</sup> The data in Figure 9—like all data we derive from the CCP—only cover consumers who hold cards on which they are legally liable to the account issuer. They do not include other authorized users on those card accounts. Some data points from our 2013 report included authorized users and this should be considered in comparing data across the two reports. Note also that the data in Figure 9 are not additive. Many of the consumers who hold at least one open general purpose card are the same consumers who hold at least one open private label card.

**FIGURE 9:** SHARE OF ADULT AMERICANS WITH ONE OR MORE (A) OPEN CREDIT CARDS; (B) OPEN GENERAL PURPOSE CREDIT CARDS; AND (C) OPEN PRIVATE LABEL CARDS (CCP, CENSUS)



**FIGURE 10:** SHARE OF CONSUMERS WITH NO CREDIT CARD HOLDINGS (CCP)

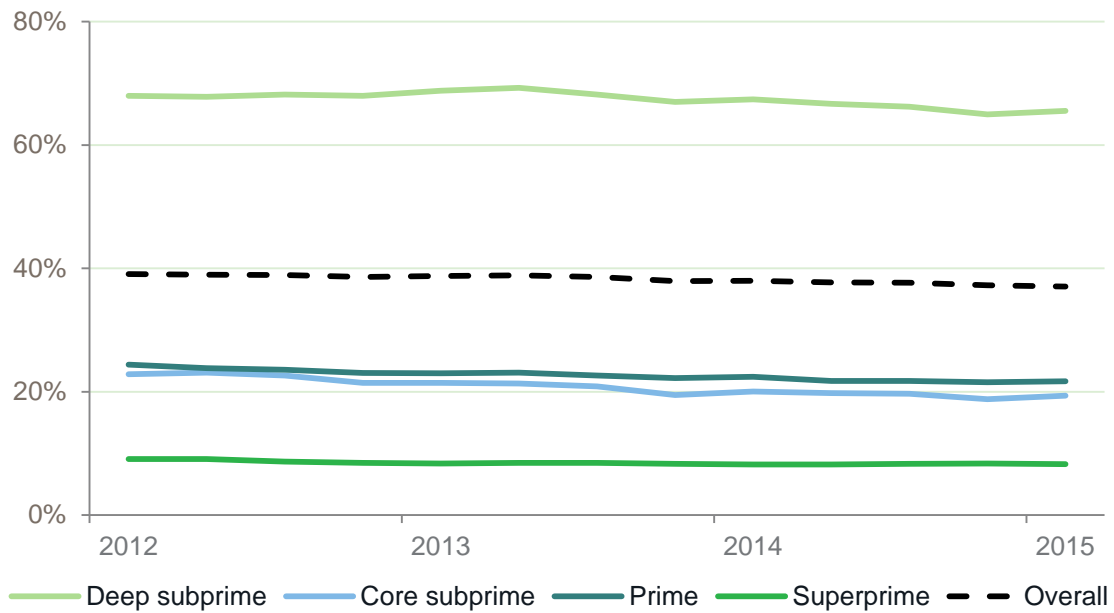


Figure 10 shows that while 37% of adult Americans do not have a credit card, this overall number conceals considerable variance by credit score. Two-thirds of consumers with a deep subprime score had no credit card at the beginning of 2015. That share drops to under 20% for consumers with a core subprime score, which is actually less than the 22% share of consumers with prime credit scores who have no card. Only 8% of consumers with superprime scores are without a credit card.

Table 1 expands on the overlap between general purpose and private label cardholding. It shows that of consumers with at least one credit card, 53% have both general purpose and private label cards. Just 7% of those with credit cards have only private label cards; conversely, about 40% of those with credit cards have only general purpose cards.

**TABLE 1: DISTRIBUTION OF CARDHOLDERS BY OPEN CREDIT CARDHOLDINGS Q1 2015 (TABLE SUMS TO 100%) (CCP)**

		Private label		
General purpose		None	One	Multiple
None		NA	5%	2%
One		18%	6%	5%
Multiple		22%	16%	26%

These data vary substantially by the credit score of the consumer. For example, while just 7% of *all* cardholders have only private label cards, the same is true for 23% of cardholders with deep

subprime credit scores.<sup>10</sup> Table 2, therefore, compares the distribution of cardholdings across consumers with subprime scores—core and deep subprime—combined.

**TABLE 2: DISTRIBUTION OF CARDHOLDERS WITH CORE OR DEEP SUBPRIME CREDIT SCORES BY OPEN CREDIT CARDHOLDINGS, Q1 2015 (CCP)**

	Private label		
General purpose	None	One	Multiple
None	NA	13%	5%
One	27%	8%	5%
Multiple	16%	10%	15%

More than half of consumers with subprime credit scores have no credit card. Only 29% of all consumers with subprime scores have more than one open credit card account. Of cardholders with subprime scores, 43% have only general purpose cards, 38% have private label and general purpose cards, and only 18% have only private label cards.

In contrast, only 12% of consumers with prime or superprime credit scores have no open credit cards. For the vast majority of these consumers who have open credit cards, the most common pattern—at 29% of cardholding consumers—is to have multiple general purpose and multiple private label cards. More than 80% of cardholders in this credit range have more than one card, independent of type. About 39% of cardholding consumers in this group have only general purpose cards, while just 5% have only private label cards. The remaining 57% have both types.

---

<sup>10</sup> Table 1 includes all adult U.S. consumers, including those with a credit record but no credit score, as well as those with no credit score at all. More than 97% of consumers with a credit record but no score lack an open credit card. Once a consumer has a credit card, they are overwhelmingly likely to be assigned a credit score.

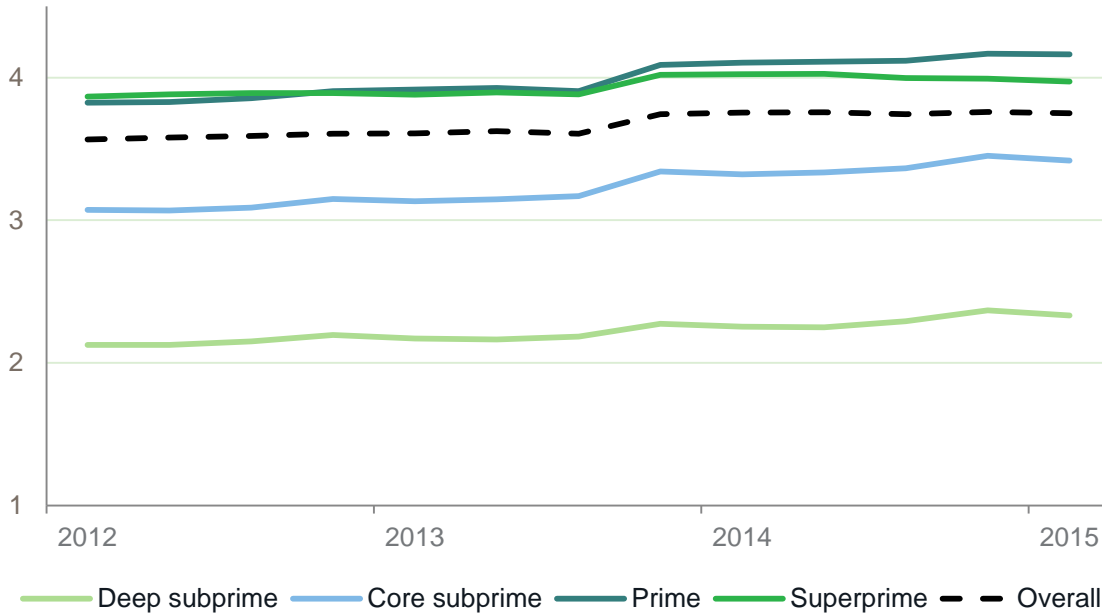
**TABLE 3: DISTRIBUTION OF CARDHOLDERS WITH PRIME OR SUPERPRIME CREDIT SCORES BY OPEN CREDIT CARDHOLDINGS, Q1 2015 (CCP)**

Private label			
General purpose	None	One	Multiple
None	NA	3%	2%
One	15%	6%	5%
Multiple	23%	17%	29%

The average American consumer credit cardholder has slightly fewer than four open credit cards. Figure 11 shows that this average has not changed significantly in the last few years. It also shows that there is significant variation in the number of cards by the credit score of the cardholder. Consumers with the lowest credit scores have, on average, the fewest number of cards, but the relationship between credit score and cardholding is not linear. Consumers with prime scores average only slightly more cards per consumer than consumers with superprime scores.



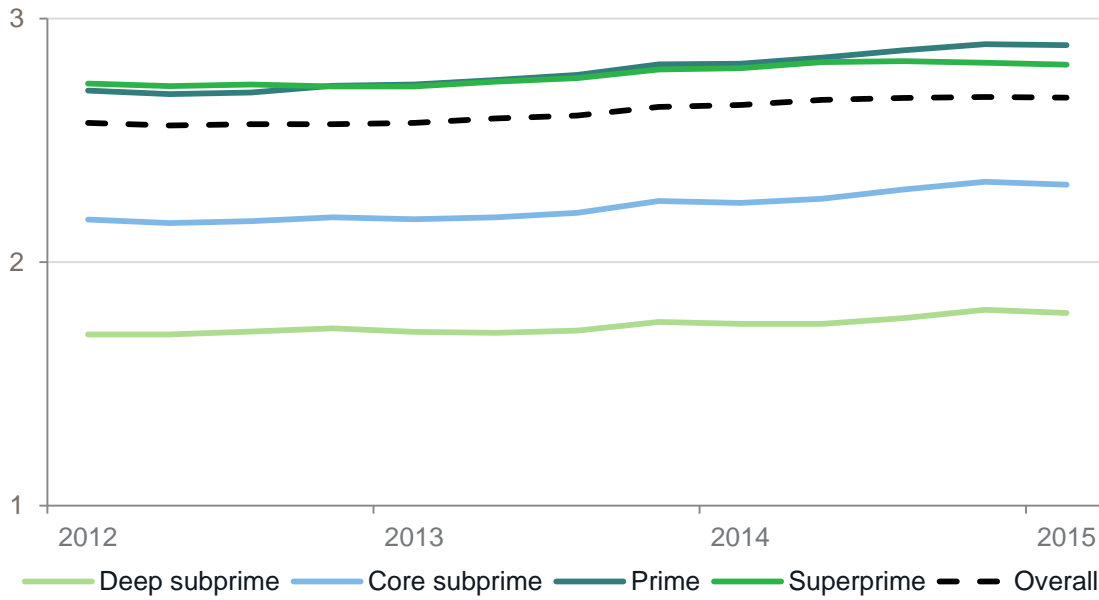
**FIGURE 11: AVERAGE NUMBER OF CARDS HELD PER CARDHOLDING CONSUMER (CCP)**



Figures 12 and 13 expand this analysis to show average cardholdings for general purpose and private label cards, respectively, by the credit score of the borrower. The average consumer who holds at least one general purpose card has consistently held about 2.6 such cards over the past few years. This number increases as credit scores improve, but there is little consistent difference between consumers with prime and superprime scores. Furthermore, even those consumers with a core subprime score who hold a general purpose card hold, on average, at least two cards. There have been no notable differences over the last few years.

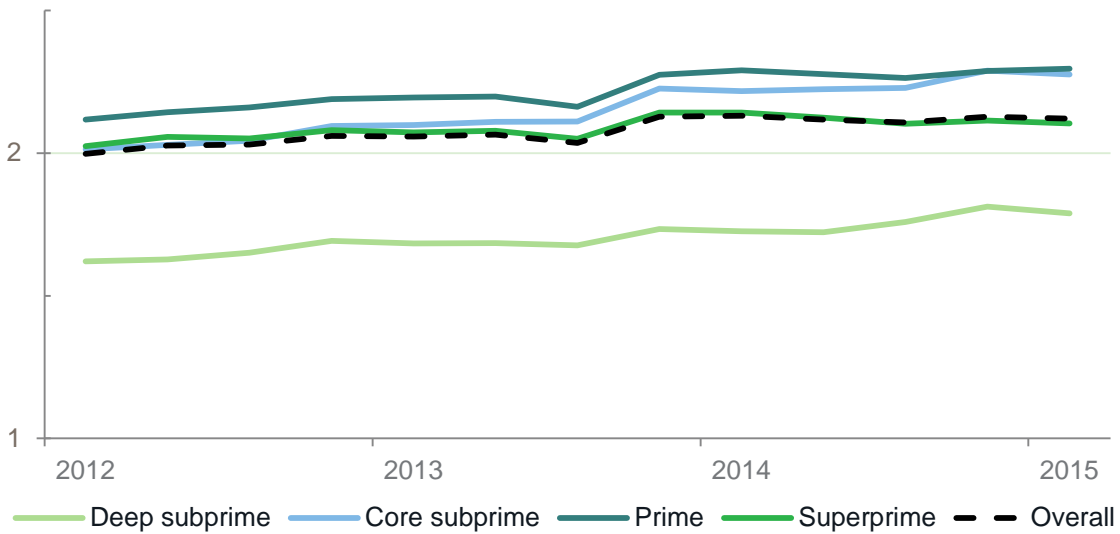
The patterns of private label cardholding are different. Holdings have been growing faster in recent years, both overall and across the range of credit scores. Additionally, consumers with core subprime scores have increased their private label cardholdings over recent years to the point where—on this metric—they now closely resemble consumers with prime scores. In addition, consumers with superprime scores now hold fewer private label cards, on average, than consumers with prime or core subprime scores.

**FIGURE 12:** GENERAL PURPOSE CARDHOLDERS' AVERAGE HOLDING OF GENERAL PURPOSE CARDS (CCP)



Figures 12 and 13 also show that while private label cardholding may generally skew towards borrowers with lower credit scores, consumers with subprime credit scores generally have similar general purpose and private label holdings. Consumers with subprime credit scores and who hold general purpose cards, on average, have around 2.2 such cards. Consumers with subprime scores who hold private label cards hold the same number of private label cards on average. Although the numbers are lower for consumers with deep subprime scores, at 1.7 cards on average, they are the same across general purpose and private label.

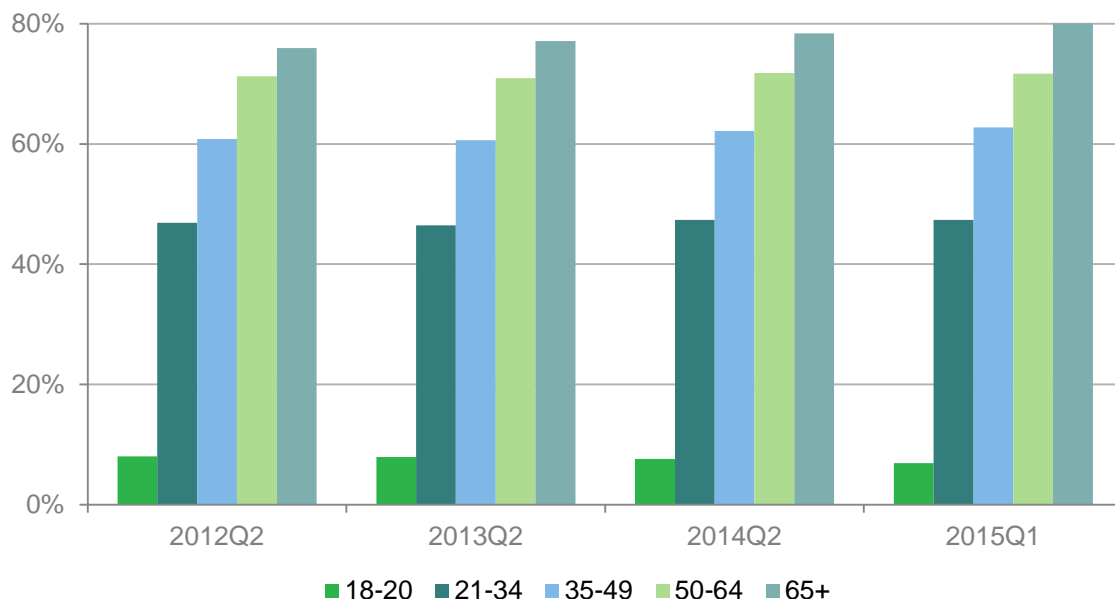
**FIGURE 13: PRIVATE LABEL CARDHOLDERS' AVERAGE HOLDING OF PRIVATE LABEL CARDS (CCP)**



### 2.2.2 By age

In the last few years, cardholding has remained relatively stable by age. Figure 14 shows the share of adults in a given age range who have at least one credit card. The only notable changes over time are a decrease in the share of consumers 18 to 20 years old with at least one credit card, and an increase in the share of consumers over the age of 65 with at least one credit card. We also examined the number of open credit card accounts held by consumers with a credit card in a given age range. As of March 1, 2015, cardholders age 18 to 20 have an average of 1.5 credit cards. The corresponding averages for consumers in the age ranges 21 to 34, 35 to 49, 50 to 64, and over 65 years old are 2.9, 3.9, 4.3, and 3.9, respectively.

**FIGURE 14:** SHARE OF CONSUMERS HOLDING AT LEAST ONE CREDIT CARD, BY AGE (CCP, U.S. CENSUS BUREAU POPULATION ESTIMATES)



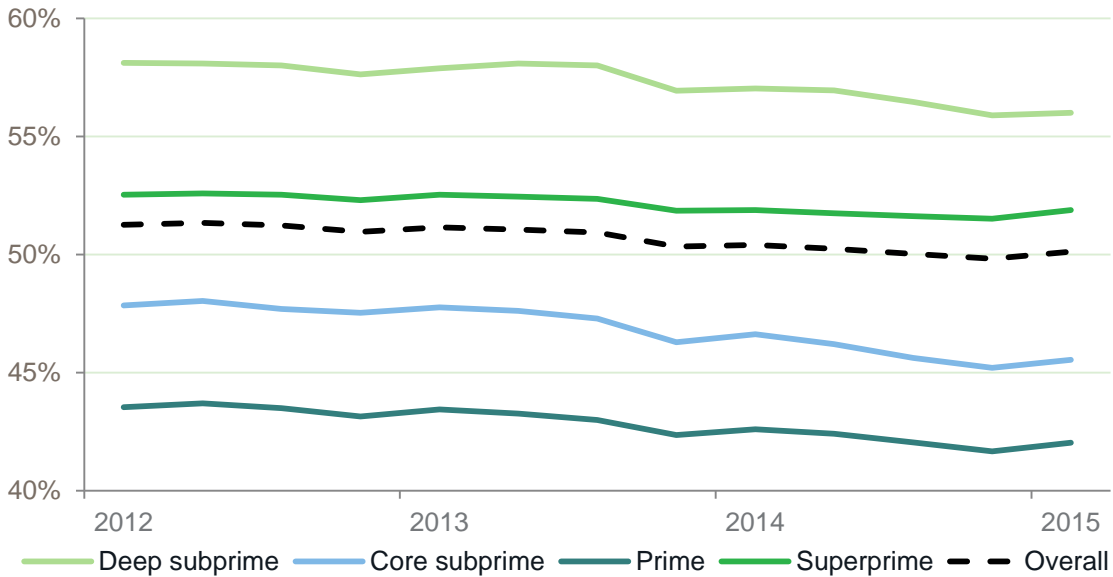
### 2.2.3 Concentration of balances

Although many consumers hold a range of credit cards, they still tend to concentrate their use onto a subset of those cards. To examine the concentration of use, we identified the share of consumers who concentrate more than 90% of their outstanding general purpose card balances on a single general purpose credit card (Figure 15). Almost exactly half of all consumers with at least one general purpose card record at least 90% of their total general purpose balances on a single card. This includes consumers who despite having a general purpose card carried no balances at all in that quarter. According to data in the CCP, about one in seven consumers with a general purpose card fell into that category in a given quarter.

Patterns of balance concentration differ between consumers with different credit scores. Consumers with the very lowest and very highest scores record above-average concentration, whereas consumers with scores nearer the center of the scale record the lowest concentration. This may be due to how supply and demand changes across credit risk tiers. As seen above, consumers with deep subprime scores tend to hold fewer general purpose cards than other consumers. As a result, they may not have the option to select between cards for individual purchases or to carry specific balances. Consumers with superprime and prime scores, while

holding similar numbers of cards on average, show very different patterns of concentration, which may be the result of different patterns of usage.

**FIGURE 15:** SHARE OF CONSUMERS WITH AT LEAST 90% OF THEIR TOTAL GENERAL PURPOSE BALANCES ON A SINGLE CARD (CCP)



## 2.3 Card payment behavior

### 2.3.1 Transactors and revolvers

Credit card users are commonly divided into two groups: transactors and revolvers. Transactors pay their balance in full every month. Almost all consumer credit cards offer a “grace period” that allows the account holder to pay no interest on purchases so long as the balance is paid in full. Transactors, therefore, almost never pay interest charges on purchases made with the card. (Grace period practices are described in more detail in section 3.) Revolvers, by contrast, use a

credit card as a credit instrument by carrying a balance from one month to the next and, as a result, generally pay interest charges for the associated extension of credit.<sup>11</sup>

The line between the two categories is porous. For example, a cardholder who generally transacts with a given account may make a late payment or even miss a payment in a given month, and thereby incur finance charges. This may be due to inadvertence on the part of the cardholder, or it may reflect the cardholder's decision to use the credit card as a credit instrument for that month by deliberately revolving the balance. Conversely, a revolver may sometimes repay the full balance and thus become a transactor for a period of time.

Categorizing accounts as revolving or transacting, therefore, requires some operating assumptions.<sup>12</sup> For the purposes of Figures 16 and 17, which show the share of revolving accounts by card type over time, we assume that an account is transacting if the account was paid in full in the prior two billing cycles. All other accounts are revolving unless the account was not used to revolve or transact in the prior two months.<sup>13</sup> Figure 16 shows that the transacting share of general purpose accounts has increased in the wake of the recession and the CARD Act. As indicated in Figure 17, private label accounts also show an increase in transacting incidence over this period, although it is smaller.

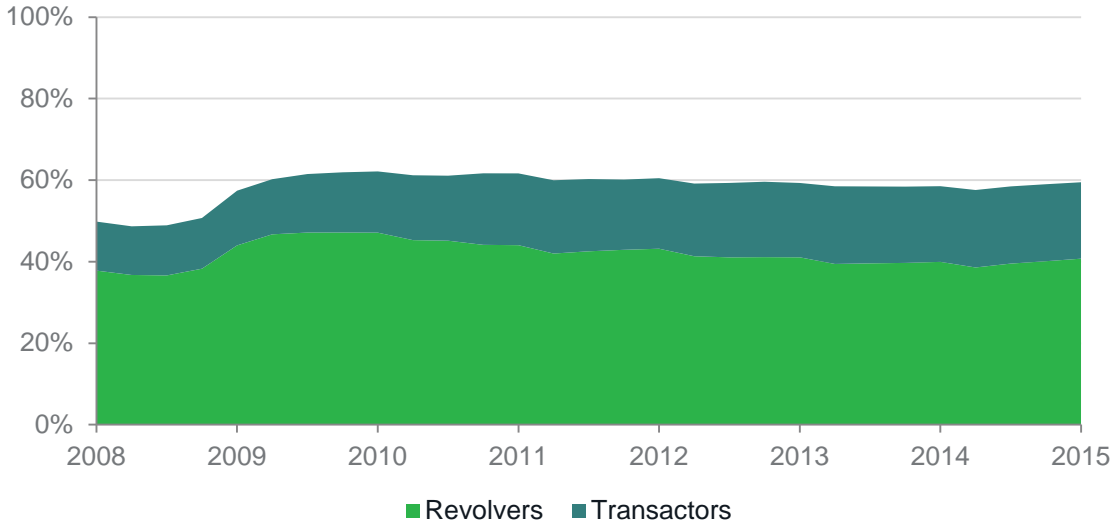
---

<sup>11</sup> Note that our definition of a revolver includes all consumers who revolve credit, even if they are benefiting from a promotional period that exempts them from finance charges. Bureau data indicate that at least a fifth of general purpose cards have some introductory rate for at least some period following their origination. In addition, cards may also have promotional deferred interest balances, in which case interest is only assessed in full at the conclusion of the promotional period if the initial promotional balance is not paid in full.

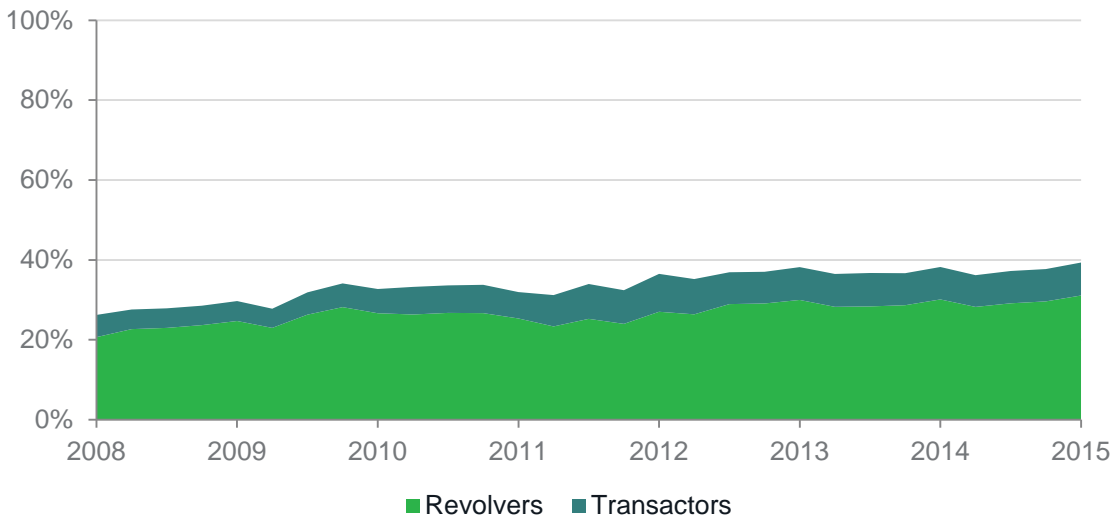
<sup>12</sup> As noted above, the CCDB is an account-level, not consumer-level, database; therefore we are only able to assign accounts, not consumers, to this category. If two accounts, one transacting and one revolving, are held by the same consumer (who would thereby generally be defined as revolving), we would have no way of identifying them as such, and therefore we can only classify each individual account accordingly.

<sup>13</sup> These definitions apply throughout the report to all other CCDB analysis which takes this distinction into account. However, accounts not classified as either revolving or transacting should not be considered "inactive." For example, the CCDB utilizes a broader definition of "active accounts" which extends back further than the most recent two months of an account's behavior.

**FIGURE 16: GENERAL PURPOSE ACCOUNTS IN THE CCDB REVOLVING OR TRANSACTING**



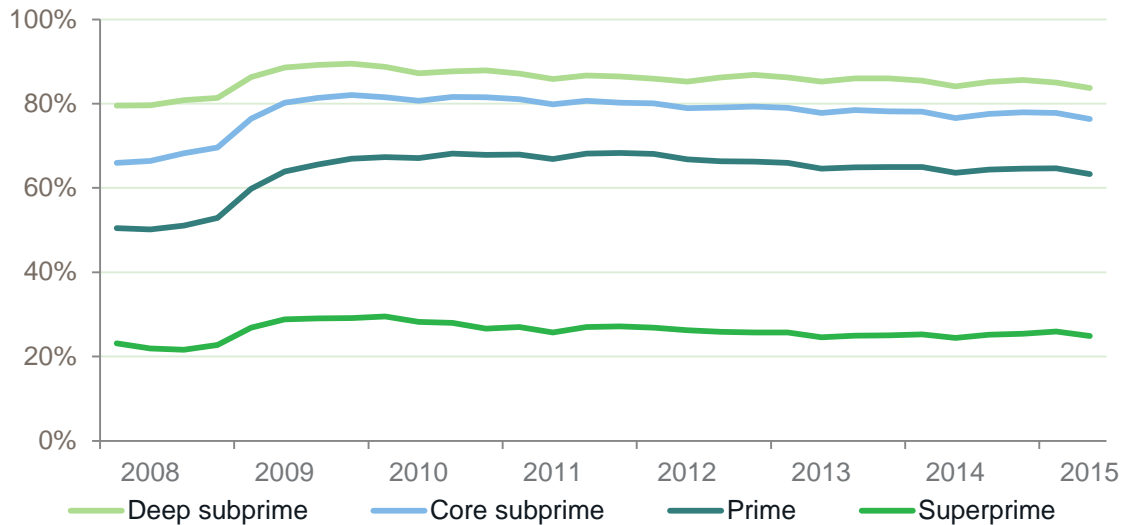
**FIGURE 17: PRIVATE LABEL ACCOUNTS IN THE CCDB REVOLVING OR TRANSACTING**



The data above do not reveal the rate at which consumers shift accounts from one category to another. Preliminary Bureau research (not shown here) indicates that there is a strong month to month persistence in an account's revolver or transactor status. In fact, the revolving or

transacting status of an account in any one month appears to be the primary correlate of its status in the next month. For accounts in general, an account is more likely to revolve as the balance on the account increases, but the relationship is not as pronounced.<sup>14</sup>

**FIGURE 18:** SHARE OF GENERAL PURPOSE ACCOUNTS IN THE CCDB REVOLVED, BY CONSUMER CREDIT SCORE



The likelihood that an account revolves also ties closely to the credit score of the borrower. Figure 18 shows that the vast majority of general purpose accounts held by consumers with subprime credit scores are revolving. General purpose accounts held by consumers with deep subprime scores revolve at a rate of between 80% and 90%. Accounts held by consumers with core subprime score revolve at only a slightly lower rate, closer to 75%.<sup>15</sup>

<sup>14</sup> In addition, the relationship between balance size and revolving status does not appear to be uniform across borrowers with different credit scores. There are indications that, within the population of consumers with high credit scores, increased debt actually decreases the likelihood that a consumer revolves rather than transacts.

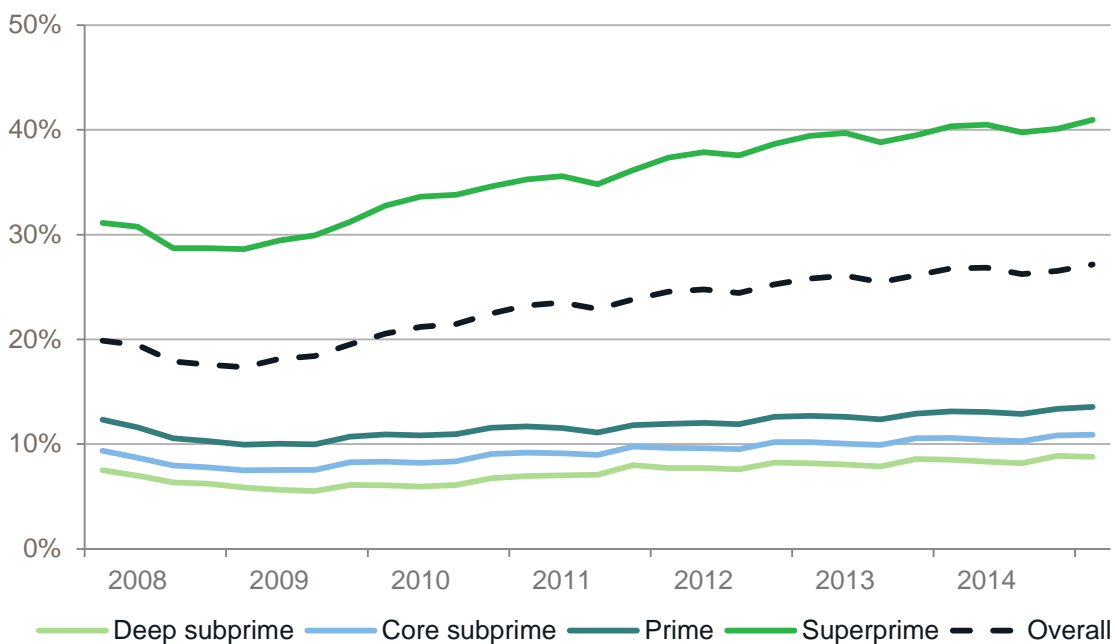
<sup>15</sup> The rate at which balances are revolved is slightly lower for private label cards, both overall and for consumers in different credit score ranges. However, the same overall pattern holds: the higher the credit score, the lower the rate at which balances are revolved.



## 2.3.2 Payment rates

Payment rate data provides an additional measure of consumer reliance on credit cards as a source of credit. Transaction rates refer to how many accounts pay their balance in full in a given period. Payment rates, by contrast, refer to the share of total cycle-beginning balances that are paid in a given billing cycle. A payment rate of 100% corresponds to all accounts transacting, and a payoff rate of 0% indicates that no credit card bills are paid even in part.

FIGURE 19: MONTHLY PAYMENT RATE FOR ACCOUNTS IN CCDB



Prior to the recession, monthly payment rates were at around 20% overall. After falling during the onset of the recession, they have not only rebounded since 2009, but have moved to around 27% by the beginning of 2015. Figure 19 shows this trend, as well as variations in the rate by the credit score of the borrower. Accounts held by consumers with superprime credit scores have significantly higher payment rates than all other accounts. Despite this difference, consumers in every credit score range have seen their payment rates not only increase from their recessionary levels, but increase beyond the levels in place before the recession.

It is unclear precisely what combination of factors has contributed to the change in payment rates relative to the pre-recession norm—or how long the change will endure. It is possible that some consumers, shocked by the recession, now choose to pay more of their balances. It is also

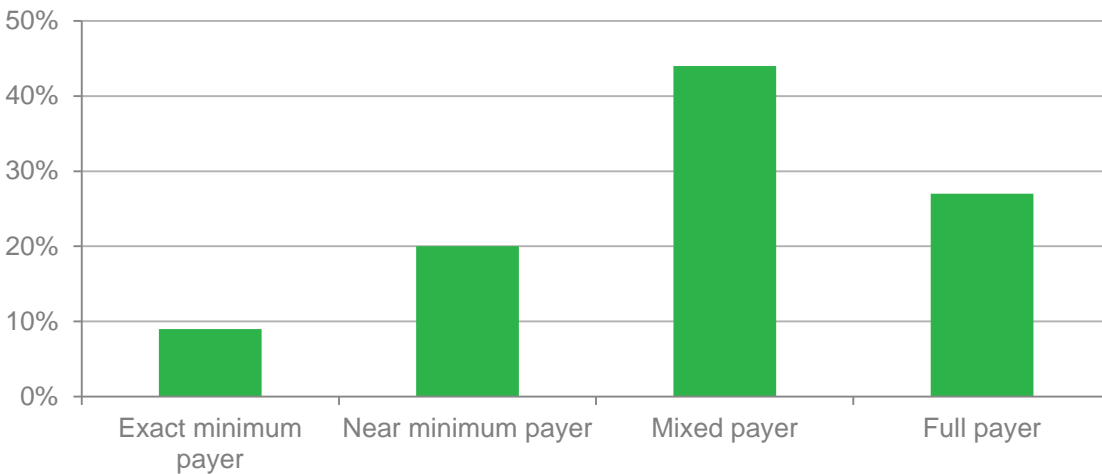
possible that some of the regulatory changes created by the CARD Act, such as clearer due dates, new ability to pay rules, and restrictions on fees, have made better payment rates easier for some consumers to achieve. Tighter credit conditions, as well as account closures and charge-offs, may also have changed the profile of credit card consumers. Whatever the precise cause, or combination of causes, improved payment rates—even as purchase volume and outstandings have grown—lower the risk of consumer harm in this market.

### 2.3.3 Payments behavior

Minimum payments are a feature of all consumer credit cards. We discuss different minimum payment approaches used by issuers in more detail in section 5.2.5. In this subsection, however, we review consumer behavior with respect to minimum payments.<sup>16</sup>

Data from the CCDB show that, on average, in any given month, about 15% of accounts make exactly the minimum payment. Another 19% pay near (and above) the minimum amount, and a third of accounts pay in full. The remainder either pays under the minimum or some intermediate amount between full and near-minimum.

**FIGURE 20:** SHARE OF GENERAL PURPOSE ACCOUNTS IN THE CCDB BY PAYMENT BEHAVIOR, 2008-2014



<sup>16</sup> This section is based on an analysis carried out by Benjamin J. Keys & Jialan Wang. See Keys & Wang, *Minimum Payments and Debt Paydown in Consumer Credit Cards* (Working Paper Aug. 2015).

These results, however, do not show accountholder behavior *over time*. As reflected in Figure 20, the same CCDB data show that over a defined period about 9% of accountholders pay exactly the minimum *in most months*.<sup>17</sup> About 20% pay close to, but slightly above, the minimum payment in most months. About a quarter of accounts pay in full in most months. The 44% of accounts not falling into one of these categories are categorized as “mixed pay” accounts.<sup>18</sup> Overall, therefore, Figure 20 shows that about 56% of accountholders have a predominant payment pattern over time of paying either in full or at (or near) the minimum.

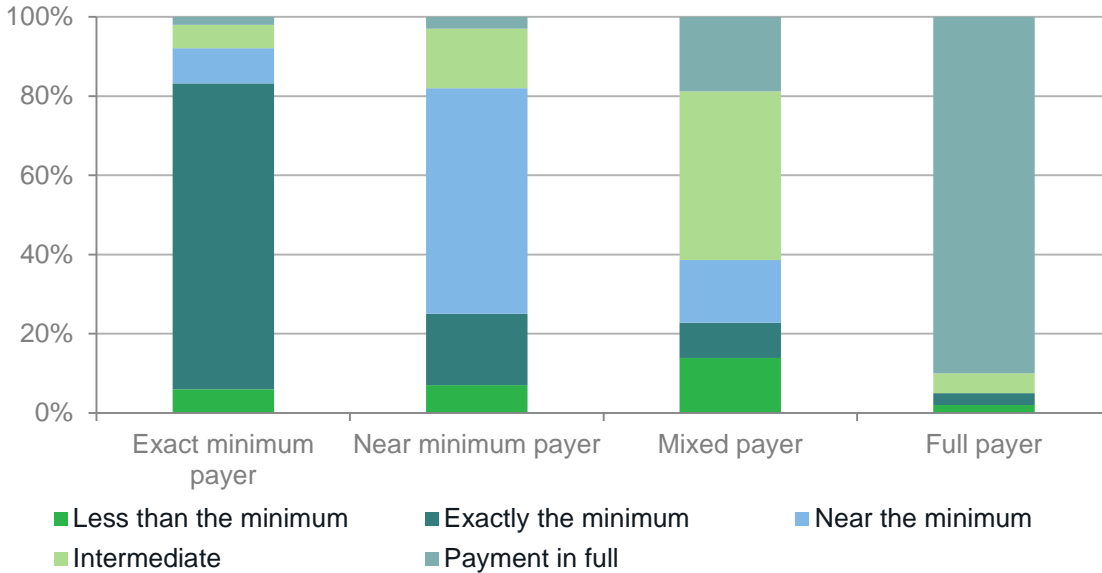
This result, however, actually understates the degree to which payments are concentrated at either end of the scale. First, as reflected in Figure 21, “exact minimum pay,” “near minimum pay,” and “full pay” accounts exhibit high levels of persistent behavior over time. For example, nearly 80% of the payments made by “exact minimum pay” accounts are exactly at the required minimum. Similarly, some 90% of payments made by “full pay” accounts are full payments. Conversely, Figure 21 also shows that even on mixed pay accounts, most payments are actually either payments in full or payments at or near the minimum.

---

<sup>17</sup> The defined period covered 2008 through 2014. For accounts that were not actively being paid on for that full period, the analysis is limited to the periods for which payments were made.

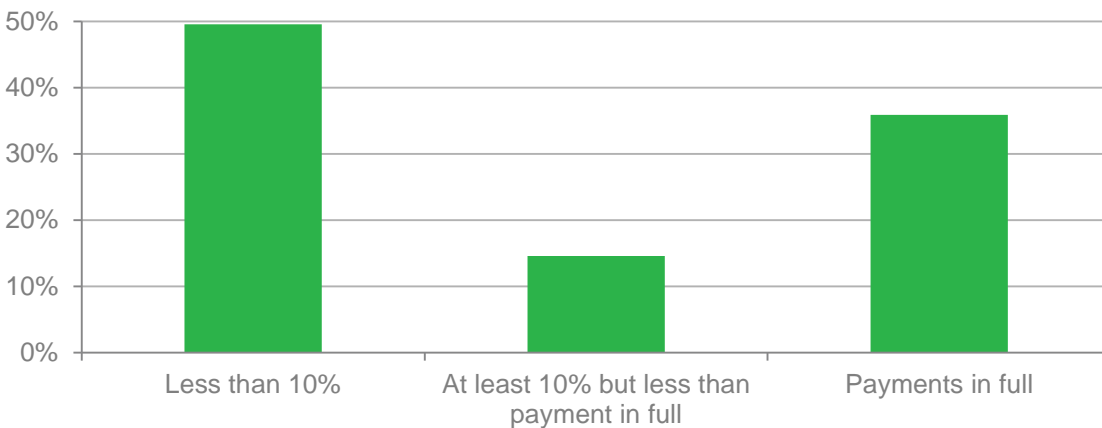
<sup>18</sup> These data only examine a subset of issuers representing a quarter of all general purpose outstandings.

**FIGURE 21: PAYMENT BEHAVIOR BY ACCOUNT TYPE, 2008-2014**



Furthermore, the distribution of payment amounts is more skewed towards low or high payments. Figure 22 shows the shares of overall dollar payment volume from 2008 to 2014 that are for: (a) under 10% of the balance of the account; (b) for 10% or more, but less than 100%, of the balance on the account; or (c) for 100% of the balance on the account. Almost all payments fall into the low or high payment categories. Only 15% of payments by dollar volume are for payments between these two categories.

**FIGURE 22: DISTRIBUTION OF PAYMENT AMOUNTS ACROSS HIGH, LOW, AND INTERMEDIATE PAYMENTS, 2008-2014**

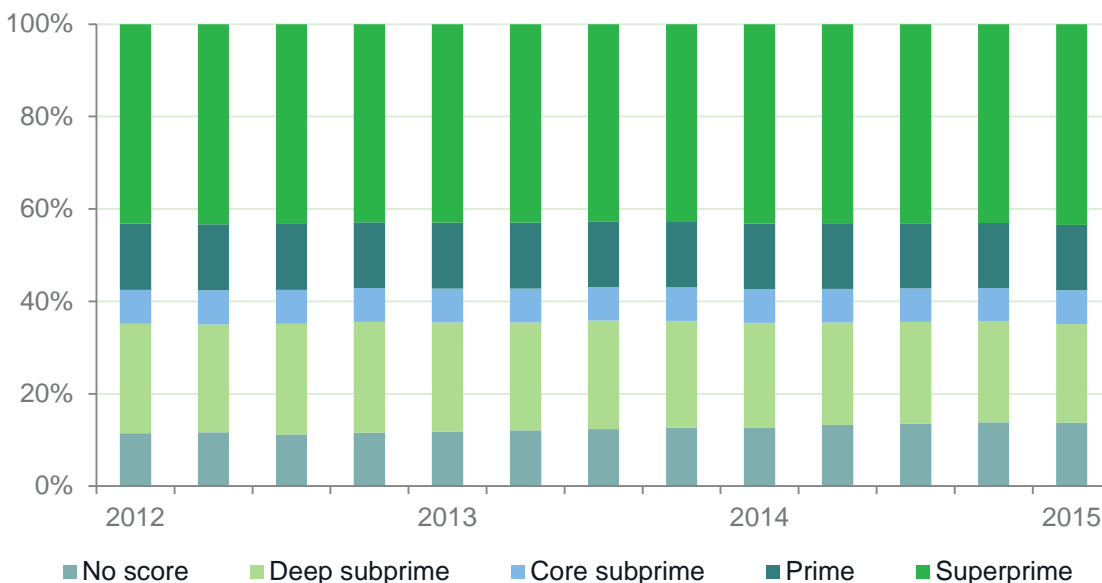


## 2.4 Credit score changes over time

In this report, we often use credit score as a primary control in our analyses. In general, we use “refreshed” credit scores in order to pick up changes in accountholders’ scores over time. For example, in Figure 19 just above, an account would be classified as held by a consumer with a superprime score in a given period if the consumer who held it had such a score in that period, regardless of what score they had when they originated the account. In interpreting credit score-related data, therefore, it is important to bear in mind that the credit scores of cardholders are shifting over time. Credit reporting agencies continually recalculate scores and credit card issuers regularly refresh the credit score data for their customer base. (In fact, this regular process has enabled an important recent innovation in credit score disclosure to consumers, which we discuss in more detail in section 5.4.)

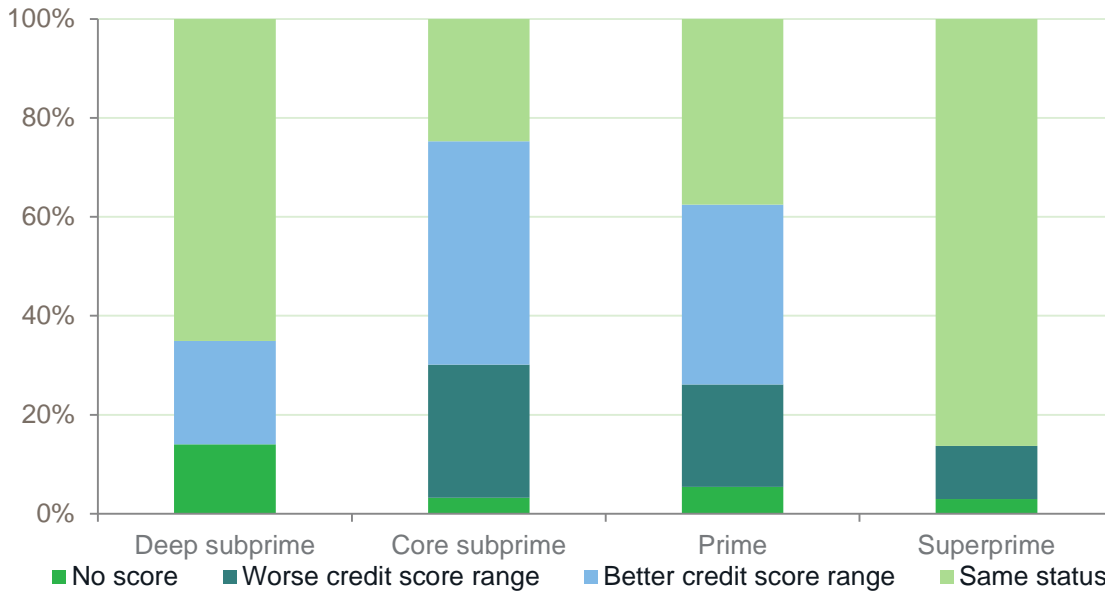
Viewing consumers collectively can obscure the change in consumer scores over time. Looking only at the 2012 through 2014 period, for example, the distribution of scores for consumers with a credit record looks static, as Figure 23 shows. This picture, however, is at least in part the result of considerable movement by consumers from one credit range to another.

**FIGURE 23:** SHARE OF CONSUMERS WITH A CREDIT RECORD WITHIN EACH CONSUMER CREDIT SCORE RANGE (CCP)



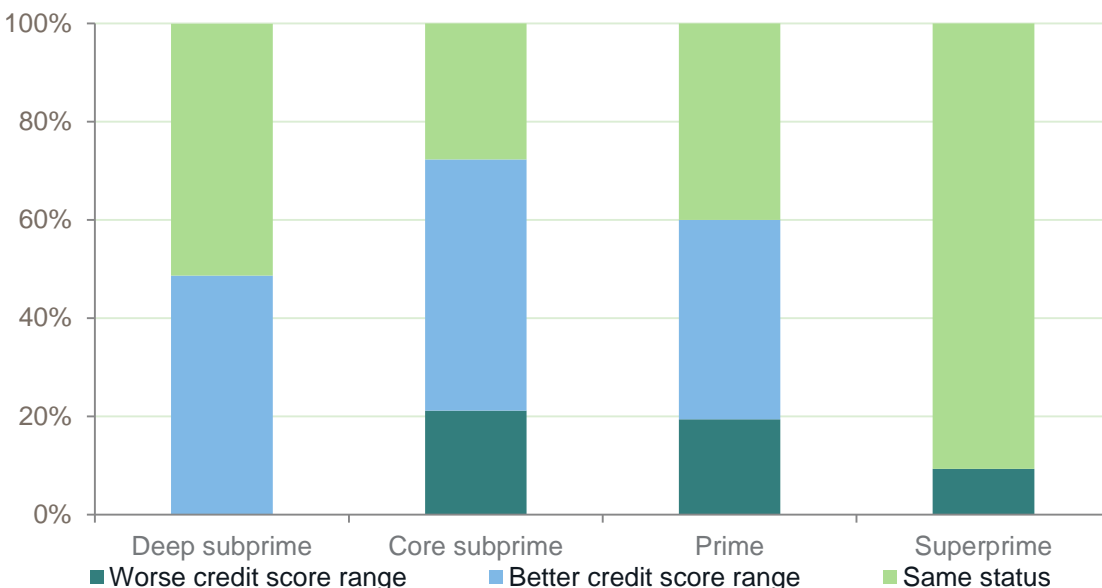
To illustrate that movement, Figure 24 shows credit scores at the end of 2014 for consumers who were in different score ranges at the beginning of 2012. Each bar represents a different credit score range for a consumer at the beginning of 2012. Within the bars, each segment shows where the credit score for consumers in that range at the beginning of 2012 ended three years later: with no score at all, a worse score, the same score, or a better score.

**FIGURE 24: CONSUMER CREDIT SCORES, Q1 2012 COMPARED TO Q4 2014 (CCP)**



Looking at consumers overall, around two-fifths had a different status at the two points at which we observed them. Part of that change was driven by consumers gaining scores when they had none before or by consumers losing a score completely. But even among that subset of consumers who both began and ended the period with a credit score, over a quarter had a score that put them in a different credit score range at the beginning and end of this three-year period. While some of that movement may represent relatively small changes in credit score for consumers with scores close to the boundaries of the ranges we used, almost a quarter of those consumers who we observed with different statuses had non-adjacent statuses in the two observed periods, suggesting a substantial change in credit score status.

**FIGURE 25: CARDHOLDER CREDIT SCORES, Q1 2012 COMPARED TO Q4 2014 (CCP)**



This picture looks different when analyzing only cardholders. Almost none of these consumers moved into a state of scorelessness. In addition, viewed through the lens of these limited parameters, cardholders generally showed more improvement in credit scores than the scored population as a whole.

These results do not necessarily represent continuous trends in credit score migration over time. Rather, they should be seen as illustrative of a general phenomenon: consumer credit scores are dynamic. Given month-to-month movements in a consumer’s credit scores, it is possible that the change shown might vary considerably even with only marginally adjusted time parameters.

## 2.5 Delinquency and charge-off rates

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. Section 8 reviews issuer practices in connection with efforts to collect delinquent and charged-off credit card debt. In this subsection, we provide a summary review of delinquencies and charge-offs in the consumer credit card market.

Delinquency rates continue at historic lows. Figure 26 shows the share of credit card accounts that are at “60+ delinquent”—meaning that they have been delinquent for over 60 days, and therefore at least three billing cycles. Delinquency rates on general purpose cards have fallen substantially from their pre-recession levels. For private label cards, which traditionally have a lower delinquency rate at the account level, there has also been a fall from pre-recession levels, but it is smaller. Figure 27 shows the same data for delinquent balance amounts. The private label balance delinquency rate exceeds the general purpose balance delinquency rate, and the fall from pre-recession levels has been steeper for both card types. A similar shift is evident for charge-offs, as reflected in Figure 28.<sup>19</sup>

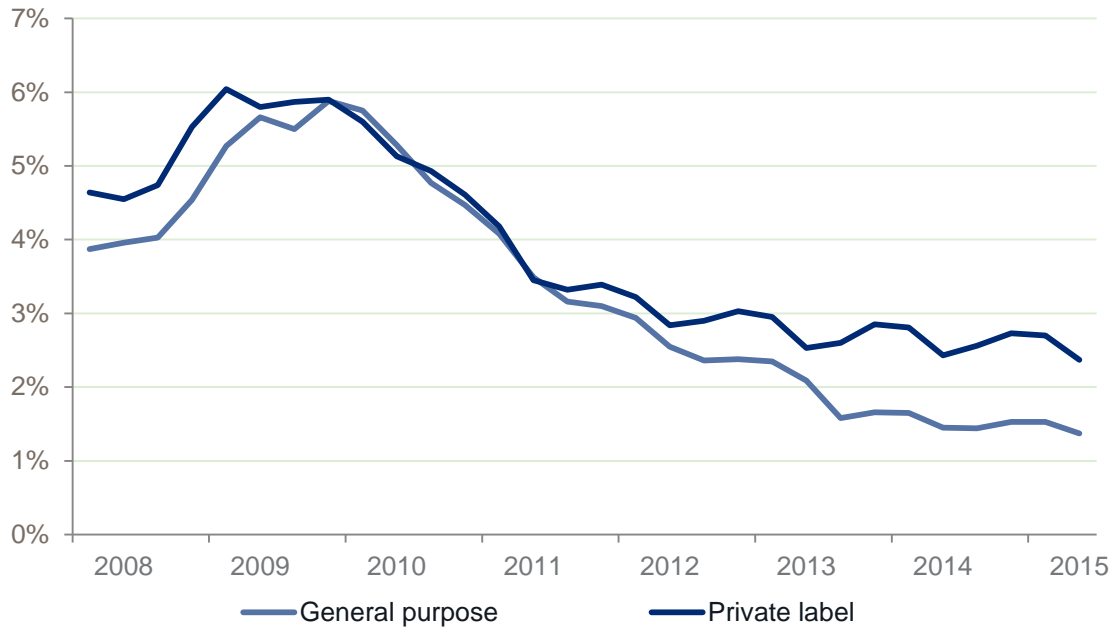
**FIGURE 26: SHARE OF ACCOUNTS IN THE CCDB THREE OR MORE CYCLES DELINQUENT**



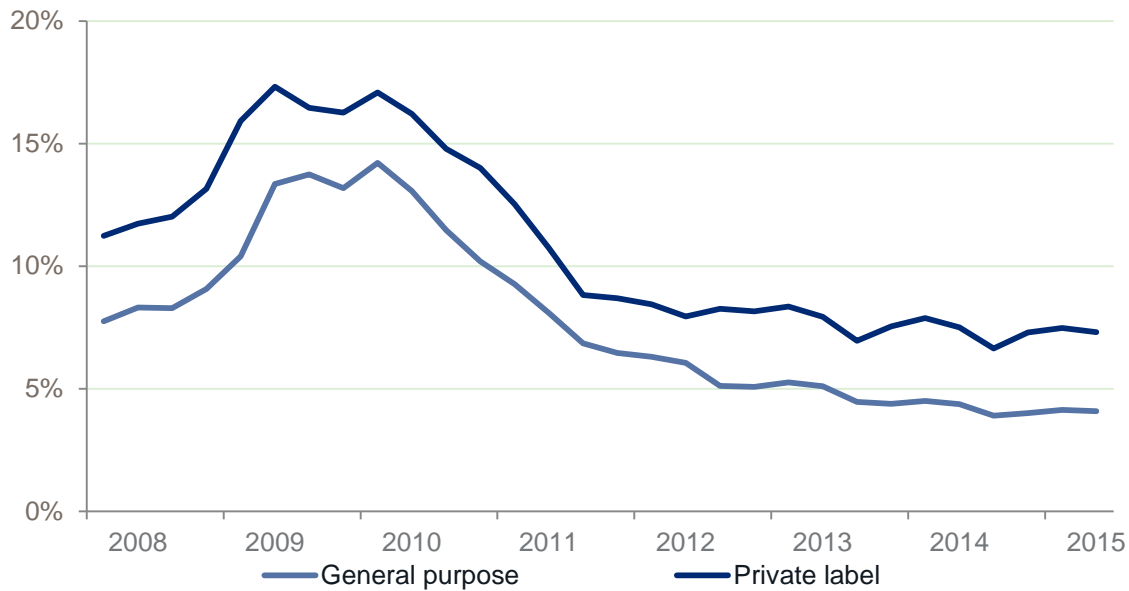
<sup>19</sup> We do not show delinquency and charge-off data by credit score because these events themselves can have a large impact on that score. While credit score at account origination is predictive of future delinquency and charge-off, that point is not actually demonstrated by examining the cardholder’s credit score once severe delinquency is already underway.



**FIGURE 27: SHARE OF BALANCES IN THE CCDB THREE OR MORE CYCLES DELINQUENT**



**FIGURE 28: ANNUALIZED RATE OF GROSS OUTSTANDING BALANCES IN THE CCDB CHARGED OFF**



Delinquency and charge-off rates are significantly higher on accounts from subprime specialist issuers. For both 2013 and 2014, the 60+ delinquency rate for balances on these accounts was slightly higher than it was for all balances on mass market accounts at the depth of the recession. Charge-off rates for these issuers in 2013 and 2014 were also significantly worse than

they were for mass market issuers, but they were actually below the worst charge-off rates realized by mass market issuers during the recession.

The continued improvement to the economy overall—and to the job market in particular—is one key driver for the decline in delinquency and charge-off rates.<sup>20</sup> Other contributing factors may include tighter lending criteria put in place in the wake of the recession, as well as the closure of riskier accounts in the downturn. Changes in consumer behavior, such as the improvement in payment rates discussed earlier, may also play a role.

---

<sup>20</sup> Appendix Figures 2 and 3 overlay otherwise-identical versions of Figures 27 and 28 with the Bureau of Labor Statistics' U3 unemployment rate over the same period, which closely tracks the declines in delinquency and charge-off rates.

## 3. Cost of credit

The CARD Act directs the Bureau to report on the costs of credit cards to consumers. As we did in our first report, we address the main components of consumer cost—fees and interest. We also assess overall costs to consumers using our established “total cost of credit” measure. The CCDB is the main data source for this section of the report.

In the CARD Act, Congress specifically indicated that our review should—within the limits of existing resources—cover the cost of credit cards to borrowers with lower credit scores. Accordingly, we break out our cost metrics according to the credit score of the borrower associated with the account. (As discussed above, the CCDB data do not and cannot identify any borrower.)

In addition, we provide cost data from a range of specialist issuers that focus on providing credit card accounts to consumers with the weakest credit scores. We refer to these issuers as “subprime specialist issuers” or “SSIs”. It is important to note, however, that these issuers represent a minority experience for consumers with subprime credit scores. In 2013 and 2014, they comprised less than a quarter of all accounts originated to consumers with subprime scores. Comparing their accounts and balances as of the end of 2014 to all those held by consumers with subprime scores, they are equivalent to only 17% and 6%, respectively.<sup>1</sup> Consequently, the subprime specialist results are *not* typical of the consumer credit card experience of cardholders with subprime credit scores.

---

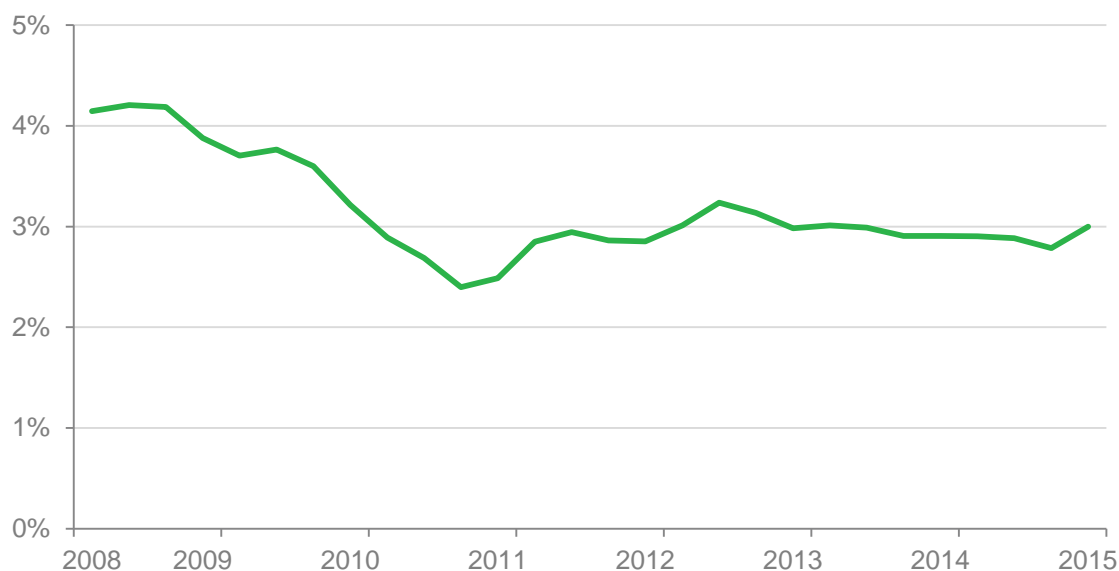
<sup>1</sup> Our data do not allow us to precisely identify the share of these issuers’ accounts and balances which are held by consumers with subprime scores. Fully one quarter of their originations were made to consumers other than those with subprime scores.

## 3.1 Fees

### 3.1.1 Total fees

The CARD Act did not prohibit any credit card fees, but it imposed a number of substantive controls on back-end “penalty” fees, such as late fees and overlimit fees.<sup>2</sup> In addition, the Act capped the total sum of certain fees that can be assessed during the first year that an account is open. These controls continue to have a major impact on pricing to consumers, as reflected in the available data on total fees.

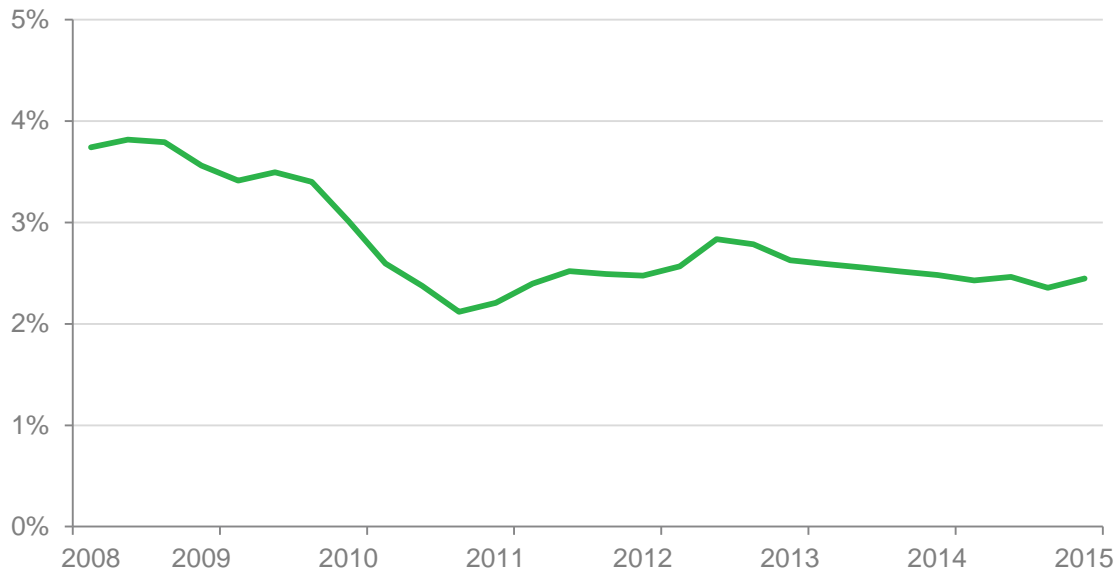
**FIGURE 1:** TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, ALL ACCOUNTS IN THE CCDB



---

<sup>2</sup> Throughout this and subsequent sections, we make broad reference to “the wake of the CARD Act.” The rules implementing the various provisions of the Act were, in fact, finalized and became effective at several different points following the passage of the law. A timeline containing all these particulars can be found in Appendix B.

**FIGURE 2:** TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, REVOLVING ACCOUNTS IN THE CCDB



Fees are a major component of the total cost to consumers of using credit cards. As of 2014, they accounted for just over one-fifth of the total cost of credit. Figure 1 shows that, as a percentage of balances, consumer credit card fee costs have largely remained unchanged since their overall decline since the CARD Act was implemented. We provide the fee calculation for consumers who revolve credit card balances and for all credit card consumers combined.<sup>3</sup>

Our last available measure, which is from the first quarter of 2015, puts fees incurred by revolvers at an annualized 2.4% of cycle-ending balances. That is slightly above the lowest measure that we have identified since we began monitoring in 2008, which was 2.1% from the fourth quarter of 2010. But it is still significantly below pre-CARD Act levels. The same general trend is true for all credit card consumers overall.

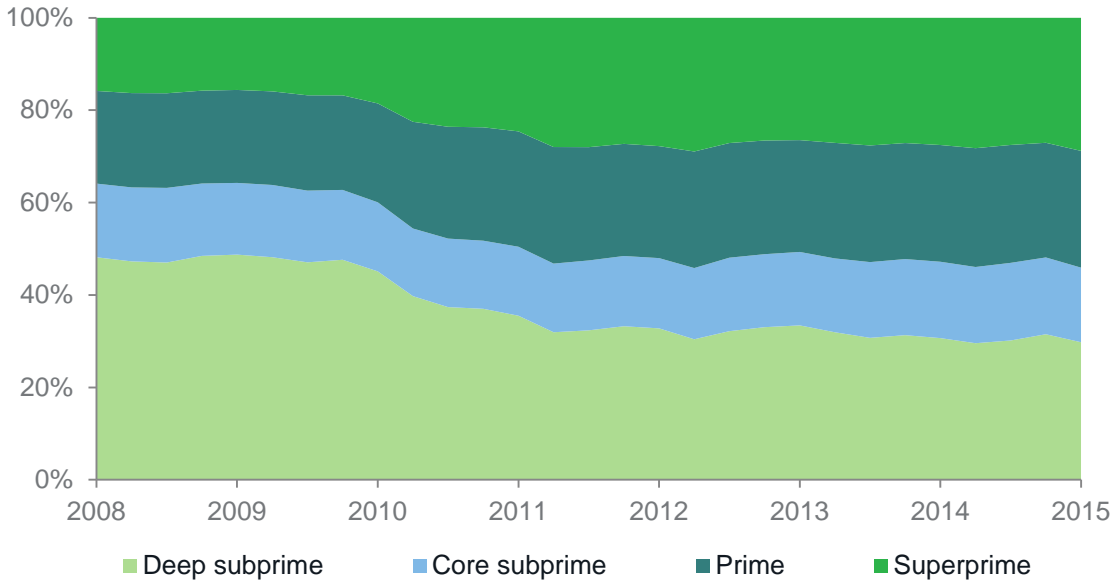
Fees have not simply declined overall since the CARD Act was implemented. The relative and absolute burden of fee costs has shifted away from consumers with the lowest credit scores. Figure 3 shows that consumers with subprime credit scores now bear a significantly lower share

---

<sup>3</sup> Revolvers incur about three quarters of all consumer fees on credit cards. See section 2 for our definition of revolver.

of revolvers' fees than they did before the CARD Act became effective. In the first quarter of 2008, consumers with subprime credit scores incurred more than 64% of all fees assessed to revolvers. By the first quarter of 2015, that had fallen to around 46%.

**FIGURE 3:** SHARE OF TOTAL FEES INCURRED BY REVOLVING ACCOUNTS IN THE CCDB, BY CONSUMER CREDIT SCORE



Given the overall decline in fee costs and the loss of fee share borne by consumers with subprime scores, we would expect to see that absolute fee costs to consumers with subprime scores have also declined. Figure 4 shows this to be the case. Although the absolute fee burden of consumers with deep subprime scores has risen from its low in the first quarter of 2011, at an annualized 7% of cycle-ending balances, it is still well below pre-CARD Act levels. Consumers with core subprime scores have seen a smaller but relatively steady decline in their fee burden as well.

**FIGURE 4:** TOTAL FEES INCURRED AS AN ANNUALIZED % OF CYCLE-ENDING BALANCES, REVOLVING ACCOUNTS IN THE CCDB

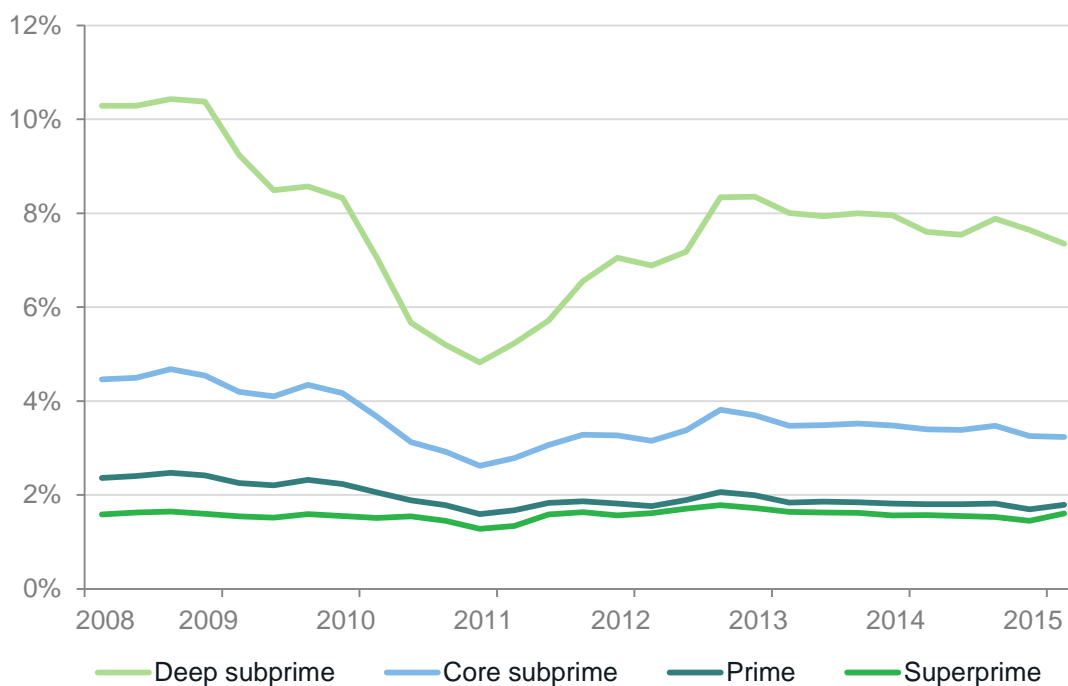


Figure 4 depicts results for the overwhelming share of the consumer credit card market for consumers in all credit score ranges. Consumers of subprime specialist products, however, face a significantly different fee burden. Based on the subprime specialist data, we estimate that cardholders with open accounts from these issuers incurred fees during each of 2013 and 2014 that exceeded 20% of year-end outstandings. (Figure 16 below contains additional details on this point.)

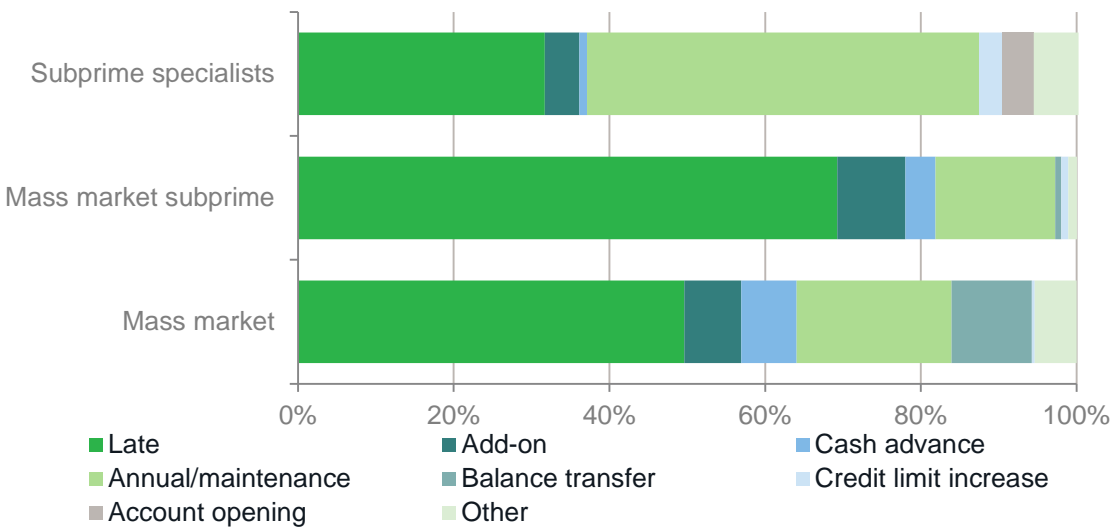
### 3.1.2 Fee composition and reliance

In the two years covered by the data available to us, subprime specialist issuers also place far more overall reliance than the mass market issuers on fees as a source of revenue. Over the course of 2013 and 2014, the mass market issuers in the CCDB obtained just over 80% of their consumer-sourced revenue from interest charges and only 20% from fees. The subprime specialists, by contrast, obtained 58% of their consumer-sourced revenue from fees over this same period. Interest accounted for only 42% of consumer-sourced revenue.

The mass market issuers also relied on a very different fee mix. Figure 5 below depicts fee shares for general purpose accounts in 2013 and 2014 for these issuers. Late fees are the largest data source for the mass market issuers. Account maintenance fees—primarily annual fees—are the next largest category, but they account for an amount less than one half of that earned from late fees. Balance transfer, cash advance, and add-on fees are the other significant categories.<sup>4</sup>

As Figure 5 shows, the smaller subprime specialist players have a distinctly different fee mix. Account maintenance fees—such as annual or monthly fees—are their single largest category. Late fees are significant, but represent a much smaller share of total fees than they do for the mass market issuers. Although counting for much smaller shares, account opening or application fees and credit line increase fees are significant categories for the subprime specialists that have no real analog among the mass market issuers.<sup>5</sup>

**FIGURE 5: FEE SHARES FOR MASS MARKET, MASS MARKET SUBPRIME, AND SUBPRIME SPECIALISTS GENERAL PURPOSE ACCOUNTS, 2013 AND 2014 (CCDB, SSI)**



<sup>4</sup> Any fee category below 1% of total fees in this period is incorporated into “other.” This is true for both Figures 4 and 5.

<sup>5</sup> Some commenters urge the Bureau to impose additional limits on “pre-account opening” fees, as well as fees assessed after the first twelve months of an account being open. See National Consumer Law Center Comment Letter (May 18, 2015) 4-5; see also Reinvestment Partners Comment Letter (May 18, 2015) 1-2.



### 3.1.3 Specific fees

#### **OVERLIMIT FEES**

Issuers generally approve credit card accounts for a line of credit capped at a specific amount.<sup>6</sup> Prior to the effective date of the CARD Act it was a standard practice for issuers to authorize transactions that exceeded the amount of this specified credit line—and generally to charge consumers for doing so.<sup>7</sup> By 2008, average overlimit fees were approaching \$35.

As detailed in our prior report, issuers generally stopped charging overlimit fees in the wake of the CARD Act. The Act did not, in fact, prohibit these fees, but it conditioned their assessment on the consumer agreeing to pay a fee in return for the issuer allowing overlimit transactions. It also required that the fees assessed be “reasonable and proportional” to the violation of the line limit.<sup>8</sup> Those rules apparently were enough to severely restrict the practice of charging overlimit fees.

---

<sup>6</sup> Some cards come with no preset limit, but they are a minority of accounts.

<sup>7</sup> Overlimit fees were typically incurred either immediately upon any individual transaction causing the balance to exceed the account’s credit limit or on the basis of whether the cycle-ending balance exceeded the account’s credit limit.

<sup>8</sup> 15 U.S.C. § 1661d(a)

**FIGURE 6:** TRENDS IN OVERLIMIT FEES, ACTIVE ACCOUNTS IN CCDB

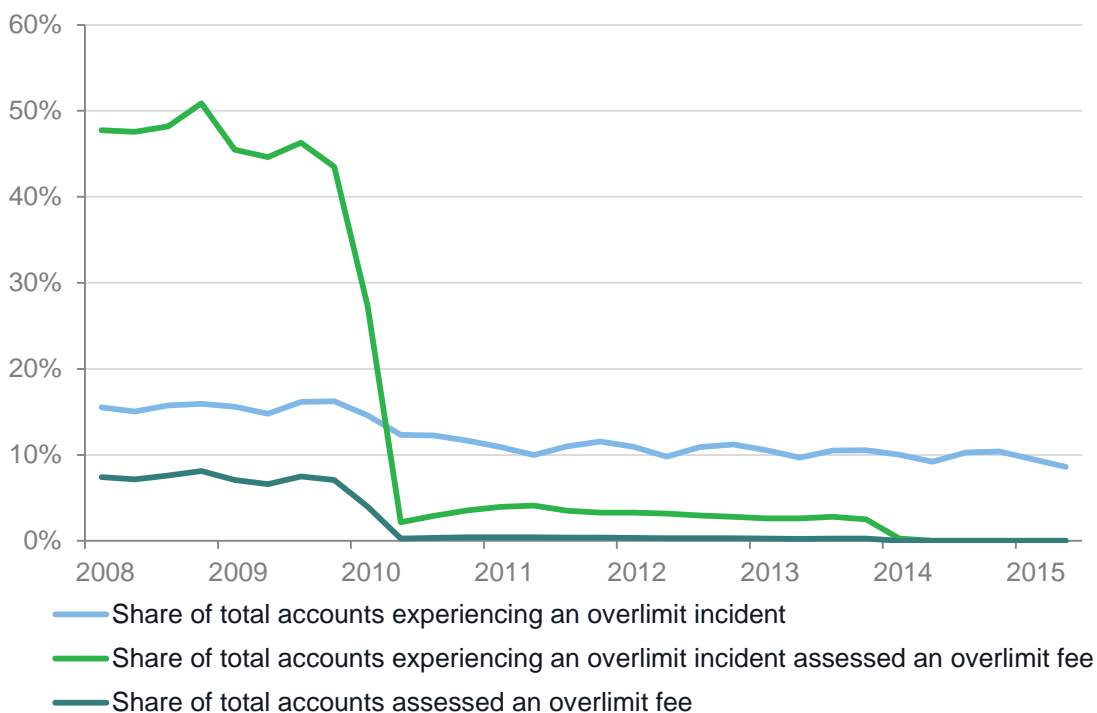


Figure 6 shows that this change has intensified since our prior report. In 2012, the final year of our prior analysis, an average 0.33% of active accounts were assessed an overlimit fee each quarter. That finding generally held up in 2013, when the share fell to 0.27% of active accounts. But from the beginning of 2014 through the end of the second quarter of 2015, even as the overlimit incidence rate remains above 10%, only an 0.0008% percent share of active accounts have been assessed an overlimit fee each quarter on average. Overlimit fees, therefore, are all but extinct among issuers in the CCDB.

Had overlimit fees been assessed on overlimit incidents at their 2008 rate, and had average overlimit fees stayed at their 2008 level, consumers would have paid \$9 billion more in overlimit fees over the four year period spanning 2011 to 2014. That cost saving calculation is limited to accounts covered by our CCDB data set. The full cost savings, therefore, are almost certainly even larger.

As we noted when presenting a similar calculation in the 2013 report, this figure may overstate—or understate—the impact of the CARD Act. We cannot say definitively whether the incidence of overlimit fees would have declined independent of the CARD Act because of changes in consumer behavior (such as fewer transactions exceeding credit limits) or issuer behavior (such

as fewer issuers authorizing such transactions). By the same token, our savings estimate would understate the impact of the CARD Act if, absent the Act, issuers would have continued to increase overlimit fees, or overlimit incidence remained constant or increased from its 2007 baseline.

## LATE FEES

Issuers will generally assess a late fee to consumers who do not make at least their minimum payment by the monthly due date. Prior to the CARD Act, the average late fee increased dramatically from the mid-1990s, reaching well over \$30 by 2005.

The CARD Act addresses late fees in three main ways. First, the rules limit the circumstances in which a payment can be deemed late. For example, issuers cannot set payment cut-off times earlier than 5 pm for any given due date.<sup>9</sup> Second, due dates are more predictable to consumers. The rules require, for example, that the due date be the same day each month, that statements be mailed at least 21 days before the payment due date, and that the statements contain a warning that failure to make a minimum payment by the due date will result in a late fee.<sup>10</sup> Third, late fees—like other penalty fees, including overlimit fees—must be “reasonable and proportional” to the underlying violation of account terms.<sup>11</sup> The Act also provides for “safe

---

<sup>9</sup> 15 U.S.C. § 1666c(a) (“[Bureau] regulations shall prevent a finance charge from being imposed on any obligor if the creditor has received the obligor’s payment in readily identifiable form, by 5:00 p.m. on the date on which such payment is due, in the amount, manner, and location indicated by the creditor to avoid the imposition thereof.”).

<sup>10</sup> 15 U.S.C. § 1666b (“If an open end consumer credit plan provides a time period within which an obligor may repay any portion of the credit extended without incurring an additional finance charge, such additional finance charge may not be imposed with respect to such portion of the credit extended for the billing cycle of which such period is a part, unless a statement which includes the amount upon which the finance charge for the period is based was mailed or delivered to the consumer not later than 21 days before the date specified in the statement by which payment must be made in order to avoid imposition of that finance charge.”); § 1637(o)(1) (“The payment due date for a credit card account under an open end consumer credit plan shall be the same day each month.”); § 1637(b)(12) (“[T]he periodic statement required under subsection (b) with respect to the account shall include, in a conspicuous location on the billing statement, the date on which the payment is due or, if different, the date on which a late payment fee will be charged, together with the amount of the fee or charge to be imposed if payment is made after that date.”).

<sup>11</sup> 15 U.S.C. § 1665d(a) (“The amount of any penalty fee or charge that a card issuer may impose with respect to a credit card account under an open end consumer credit plan in connection with any omission with respect to, or

harbors” which set values for penalty fees that are presumed to be reasonable and proportional. We discuss late fee practices in more detail in section 5.2.3. It is worth noting here, however, that some issuers have begun to compete on the basis of this particular price point.<sup>12</sup>

Figure 7 below shows that late fees remain well below their pre-CARD Act levels.<sup>13</sup> Before the CARD Act, late fees were approaching \$35 on average. Shortly after the Act became effective, they reached a low point of just over \$23. They then increased slightly from that low point through the end of 2012. In the intervening period, they have stabilized at \$27.

The persistence of this decline is notable because the Bureau has increased the safe harbor for penalty fees twice since the initial finalization of the CARD Act rules, and many large issuers appear to be updating new account agreements to take advantage of these permitted increases.<sup>14</sup> The lack of a commensurate increase in the size of the average late fee, therefore, may be explained by some combination of two causes. It is possible that issuers may not have updated the late fee terms on existing accounts or only done so after some lag. Second, the composition of fees could be changing. Under the terms of the penalty fee safe harbor, the first late fee assessed to a consumer on a given account is subject to one cap. Subsequent fees are subject to a higher cap. If consumers are incurring fewer repeat late fees, therefore, there will be downward pressure on the size of the average late fee.

---

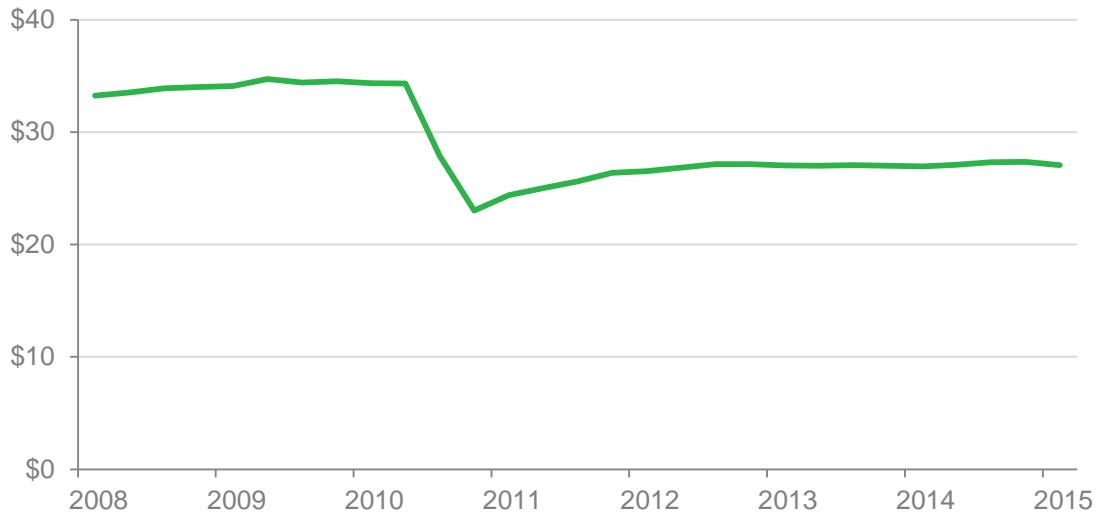
violation of, the cardholder agreement, including any late payment fee, over-the-limit fee, or any other penalty fee or charge, shall be reasonable and proportionate to such omission or violation.”).

<sup>12</sup> Some credit card products do not carry late fees or do not assess late fees for the first late incidence. These practices are described in more detail in section 5’s coverage of issuer practices.

<sup>13</sup> Figure 7 calculates the average fee by dividing total late fees assessed by the number of late fees incurred.

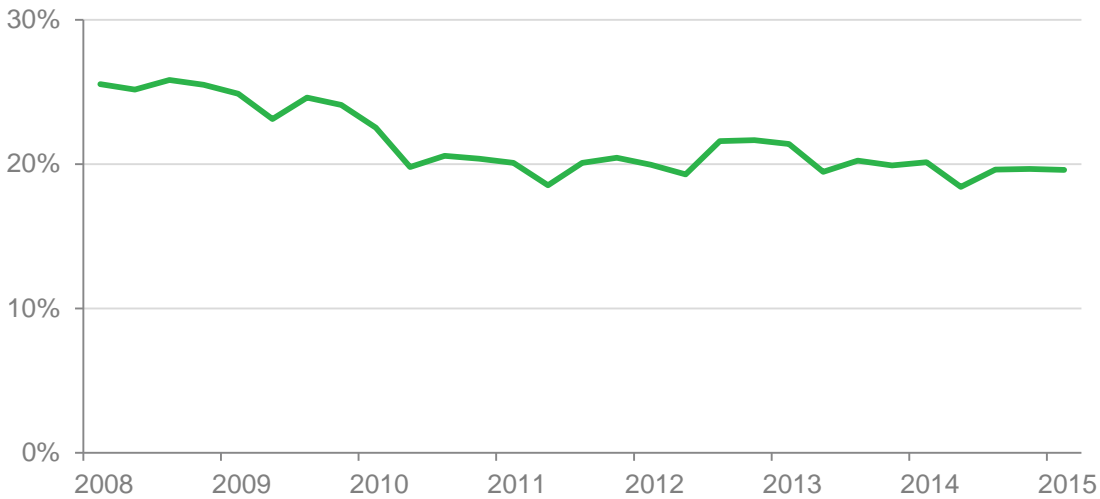
<sup>14</sup> Regulation Z requires the Bureau to annually adjust the safe harbors to reflect changes in the Consumer Price Index. See 12 CFR § 1026.52(b)(1)(ii)(D).

**FIGURE 7: AVERAGE LATE FEE FOR CCDB ACCOUNTS**



The quarterly incidence of late fees has also maintained the lower level achieved in the wake of the CARD Act. As Figure 8 shows, the quarterly incidence of late fees reached under 20% of active accounts by the second quarter of 2011. It has held relatively steady at around 20% since then, although it reached a new low of 18% in the second quarter of 2014. (Consumers traditionally concentrate some of their pay down of balances in the second quarter after the receipt of tax refunds, and this cyclicity may be reflected in the late fee incidence rate as well.) These decreases are not unambiguously attributable to the CARD Act alone. Improvements in the economic outlook and the changing credit risk composition of accounts have undoubtedly had some impact. We can say, however, that had late fees remained at pre-CARD Act levels, consumers whose accounts are within the CCDB would have paid \$7 billion more in late fees between 2011 and 2014.

**FIGURE 8:** QUARTERLY INCIDENCE OF LATE FEES, ACTIVE ACCOUNTS IN CCDB



### **ANNUAL FEES**

The CARD Act places fewer restrictions on annual fees than overlimit and penalty fees.<sup>15</sup> As a result, they might seem to offer issuers an obvious means to offset declining revenue from fees that the Act directly restricted. Our last report noted an uptick in the incidence of annual fees since the CARD Act was implemented. Since then, however, newer data show that the incidence of annual fees has fallen back and is now just below pre-CARD Act levels. This trend is reflected in Figure 9.

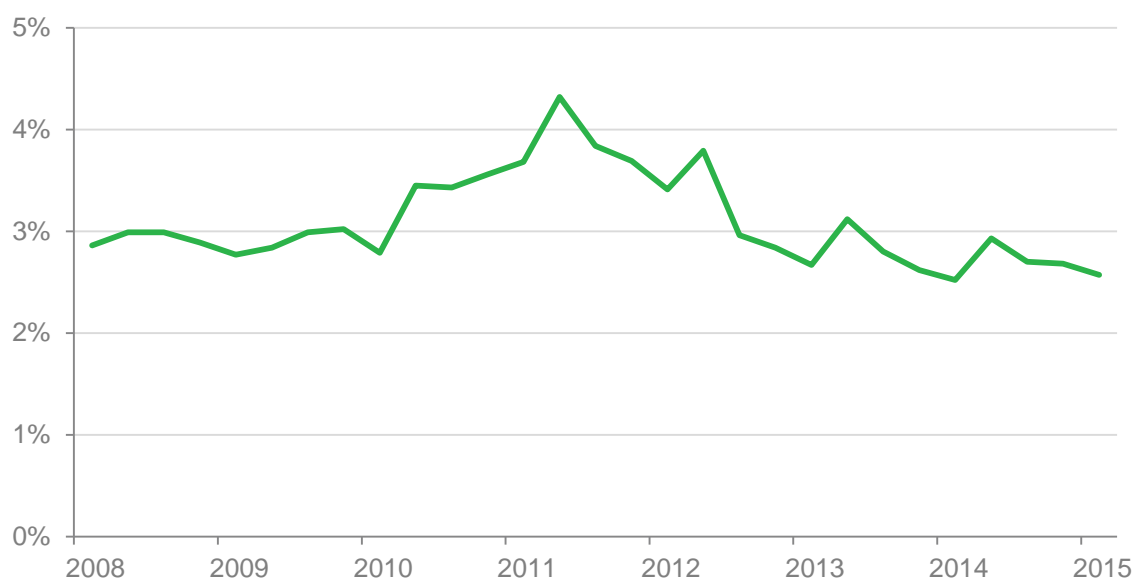
Although annual fees have become less common, when they do occur, the average amount of the fee has continued to increase from the beginning of 2011. (Average annual fees actually fell between the enactment of the CARD Act and its two main implementation dates in 2010.) As of the first quarter of 2015, they had reached an average of \$48.

---

<sup>15</sup> Annual and other account maintenance fees are subject to the 25% cap on fees in the first year of an account. 15 U.S.C. § 1637(n) (“If the terms of a credit card account under an open end consumer credit plan require the payment of any fees (other than a late fee, over-the-limit fee, or fee for a payment returned for insufficient funds) by the consumer in the first year during which the account is opened in an aggregate amount in excess of 25 percent of the total amount of credit authorized under the account when the account is opened, no payment of any fees (other than any late fee, over-the-limit fee, or fee for a payment returned for insufficient funds) may be made from the credit made available under the terms of the account.”).

Noting the increase in annual fee amount and (at that point) fee incidence, our prior report noted that the occurrence of annual fees was certain, which made it easier for consumers to anticipate costs. Additionally, annual fees tend to be associated with rewards cards. Almost 70% of all annual fees assessed by issuers in the CCDB in 2013 and 2014 were on rewards accounts. (Over the same period rewards accounts incurred only 44% of all other fees.) Rather than directly reflecting credit conditions, annual fees charged by mass market issuers may reflect consumer demand for rewards. For more on credit card rewards, see section 7 below.

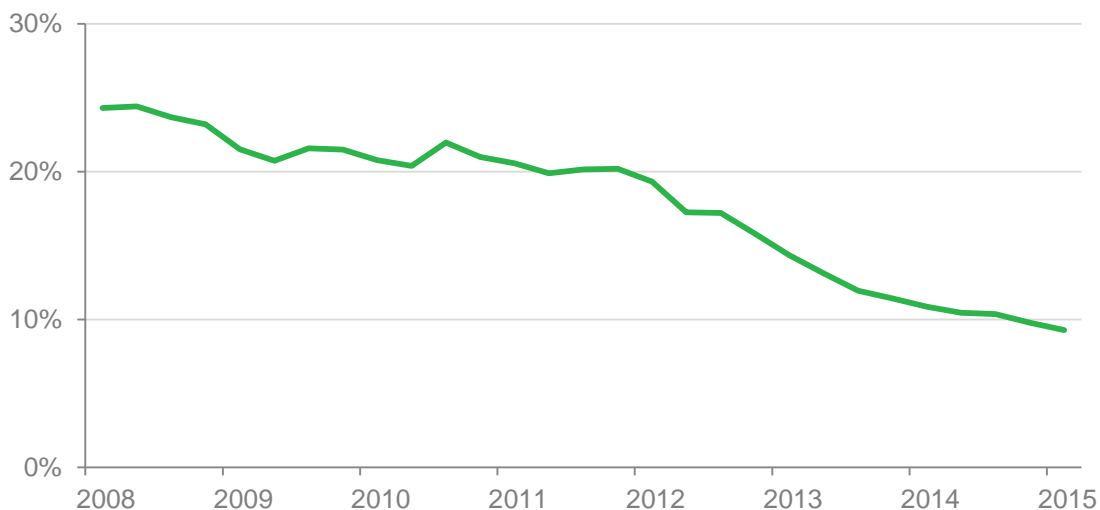
**FIGURE 9: QUARTERLY ANNUAL FEE INCIDENCE, OPEN ACCOUNTS IN THE CCDB**



#### **OTHER FEES**

In the 2013 report, we noted a decline in the incidence and value of those fees not specifically discussed above. These include add-on fees, balance transfer fees, cash advance fees, and foreign transaction fees. That decline has accelerated in recent years, as reflected in Figure 10.

**FIGURE 10:** QUARTERLY INCIDENCE OF OTHER FEES, ACTIVE ACCOUNTS IN THE CCDB



This decline has been driven in large part by a decline in the incidence of add-on fees for debt suspension or cancellation, though the average such fee has not changed much in amount. Prior to the CARD Act, almost 19% of active accounts incurred such fees. By 2015, that rate had fallen to just over 6%. This decline may have a range of causes, but one factor may have been Bureau enforcement actions. Marketing practices for add-on products have been a major focus of Bureau enforcement actions targeting unfair, deceptive, and abusive (“UDAAP”) conduct. Those enforcement actions have resulted in issuers refunding nearly \$2 billion to consumers since the establishment of the Bureau. Had the incidence of such fees persisted at their average level during 2008 to 2011, consumers would have paid close to \$4 billion more in such fees since the beginning of 2012.

The incidence and amount of other major fees, notably balance transfer and cash advance fees, have not substantially changed from their 2012 levels.

## 3.2 Interest rates

The interest rate on a consumer credit card is the product’s largest driver of costs to consumers. In this subsection, we review overall trends on consumer credit card interest rates, including potential CARD Act impacts. We reserve discussion of the potential costs to consumers associated with variable rate credit cards for section 3.5.



### 3.2.1 Repricing

Prior to the CARD Act, credit card issuers were permitted to—and often did—“reprice” the interest rate on consumer credit cards. Issuers could establish triggers that resulted in immediate rate increases on both new purchases and existing balances, leaving consumers exposed to retroactive price changes associated with their prior use of the account.<sup>16</sup> Price change triggers included conduct related to the credit card account, such as a late payment. But they could also be based on the consumer’s broader credit conduct on other, unrelated accounts. More generally, credit card issuers were permitted to reprice the interest rate on consumer credit cards independent of any particular triggering action by the consumer. Such price increases often were done on a portfolio wide basis or to certain segments within a portfolio. The result was pricing that was hard for consumers to predict.

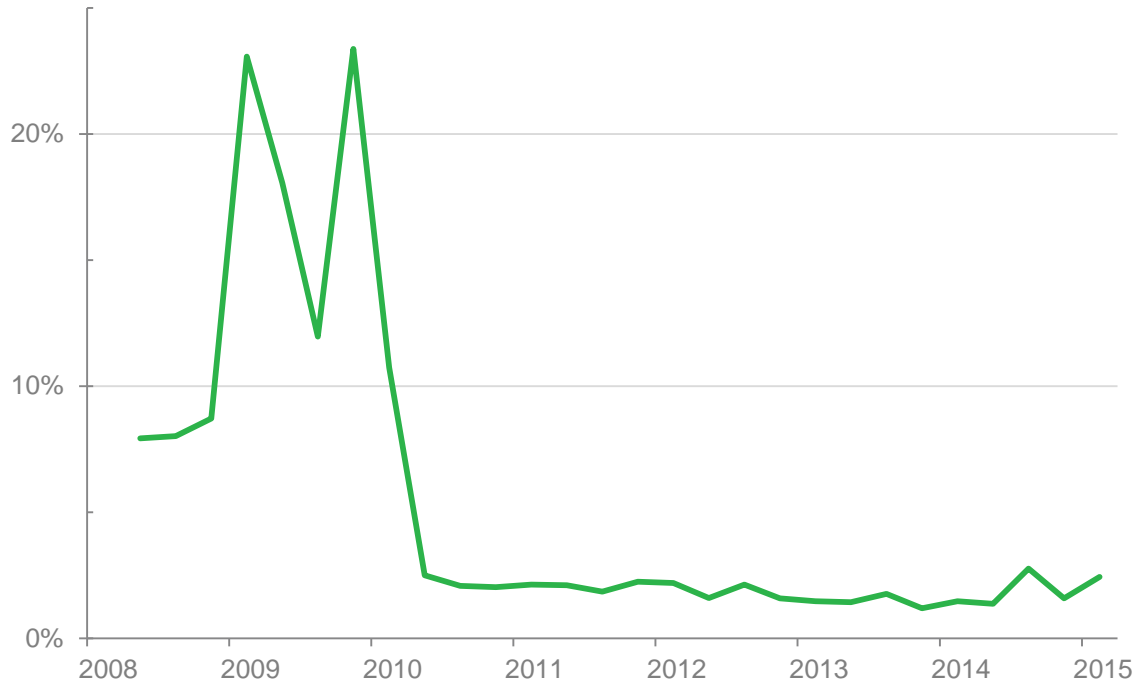
The CARD Act did not prohibit all interest rate changes, but it limited those that issuers could use and it established new procedural steps for those that were permitted. Our prior report found that once the CARD Act became fully effective, upwards repricing declined to an average quarterly rate of 1.5% on active accounts in 2012.<sup>17</sup> As Figure 11 shows, there has been little overall change since then, with quarterly averages of 1.5% and 1.8% in 2013 and 2014 respectively. In two recent quarters, we are able to observe a slight uptick in upwards repricing, which can be traced to repricing activity by some—but not all—large issuers. Even with this small increase, however, the repricing rate remains very significantly below any pre-CARD Act baseline we have been able to establish, which suggests—while not conclusively proving—that the Act’s restrictions continue to discourage repricing activity.

---

<sup>16</sup> Prior to passage of the CARD Act, the Board of Governors of the Federal Reserve, along with several other regulators, had adopted a rule generally restricting such retroactive price changes under its authority to prohibit unfair and deceptive acts or practices. See *Unfair or Deceptive Acts or Practices*, 74 Fed. Reg. 5498 (Jan. 29, 2009).

<sup>17</sup> While 2009 and 2010 were associated with very high rates of repricing, to the extent early 2008 can be used as a baseline, repricing incidence was still 8%, meaning a 1.5% rate is a decline by any comparison. Some commenters contend that the limitations placed on issuers’ abilities to price risk has led to higher rates and lower credit lines for consumers. See *American Financial Services Association Comment Letter (May 18, 2015)* 3; see also *Auriemma Comment Letter (May 18, 2015)* 2.

**FIGURE 11: QUARTERLY INCIDENCE OF UPWARDS APR REPRICING, ACTIVE ACCOUNTS IN THE CCDB**



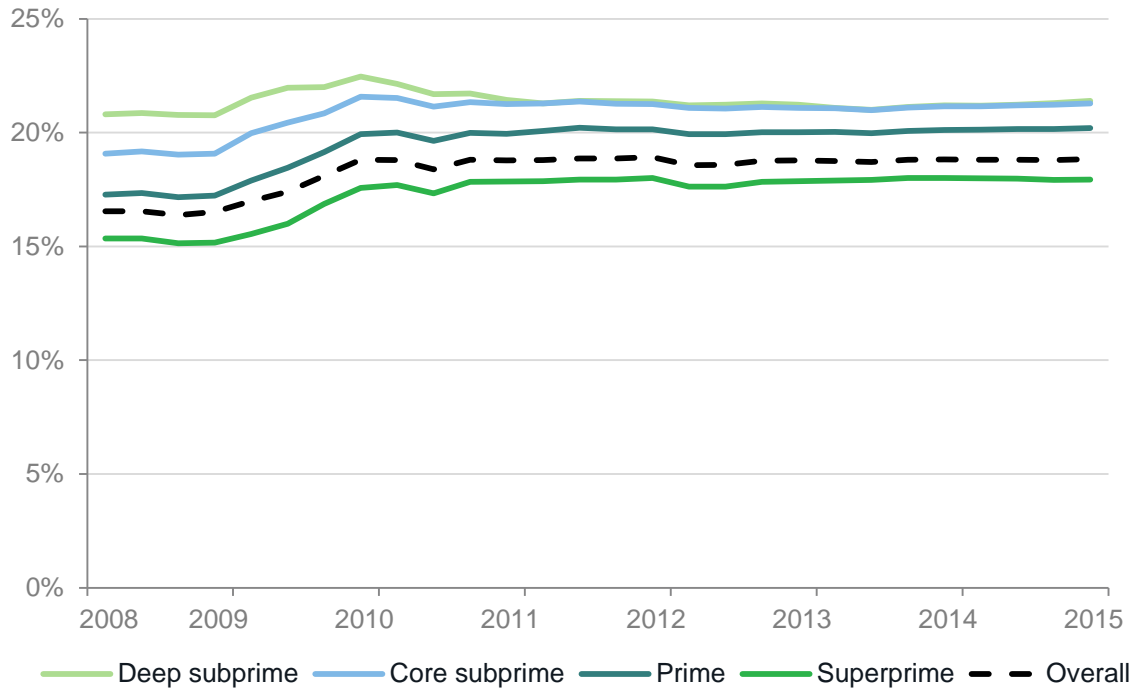
### 3.2.2 Retail APR and effective interest rates

The run-up to passage of the CARD Act and the period prior to its first implementation date in the first quarter of 2010 saw an increase in the average “retail APR” applicable to credit card accounts.<sup>18</sup> Our earlier report explained some of the factors that might have contributed to this increase. These included the shift away from low-salience back-end fees, restrictions on repricing, the tightening of credit standards pushing accounts from one price tier to another, and the need to compensate for losses caused by charge-offs associated with the recession. The report noted, however, that retail APRs generally stabilized from that point, though subprime accounts showed retail APR decreases in 2010 and the beginning of 2011. As Figure 12 shows, CCDB data confirm the general stabilization of retail APRs from that point.

---

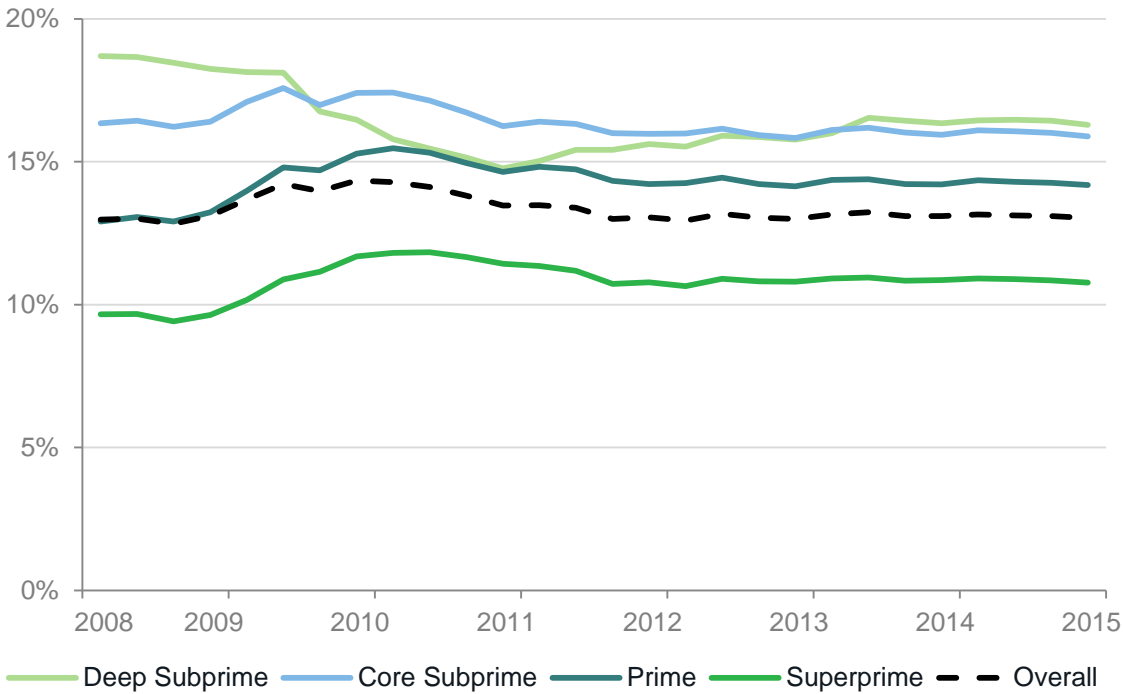
<sup>18</sup> The retail APR is the APR applicable to balances stemming from purchases. Issuers often charge separate rates for balances stemming from cash advances and balance transfers. These rates are not captured by the CCDB data on retail APRs.

**FIGURE 12: AVERAGE RETAIL APR, OPEN ACCOUNTS IN THE CCDB**



Industry observers often use an “effective interest rate” measure of interest rates because of various limitations associated with retail APRs. These limitations are described in more detail in our prior report. In brief, however, average retail APRs count the APRs applicable to all accounts rather than only those that revolve. As only revolving accounts pay interest charges, retail APRs do not directly track the interest rates paid by those consumers who actually pay them. In addition, the multiplicity of balances on a given account and the complexity of the payment allocation rules applicable to those different balances also limit the utility of retail APRs in expressing the interest rate “price” paid by consumers who revolve those balances. Effective interest rates compensate for these deficiencies by assessing total interest charges for a given period of time as an annualized percentage of period-ending balances. Figure 13 shows effective interest rates for all revolving accounts and by the credit score of the account holder. Overall, there has been a slight decline in effective interest rates since implementation of the CARD Act began in the first quarter of 2010.

**FIGURE 13: EFFECTIVE INTEREST RATE, REVOLVING ACCOUNTS IN THE CCDB**



### 3.3 Total cost of credit

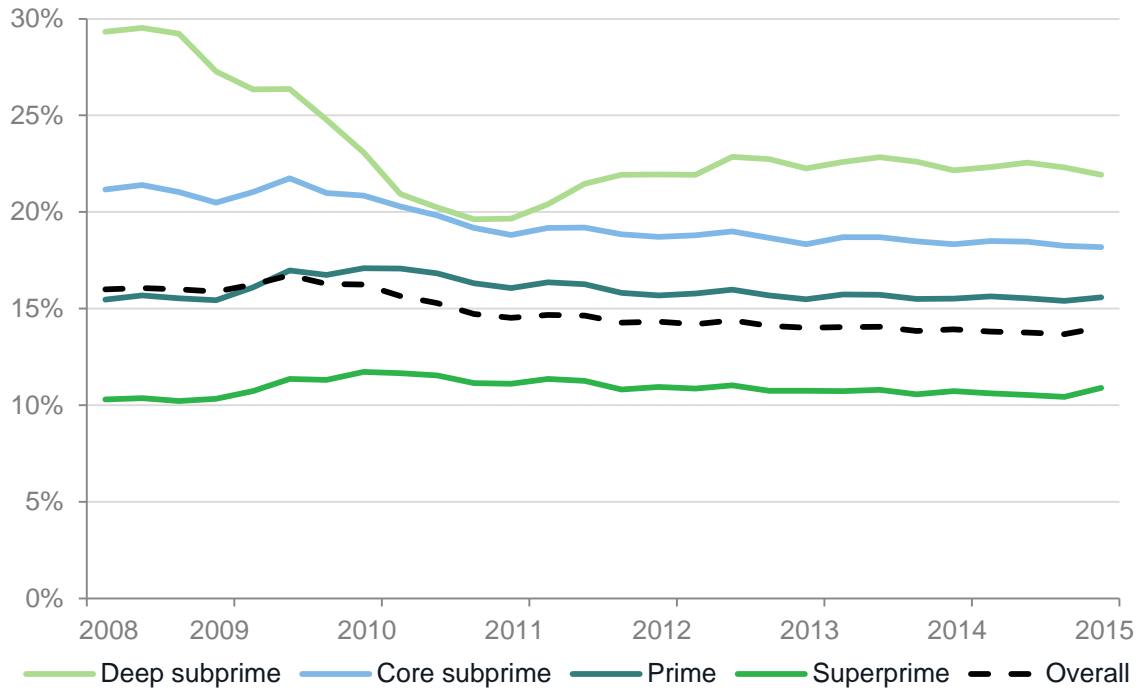
To capture the all-in cost of using credit cards, we continue to rely on our Total Cost of Credit metric, or “TCC.”<sup>19</sup> TCC captures the totality of payments by consumers to issuers each quarter as an annualized percentage of cycle-ending balances.

Figure 14 shows that TCC, both overall and for consumers in each credit score range, has remained effectively unchanged since the prior report.<sup>20</sup> As a result, TCC continues to show an overall decline since the CARD Act became law.

---

<sup>19</sup> Since we first used the TCC metric in our last credit card market study, we have used it in other Bureau reports and research, including the Bureau’s study on pre-dispute arbitration clauses.

**FIGURE 14: ANNUALIZED TOTAL COST OF CREDIT, ALL ACCOUNTS IN THE CCDB**

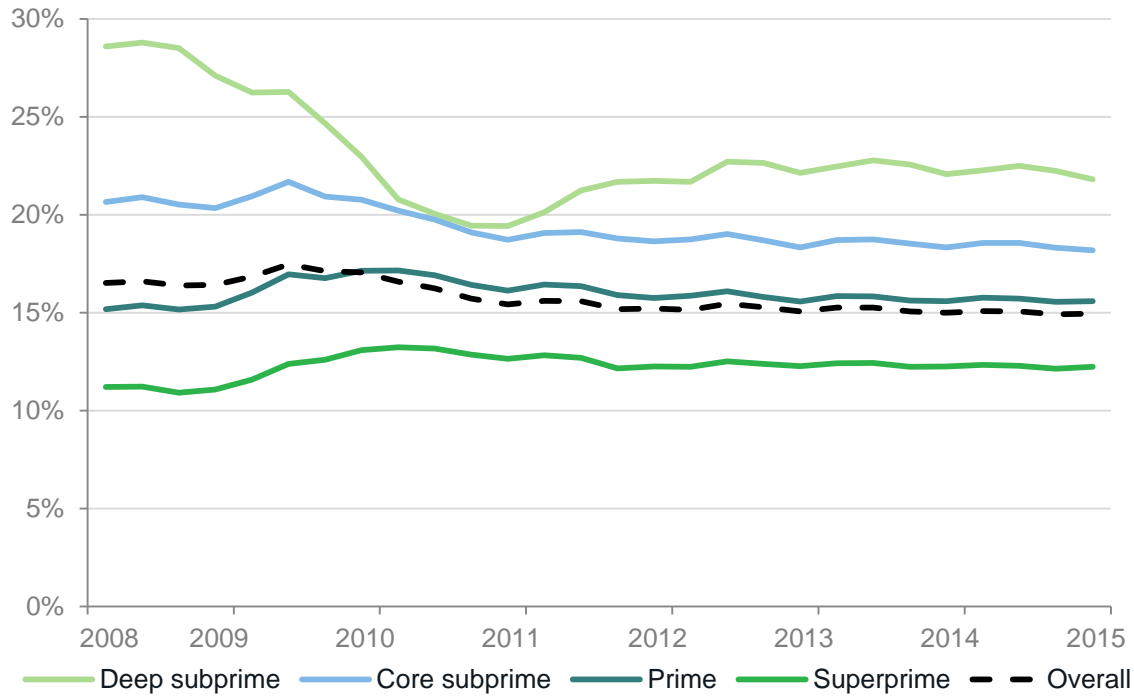


Given that revolvers pay the overwhelming share of fees and interest, however, we also review TCC trends for this specific population. Revolving accounts comprise almost 85% of balances in the CCDB, incur three-quarters of all fees, and pay almost all interest charges.<sup>21</sup> Figure 15 shows that revolving accounts show the same general TCC trends as all accounts. As of the first quarter of 2015, TCC for these accounts was at 15%, some 190 basis points lower than it was at the enactment of the CARD Act.

<sup>20</sup> Accounts for which FICO information was missing or otherwise unknown or unavailable are included in the overall calculation. Over the past two years, those accounts have comprised about 2% of all accounts in the CCDB.

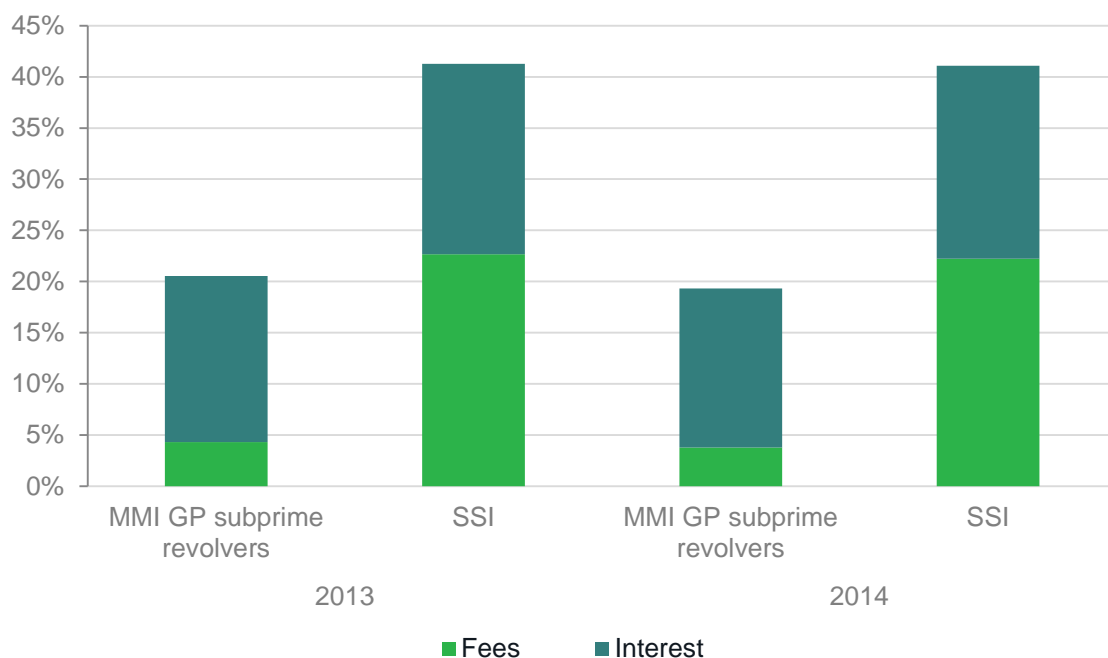
<sup>21</sup> Assessing the number of *consumers* who revolve credit is a difficult task. The CCDB provides account-level, not consumer-level, data, and the Consumer Credit Panel does not clearly delineate revolvers from transactors. The Federal Reserve’s most recent triennial Survey of Consumer Finances, however, concludes that between 35% of households carried credit card balances in 2010 and 40% did so in 2013.

**FIGURE 15: ANNUALIZED TOTAL COST OF CREDIT, REVOLVING ACCOUNTS IN THE CCDB**



For consumers of subprime specialist cards, however, the total cost of credit is significantly higher than that experienced by mass market cardholders. We do not have data from these issuers that predate the CARD Act, so we are only able to establish a baseline against which we may be able to compare TCC in future years for this section of the market.

**FIGURE 16:** TOTAL COST OF CREDIT, MASS MARKET SUBPRIME GENERAL PURPOSE REVOLVING ACCOUNTS COMPARED TO SUBPRIME SPECIALIST PRODUCT USERS (CCDB, SSI)



In 2013 and 2014, TCC on all subprime specialists’ accounts in our data was 41% of year-ending balances. In contrast, core and deep subprime accounts in the CCDB experienced a TCC of 22% and 18% respectively over those two years. These comparisons may be inexact since the composition of consumers within the subprime category—both in terms of their current credit score and credit score at origination—may vary between the subprime specialists and the mass market issuers. Nonetheless, it is noteworthy that the TCC for the subprime specialists is almost twice as high as it is for most subprime credit card accounts.

Again, these results should not be viewed as typical for consumers with subprime or even deep subprime scores. As noted at the beginning of this section of the report, these issuers represent a minority experience for consumers with such scores. For most consumers with subprime credit scores, therefore, the TCC picture has improved since the CARD Act. For consumers of subprime specialist products, however, we do not have data on trends since the CARD Act.

## 3.4 Comparative costs

The 2013 report tracked credit costs in the consumer credit card market relative to credit costs in the small business credit card market. The small business credit card market in the United States is markedly smaller than its consumer credit card counterpart.<sup>22</sup> There are other differences in the two markets. Each has different cost structures and different demand dynamics. Nonetheless, one potentially significant difference is that while the consumer credit card market was made subject to the CARD Act and to the other protections of the Truth in Lending Act (“TILA”), the small business credit card market was not subject to the CARD Act nor, for the most part, to other provisions of TILA.

Despite this difference, the 2013 report found that trends in the cost of credit were broadly similar across the two markets.<sup>23</sup> More recent data confirm this same pattern. Retail APRs have continued generally in line in both markets, as shown in Figure 17. Over the last two years, the total cost of credit for revolving accounts in the two markets also continues to show the same pattern as in earlier years.<sup>24</sup> In fact, the TCC on consumer credit cards has generally fallen from the 2008 recession by more than the TCC on small business credit cards.

If consumer protection regulation had increased the cost of credit in the consumer credit card market relative to the small business credit card market, then we might expect to see greater cost of credit reductions (or smaller increases) in the small business credit market. But the available data do not offer any support to that hypothesis.

---

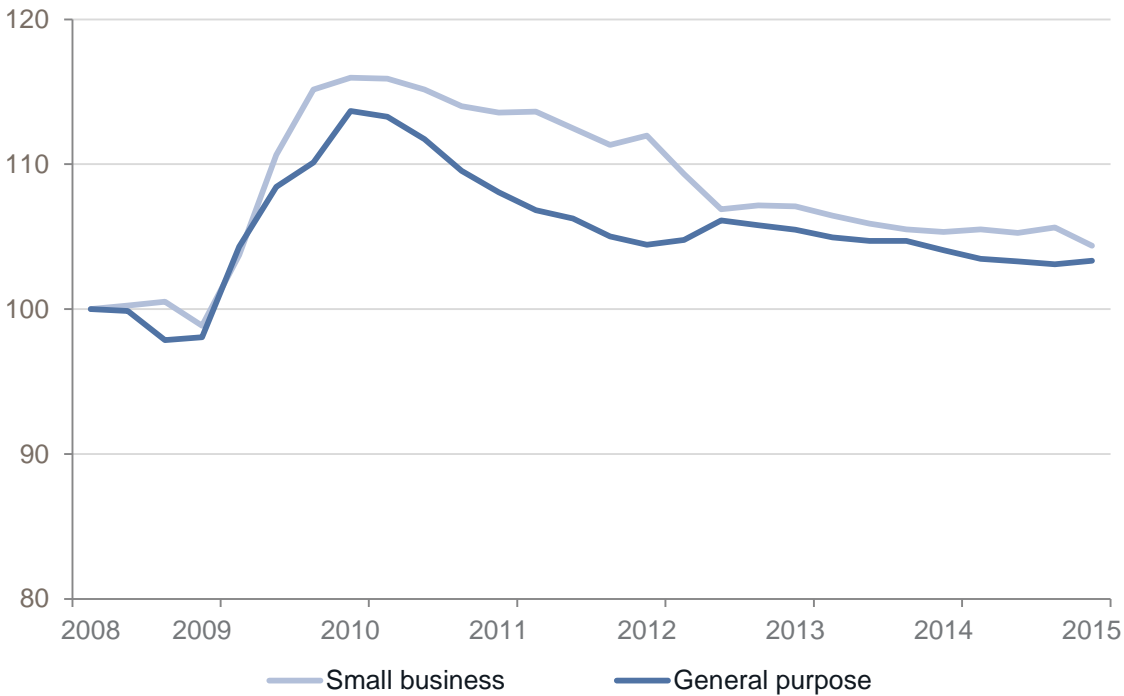
<sup>22</sup> According to Mercator, there are 13.9 billion small business credit card accounts as of 2015, which is less than 4% of all general purpose accounts. These accounts represent a very disproportionate share of all credit card spending—over \$430 billion, or nearly one-in-six dollars spent on general purpose credit cards. However, they only represent about \$50 billion of outstanding credit card debt, less than 8% of the amount owed on general purpose credit cards. See Alex Smith, Mercator Advisory Group, *Small Business Credit Cards: The Key to Richer Customer Relationships*, (Nov. 5, 2015), <https://www.mercatoradvisorygroup.com/Reports/Small-Business-Credit-Cards--The-Key-to-Richer-Customer-Relationships/>.

<sup>23</sup> To the extent they diverged, over time consumer credit had become less expensive relative to small business credit.

<sup>24</sup> To establish a standardized comparison, we only included issuers that issue credit cards to both consumers and small businesses.



**FIGURE 17:** AVERAGE RETAIL APR, GENERAL PURPOSE AND SMALL BUSINESS (INDEXED TO 100 IN Q2 2008; REVOLVING ACCOUNTS IN THE CCDB)

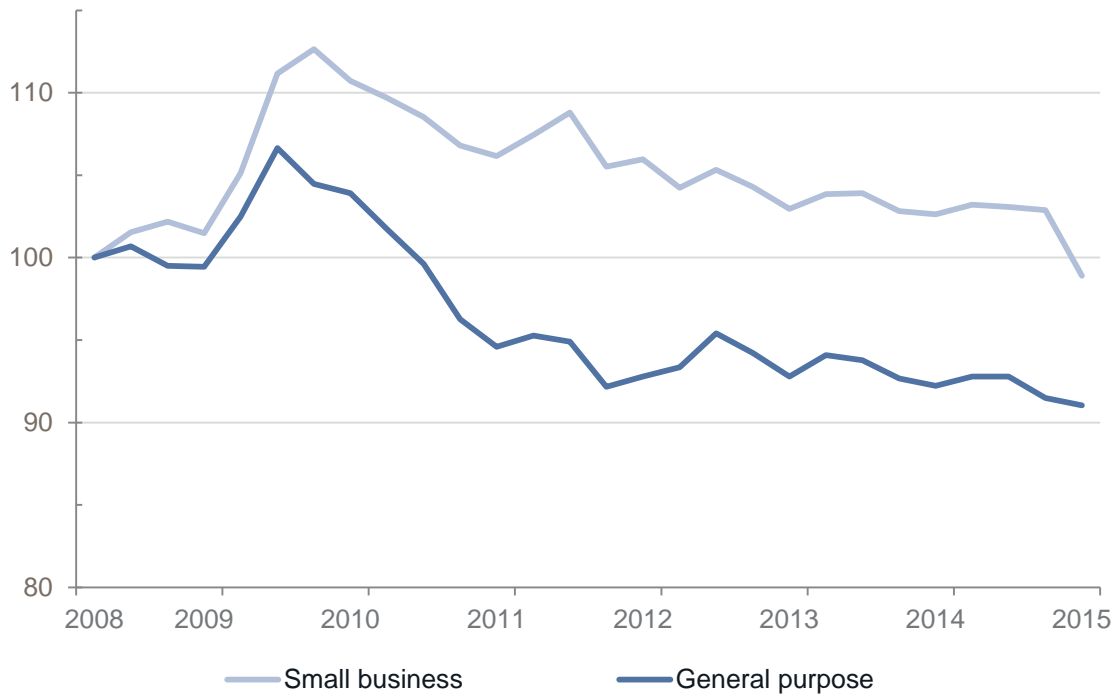


We cannot say definitively what explains the relative cost of credit trends in the two markets. Given the many differences between the two markets, it is possible that the difference in regulatory regimes played little role in the pattern that we observe. It may be worth noting, however, that the kind of price regulation contained in the CARD Act—shifting the cost of credit to upfront, salient price terms like the APR and annual fee and away from low salience back-end fees and price increases—may sharpen price competition in the consumer credit card market, putting more downward pressure on the overall cost of credit to consumers than would otherwise be the case.<sup>25</sup>

---

<sup>25</sup> The emergence of products on the market competing explicitly on late fees may show that to the extent that back-end pricing persists in the wake of the CARD Act, it may become a vector for further competition that enhances consumer welfare.

**FIGURE 18:** TOTAL COST OF CREDIT, GENERAL PURPOSE AND SMALL BUSINESS (INDEXED TO 100 IN Q2 2008; REVOLVING ACCOUNTS IN THE CCDB)



### 3.5 Variable APRs

One exception to the CARD Act’s limits on retroactive rate increases are increases based on a change in an underlying linked rate. Terms and conditions on many credit card accounts—both before and after the CARD Act—state the applicable interest rate as a set amount above a linked rate such as the “Prime” rate. Subject to various notice requirements, the CARD Act allows issuers to change these variable rates as the underlying benchmark rate changes.<sup>26</sup>

The variable rate exception allows issuers to respond more flexibly to broad macroeconomic and credit market conditions. For example, a variable rate may be tied to an index that would

---

<sup>26</sup> 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.”).

increase if the cost of funds to the issuer also increased. At least in the normal course, variable rate changes are unlikely to be subject to abuse by issuers because they are limited by outside circumstances beyond the issuer's control.

Although there are reasons, therefore, to view variable rates positively, these rates may also create some risks to consumers. Our market monitoring found that issuers which use variable rate pricing universally rely on the *Wall Street Journal's* U.S. Prime Rate. However, there has not been any increase in the effective federal funds rate, and by extension the U.S. Prime Rate, since the implementation of the CARD Act.

Since the CARD Act and the associated decline in upwards repricing, consumers may have come to expect that their existing balances, in general, will not be repriced. But if the effective federal funds rate, and therefore the Prime Rate, increases, revolving consumers will be exposed to significant cost increases on their existing balances. For example, a consumer revolving \$15,000 in credit card debt at an average rate of 12% would face an additional monthly interest charge of nearly \$12.50 following a single percentage point increase in rates. This would translate to nearly \$150 in additional finance charges annually. The Federal Open Market Committee (FOMC) expects rates to rise, with a median projection of a 25 basis point ("bps") increase by the end of 2015 and a roughly 100 bps increase each year over the subsequent three years.<sup>27</sup>

Over the first half of 2015, more than 94% of the general purpose accounts in the CCDB have variable APRs. More than 57% of the private label cards have variable APRs. As of mid-2015, approximately \$580 billion in revolving balances on general purpose cards and \$40 billion for those on private label accounts are subject to variable rate repricing.<sup>28</sup> On the assumption that general purpose cards have an average interest rate of 12% and private label rates are at 24%, a single percentage point increase in each rate would carry an estimated annual cost to consumers of nearly \$6 billion. Even a 25 bps increase in interest rates would likely carry an annual average

---

<sup>27</sup> See Federal Reserve Board, *Economic Projections*, (Sept. 2015), <http://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20150917.pdf>; see also Appendix Figures 4 and 5 for more on the history of the U.S. Prime Rate and detailed rate path projections.

<sup>28</sup> Balances are not uniformly spread across variable and fixed rate accounts. About 92% of general purpose revolving balances are on variable rate accounts. About 47% of private label revolving balances are. The estimates we present use these numbers, not the slightly higher numbers for variable rate penetration at the account level.

cost of well over \$1 billion to consumers who revolve credit card debt. Should FOMC projections prove broadly accurate, consumers revolving balances subject to variable rates could be assessed well over \$30 billion in additional finance charges over the next three years absent any change to their revolving practices.

## 3.6 Conclusion and areas for future study

The shift towards front-end pricing triggered by CARD Act reforms has persisted across the board since our 2013 report. Overlimit fees and repricing activity remain negligible. Late fees remain below pre-CARD Act levels. Overall, therefore, the market remains one in which costs to consumers derive more from front-end terms like retail APRs and annual fees and less from back-end fees and repricing.

For consumers who comparison shop for credit cards on the basis of cost, therefore, the benefits of the CARD Act remain in place. Those benefits also continue to accrue to consumers assessing the costs of financing a purchase with a credit card. That advantage may become increasingly important as a wider range of credit devices become available to consumers at the point of sale, particularly when purchasing items online or via a mobile app. We discuss these point-of-sale alternatives in section 9 below.

The improvement to cost transparency that resulted from the CARD Act, however, does not mean that consumers who revolve credit necessarily obtain or use the credit card that would yield them the lowest overall cost or the greatest overall benefit. In fact, our deferred interest and rewards research provides some evidence that some consumers may not optimize their card use.

An important area for further study, therefore, is the extent to which consumers make “suboptimal” choices about which credit cards to obtain and use. For example, are consumers who are revolving a balance using the lowest-rate card in their wallet? Do they have options available to them that would reduce their costs? These are questions that the Bureau’s researchers hope to explore in the coming years.

## 4. Availability of credit

Our 2013 report assessed whether the CARD Act had a negative impact on the availability of credit. Although the data did show reductions in credit availability across most metrics that we reviewed, the reductions largely preceded enactment of the CARD Act. The Great Recession certainly caused substantial credit losses in a broad range of markets, credit cards included. It led also to a tightening of underwriting standards and to the closure of existing accounts, which were changes that disproportionately impacted consumers with lower credit scores. But those impacts were independent of the CARD Act. Indeed, across most of the metrics we examined, the data showed that credit availability expanded in the years following the CARD Act as compared to its recessionary trough. We were unable to discern any evidence that the CARD Act negatively impacted the rate of recovery in the overall credit card market following the recession.

We did note, however, that a number of CARD Act provisions were intended to limit the availability of credit in specific circumstances. These provisions included various restrictions on marketing credit cards to students and to consumers under the age of 21. They also encompassed certain “ability to pay” requirements applicable to consumers under 21 and to credit card consumers more generally. The data reviewed in our 2013 report were generally consistent with the view that these restrictions impact the availability of credit.

In this section we examine the availability of credit in the credit card market over the past two years. We find that credit card availability has continued to improve since our earlier report.<sup>1</sup>

---

<sup>1</sup> Some commenters contend that the CARD Act has generally restricted credit card availability, especially for low- to middle-income consumers. *See* American Bankers Association Comment Letter (May 18, 2015) 1-2; *see also* American Financial Services Association Comment Letter (May 18, 2015) 3; Experian Comment Letter (May 18, 2015) 3-4.

Although the overall cost of credit can be meaningfully reduced to a single overall metric (“total cost of credit,” or “TCC”), that is not true for credit availability. Instead, availability must be seen as the result of a complex interaction between consumer demand for credit and issuer willingness to supply it. As in the prior report, therefore, we review a range of metrics.

## 4.1 New accounts

Issuers receive hundreds of thousands of applications for new credit card accounts each day. Some applications are solicited via targeted mail or other forms of targeted marketing. Some are the result of mass, untargeted advertising, and some are not traceable to any marketing activity. Some are approved. Others are rejected. We examine components of this account origination process below.

### 4.1.1 Solicitations

Issuers have long solicited credit card applications via direct mail. Often they use pre-screened or “pre-approved” offers. To make these offers, an issuer develops criteria or scoring algorithms designed to identify prospects likely to respond to those offers and meet its underwriting criteria for issuing a credit card. The issuer then provides these criteria or algorithms to a credit reporting agency which identifies consumers to whom the issuer then mails a “firm offer” of credit. Sometimes issuers use direct mail to send invitation-to-apply (ITA) offers, which are not pre-screened on the basis of credit reporting data. Although issuers place considerable reliance on direct mail, whether for pre-screened or ITA offers, application response rates—whether approved or not—generally do not exceed 1% of mailings.

In our last report, we noted that mail solicitation volume began to pick up before the CARD Act was enacted and continued to increase through to late 2011. At that point it declined, perhaps because online marketing was beginning to replace some direct mail activity. Since our 2013 report, the use of digital channels to originate credit card accounts has risen markedly. As discussed in the next subsection below, issuers have generally seen their online originations rise

---

dramatically over this period. The online channel has become the indisputably dominant channel for general purpose originations.

In line with this result, Mintel survey data show that two-thirds of consumer credit card applications now come via digital channels. Online applications, however, are only a rough proxy for digital solicitation because issuers use direct mail to steer prospects to online applications. In fact, many direct mail packages now do not include paper application materials.<sup>2</sup> Even so, digital is now the predominant medium for credit card marketing. A recent Mintel survey found that, for cards for which a member of their household applied, more than 45% of the underlying offers came via a digital channel—in contrast to the 23% of underlying offers that came via direct mail. Consumers further reported that some 11% of their offers were obtained from third-party websites, which is a larger share than consumers reported obtaining via either email from issuers or from a bank branch.<sup>3</sup> The most common source of a digital offer was the issuer's own website. Email and text message solicitation, the most direct analog to direct mail, represent a combined 12% of applied-for offers, over half the share represented by the traditionally-dominant acquisition channel.

The rise of online marketing and solicitation makes mail volume—already a very inexact proxy—an increasingly unreliable indicator of credit availability. Because it is often used in this way, however, we have determined, for the time being, to retain it among our reported metrics. Figure 1 shows that mail volume plummeted with the onset of the recession, picking up following passage and implementation of the CARD Act.<sup>4</sup> Almost two years after the CARD Act took effect, mail volume again declined. It has held relatively steady since that time, with that pattern common to all credit score ranges. The downward shift in direct mail from late 2011 may reflect the increasing importance of digital solicitation of various kinds.

---

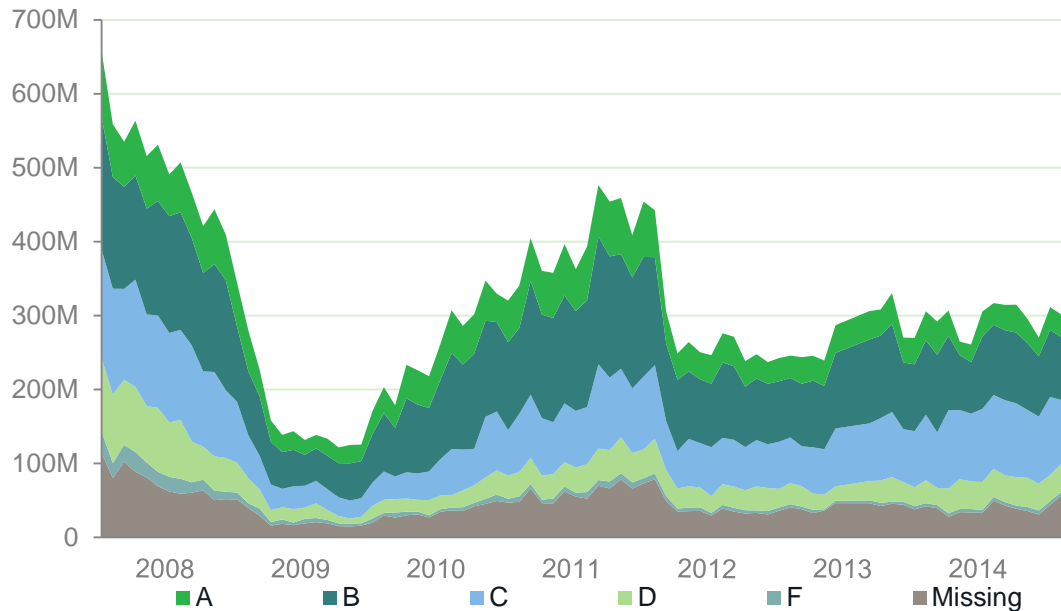
<sup>2</sup> Mintel data indicate that two-thirds of the consumers who apply in response to direct mail offers use an online channel to do so. Only 8% of applications are mailed responses to direct mail.

<sup>3</sup> Some issuers have confirmed to the Bureau that in the last few years they have seen significantly larger shares of applications originating with such third-party websites.

<sup>4</sup> Because of its source, Figure 1 uses VantageScores, which are a widely used set of risk scores developed by credit reporting agencies to assess a consumer's credit worthiness. The VantageScore scale can be mapped to letter grades from A to F, with F representing the highest risk of default.

It is worth noting that even with this significant decline in direct mail volume, in 2014 approximately 3.6 billion credit card solicitations were mailed. That is nearly three mailings monthly for every household in the United States. Given that a significant portion of households are not solicited either because they are deemed too risky or unlikely to respond to an offer, those households who are targeted are actually receiving solicitations far more frequently.

**FIGURE 1: MONTHLY MAIL VOLUME TRENDS BY CONSUMER CREDIT SCORE**



## 4.1.2 Originations

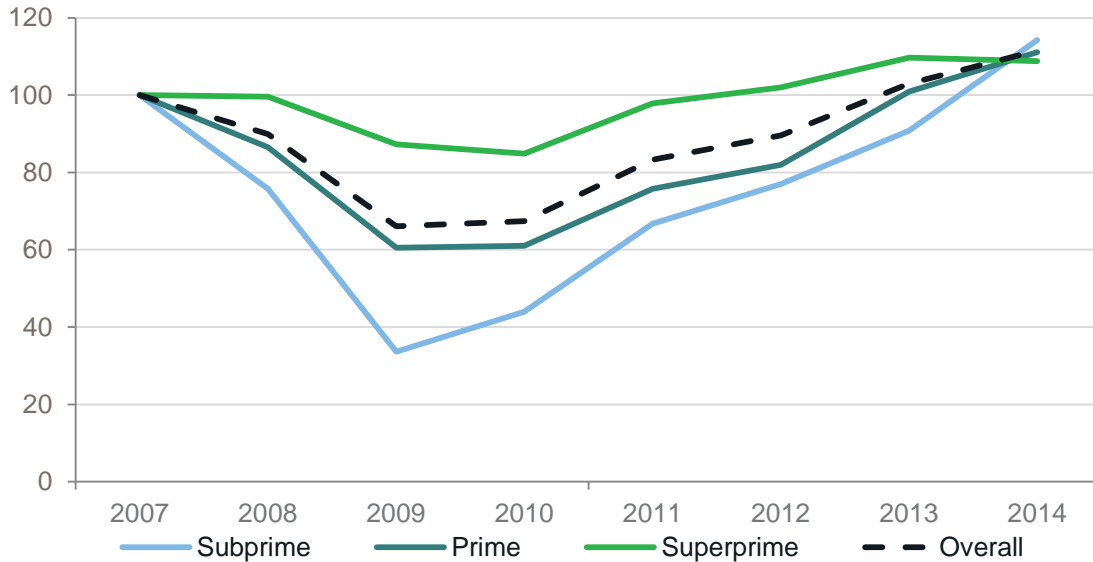
### NEW ACCOUNT GROWTH

During the recession, account origination fell for consumers in every score range, but particularly for consumers with weaker scores. Figure 2 shows new account origination trends for mass market issuers within the scope of our MMI review, both overall and for consumers with different credit scores at origination. After dropping significantly during the recession, account origination began to pick up. The upturn began from 2009 for consumers with subprime scores. Origination of accounts to consumers with prime and superprime scores—which had not fallen as far as originations to consumers with lower scores—shifted upwards from 2010. By the end of 2014, consumers in every credit range were opening more accounts with mass market issuers on an annual basis than before the recession. Other data sources that cover more of the market also show steady growth in account origination over the last few years,



but do not show it rebounding as fast. Experian data, for example, show consumer credit card origination reaching pre-recession levels only in 2015, so it is possible that the issuers within the scope of our MMI review outpaced the rest of the market.

**FIGURE 2:** MASS MARKET ACCOUNT ORIGINATION VOLUME, NORMALIZED TO 2007 (MMI)

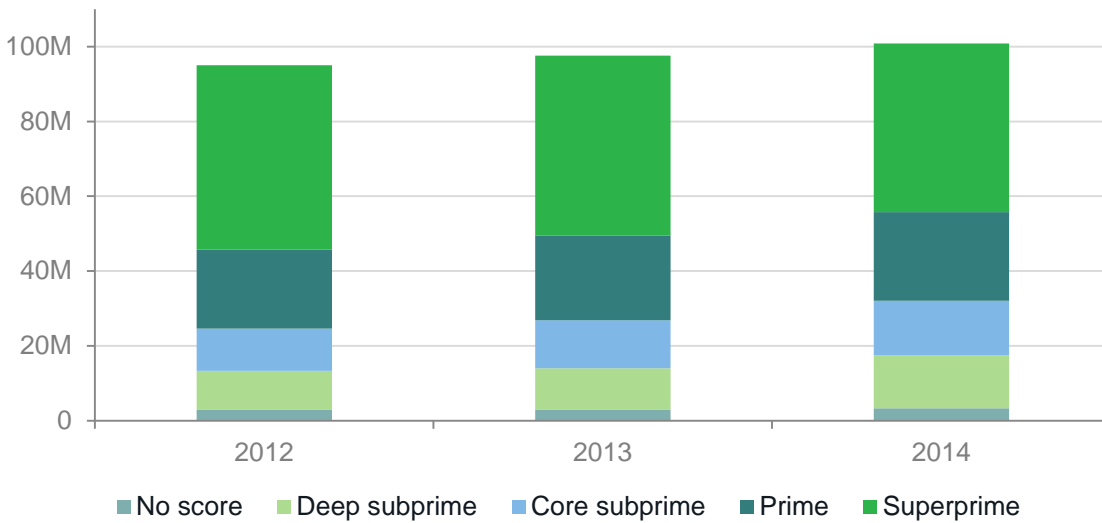


Using the Consumer Credit Panel, we can look in more detail at account originations over the last few years. We are also able to compare the credit scores of consumers who open new accounts with those of scored consumers overall. Figure 3 first shows the annual volume of new accounts, both overall and for accounts held by consumers in different credit score ranges, from 2012.<sup>5</sup> In line with Figure 2, each year shows an increase. Consumers in every credit score range—and consumers with no score—originated more accounts each year. More than 100 million accounts were originated in 2014.

---

<sup>5</sup> The credit scores used reflect the credit score of the consumer at origination. Accounts originated to consumers with no credit score are excluded from subsequent applicable figures, but this should not be taken to suggest that there were no such originations.

**FIGURE 3:** ANNUAL NEW ACCOUNT VOLUME, BY CONSUMER CREDIT SCORE (CCP)

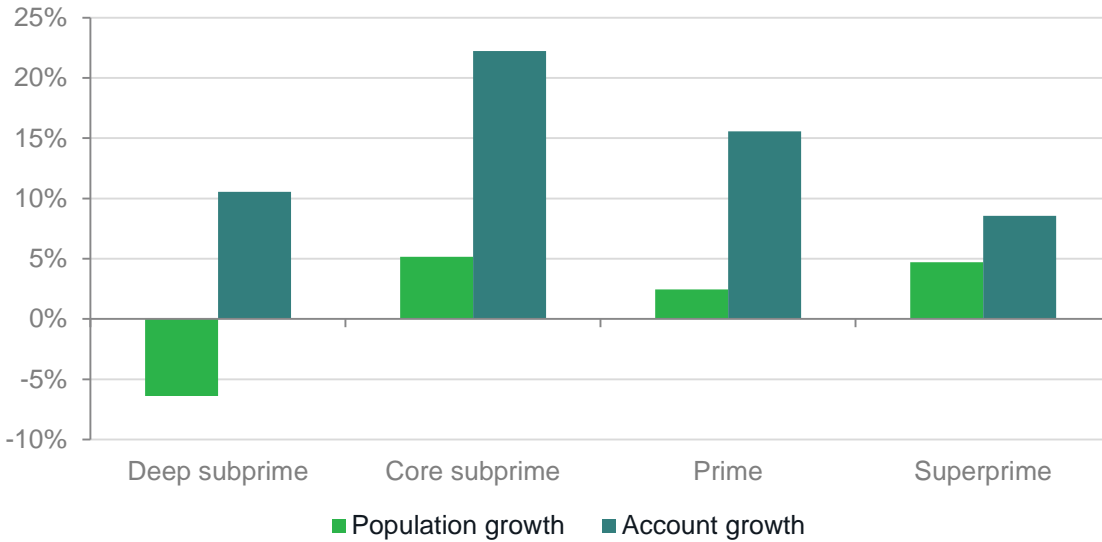


For the last two years, annual growth in account origination has been around 3%. The adult population in the U.S. has grown more slowly at around 1%. The growth in originations, therefore, is not simply keeping up with population growth, but outstripping it. As Figure 4 shows, that same phenomenon occurs for account growth in every credit tier, but account growth has skewed towards consumers with lower credit scores. By the end of 2014, consumers with subprime scores represented 31% of originations, even as they accounted for only 29% of the population of scored consumers. In early 2012, those same numbers were 23% and 31%, respectively.<sup>6</sup>

---

<sup>6</sup> Despite this evidence, some trade associations still contend that the CARD Act resulted in less credit card availability for consumers, especially consumers with subprime scores. See American Bankers Association Comment Letter (May 18, 2015) 1-4.

**FIGURE 4:** ANNUAL ACCOUNT GROWTH AND SCORED CONSUMER POPULATION GROWTH, BY CONSUMER CREDIT SCORE, Q1 2012–Q1 2015 (CCP)

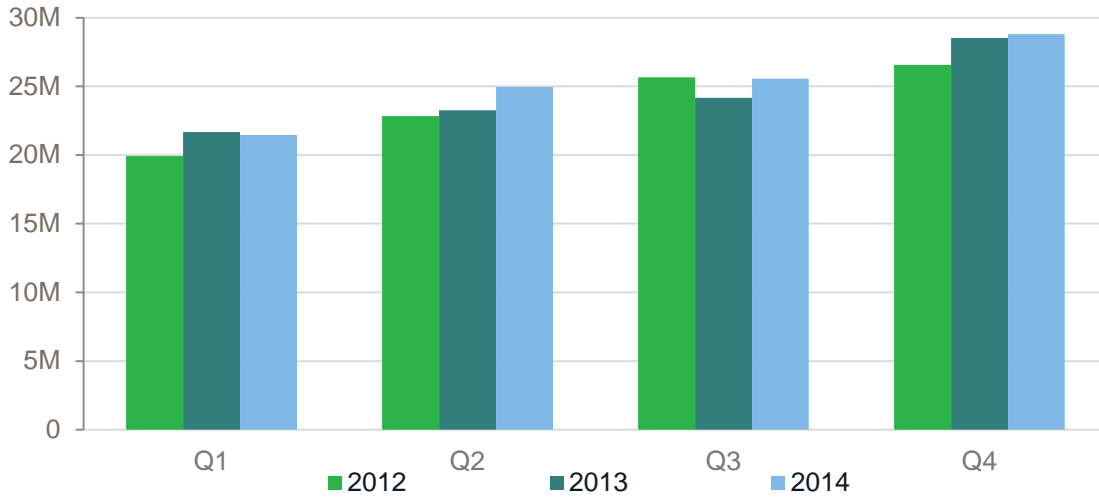


The figures above focus on annual originations and account growth because originations are highly seasonal.<sup>7</sup> Figure 5 shows how the overall annual growth in originations conceals this seasonality. Looking at originations by quarter, the overall growth trend is reasonably clear, even as account origination activity falls back very significantly from the final quarter of each year to the first quarter of the next. Looking at all consumer credit card products, originations in the fourth quarter are consistently one-third greater than originations in the first quarter of the same calendar year. Private label originations, however, show even more extreme seasonality. In 2014, fourth quarter private label originations were 60% greater than first quarter private label originations.

---

<sup>7</sup> Quarterly analogs to some of the figures in this section are included in the Appendix. See Appendix Figure 6.

**FIGURE 5: ACCOUNT ORIENTATION SEASONALITY (CCP)**



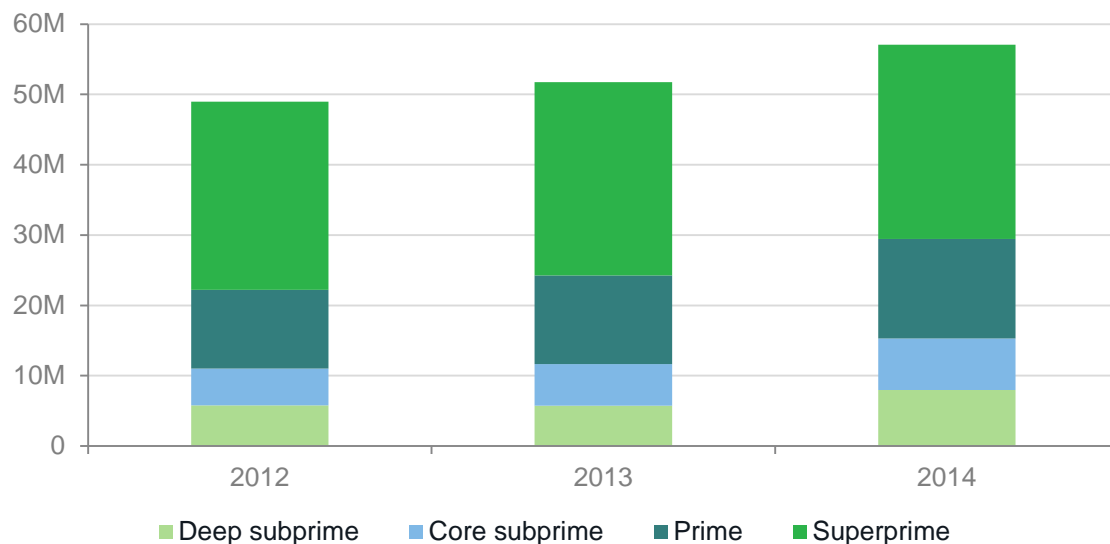
The majority of new accounts originated each year are general purpose accounts. We estimate that issuers originated some 60 million such accounts in 2014. That same year, they originated about 40 million private label accounts. Figure 6 shows annual changes in origination volume for general purpose accounts, both overall and by the credit score of the consumer on the new account. Figure 7 shows the same data for private label originations.<sup>8</sup> Although private label cards account for only 40% share of originations, that is slightly larger than their 35% share of total open accounts.

Consumers with superprime scores represent around two-fifths of credit files, yet were responsible for half of general purpose originations in 2012 and 2013. The share of such accounts opened by consumers with subprime scores, however, has increased over the last few years, as Figure 6 reflects. Conversely, the superprime share of general purpose originations has declined to under 45%, which is closer to these consumers' overall share of the credit visible population.

---

<sup>8</sup> A quarterly version of this figure is included as Appendix Figure 6.

**FIGURE 6:** ANNUAL NEW GENERAL PURPOSE ACCOUNT VOLUME, BY CONSUMER CREDIT SCORE (CCP)



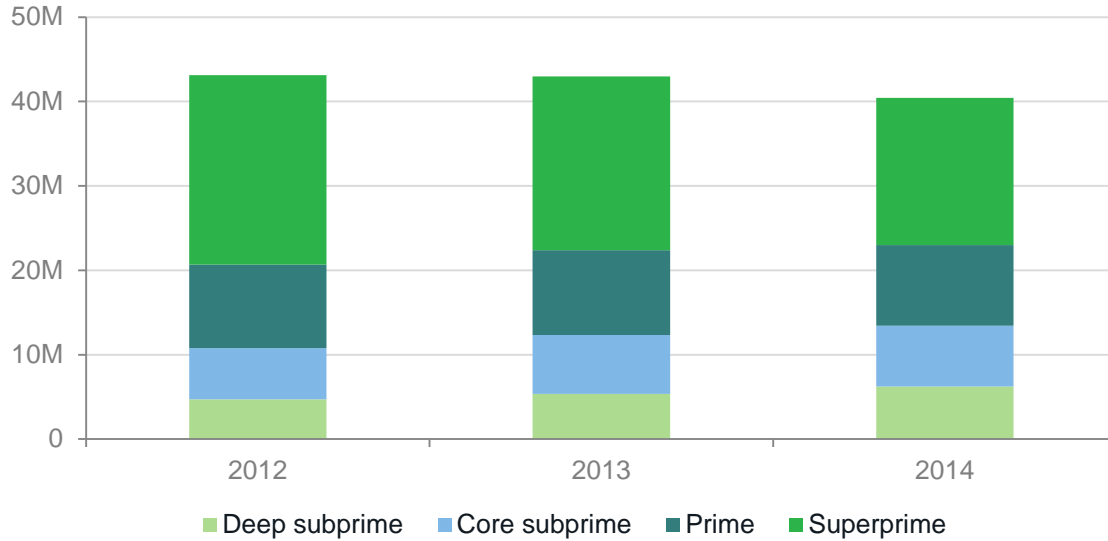
As Figures 6 and 7 show, consumers with subprime scores represent a substantially larger share of private label originations than general purpose originations. Furthermore, Figure 7 shows that the share of private label accounts newly opened by such consumers has grown substantially since early 2012.<sup>9</sup>

Figure 8 reflects that—just as with originations trends overall—general purpose and private label account growth has exceeded growth in the scored U.S. population. Once again, that is true across both card types for growth within each credit tier. The growth in general purpose and private label accounts, therefore, has exceeded background growth in the credit visible population, both overall and within each credit tier.

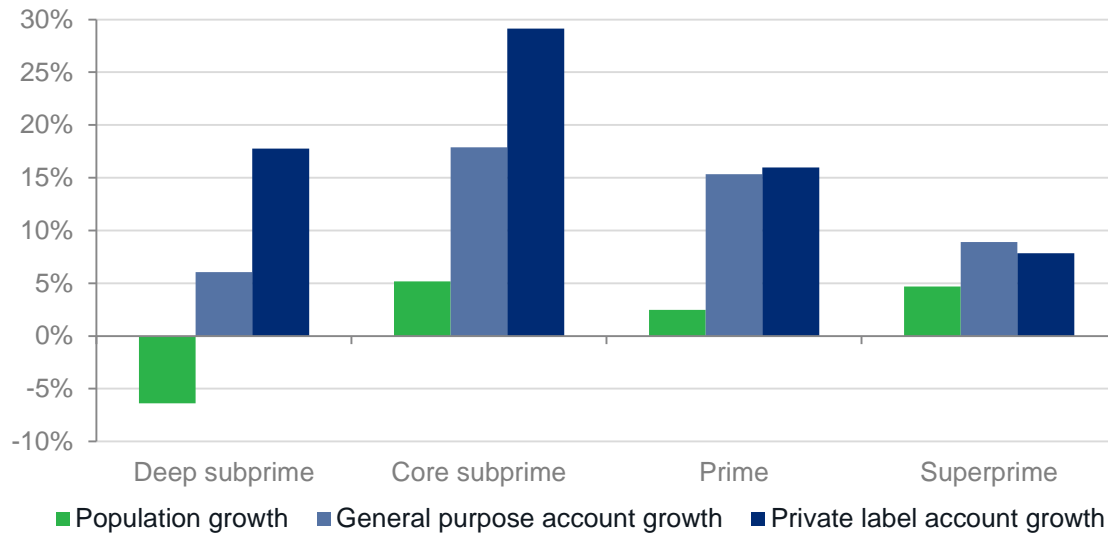
---

<sup>9</sup> As noted, Figure 7 shows only annual originations volume. Appendix Figure 6, however, shows the same data on a quarterly basis. Not only does it evidence the extreme seasonality of private label originations, with new originations disproportionately concentrated into the fourth quarter holiday season. It also shows that the fourth quarter spike in originations is disproportionately driven by consumers with subprime scores.

**FIGURE 7:** ANNUAL NEW PRIVATE LABEL ACCOUNT VOLUME, BY CONSUMER CREDIT SCORE (CCP)

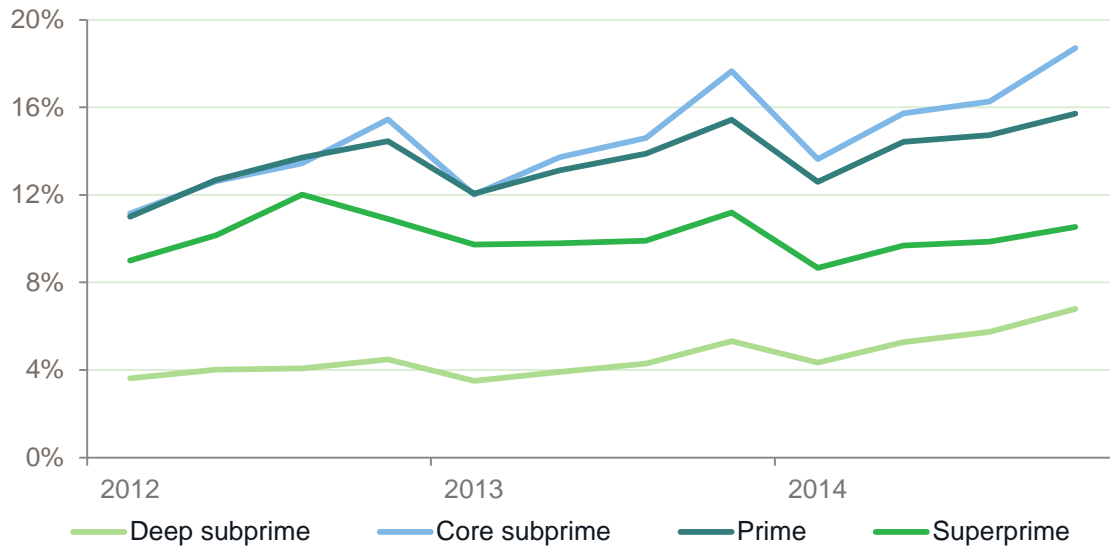


**FIGURE 8:** ANNUAL GENERAL PURPOSE AND PRIVATE LABEL ACCOUNT GROWTH AND SCORED CONSUMER POPULATION GROWTH, BY CONSUMER CREDIT SCORE, Q1 2012 TO Q1 2015 (CCP)



Looking more closely at origination volume, Figure 9 shows the share of consumers with a given credit score who opened at least one card in a given quarter over the last few years.<sup>10</sup> Consumers with prime or subprime scores are markedly more likely to open an account in a given quarter than consumers with superprime or deep subprime scores. In addition, the incidence of consumers opening at least one credit card within a given quarter has increased over this period for consumers with prime and subprime scores. (For consumers with superprime scores, the quarterly incidence rate is more constant.) These incidence rates are growing fastest for consumers with subprime and deep subprime scores.<sup>11</sup>

**FIGURE 9:** QUARTERLY SHARE OF CONSUMERS ORIGINATING A CREDIT CARD (CCP)



### OTHER CREDIT MARKETS

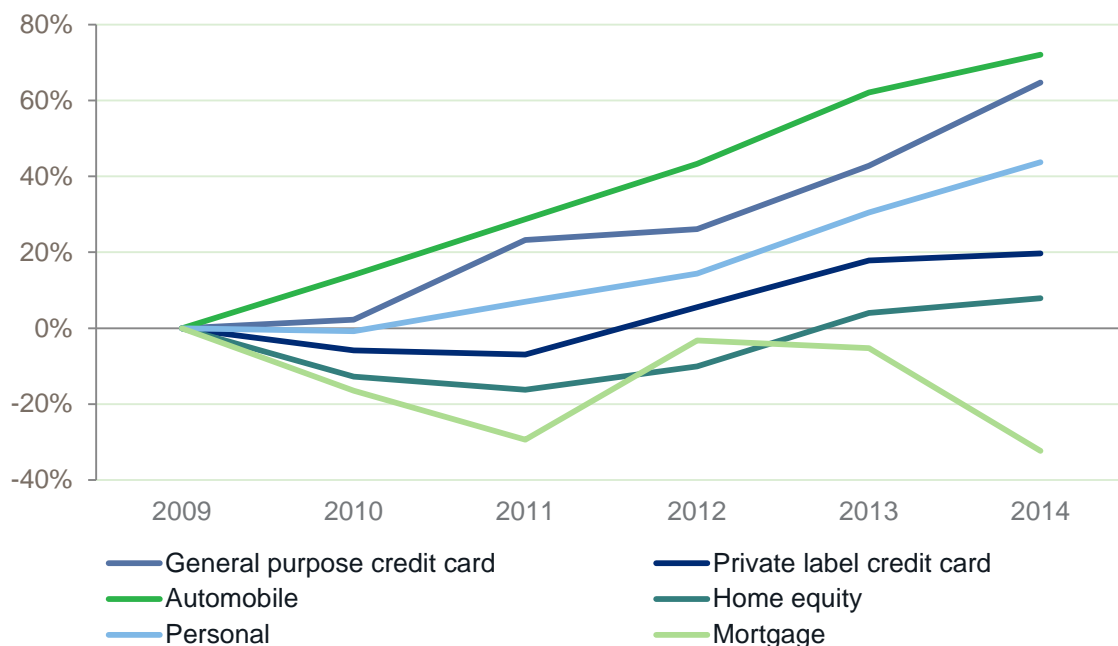
New account growth in the consumer credit card market is not only objectively significant—it also matches or exceeds origination growth in other credit markets. Using data from Experian-Oliver Wyman Market Intelligence Reports, Figure 10 shows that general purpose credit cards

<sup>10</sup> The data are not additive. A consumer who originated in one quarter may also have originated in a later quarter in the same year. So Figure 5 should not be used to construct annual origination rates.

<sup>11</sup> The overall picture of originations shown in Figure 9 is the product of somewhat different incidence patterns for general purpose and private label originations. These are explored in more detail in Appendix Figure 6.

lag only auto loans in originations growth since passage of the CARD Act in 2009. Private label originations growth has been steadier, but still outstrips originations for other major credit categories. Overall, over the last five years, consumer credit card originations show markedly more robust growth than every other major consumer credit market with the sole exception of auto loans.

**FIGURE 10:** NEW ACCOUNT ORIGINATIONS BY PRODUCT, % CHANGE SINCE 2009 (EXPERIAN MIR)



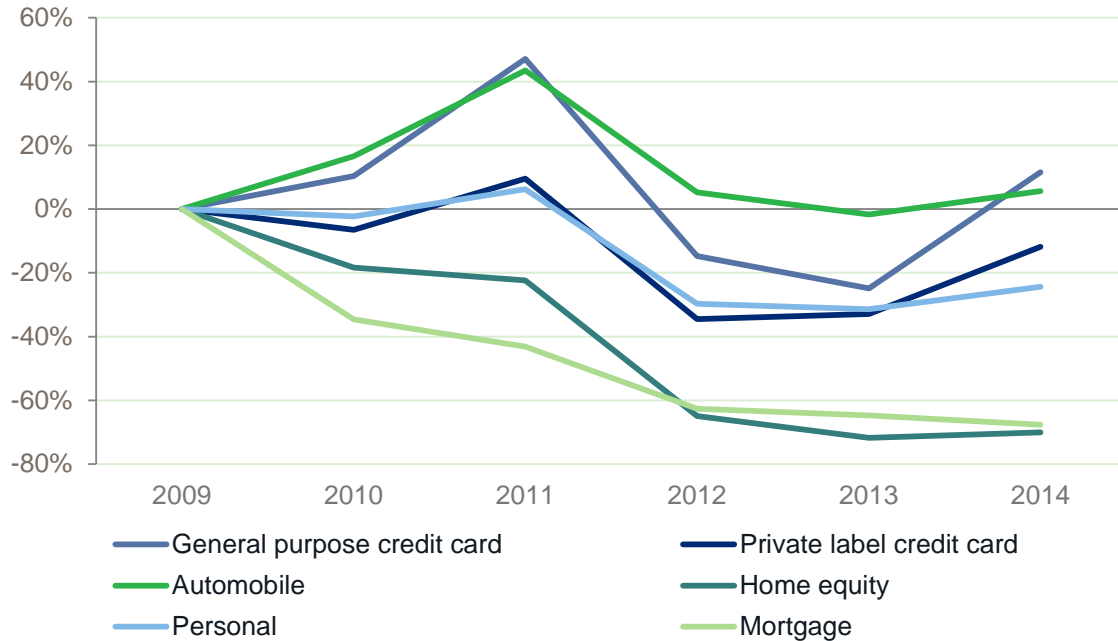
Restricting our analysis to just those consumers with lower credit scores, the same overall pattern can be detected. Using the same data source as for Figure 10, Figure 11 shows, in fact, that general purpose originations to this group of consumers grew faster than originations in any other major consumer credit category over this five-year period, auto loans included.<sup>12</sup> Consumer credit cards as a whole was one of the only major consumer credit categories in which 2014 originations to consumers with subprime scores surpassed their level in 2009. Growth in

<sup>12</sup> Because of its source, Figure 11 uses D and F VantageScores to denote higher risk credit scores. VantageScore D is defined as “Non-Prime,” and VantageScore F as “High Risk.” These scores and the populations they are used to identify broadly overlap with our FICO-based definitions of subprime, but they are not exactly coterminous.



private label originations to these consumers also exceeded the growth in personal loan and home-secured loan originations to this same group.

**FIGURE 11: NEW ACCOUNT ORIGINATIONS BY CONSUMERS WITH LOWER CREDIT SCORES, BY PRODUCT, % CHANGE FROM 2009 (EXPERIAN MIR)**



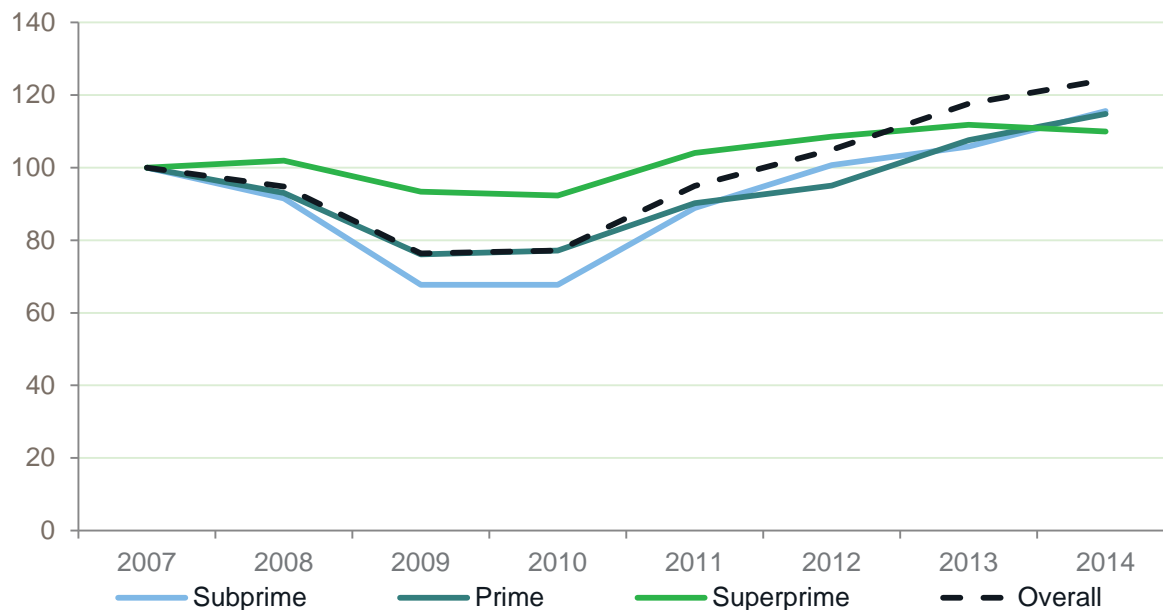
### 4.1.3 Applications and approvals

#### APPLICATION TRENDS

Application volume declined with the onset of the recession. As Figure 12 shows, however, application volume started to grow again by 2010 and it has shown steady increases since that point. Applications from consumers across all credit score ranges now exceed pre-recession levels. The growth in application volume has been relatively steady since 2010 across each credit score tier. There has been a recent increase, however, in application volume from consumers for

whom issuers had no valid credit score. That increase may reflect the increased prominence of digital application channels.<sup>13</sup>

**FIGURE 12:** APPLICATION VOLUME FOR MASS MARKET ISSUERS, BY CONSUMER CREDIT SCORE, NORMALIZED TO 2007 (MMI)

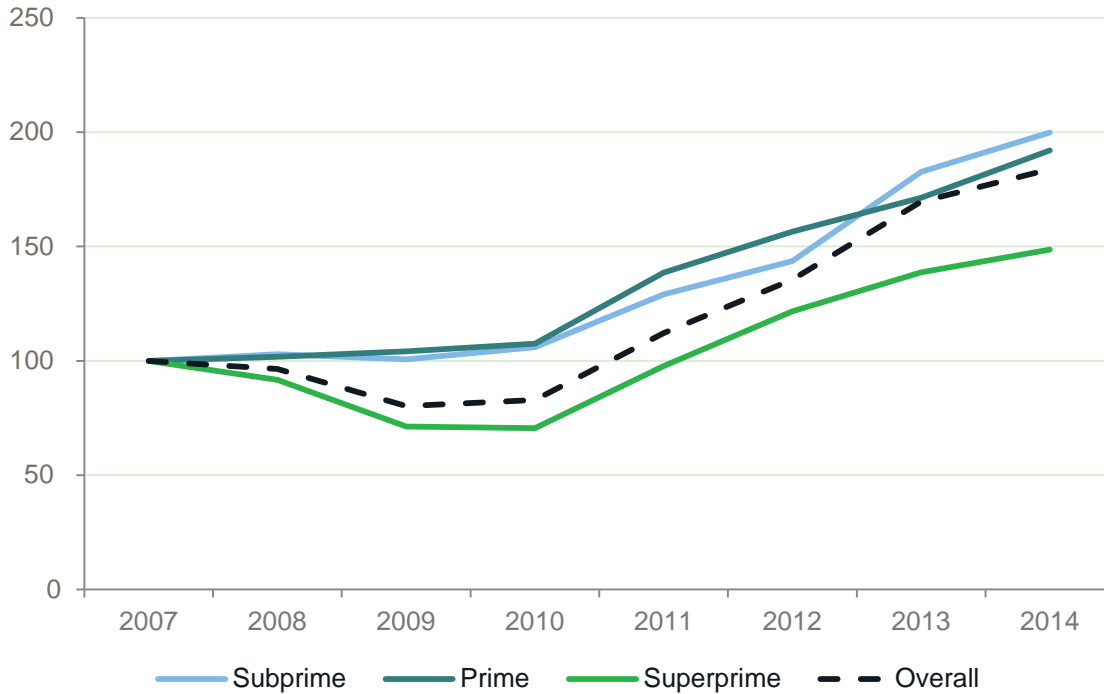


Online application growth has been faster than application growth overall. As noted above, consumers now make two-thirds of their credit card applications online. In-person applications represent about 18% of all applications. The remaining applications are split roughly equally between mailed and over-the-phone applications. Some online application volume can be traced to mailed offers. But much of it—perhaps most of it—is not solicited via these traditional channels, but is the product of an issuer’s digital presence, such as its own website or a listing on a third-party website. Figure 13 shows trends in online application volume by the credit score of the applicant. It undercounts online applications as a whole because it excludes those that can be linked by the issuer to a pre-screened, invitation-to-apply, or branch-based offer. Even with these exclusions, however, online application incidence has increased well above pre-recession

<sup>13</sup> Part of the “missing” score population may simply reflect that data was missing from applications. However, it is not obvious why that phenomenon would show a marked increase over such a short period.

levels for consumers in every credit score range. There is a particularly marked recent increase for consumers for whom issuers could not identify a valid credit score.

**FIGURE 13:** ONLINE APPLICATION VOLUME FOR MASS MARKET ISSUERS BY CREDIT SCORE, NORMALIZED TO 2007 (MMI)



### APPROVAL RATES

Although regulatory constraints play some role, issuers generally control their own approval rates. As a result, approval rates may represent a more direct means of assessing credit availability than measures like origination volume that directly reflect consumer demand for credit. Even so, some of the factors that impact an issuer’s determination of its approval rate—such as the mix of applications that it receives—are not directly within its control. Approval rates, therefore, should be seen as part of the overall picture of credit availability, not as a determinative factor alone.

Figure 14 shows that approval rate trends for mass market issuers have held relatively steady since 2010. Consumers with prime and subprime scores have seen steady increases in approval rates on their applications. Approval rates for consumers with superprime scores and consumers without a credit score have remained flatter. The volume of unsuccessful applications from

consumers without a credit score is sufficient to push overall approval rates down by seven percentage points. That reduction is larger than in the past, presumably because of the large increase in applications from such consumers.

**FIGURE 14: MASS MARKET APPROVAL RATES BY CONSUMER CREDIT SCORE (MMI)**

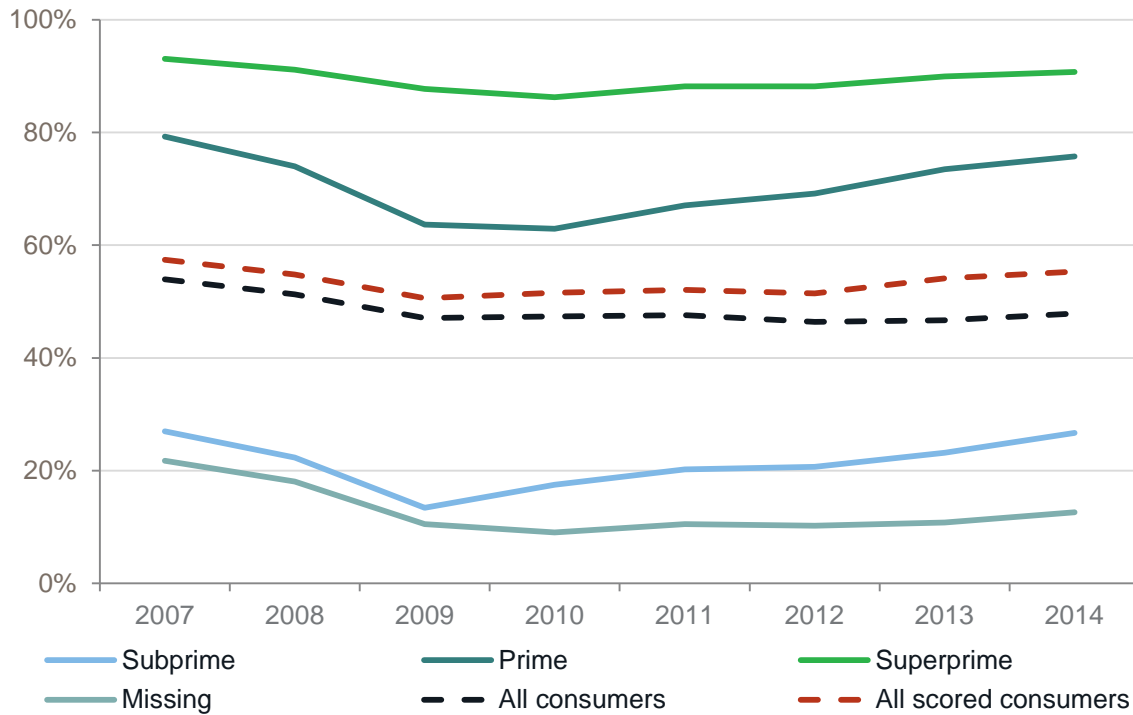
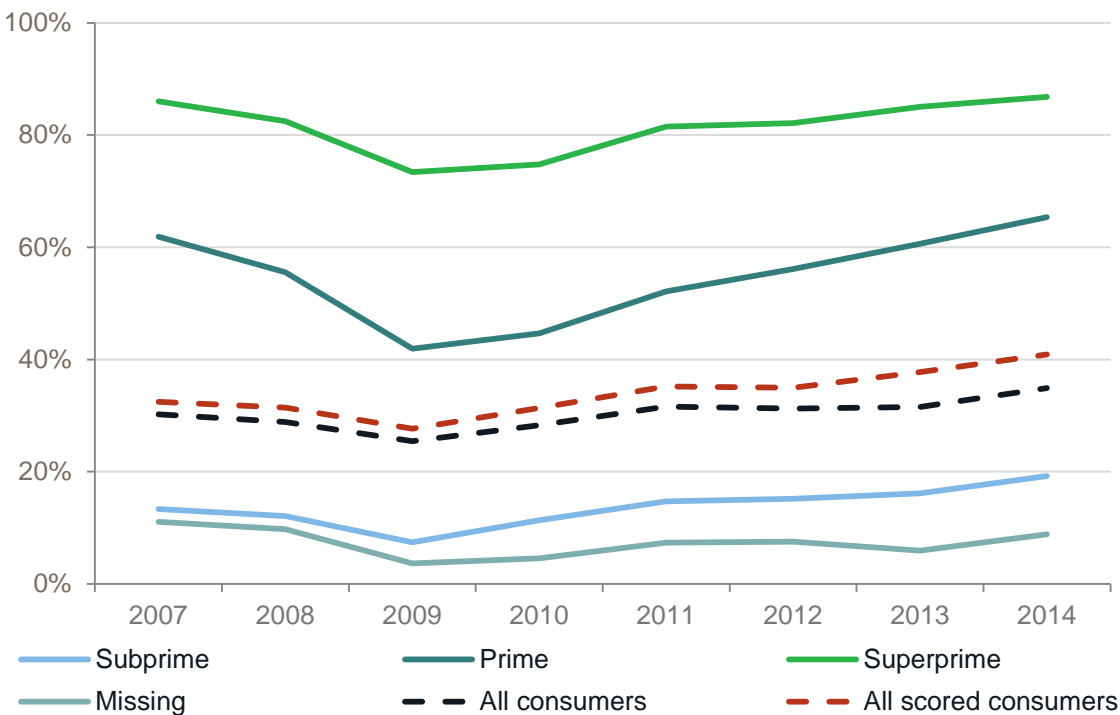


Figure 15 shows approval rates for the online channel. (Again, it is limited to online applications that the issuer has not linked to a pre-screened, invitation-to-apply, or branch-based offer.) Although the trends are similar here to the picture for approval rates overall, online approval rates remain below overall rates. The gap, however, has closed somewhat over the last few years. In 2009, for example, mass market issuers approved some 64% of prime applications overall, but only 42% of prime applications in the online channel—a gap of 22 percentage points. That same year, 13% of subprime applications were approved overall, almost double the 7% approval rate for subprime applicants in the online channel. By 2014, there was only an 11 percentage point gap between prime applications overall (at 76%) and online (at 65%). That same year, the online approval rate for subprime applicants (at 19%) had reached 66% of the overall application rate for that credit tier (at 27%).

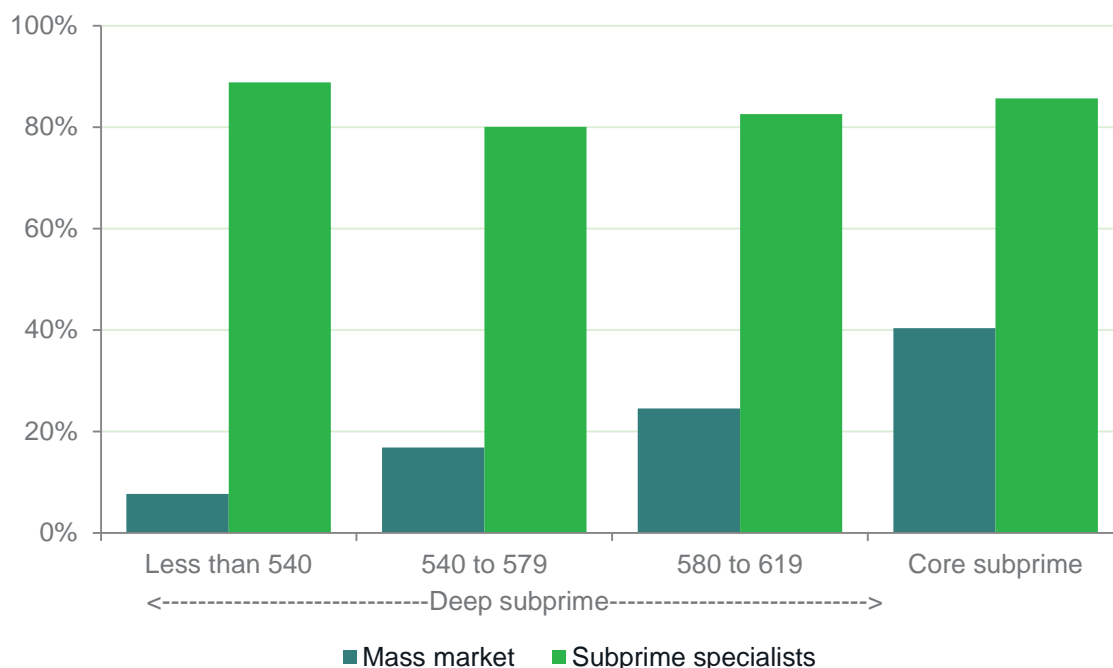
**FIGURE 15: MASS MARKET APPROVAL RATES BY CONSUMER CREDIT SCORE, ONLINE CHANNEL (MMI)**



In addition, the gap between overall and online approval rates is much more significant for certain credit tiers. There is almost no gap for consumers with superprime scores between approval rates overall (91%) and in the online channel (87%). For consumers with subprime scores, however, there is an eight percentage point gap, even though the approval rate overall is still only 27%. For consumers with superprime scores, therefore, the online application channels may simply represent a more convenient method of application—not one that stimulates higher risk applications. For consumers with subprime scores, by contrast, the online applicant pool appears to be viewed by issuers as higher risk than the applicant pool overall. That may suggest that the ease of applying online is leading to increasing application volume from consumers with subprime scores who would not be solicited to apply for those products.

Approval rates vary significantly between mass market and subprime specialist issuers. For consumers in each credit score range, subprime specialists approve applicants at a much higher rate than mass market issuers do. Figure 16 shows the contrast between these two sets of issuers with respect to their approval rates for consumers in different credit risk tiers. (Figure 16 shows three approval rates for applicants with deep subprime scores. The left hand set of bars reflects approval rates for applicants with the weakest scores. Scores improve along the horizontal axis.) The contrast is especially marked with respect to consumers with the weakest scores.

**FIGURE 16: APPROVAL RATES BY CONSUMER CREDIT SCORE, MASS MARKET AND SUBPRIME SPECIALIST ISSUERS, 2013-2014**



Part of the explanation for this discrepancy may lie with subprime specialists’ reliance on pre-screening and with the lower approval rates associated with online applications. Figure 17 below compares general purpose card account application channels in 2013 and 2014 for the two sets of issuers. It is limited to applications from consumers with subprime credit scores.<sup>14</sup> While pre-screening was used in connection with about 13% of mass market issuer applications, specialist subprime issuers received around 55% of their applications through this channel.<sup>15</sup> Conversely, mass market issuers received around 56% of their applications via digital channels. Subprime specialists received 33% via this channel.<sup>16</sup> (There is a third major channel difference between

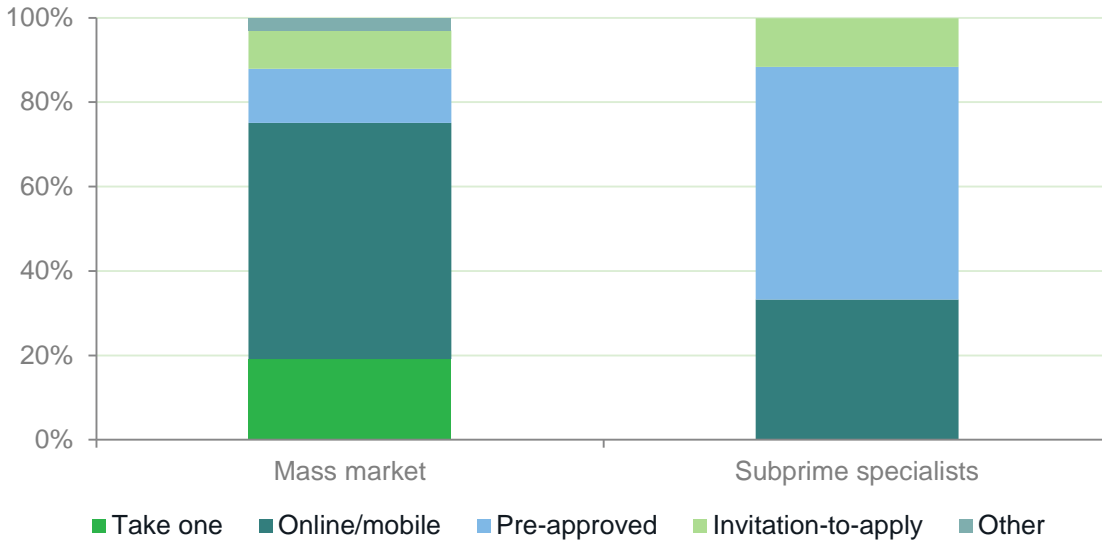
<sup>14</sup> In addition, both Figures 17 and 18 also examine – for data limitation reason – only applications and approval rates for general purpose products without a retailer cobrand.

<sup>15</sup> Again, this undercuts the use of the online channel because it excludes online applications that the issuer links to pre-screens, invitations-to-apply, or take-ones.

<sup>16</sup> This discrepancy may be the result of name recognition for mass market issuers. Consumers may seek out their brand names online. The subprime specialists, by contrast, have a smaller, more targeted reach.

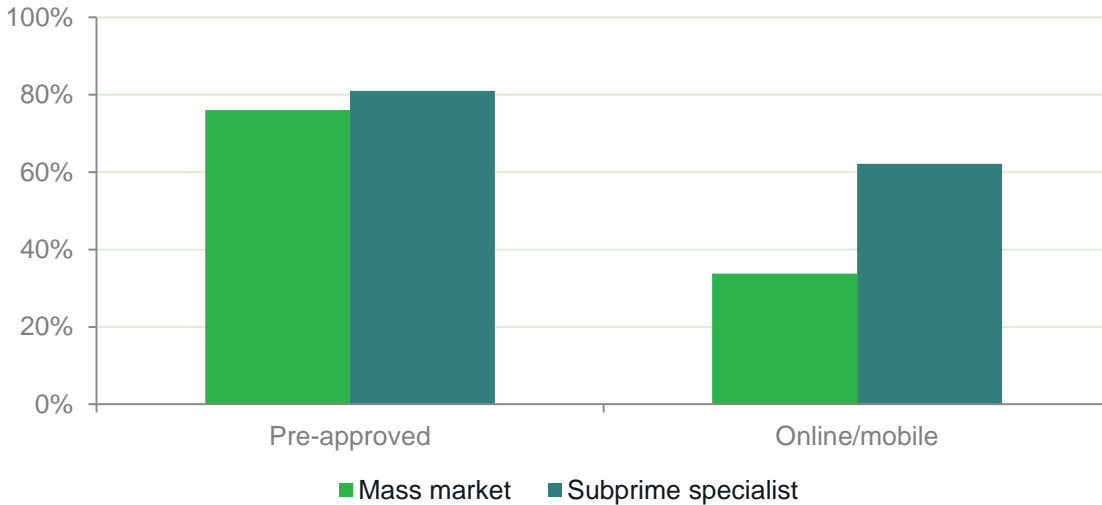
the two sets of issuers. Mass market general purpose issuers still rely on “take-one” applications secured through their branch networks or other partner locations. Subprime specialists make negligible use of this channel.)

**FIGURE 17: MASS MARKET AND SUBPRIME SPECIALIST GENERAL PURPOSE CARD APPLICATION CHANNEL SHARES FOR APPLICANTS WITH SUBPRIME CREDIT SCORES, 2013-2014 (MMI, SSI)**



Even controlling for channel, however, subprime specialists have higher approval rates. Figure 18 compares approval rates for pre-screened and online applications. Although the pre-screened approval rates are close, the rate for the subprime specialists is marginally higher. The discrepancy in approval rates for online applications is more marked, with the mass market online approval rate little more than half the rate of the subprime specialists.

**FIGURE 18:** MASS MARKET & SUBPRIME SPECIALIST GENERAL PURPOSE PRE-APPROVED & ONLINE/MOBILE CHANNEL APPROVAL RATES FOR APPLICANTS WITH SUBPRIME SCORES, 2013-2014 (MMI, SSI)



#### ABILITY TO PAY

The CARD Act requires issuers to consider a consumer’s “ability to pay” for the cost of using a new credit card line. Section 5.5 contains a detailed discussion of these so-called “ATP” requirements and the various practices now used by issuers to implement them. In summary form, however, these rules require issuers to consider a consumer’s debts and income (and/or assets) in determining whether the consumer is able to make the minimum payments that would be required on the account if the full line were utilized.

For 2013 and 2014, issuers reported that they denied some 4.7% of applications *solely* because the application did not meet ATP requirements. This includes both consumers for whom no income information was available and consumers for whom such information was available but the income reported was deemed insufficient to sustain the account. The “ATP denial rate,” moreover, varied substantially across issuers—from less than 1% to over 16%. In all cases, however, it is difficult to draw firm conclusions about the drivers of this variance.<sup>17</sup>

---

<sup>17</sup> There are at least three major drivers of variance that we are unable to disaggregate on any systematic basis. The first is the range of ATP practices used by different issuers. (We describe these in more detail in section 5.5.) Second,



The intent of the ATP requirements is to prevent extensions of credit to consumers who cannot afford them. It is possible, therefore, that the onset of the ATP requirements would be reflected in lower delinquency rates on cards originated after the implementation of those requirements. We know that the requirements did have some impact: nearly 5% of all applications are declined for ATP reasons alone. Accordingly, we review delinquency rates on accounts originated in 2009 before the implementation of the ATP rules, and on accounts originated in 2010, most of which were subject to the ATP rules.<sup>18</sup> More specifically, we look at delinquency rates once the accounts have reached the same age—or, in industry terms, after an identical number of “months on book.” For these purposes, we used nine months.

Figure 19 shows the results. For accounts in every score range, accounts not subject to the ATP rules showed higher 30+ delinquency rates after nine months. Although these results are directionally consistent with the apparent intent of the ATP rules, they should be treated with caution. Other CARD Act rules may also have impacted the incidence of delinquency. In addition, issuer policies may have changed for reasons unrelated to the ATP rules. There is little indication, however, that credit criteria tightened in this period separate and apart from the onset of the ATP rules. The Board’s quarterly Senior Loan Officer Survey shows that credit card underwriting was generally easing through 2009 and 2010. The one exception was the April 2010 survey, which reported tighter underwriting the previous quarter—but that was the period containing the implementation deadline for the ATP rules.<sup>19</sup> Background economic conditions may also have shifted over the period. Given this range of potentially confounding factors, further research would be required to isolate the precise effect of the ATP rules on delinquency.

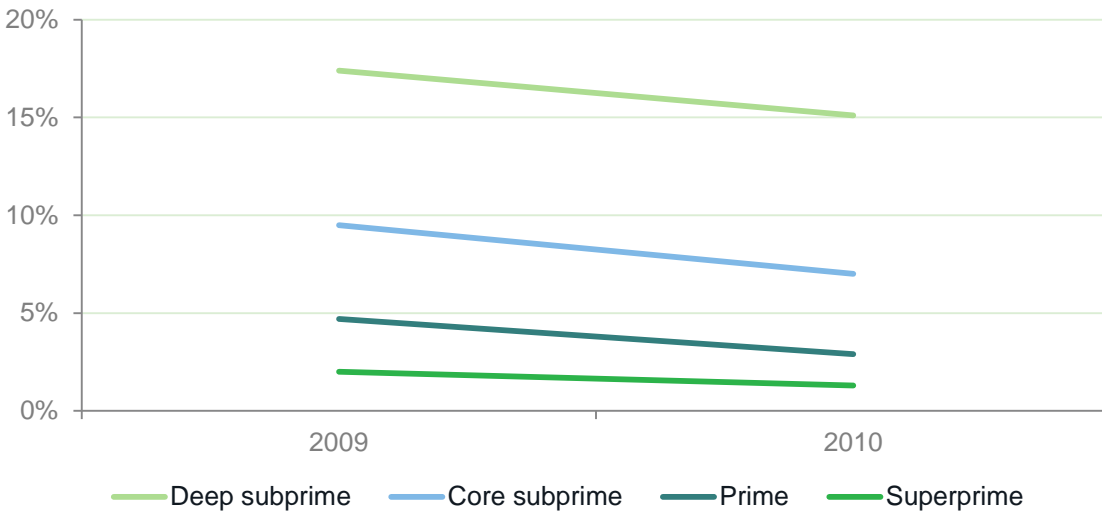
---

issuers follow a range of other underwriting and application policies and processes, which will impact the rate at which consumers are denied solely for ATP reasons. Third, issuers have different applicant pools.

<sup>18</sup> CARD Act rules required issuers to comply with the new ATP rules by February 22, 2010. See Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1735, 1743.

<sup>19</sup> See Board of Governors of the Federal Reserve Board, *The October 2015 Senior Loan Officer Opinion Survey on Bank Lending Practices* (Nov. 2, 2015), <http://www.federalreserve.gov/boarddocs/snloansurvey/201511/fullreport.pdf>.

**FIGURE 19:** 30+ DAY BALANCE DELINQUENCY RATES FOR ACCOUNTS' NINTH MONTH ON BOOK, BY CONSUMER CREDIT SCORE, ACCOUNTS ORIGINATED IN 2009-2010 (CCDB)



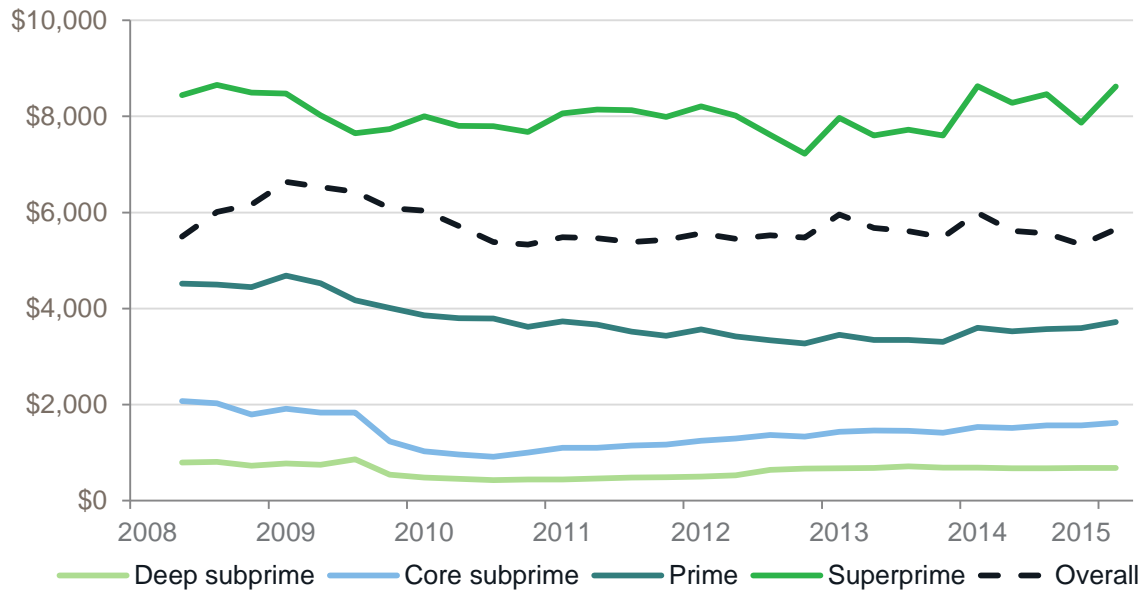
## 4.2 Credit lines

A key component of a credit card account is the credit line – the maximum amount a consumer is permitted to borrow on the account. The decision by issuers to originate an account is not a binary one. The issuer can and must choose how much credit to extend an approved consumer. Often, approval and line assignments are decided together as part of a single process. Additionally, existing credit lines can be increased or decreased for a range of reasons.

### 4.2.1 Credit lines on new accounts

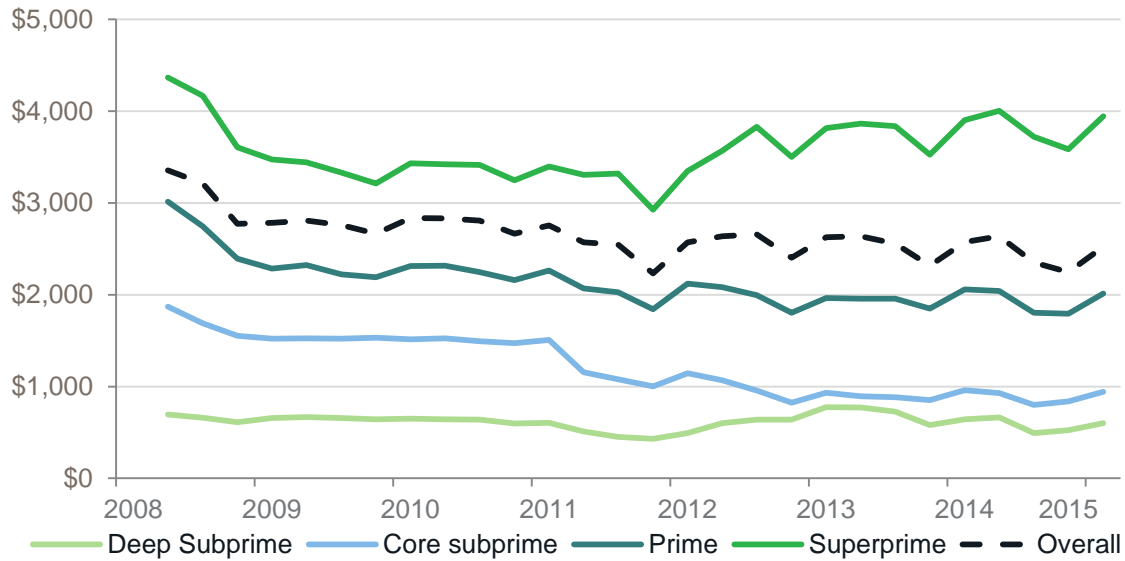
The Great Recession was associated with a substantial contraction in average credit lines for new general purpose cards. The contraction was concentrated among consumers with lower credit scores. Since then, however, credit lines for new general purpose accounts have rebounded substantially. For consumers with deep subprime credit scores, average new general purpose lines have been just below \$700 over the past year. That is about \$100 lower than before the recession, but well above the 2010 average of under \$450. Similarly, consumers with core subprime scores have received average new general purpose lines in excess of \$1,500 since late 2013. In 2010, new lines to this group had fallen below \$1,000. Only new general purpose lines offered to consumers with superprime scores have remained largely constant since 2008.

**FIGURE 20: AVERAGE LINE ON NEW GENERAL PURPOSE ACCOUNTS IN THE CCDB, BY CONSUMER CREDIT SCORE**



For new lines on private label cards, the picture is more mixed and consistent trends are harder to identify. Figure 21 shows that with the onset of the recession, new private label lines declined sooner and more severely than general purpose lines. Overall, however, they have held steady since about 2011. That overall trend conceals significant variation across credit tiers. Since 2011, new lines for consumers with core subprime scores have declined, even as they have increased for consumers with deep subprime scores. New line amounts for consumers with prime scores have been more volatile, but show no obvious trend since 2011. New superprime lines have trended upwards.

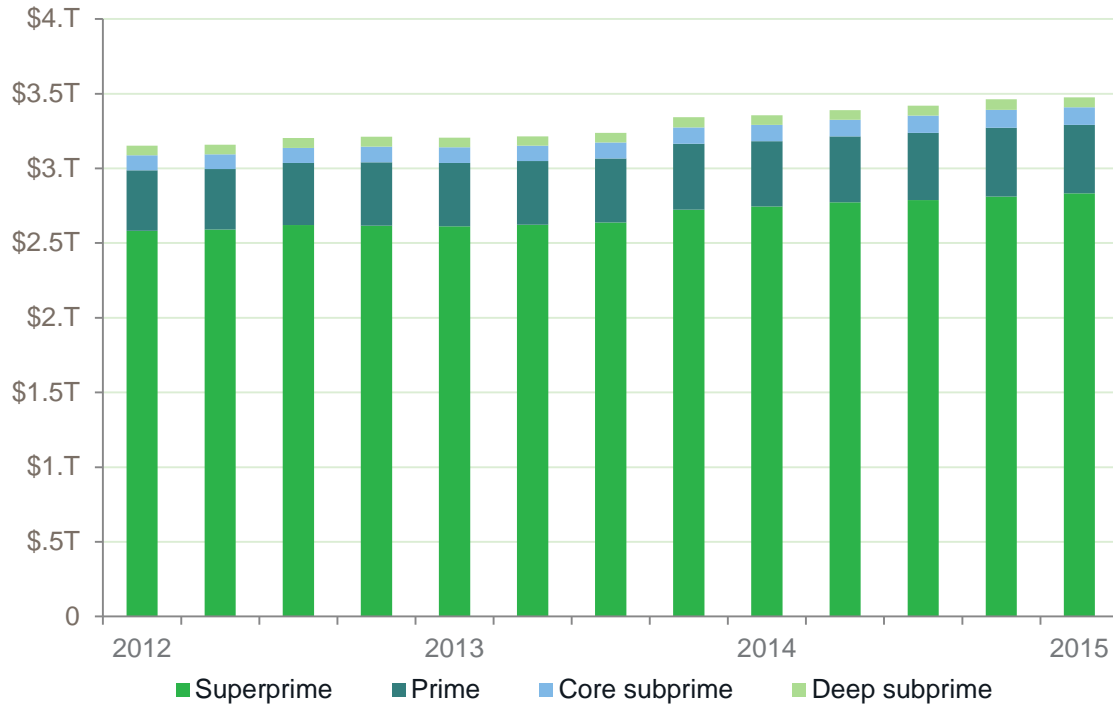
**FIGURE 21: AVERAGE LINE ON NEW PRIVATE LABEL ACCOUNTS IN THE CCDB, BY CONSUMER CREDIT SCORE**



#### 4.2.2 Total line

In aggregate, consumers have access to nearly \$3.5 trillion in card credit as of early 2015. This represents an increase of nearly \$325 billion—or 10%—since early 2012. The increase has been relatively steady across the period, as Figure 22 reflects. It has been felt by consumers in every credit score range, though somewhat less by consumers with deep subprime scores. They have seen their aggregate credit line increase by about 4%, which compares to double-digit percentage increases over the same period for consumers in every other credit score range, core subprime included.

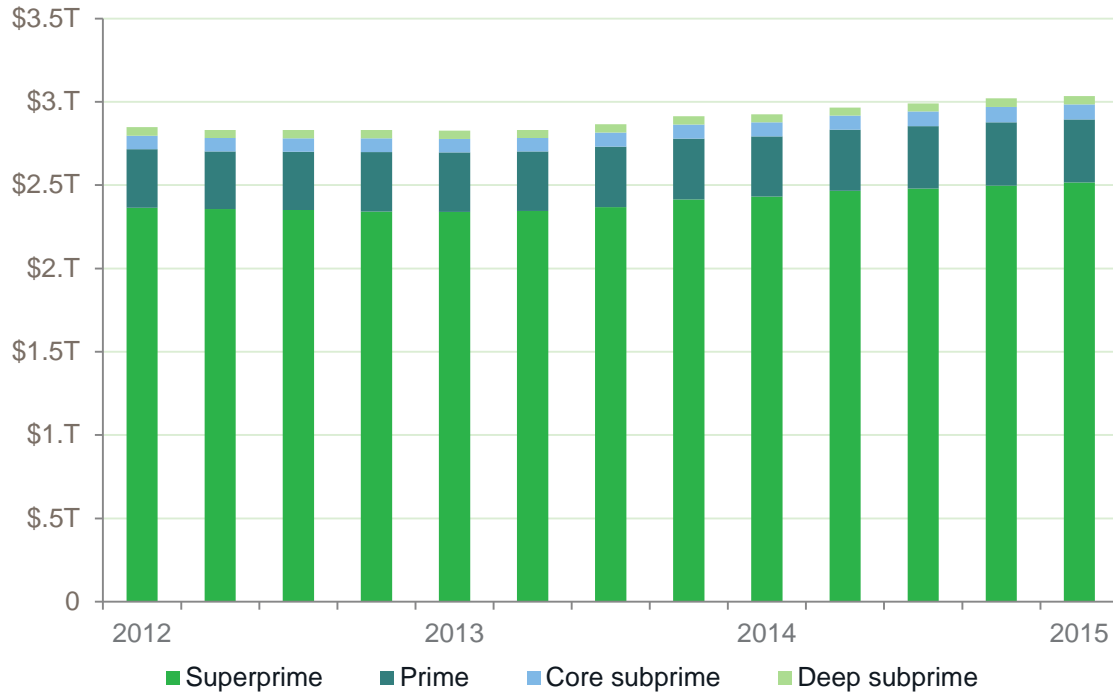
**FIGURE 22: TOTAL CREDIT LINE BY CONSUMER CREDIT SCORE (CCP)**



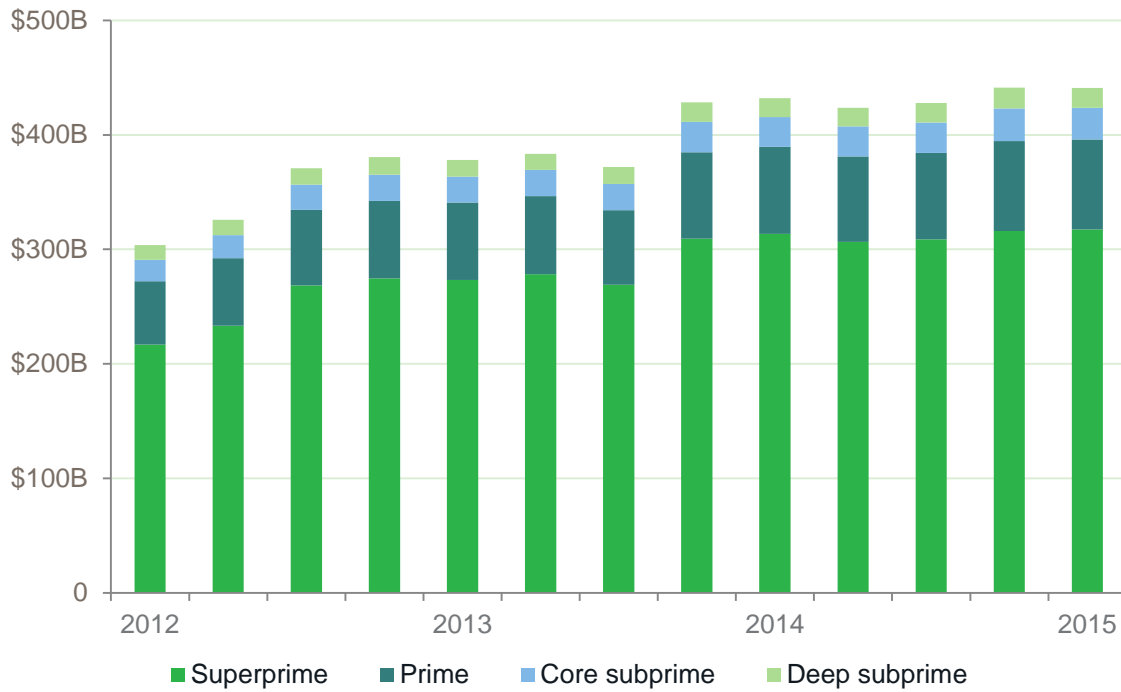
Over \$3 trillion in line is available to consumers on general purpose accounts, an amount that represents a 7% increase from early 2012. Consumers with deep subprime scores have experienced little change in their aggregate available general purpose credit. Consumers in every other credit score range, however, have experienced notable increases, including an 11% increase for consumers with core subprime scores.

Private label credit line represents less than one-seventh of aggregate credit available to consumers, but it has disproportionately driven the overall increase in line available to consumers. Since early 2012, it has comprised more than 40% of the overall increase in total credit line. Consumers in every credit score band have shared in this increase. Private label credit available to consumers with deep subprime scores has grown by 32% since early 2012. For consumers in every other score range, the growth rate has exceeded 40%. Figures 23 and 24 lay out the quarterly trends in aggregate line since 2012 for the two product types.

**FIGURE 23: TOTAL GENERAL PURPOSE CREDIT LINE BY CONSUMER CREDIT SCORE (CCP)**



**FIGURE 24: TOTAL PRIVATE LABEL CREDIT LINE BY CONSUMER CREDIT SCORE (CCP)**



### 4.2.3 Unused line and utilization

Changes in total line are an important indicator of credit availability. To put those changes in perspective, however, it is useful to analyze the extent to which consumers are using that line. We do so by looking at aggregate *unused* line, as well as consumer utilization rates.

#### UNUSED LINE

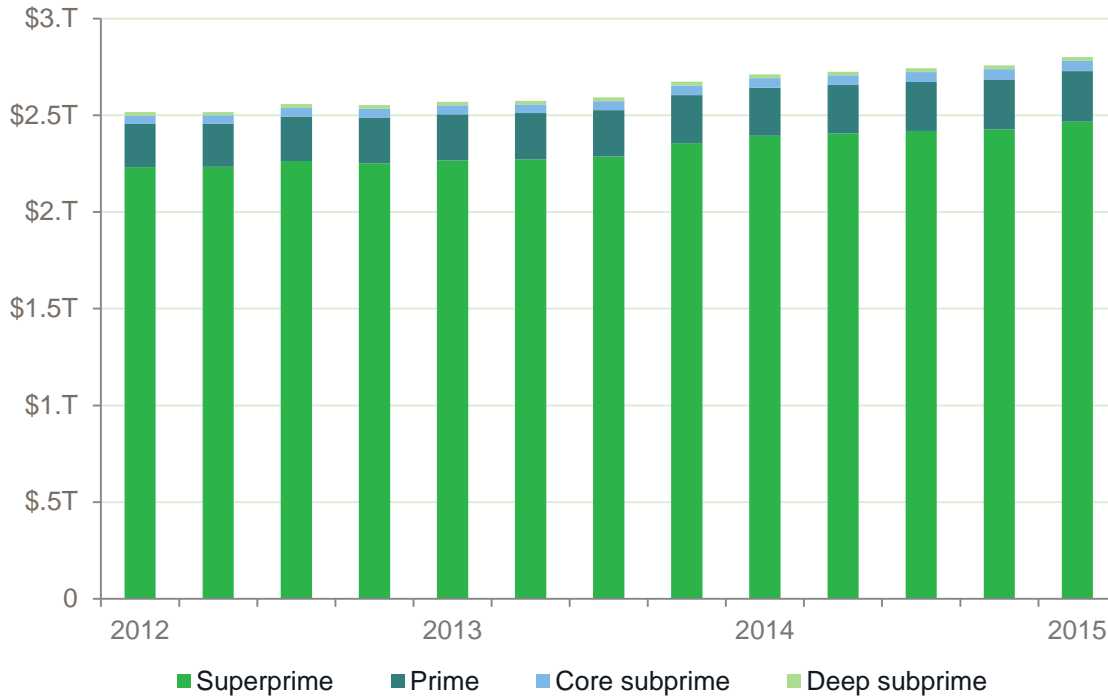
Almost all credit available to consumers on credit cards is unused. Of the roughly \$3.5 trillion in total line available as of early 2015, fully \$2.8 trillion was unused. By comparison, in the same period, U.S. gross domestic product (annualized and seasonally adjusted) totaled over \$17.6 trillion.<sup>20</sup> Therefore, consumers had available to them unused line equivalent to nearly one-sixth of GDP.

Total unused line has increased by double-digit percentages for consumers in every credit score band since early 2012. That includes consumers with deep subprime credit scores, who have over \$20 billion of total unused line. Consumers with superprime scores have nearly \$2.5 trillion dollars in unused line. The average cardholder with a superprime credit score had nearly \$26,000 in unused line in early 2015. The average cardholder with a prime score had nearly \$10,000. For cardholders with core and deep subprime scores, average unused line was, respectively, around \$3,700 and just over \$1,100. (The distribution of unused line across general purpose and private label cards tracks the distribution of total line across these products. Full details are at Appendix Figures 7 and 8.)

---

<sup>20</sup> See Press Release, U.S. Bureau of Economic Analysis, Gross Domestic Product: Third Quarter (Advance Estimate) (Oct. 29, 2015) 7, [http://www.bea.gov/newsreleases/national/gdp/2015/pdf/gdp3q15\\_adv.pdf](http://www.bea.gov/newsreleases/national/gdp/2015/pdf/gdp3q15_adv.pdf). According to the U.S. Bureau of Economic Analysis, which publishes these data, gross domestic product, “the featured measure of U.S. output, is the market value of the goods and services produced by labor and property located in the United States.” U.S. Bureau of Economic Analysis, *A Guide to the National Income and Product Accounts of the United States*, 5, <http://www.bea.gov/national/pdf/nipaguid.pdf> (last visited Nov. 17, 2015).

**FIGURE 25: TOTAL UNUSED LINE BY CONSUMER CREDIT SCORE (CCP)**

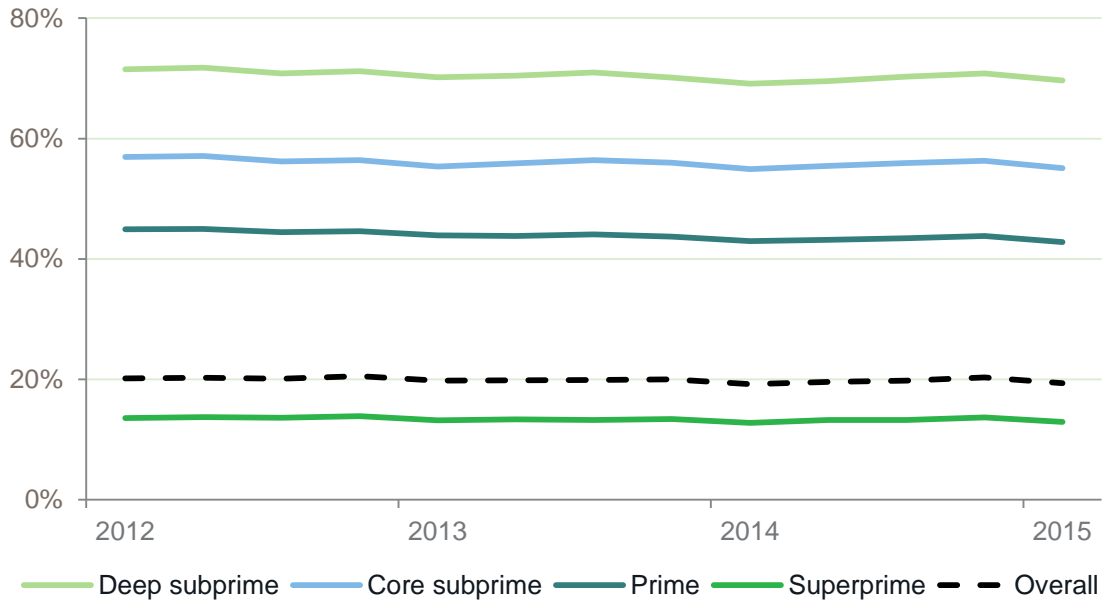


### UTILIZATION

Consumer utilization of available credit has held very steady over the last few years. As Figure 26 shows, that is true for consumers in each credit score range. The unchanged utilization picture suggests that at least within the cardholder population there have not been recent changes in demand that have not been accompanied by parallel changes in supply—or vice versa.



**FIGURE 26: AVERAGE UTILIZATION BY CONSUMER CREDIT SCORE (CCP)**



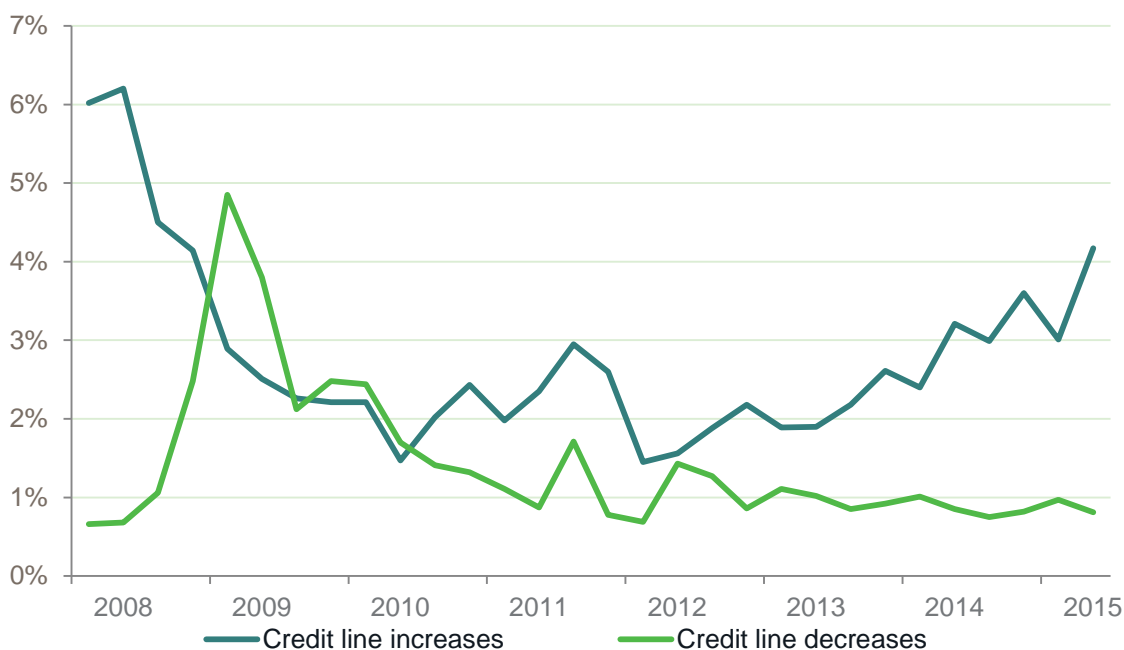
#### 4.2.4 Line changes

The line on any given credit card may be increased after origination. Credit line increases, which are also known as “CLIs,” can happen in two ways. The consumer can affirmatively request a line increase. We refer to this as a reactive credit line increase, or “RCLI.” Or an issuer can increase the line without an affirmative consumer request. We refer to this as a proactive credit line increase, or “PCLI.” We cover the practices used by issuers in connection with CLIs in more detail in section 5.5. This section looks at data on the number of CLIs. Lines can also be decreased, and this section reviews data on decreases as well.

##### **OVERALL**

Figure 27 shows the quarterly incidence of line increases and decreases on general purpose accounts in the CCDB. Overall, CLI incidence has increased strongly in recent years after a severe fall with the onset of the recession. The incidence of credit line decreases rose sharply during the recession, but has now declined to roughly its pre-recession level.

**FIGURE 27: QUARTERLY SHARE OF GENERAL PURPOSE ACCOUNTS IN THE CCDB EXPERIENCING INCREASES OR DECREASES IN TOTAL CREDIT LINE**



### REACTIVE CREDIT LINE INCREASES

Substantial numbers of consumers apply for credit line increases each year. Mass market issuers within the scope of our MMI review received more than 30 million such requests in 2013 and 2014 combined. Overall, they approved 37% of such requests, although not necessarily at the full amount requested by the consumer. Across these two years, the volume of requests rose by 17%. Even so, the approval rate rose by 6%. For the issuers within the scope of our review, the number of RCLIs granted increased nearly 25% from 2013 to 2014.

Although most RCLI applications are declined, only about 3% of RCLI applications are declined for ATP reasons alone. That “ATP decline” rate held roughly constant across 2013 and 2014, even as the overall rate of approvals for RCLIs declined over this period. For RCLIs, the data we reviewed does not distinguish ATP declines for a lack of income *information* from ATP declines for lack of *income*. If most consumers who affirmatively apply for a line increase are willing to provide income information, however, that would mean that most ATP declines in this context are for insufficient income. The RCLI decline rate, therefore, would represent a limit on credit availability that Congress specifically intended.

## PROACTIVE CREDIT LINE INCREASES

So long as consumers utilize and repay increased credit lines, issuers benefit from extending CLIs to consumers who do not request them. Most major issuers have proactive CLI programs that periodically assess accounts to determine whether the issuer can and should extend more credit to the account holder. PCLIs are far more common than RCLIs. Over the two year data period we reviewed, there were more than 50 million PCLIs granted, which is more than four times the number of RCLIs approved over the same period. Issuers' apparent willingness to expend substantial resources on increasing consumer credit lines proactively suggests that proactive increases lead consumers to borrow—or at least spend—more on their credit cards.

Many industry commenters, however, contend that certain prudential regulators' restrictions on the use of "modeled income" have impacted the operation of PCLI programs.<sup>21</sup> With credit card applications and RCLI applications, the consumer may have some expectation that he or she will need to provide a statement of income. In the PCLI context, however, the issuer is generally trying to make the CLI determination with minimal or no involvement on the consumer's part. Issuers that can use modeled income in this context, therefore, may have a significant advantage over those that cannot.

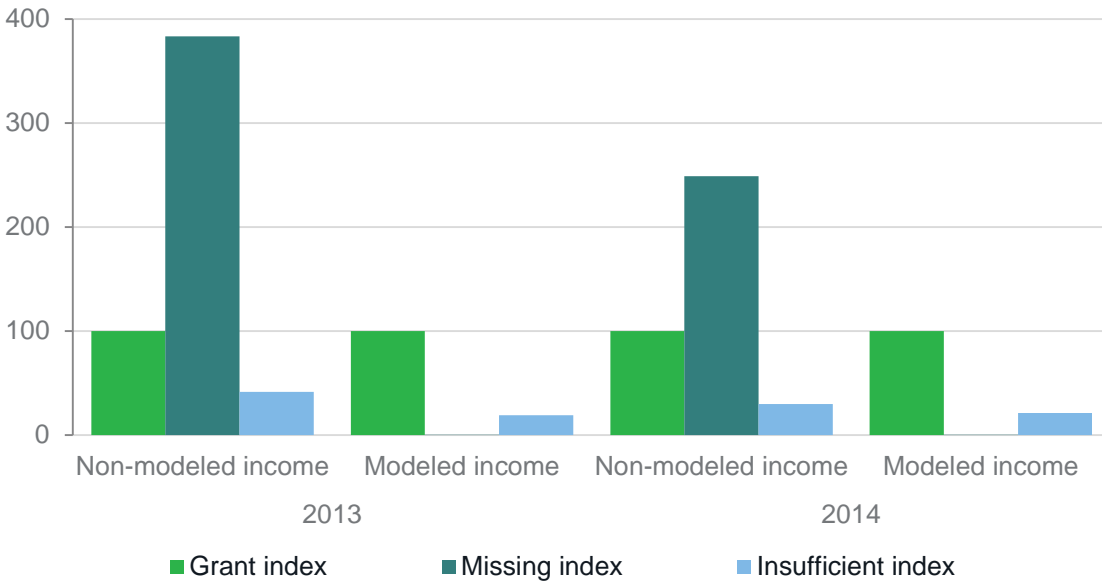
It is not straightforward to assess the impact of the ATP rules on PCLI programs because these programs differ significantly in their operational details. To assess the impact of the ATP rules in this area, therefore, we used the following approach. For each issuer, we first normalized the number of PCLIs they granted in each year to 100. We then normalized to that baseline the number of PCLIs that each issuer reported being unable to offer for ATP reasons. More specifically, we normalized the number of potential PCLIs that the issuer reported its PCLI program as failing solely for the lack of income information, and we separately normalized the number for which the issuer had enough income information but the consumer lacked sufficient income. We then averaged together these normalized values across the issuers within the scope of our MMI review, weighted by each issuer's active account volume.

---

<sup>21</sup> See, e.g., American Financial Services Association Letter (May 18, 2015) 5; see also Auriemma Consulting Group Letter (May 18, 2015) 16; Experian Letter, 2-3. Income models seek to estimate a consumer's income using other variables. For more on modeled income and other income sources used in connection with ATP practices, see section 5.5.2.

Figure 28 shows the results of this analysis. For each year, it provides the data separately for issuers that reported using modeled income in their PCLI programs and for those issuers that reported not doing so. Several points are notable.

**FIGURE 28: PCLI PROGRAM OUTCOMES (MMI & CCDB)**



First, issuers that do not use modeled income face a severe shortage of income information. In 2013, for example, income information shortfalls caused these issuers to have nearly four times as many PCLI rejections as grants.<sup>22</sup> In contrast, issuers that use modeled income have eliminated this income information problem. They fail almost no accounts for a PCLI on this basis.

Second, the income information shortfall may be diminishing over time for issuers that cannot use modeled income. In 2014, these issuers had only two-and-a-half times as many PCLI rejections as grants for this reason—a significant change over 2013. That may reflect that issuers

<sup>22</sup> Of course, some accounts not granted a PCLI for lack of income information would presumably fail for lack of sufficient income even if income information were available.

that cannot use modeled income have become much more effective at soliciting updated income information from cardholders on a regular basis.

Third, if the issuer has income information on the account, ATP restrictions block markedly fewer PCLIs than are granted. For issuers that use modeled income, PCLI failures for this reason are about one-fifth as common as PCLI grants. For issuers that cannot use modeled income, there are proportionally more PCLI failures for this reason—even though these issuers have proportionally fewer accounts with sufficient income information.

Finally, Figure 28 does not show the overall discrepancy in PCLI grants across issuers that use and do not use modeled income. To isolate the effect of the ATP rules, it normalizes PCLI grants for both groups of issuers to the same baseline. Given the results shown in Figure 28, however, it is evident that there is such a discrepancy. Overall, we found that the number of PCLIs granted annually by banks using modeled income is equal to about 28% of their active accounts. For those not using modeled income, however, the same ratio is only about 5%.

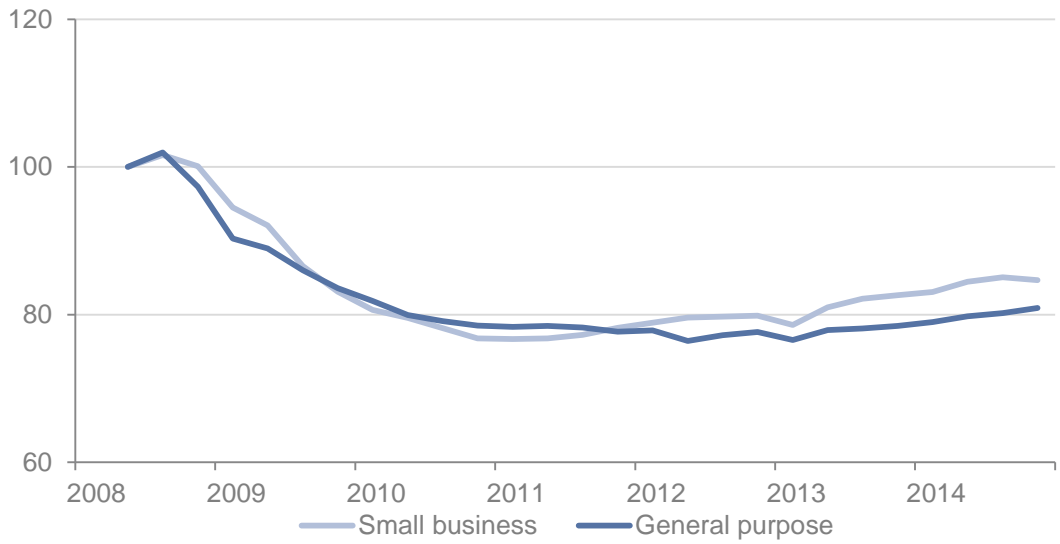
#### 4.2.5 Account closure

Consumers can also close their accounts. In some instances, issuers may affirmatively close accounts without a consumer request to that effect. That may occur for a range of reasons, from default to inactivity to the death of the cardholder. For the mass market issuers in the CCDB, since 2011, overall account closure rates have steadied at between 2% and 3% on a quarterly basis, after spiking to more than 10% during the recession. This is below their level at the beginning of 2008.

#### 4.2.6 Comparative credit line

As noted in section 3.4, small business credit cards were not subject to CARD Act rules. A review of credit line trends in the small business card market relative to trends in the consumer credit card market, therefore, may provide some insight into the impact of those rules. As was true with respect to our analysis of the cost of credit, the 2013 report and our analysis in this report indicate that trends with respect to total credit lines were broadly similar across the two markets. This is reflected in Figure 29. As with the cost trends, however, we cannot say definitively what causes the relative credit line trends in the two markets.

**FIGURE 29: TOTAL CREDIT LINE, GENERAL PURPOSE AND SMALL BUSINESS ACCOUNTS IN THE CCDB (INDEXED TO 100 IN Q2 2008)**



# 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.”<sup>1</sup> We address this topic under five headings: first, the readability of consumer credit cardholder agreements; second, a review of specific pricing practices and disclosures across the industry; third, online access to account information and disclosures; fourth, issuer disclosures of credit score information to their consumer cardholders; and fifth, issuer practices concerning the CARD Act’s “ability to pay” requirements.

## 5.1 Cardholder agreement readability

### 5.1.1 Methodology

The Bureau’s previous report reviewed a sample of cardholder agreements for large issuers to examine potential CARD Act impacts on agreement length and form. In this report, we examine more agreements across more issuers in order to examine both changes over time and variations between different issuer groups. We reviewed every agreement submitted to the Bureau’s credit card agreement database at year-end 2012, 2013, and 2014 for all issuers in the following three groups:

---

<sup>1</sup> 15 U.S.C. § 1616(a)(1)-(2).

- Those same mass market issuers which constituted the subject of the MMI data relied on earlier, who together account for predominant shares of all credit card originations and balances;
- The largest credit union issuers of Visa and/or MasterCard-branded consumer credit cards; and
- Those same subprime specialist issuers which constituted the subject of the SSI data relied on earlier.

We first calculated averages across agreements for all metrics for each issuer. Issuers were then assigned equal weight within their group to calculate overall group averages. This analysis has a different scope, methodology, and intent than the agreement analysis in the earlier study. As a result, this analysis should not be viewed as directly comparable to that prior analysis.

## 5.1.2 Length

Figure 1 depicts the length of agreements for the different issuer groups over time. The green bars illustrate average length. The black vertical lines for each bar show the low and high inputs to that average. Perhaps the most striking feature of this data is the average length of agreements for subprime specialist-issued products. On average, these agreements are more than 70% longer than the other agreements within the scope of our review. Also notable is the lack of substantial change over the three-year period within any of the groups, although the larger issuers do show a slight increase in average length over the period.<sup>2</sup>

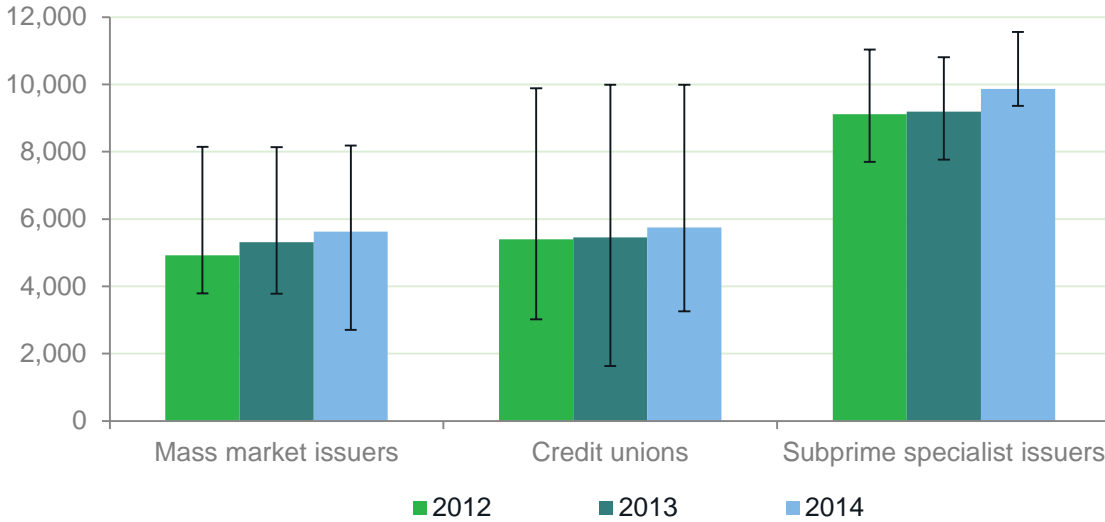
Another notable observation is the variation in the high-low range across the issuer groups. On average, credit unions had agreements that were similar in length to the large issuers. But there were some credit unions with agreements that were either notably longer or notably shorter than the longest and shortest agreements produced by the large issuers. Conversely, subprime specialist issuers had substantially longer agreements on average, but had the least variation in average length of any of the groups of issuers.

---

<sup>2</sup> One industry commenter notes that “while industry efforts to simplify agreements are ongoing, opportunities for enhancement remain.” Auriemma Comment Letter (May 18, 2015) 3. In particular, “[a]greements remain protracted despite incremental reductions in length.” *Id.*



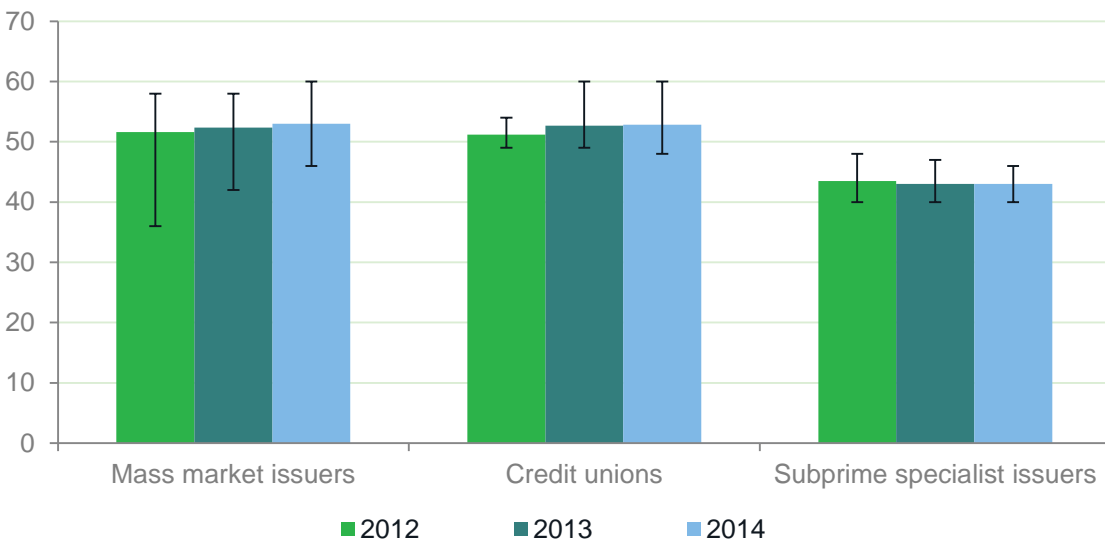
**FIGURE 1: AVERAGE WORD COUNT OF CARDHOLDER AGREEMENTS**



### 5.1.3 Readability

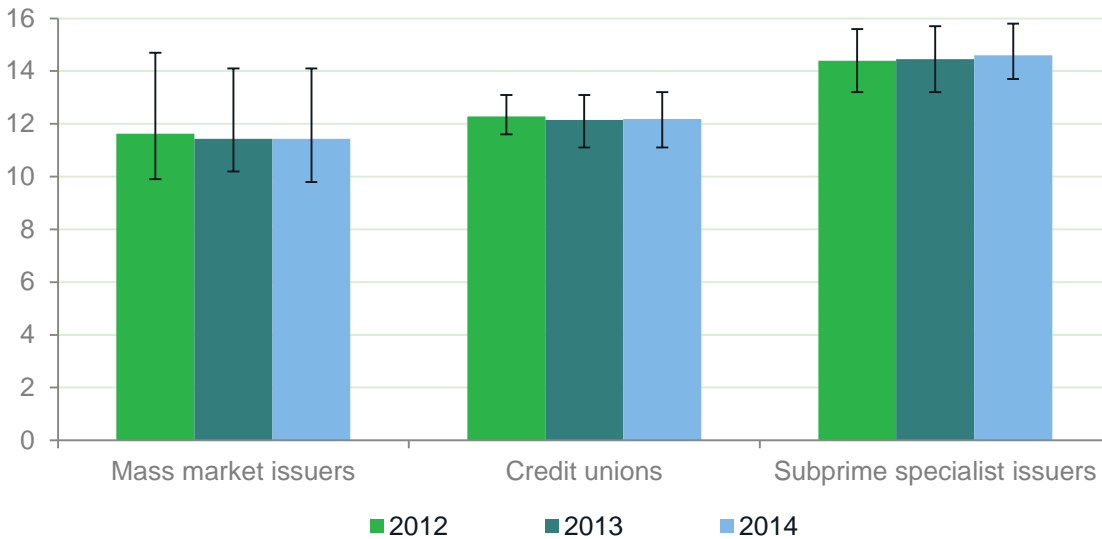
Several methods enable quantitative assessment of a text’s readability. These methods enable us to compare the relative readability of different documents. We rely on two such methods to analyze and compare the readability of credit card agreements: first, Flesch reading ease; and second, Flesch-Kincaid grade level.

**FIGURE 2: AVERAGE FLESCH READABILITY SCORE OF CARDHOLDER AGREEMENTS**



We apply the same methodology and visualization approach to Flesch reading ease as we did to word length in the prior section, and similar trends emerge. Higher Flesch readability scores connote better readability than lower scores do. As shown in Figure 2, the subprime specialists stand out as having consistently lower readability scores and more constricted ranges. Little change over time is observed within any of the three groups.

**FIGURE 3:** AVERAGE FLESCH-KINCAID GRADE LEVEL OF CARDHOLDER AGREEMENTS



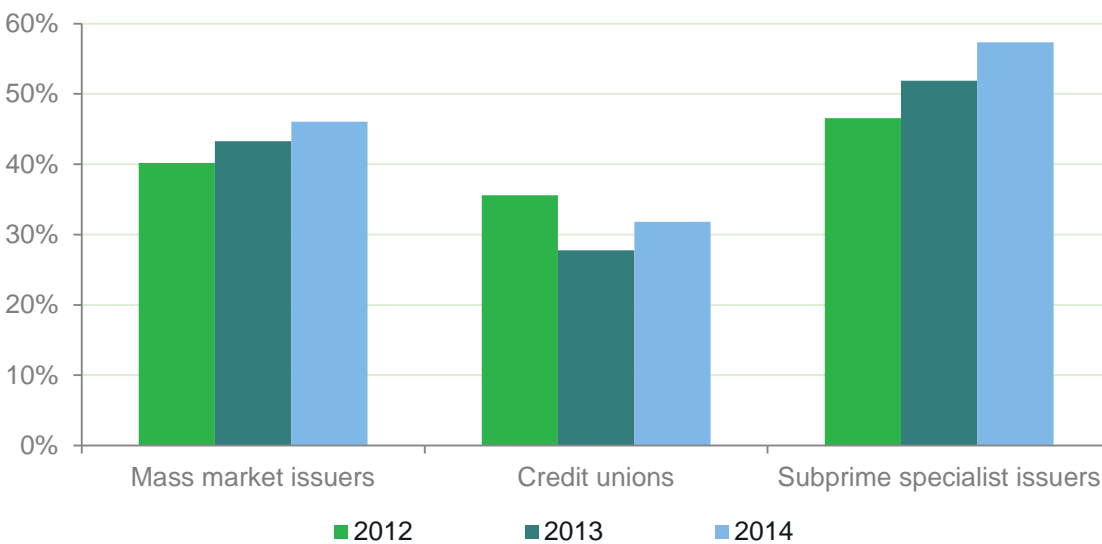
Very similar results hold for grade levels using the Flesch-Kincaid method, as shown in Figure 3. Here, a lower score denotes that the agreement is easier to understand. The derivations of Flesch reading ease and Flesch-Kincaid grade are very similar and the measures tend to be correlated. The similarities between Figures 2 and 3, therefore, are unsurprising.

The conversion to a grade score, however, highlights an important point. Large bank issuers and large credit unions are providing agreements that Flesch-Kincaid indicates should be readable by a high-school graduate. In contrast, the subprime specialists are using agreements that, on average, are at the reading level expected only after completing two years of post-secondary education.

This is especially concerning because these issuers generally market to—and, therefore, presumably serve—consumers who lack any post-secondary education. Using data from Mintel and Experian, we calculated the share of each group of issuers’ marketing mailings that went to households headed by consumers without post-secondary education. Figure 4 shows that large

bank issuers and subprime specialists alike are sending large and rising shares of mailings to such households. But subprime issuers send the largest share, with mailings to households headed by consumers with no college education exceeding half of their entire mail volume in 2013 and 2014. Furthermore, although subprime issuers send much less mail volume than larger issuers, among issuers in our dataset, these smaller issuers' share of all mailings sent to households headed by consumers with no college education doubled from 2012 to 2014.

**FIGURE 4:** SHARE OF MAILINGS SENT TO CONSUMERS WITH NO COLLEGE EDUCATION (MINTEL AND EXPERIAN)



Despite some evidence that issuers have been working to improve the readability of their agreements, these agreements continue to pose a challenge to consumers.<sup>3</sup> It is also troubling that the most complex, difficult-to-read agreements are disproportionately marketed to consumers who may be the least equipped to comprehend and navigate them.

---

<sup>3</sup> One industry commenter contends that “issuers should be allowed to continue to evaluate the readability of their agreements and make appropriate adjustments, consistent with existing regulation.” Morrison & Foerster LLP Comment Letter (May 18, 2015) 10.

## 5.2 Issuer pricing and disclosure practices

Based on the comments received in response to the Bureau’s Request for Information, as well as a range of market monitoring and supervisory activity, this section focuses on grace periods, late fees, minimum finance charges, and minimum payments. Using a sample of agreements, described further below, we analyze the pattern of applicable issuer practices, as well as the pattern of disclosures associated with these practices.

### 5.2.1 Methodology

Because a preliminary brief review of the agreements showed few changes between 2012 and 2014, we focused on agreements from year-end 2014. Again, we review agreements from all three issuer categories identified above. Our review for larger bank issuers includes both general purpose and private label card agreements. In some cases, we supplemented this sample with additional specific agreements identified from market monitoring as representing distinct divergences from broad trends. The intent of this review, therefore, is not to draw rigorously quantitative conclusions about the market, but to assess more qualitatively the range and rough frequency of practices in-market. Given the nature of the review, we do not use precise percentages in this subsection, but provide only more qualitative assessments. (When we supplement our review using additional sources such as the CCDB, however, we quantify them accordingly.)

### 5.2.2 Grace periods

Typically, a consumer who pays his previous balance in full when payment is due has a period of time after the close of the ensuing billing cycle to pay his full balance without incurring interest on new purchases made in that billing cycle. This period is generally referred to as the “grace period” on the account. If the consumer pays less than the full balance for the billing cycle by the payment due date, he loses this grace period. The purchase balance that is not paid is then subject to interest from the date of purchase or from the first day of the current billing cycle, whichever is later. New purchases are thereafter charged interest from the date of purchase. That practice ends once the grace period is restored. Almost all the agreements we reviewed provided for a lost grace period to be restored by the consumer paying the outstanding balance in full for two consecutive monthly bills.

In summary, consumers who revolve balances do not experience grace periods. Rather, they accrue interest on all new purchases from the date of purchase. Consumers who do not revolve balances and instead use their credit card only to transact have grace periods and pay no interest for using the card.

Almost all the agreements we reviewed contained terms that provided grace periods on new purchases. Large bank agreements uniformly contained such terms. One of the subprime specialists whose agreements we reviewed did not offer any grace period, but charged all cardholders interest from the date of purchase. Grace periods almost always encompassed the full billing cycle, which generally tended to be 25 days. We saw little variation in these practices for different products offered by the same issuer. The general 25 day duration exceeds CARD Act requirements. The Act does not require a grace period to be offered. For accounts that offer a grace period, however, the issuer must adopt reasonable procedures to ensure that a periodic statement is mailed or delivered at least 21 days prior to the date on which the grace period expires. The card issuer cannot impose finance charges if it receives a payment that satisfies the terms of the grace period within 21 days of the date it mailed the periodic statement.<sup>4</sup>

Grace periods are relatively complex in their operation. This is especially true with respect to the interaction of grace periods and promotional offers. For example, many solicitations for general purpose credit cards offer the consumer the opportunity to transfer a balance and pay 0% for a period of time. Some of the relevant marketing materials emphasize the savings that these promotions can enable. Some consumers who take advantage of such an offer may elect to pay only the minimum amount due each month in order to take maximum advantage of the promotional, interest-free period. That means, however, that the consumer is revolving the balance. Indeed, if the consumer did not revolve the promotional balance, the upfront cost of the promotional balance transfer—typically 3%—would almost certainly make the promotion a net cost to the consumer, contradicting the claim that such promotions enable the consumer to save

---

<sup>4</sup> See 12 C.F.R. § 1026.5(b)(2)(ii)(B)(1)(ii).

money. But many—and possibly all—issuers do eliminate the grace period on purchases when the consumer revolves promotional balances, such as zero percent balance transfer offers.<sup>5</sup>

This practice is of particular concern when a promotional balance transfer offer is sent to existing customers who are transacting on their account. If those consumers take advantage of the promotional offer, they will lose their grace period by taking the balance transfer. A review of data for select issuers shows that a notable share of accounts—ranging from the low single digits to above 10%—accepting a balance transfer were in transactor status at the point they took the transfer. All these consumers stood to lose their grace period on new purchases. Moreover, for every issuer, most of the potentially impacted population of accounts went on to make purchases before the balance transfer was paid—thereby incurring interest charges on new purchases and increasing the effective cost of the balance transfer.

In 2014, the Bureau issued a supervisory bulletin cautioning issuers to avoid deceptive and abusive practices when marketing promotional offers that would effectively end some consumers' grace periods.<sup>6</sup> As the Bureau noted in the bulletin, it is not always obvious to consumers when the utilization of a promotional offer, such as a balance transfer offer, will invalidate the grace period on new purchases. Especially in light of the potential costs to an identifiable and sizeable population of cardholders, the failure to warn potentially affected consumers of this contingent cost could constitute abusive behavior. Several industry comment letters state that in light of the Bureau's warning, some issuers are testing new disclosure language to try to improve consumer understanding of these interest charges.<sup>7</sup> Although the data do not permit us to draw conclusive causal connections, issuers that drew more attention to the interest costs on new purchases for transactors who accepted a promotional balance transfer

---

<sup>5</sup> The Bureau's research to date suggests that issuers do not typically eliminate consumers' grace periods when they revolve deferred interest promotional balances, making them an exception.

<sup>6</sup> One commenter suggested that the following rules should govern grace periods: (1) all transactions on a card should be subject to the same grace period; (2) rules for losing and regaining grace periods must be simple; and (3) there should not be any trailing interest once the consumer pays the full balance due. *See* National Consumer Law Center Comment Letter (May 18, 2015) 14. We discuss trailing interest in section 5.2.4 below.

<sup>7</sup> *See* American Bankers Association Comment Letter (May 18, 2015) 13; *see also* Morrison & Foerster Comment Letter (May 18, 2015) 4; Financial Services Roundtable & Consumer Bankers Association Comment Letter (June 17, 2015) 6.

did see a lower rate of new purchases after promotions than issuers that did not. The Bureau will continue to examine grace period practices to ensure consumers are informed about their operation as effectively as possible and that issuer practices fully comply with the law.

### 5.2.3 Late fees

The CARD Act established a principle of permitting only those penalty fees whose amounts were “reasonable and proportional” to the omission or violation which triggered the penalty fee.<sup>8</sup> In the case of late fees, the implementing regulations established a safe harbor for these purposes. As initially set, the safe harbor allowed a late fee of up to \$25 for the first instance and up to \$35 for subsequent instances within six subsequent billing cycles.<sup>9</sup> Pursuant to regulations that provide for annual adjustments based on changes in the Consumer Price Index, the safe harbors were raised for 2014 and then again for 2015. For 2016, the threshold will remain the same for the first late fee, and has been lowered for all subsequent late fees. Since the agreements we examined date to 2014, the relevant safe harbors were those in effect in 2014, which were \$26 and \$37 respectively.<sup>10</sup>

Our review found that most issuers remained within the safe harbor. Some were precisely so. Others retained the maximum allowable fees under the initial regulation, rather than increase fees by \$1 and \$2 respectively. Individual issuers were generally consistent across agreements. Only one issuer whose agreements were reviewed—a credit union—expressly stated late fees substantially below the allowed maximum. Only one large issuer offered an agreement that appeared to indicate an unvarying \$35 late fee.

Most, though not all, issuers expressly noted that late fees may be limited by the size of a consumer’s minimum payment. We also identified two bank issuers which offered specific agreements that limit late fees. One of these agreements completely eschewed assessing late fees

---

<sup>8</sup> 15 U.S.C. § 1665d(a).

<sup>9</sup> 12 C.F.R. § 1026.52(b)(1)(ii).

<sup>10</sup> Following a mandatory annual review, the Bureau explained the increases further at Truth in Lending (Regulation Z), 78 Fed. Reg. 76033 (Dec. 16, 2013).

under any circumstance. The other charged late fees only after a consumer was late for a second time.

## 5.2.4 Minimum finance charges

Consumers who are revolving a balance and have therefore incurred finance charges may be subject, by the terms of their cardholder agreement, to a minimum finance charge. Many issuers have such minimum charges in cardholder agreements. In our sample, issuers varied widely as to whether they established a minimum finance charge and, if so, the amount of that charge. Credit unions either expressly stated that they set no minimum interest charge or had no relevant language on point. Large banks were more varied. Though some of their agreements did not establish minimum finance charges, most did. That was true for general purpose as well as private label cards.

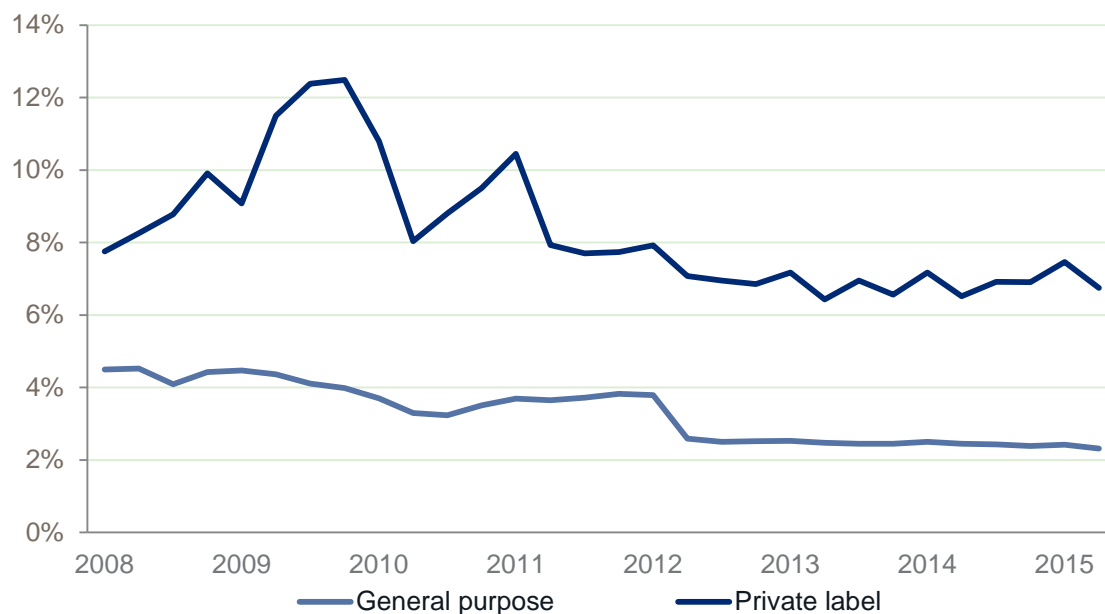
All issuers with a minimum finance charge tended to set the same minimum finance charge across their general purpose agreements, but issuers were not internally consistent in their private label portfolios. Minimum finance charges that we reviewed ranged from \$0.50 to \$2. Private label cards tended to have charges at the upper end of the range. General purpose cards were mostly at the other end. Subprime specialist issuers universally set the minimum finance charge at \$1.

Combined with grace period rules and with daily compounding of interest, minimum finance charges can contribute to consumer confusion about “phantom” charges that may be incurred after the consumer pays the outstanding balance in full. If a consumer without a grace period pays his outstanding monthly balance, he will incur a marginal interest charge for the time between the end of the last billing cycle and the date he makes payment. Such small interest charges are often referred to as “trailing interest.” (This problem recurs until the consumer has restored their grace period, thereby cutting off the accrual of interest on this “trailing interest” balance.)

Absent a minimum finance charge, trailing interest might be less common because its low amount might not justify the cost of servicing the payment. When issuers establish minimum finance charges, however, trailing interest is more likely to occur and may catch unwary consumers with outstanding balances when they do not expect any balance to be there. While the amount of the charge may not be high, the fact that it is unanticipated may cause consumers to miss payments and incur late charges—potentially several times over.



**FIGURE 5:** QUARTERLY INCIDENCE RATE OF MINIMUM FINANCE CHARGES ON ACTIVE CCDB ACCOUNTS



Minimum finance charges are not uncommon, as Figure 5 reflects. Data in the CCDB show that 4% of active accounts were assessed such a charge in each of the first two quarters of 2015.<sup>11</sup> The rate of incidence varies by card type and issuer. Private label cards are significantly more likely to incur these charges—and, as noted, tend to have the highest charges per incident.

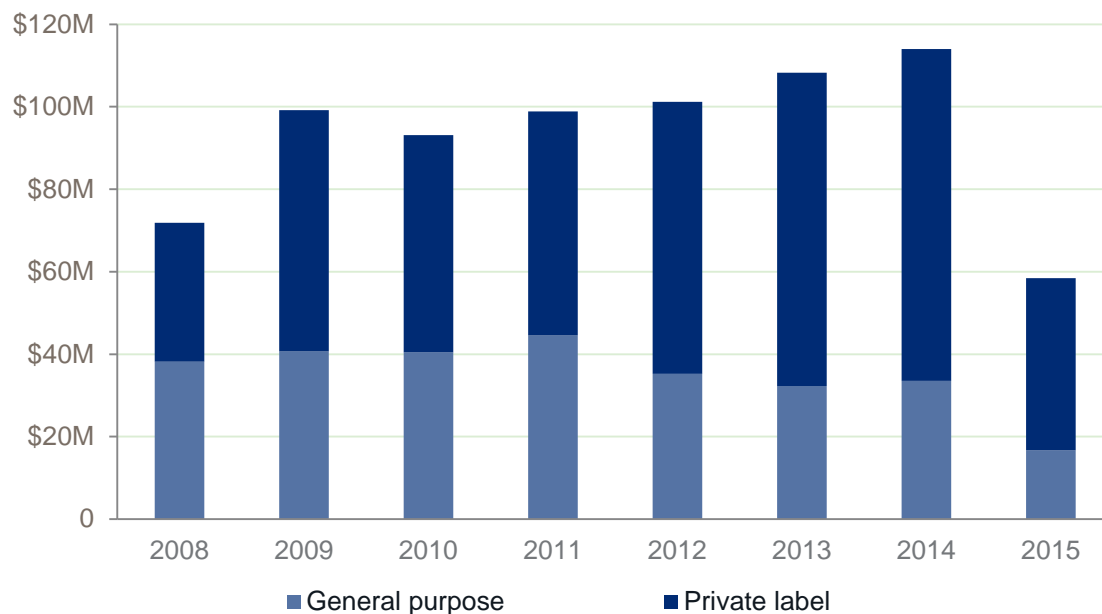
As shown in Figure 6, minimum finance charges have exceeded \$100 million every year since 2012. More than two-thirds of these charges are assessed to private label accounts.<sup>12</sup> Several issuers had annual incidence rates in excess of 25% and one had an incidence rate approaching 50%. Issuers with the highest incidence rates also tended to have the highest charge per incident.

---

<sup>11</sup> We identify the incidence of minimum finance charges by identifying interest charges equal to the minimum finance charge on that account. It is possible, of course, that an account incurs an interest charge in this precise amount “organically,” meaning based on the precise interest rate and balance on the account and not by the operation of the minimum finance charge. Statistically, this is unlikely to occur. If our data were driven by “noise,” we would not see the same high correlation between specific issuers and the precise minimum charges stated in their agreements. Furthermore, issuers that did not specify a minimum finance charge in their agreements had a very low incidence rate. It is likely, therefore, that our data are not driven by false positives.

<sup>12</sup> Given that these numbers only reflect practices evident in the CCDB, the true figures will be still higher.

**FIGURE 6:** AGGREGATE MINIMUM FINANCE CHARGES IN THE CCDB<sup>13</sup>



The agreements that we reviewed did not expressly warn consumers that interest accrues on the end-of-cycle balance even after the payment in full of the corresponding statement balance. In addition, those agreements did not explain how the consumer could end trailing interest.

### 5.2.5 Minimum payments

Of the contractually-specified practices examined by the Bureau, minimum payment formulae showed the widest range. In reviewing minimum payment agreement terms, we noted not only the scope and prominence of certain practices, but the complexity of those practices and how issuers communicated them to consumers.

Almost all issuers set fixed floors on the value of minimum payments. The floor varied across issuers. The most common floor was \$25. Most large issuers used this amount. Subprime banks tended to set higher floors. Credit unions generally set lower ones.<sup>14</sup>

---

<sup>13</sup> These are not annualized numbers; therefore, the total for 2015 encompasses only the first six months of the year.

Moreover, we also identified a range of disclosed practices in the minimum payment calculation. The first major point of difference is between issuers that calculate the minimum payment as a percentage of the total statement balance including finance charges, and those that calculate the minimum payment as a percentage of the total statement balance excluding finance charges, and then subsequently add the total finance charge to the minimum payment due. The former practice is overwhelmingly used by both credit unions and subprime banks. The latter practice is overwhelmingly used by large issuers, with only limited exceptions.

Among issuers that calculate the minimum payment as a share of total new balances including capitalized finance charges, credit unions universally require minimum payments of 2% of the total balances. Subprime banks require substantially larger payments, with both 5% and 7% minimum payments in our sample. The single large bank issuer that used this method charged 3%, except in certain circumstances—principally when late fees were assessed—when the minimum payment rose to 4% of the total balance.

Among issuers that calculate the minimum payment as a percentage of total balance excluding finance charges (then subsequently add total finance charges), almost all issuers set that percentage at 1%. These issuers included the one subprime specialist that used this practice. We also found two products, one private label and one general purpose, that used both methods, applying whichever was greater.

We noted if issuers specified whether past due amounts, amounts over the credit limit, or late fees are included in minimum payments. All large issuers specify that late fees or penalty fees are included, with the one exception of the product that did not charge any late fees. Most—but not all—subprime banks specified that penalty and other service fees must be paid in the minimum payment. Most credit unions did not. Most issuers of all kinds specified that past due amounts are included in the minimum payment. Only one large bank issuer and one credit union consistently did not. The majority of issuers we reviewed did not specify that amounts exceeding the credit limit are included in the minimum payment. Some of the largest issuers, however, were exceptions to this general practice.

---

<sup>14</sup> A higher floor is not necessarily harmful to the cardholder. All other factors being equal, it requires faster payment.

In our review of subprime specialist practices, we noted that for some of these issuers, fees assessed to the line at origination were a large driver of the total cost of credit for their cardholders. Unlike penalty or service fees, we did not find that these fees are required to be paid in full as part of the minimum payment. As a result, a consumer using a card from such an issuer could end up making minimum payments that include very significant payments for finance charges and fees, including finance charges on fees—while making less progress in paying down the charges incurred from purchase activity.<sup>15</sup>

The agreements' treatment of minimum payments became particularly complex in the context of multiple balances subject to different interest rates. For example, some accounts may carry a promotional balance at a reduced or deferred rate of interest, while also carrying various non-promotional balances. Of the agreements we reviewed, many mentioned that promotional balances impact the minimum payment calculation, but did not specify precisely how. Many also made reference to separate promotional terms and conditions documents not included as part of the general cardholder agreement. The agreements were also vague as to how payments above the minimum payment are applied. We examine minimum and above-minimum payment allocation practices for deferred interest products in section 6 below.

Finally, we found no simple correlation between the length and complexity of the minimum payment clause and the size of the required minimum payments as a share of total balances. Large bank issuers tended to have agreements—especially on private label products—that appeared the most complex on this point, at least based on length and on the number of variables and contingencies in the minimum payment calculation. Yet these issuers were consistently in the middle of the range of minimum payments relative to balances.

---

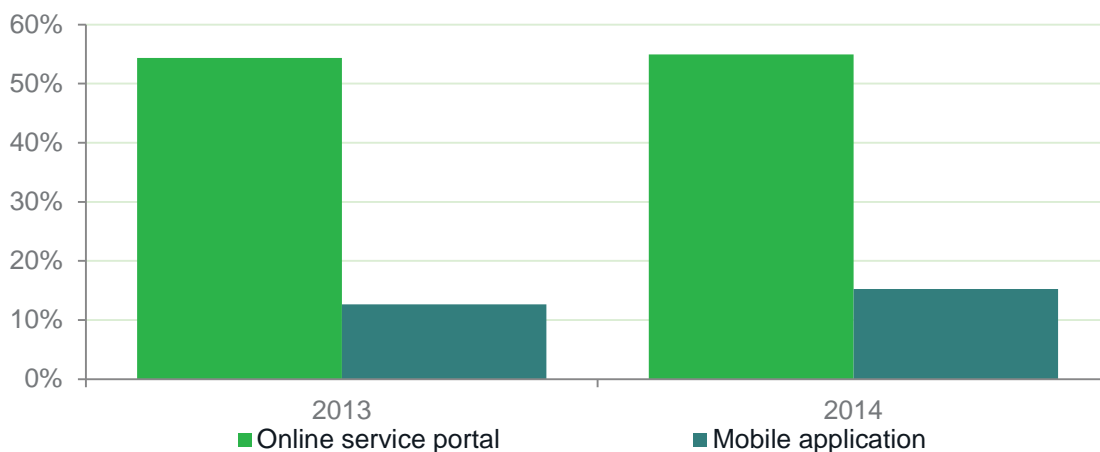
<sup>15</sup> Once a consumer has made purchases on a card with large upfront fees capitalized into the principal balance, it is impossible to distinguish rigorously between the consumer paying down purchases or fees. Even so, the presence of a substantial fee-based addition to credit card balances above and beyond purchase volume does mean that, for any given pattern of usage and payment on the card, the consumer will pay more in finance charges and take longer to pay down the balance than if the consumer used a card that did not assess such fees.

## 5.3 Online access to account information and disclosures

Consumers are increasingly obtaining, maintaining, and using credit card products via digital channels. (We discuss some specific developments in our analysis of credit card market innovation in section 9.) As part of its market monitoring efforts, the Bureau surveyed credit card issuers about their users' online engagement with their credit cards in 2013 and 2014.

The first results from that survey can be seen in Figure 7. Issuers reported that most accounts are enrolled in online account portals.<sup>16</sup> Only a minority of accounts are enrolled in issuers' mobile applications, but that share appears to be on the rise.

**FIGURE 7:** SHARES OF ACTIVE ACCOUNTS ENROLLED IN ONLINE SERVICE PORTALS AND MOBILE APPLICATIONS (MMI)



Enrolling in an online portal or a mobile application does not mean that consumers have opted against receiving paper statements. As Figure 8 shows, about a quarter of active accounts have opted out of paper statements, though the share of opt-out accounts continues to increase slowly.

---

<sup>16</sup> The data in Figure 5 encompass general purpose and private label accounts. Although we cannot make a complete separation of the data for the two account types, available indications are that general purpose accounts are substantially more likely than private label accounts to be enrolled in online service portals and mobile applications.

In reality, however, these opt-outs are for the most part opting out of reviewing their statements entirely. Figure 8 also reflects that only about 10% of active accounts have an online statement reviewed by the cardholder within a given quarter. Even if all these online statement reviews were on accounts that had opted out of paper statements, more than half of the accounts that opted out of paper statements would not be reviewing a statement of any kind in a given quarter. Consumers would therefore be less likely to identify any erroneous or fraudulent transactions. They would also not encounter standard mandatory statement disclosures, such as the minimum payment warning.<sup>17</sup>

In addition, consumers accepting deferred interest offers would not be encountering required disclosures for those products. The data suggest that retail or private label accounts are at least as likely as general purpose accounts to be opted out of paper statements—even as private label accountholders are substantially less likely to access online statements.

**FIGURE 8:** PAPER STATEMENT OPT-OUT AND ONLINE STATEMENT ACCESS, AS A SHARE OF ACTIVE ACCOUNTS (MMI)



<sup>17</sup> CARD Act rules require statements to contain a “Minimum Payment Warning” that informs the consumer how long it would take to pay the present balance making only minimum payments. See 12 C.F.R. §1026.7(b)(12).

Online and mobile tools and platforms that allow consumers to access and manage their accounts—including by opting in to payment reminders of various kinds—can have clear benefits. They cut down account servicing costs. Preliminary indications suggest they can cut down late payments as well, which holds out promise that they may also have longer term impacts on delinquency and charge-off rates. More fundamentally, they offer consumers the potential for more control over their financial lives.

At the same time, required statement disclosures were developed to provide important information to consumers, such as the overall fee burden of an account. With some more complex products, such as deferred interest promotions, the statement may contain even more critical information in particular billing cycles. Yet online, consumers simply do not review statements in significant numbers.

If statements help to deliver important information, therefore, the data above indicate that consumers who have opted out of receiving paper statements as well as reviewing online statements would be well served if the important disclosures contained in those statements were delivered through additional means. Online and mobile platforms could offer new, flexible ways in which to bring relevant account information to the consumer’s attention outside of the formal monthly statement.<sup>18</sup>

The Bureau will continue to monitor this space so it can understand what online engagement practices help consumers the most.<sup>19</sup> To the extent that an issuer—or a group of issuers—believe that existing rule requirements hinder more effective online disclosure at any stage of the credit

---

<sup>18</sup> This may apply, in particular, to underserved consumers. According to a recent Bureau report, “underserved consumers use and value alerts as a key function of their mobile financial service.” Consumer Financial Protection Bureau, *Mobile financial services* (Nov. 2015) 25, [http://files.consumerfinance.gov/f/201511\\_cfpb\\_mobile-financial-services.pdf](http://files.consumerfinance.gov/f/201511_cfpb_mobile-financial-services.pdf).

<sup>19</sup> A number of industry commenters cautioned against one-size-fits-all approaches to online disclosure that might constrain the emergence of consumer-friendly disclosure formats in digital channels. See Financial Services Roundtable & Consumer Bankers Association Comment Letter (June 17, 2015) 4; see also American Bankers Association Comment Letter (May 18, 2015) 14; League of Southeastern Credit Unions & Affiliates Comment Letter (May 19, 2015) 3-4. Others suggested that online portals should prominently feature certain critical information from the statement, such as the total of interest and fees for the relevant period. See National Consumer Law Center Comment Letter (May 18, 2015) 10-11.

card lifecycle, they could seek to test their preferred alternatives by submitting an application to the Bureau's trial disclosure program.<sup>20</sup>

## 5.4 Open credit score initiative

Credit scores are fundamental to consumers' ability to access credit—and the price at which they do so. Most creditors use credit scores in determining whether to extend credit to a consumer and, if so, at what price. Credit card issuers and other open-end creditors also often use credit scores in adjusting pricing and credit lines over time. Credit scores also play outside of the credit context. For example, related scores may impact a consumer's ability to obtain various types of insurance or the price of that insurance.

Even so, consumer access to credit score information has been relatively limited. Consumers were able to obtain a free copy of their credit report on an annual basis, but few did so.<sup>21</sup> Over the last few years, however, credit card issuers have begun to make scores available, free of charge, to their customers. At this point, recurring credit score disclosure is moving from an innovative best practice to being a new norm for the credit card industry.

In 2013, a handful of large- and medium-sized credit card issuers started to offer free credit scores to their consumers on a large scale.<sup>22</sup> In early 2014, the Bureau identified recurring credit score disclosure as a best practice for consumer credit card issuers.<sup>23</sup> A significant number of

---

<sup>20</sup> See Project Catalyst, *Run a Trial Disclosure*, Consumer Financial Protection Bureau, <http://www.consumerfinance.gov/projectcatalyst/run-a-trial-disclosure/> (last visited Nov. 19, 2015).

<sup>21</sup> See 15 U.S.C. § 1681j(a)(1)(A); 12 C.F.R. pt. 1022; see also *Free Annual File Disclosures*, 75 Fed. Reg. 9726 (Mar. 3, 2010) (to be codified at 16 C.F.R. pt. 610).

<sup>22</sup> See FICO, *FICO Score Open Access*, <http://www.fico.com/en/products/fico-score-open-access>. (last visited Nov. 24, 2015). This development followed FICO's agreeing to permit financial institutions that had purchased scores for their own purposes to distribute those scores to consumers free of charge.

<sup>23</sup> The Bureau's call was echoed in an Executive Order from October 2014 stressing the importance of credit score disclosure in combating identity theft. See Press Release, White House Press Office, Fact Sheet: Safeguarding Consumers' Financial Security (Oct. 17, 2014), <https://www.whitehouse.gov/the-press-office/2014/10/17/fact-sheet-safeguarding-consumers-financial-security>.



bank and credit union issuers have now adopted this general practice, using a variety of disclosure models.<sup>24</sup> The list of issuers making scores available on a regular, recurring basis now includes all the largest credit card issuers, some of which now market the practice in credit card solicitations. That list also encompasses some smaller issuers.

The Bureau suggested this change because of the potential benefit to consumers from being aware of their credit score and how it may change over time.<sup>25</sup> If consumers see their credit scores on a recurring basis—and especially if they see a change in their score—they may be motivated to understand how to maintain or improve their scores. They will also be better placed to identify and correct mistakes in their credit record in a timely fashion.

In the past, consumers may have focused on the importance of credit scores only after the fact—once a loan application had been denied. The emerging norm of credit score disclosure to credit card consumers can help consumers to take action to protect or improve their credit standing on an ongoing basis.<sup>26</sup> Consumers who can improve their scores will have greater access to more affordable credit and experience measurable improvement in their financial lives.

Estimating the number of cardholders with access to credit score information via their card issuer is not straightforward because one consumer may have access through a number of different cards. In October 2015, Fair Isaac estimated that consumers holding about 100 million

---

<sup>24</sup> In addition to those early adaptors cited earlier, the Bureau has identified the following issuers as adopting a general practice of making scores available to credit card customers on a regular and recurring basis: Capital One Financial, Bank of America, Citibank, Chase Bank, American Express, Synchrony Financial, US Bank, USAA, Pennsylvania State Employee Credit Union, Digital Federal Credit Union, State Employees Credit Union, Alliant Credit Union, Merrick, and Credit One. The Bureau has also identified some issuers that make scores available, but not on a recurring, general basis.

<sup>25</sup> Some issuers reported overwhelmingly positive results to their score disclosure efforts. *See, e.g.*, Discover Comment Letter (May 18, 2015) 1-2. Some trades, however, criticized the Bureau for failing to conduct formal cost-benefit analysis in this area and for adopting an initiative that did not use more proscriptive standards. *See, e.g.*, US Chamber of Commerce Center for Capital Markets Competitiveness Comment Letter (May 18, 2015) 10-11.

<sup>26</sup> *See, e.g.*, Ask CFPB, *How do I get and keep a good credit score?*, Consumer Financial Protection Bureau (last updated July 11, 2014), <http://www.consumerfinance.gov/askcfpb/318/how-do-i-get-and-keep-a-good-credit-score.html>.

accounts now have free access to FICO scores.<sup>27</sup> Reflecting the rapidity with which this practice has emerged, the 100 million number is an increase from 8 million less than two years ago.<sup>28</sup> Some 50 participating banks and lenders and more than 30 participating non-profit credit counseling providers are now working with Fair Isaac on providing access.<sup>29</sup> VantageScore, another credit scoring company, recently announced partnerships with several personal finance websites to offer its credit score for free to their combined 20 million subscribers.<sup>30</sup> In addition, some issuers also disclose VantageScores to their consumers. Other actors, including non-credit card lenders, have taken steps towards mass credit score disclosure as well.<sup>31</sup>

Credit card issuers have not adopted identical practices when rolling out credit score disclosure. In fact, there is a wide range of practices being used. Some issuers have made scores available on paper statements. Others have limited disclosure to customers accessing their accounts online. Issuers have employed a range of different practices to alert consumers to the availability of credit score information. Issuers have also disclosed different credit scores. Some have disclosed scores that they themselves use in underwriting; others have used different “educational” scores.<sup>32</sup> Issuers have also contextualized credit score information in slightly different ways, with some providing more detailed or tailored information about factors affecting disclosed

---

<sup>27</sup> See FICO Blog, *100 Million and Counting*, FICO (Oct. 22, 2015), <http://www.fico.com/en/blogs/risk-compliance/100-million-counting/>.

<sup>28</sup> See id.

<sup>29</sup> See id.

<sup>30</sup> See VantageScore, *Free Score Providers*, <http://www.vantagescore.com/free> (last visited Nov. 19, 2015).

<sup>31</sup> The list of non-credit card lenders includes, for example, Sallie Mae, Hyundai Motor Finance, and Kia Motors Finance. In early 2015, Fair Isaacs concluded new agreements with the three largest credit reporting agencies that will allow millions of consumers who receive nonprofit credit counseling, housing counseling, and other services to obtain a copy of the FICO score purchased by these organizations. See Corey Stone & Daniel Dodd-Ramirez, *Millions of Consumers Will Now Have Access to Credit Scores and Reports Through Nonprofit Counselors*, Consumer Financial Protection Bureau, <http://www.consumerfinance.gov/blog/millions-of-consumers-will-now-have-access-to-credit-scores-and-reports-through-nonprofit-counselors/> (last updated June 2015).

<sup>32</sup> See Consumer Financial Protection Bureau, *Analysis of Differences between Consumer- and Creditor-Purchased Credit Scores* (Sept. 2012), [http://files.consumerfinance.gov/f/201209\\_Analysis\\_Differences\\_Consumer\\_Credit.pdf](http://files.consumerfinance.gov/f/201209_Analysis_Differences_Consumer_Credit.pdf).

scores. Some issuers have also provided other information from credit records, such as the number of open lines.

Issuers have also reported a range of different responses and use rates by consumers.<sup>33</sup> Looking forward, the Bureau will continue to monitor the specific practices used by different credit card issuers (and other lenders) to see what impacts can be measured and what best practices may exist in this area.

## 5.5 Ability to pay practices

Among the key reforms included in the CARD Act was a requirement that, before opening a credit card account or increasing the credit line on an existing account, an issuer must assess the consumers' ability to make required payments on the account.<sup>34</sup> Section 1026.51 of Regulation Z implements this requirement, commonly referred to as the credit card “ability to pay”—or “ATP”—rules. These rules have a number of different components, including the following:

- To be approved for a new account or an increase in credit line on an existing account, the consumer (or other party liable on the account) must have their own independent income or assets, or have a “reasonable expectation of access” to income or assets of others, that, considered in the light of the consumer’s current obligations, are sufficient to make required minimum payments on the account.<sup>35</sup>

---

<sup>33</sup> In addition to noting benefits provided to its cardholder, one early adopter, Barclaycard U.S., reports that “increases in customers’ digital engagement, low additional operational expenses, and the potential for this program to be a positive influence on cardholder behavior provide benefits to the lender. See Vyacheslav Mikhed, *Can Credit Cards with Access to Complimentary Credit Score Information Benefit Consumers and Lenders?* Philadelphia Federal Reserve Bank (Sept. 2015) 18-19, [https://www.philadelphiafed.org/-/media/consumer-credit-and-payments/payment-cards-center/publications/discussion-papers/2015/d\\_2015\\_can-credit-cards-with-access.pdf](https://www.philadelphiafed.org/-/media/consumer-credit-and-payments/payment-cards-center/publications/discussion-papers/2015/d_2015_can-credit-cards-with-access.pdf).

<sup>34</sup> The CARD Act added a new section 150 to TILA, codified at 15 U.S.C. § 1665e, which requires that an issuer may not open a credit card account, or increase the line on an existing account, without first “consider[ing] the ability of the consumer to make the required payments under the terms of [the] account.”

<sup>35</sup> 12 C.F.R. § 1026.51(a)(1)(i); Comment 51(a)(1)(i)-4.

- A consumer who is under 21 years can only rely on “current or reasonably expected” income or assets, considered in the light of current obligations. Incomes or assets to which there is only a reasonable expectation of access are insufficient to meet the required “independent” ability to pay on the account.<sup>36</sup> A consumer who is under 21 years who lacks the independent ability to pay may qualify for a credit card account if there is a co-signer, guarantor, or joint applicant who is 21 years or older on the account who satisfies the ATP test.<sup>37</sup>
- To meet these requirements, issuers must use a reasonable method for calculating the required minimum payment on the account. An acceptable method is to assume that the consumer uses the full available line from the first day the account is open or the line is increased.<sup>38</sup>

In addition, the rules require that issuers establish and maintain reasonable “written policies and procedures” to consider the consumer’s ability to make the required minimum payments under these standards.<sup>39</sup> To prepare the current report, the Bureau reviewed these policies and procedures for a range of different issuers. Our intent was not to monitor for legal compliance per se, but to understand the range of practices in use and how those may impact consumers and issuers. We also received comments on the ability to pay rules and related practices in response to our March 2015 Request for Information. These comments principally focused on the use of modeled income in ATP determinations and on the separate ATP determinations for consumers under 21 years old, both of which are discussed below.

### 5.5.1 Sourcing debt information

All of the issuers we surveyed rely, at least in part, on a consumer credit reporting company for information on consumers’ current debt obligations. In fact, with the exception of housing costs,

---

<sup>36</sup> 12 C.F.R. § 1026.51(b)(1)(i); Comment 51(b)(1)(i)-1.

<sup>37</sup> 12 C.F.R. § 1026.51(b)(1)(ii).

<sup>38</sup> 12 C.F.R. § 1026.51(a)(2).

<sup>39</sup> 12 C.F.R. § 1026.51(a)(1)(ii).

issuers reported using credit reporting agency (CRA) information to calculate all consumer obligations, both revolving and installment.

### **HOUSING COSTS**

For ATP purposes, issuers generally reported that they ask consumers for their monthly housing cost at the time of application and then use the greater of consumer-reported or CRA-reported housing costs. If the issuer does not have a housing cost number from either of these sources, and is unable to obtain one from the consumer by mail or phone, it will estimate such information. When the CRA has a mortgage balance on file for the consumer, some issuers use a percentage of that balance to construct an estimate. When there is no mortgage balance on file, issuers use a predetermined share of the consumer's monthly income or the median cost of housing in the consumer's metropolitan statistical area to estimate housing cost. We saw little variation in the assumptions used in these calculations.

### **OTHER DEBTS**

Issuers reported using CRA-sourced information for all other debts. They use the credit file's monthly payment amount when it is available. When only credit balances are available, issuers estimate a monthly payment based on the balance and type of debt. Generally, issuers reported that they exclude charged-off debts and debt information that has not been updated for at least six months.

## **5.5.2 Sourcing income and asset information**

The regulations list several categories of information a card issuer may use to discern income and assets, including: (1) information provided by the consumer, whether in connection with the credit card account or some other financial relationship with the issuer or its affiliates; (2) information obtained through “empirically derived, demonstrably and statistically sound” (or “EDDS”) models that reasonably estimate income or assets; or (3) information obtained from third parties.<sup>40</sup>

---

<sup>40</sup> See § 1026.51(a)(1)(i); see also Comment 51(a)(1)(i)-5.

## STATED INCOME

Consumer-reported income—often referred to as “stated income”—is the main source that issuers use to determine income for ATP purposes. When a consumer applies for an account, the issuer solicits stated income, generally referred to on the application as “total annual income” or “total annual gross income”, as part of the application. When soliciting stated income, issuers generally ask for either “gross annual income” or “total annual income” and note that the applicant need not reveal alimony, child support, or separate maintenance income unless they want it considered as a basis for repayment. Some issuers provided guidance to applicants that they may include other accessible income, such as income that is regularly deposited into an account the applicant owns or, if the applicant is over the age of 21, income that is not earned or owned by the applicant but is regularly used to pay the applicant’s expenses. Every card issuer we surveyed uses that application information in its ATP decision-making on new card applications.

With the exception of two subprime specialist issuers, every surveyed issuer routinely solicits updated statements of income from its customers. Issuers can use updated information to provide credit line increases (“CLIs”) to their existing cardholders. Conversely, the absence of updates can limit the ability of issuers to provide “proactive” CLIs, which are CLIs that do not originate with a consumer request. Presumably to maintain their CLI programs in the wake of the ATP rules, some issuers have increased their efforts to obtain updated income information.

Stated income updates are now solicited in person, online, by mail, and by phone. Some of these solicitations are in connection with pending CLI determinations, but many others are carried out on a routine basis, especially as the stated income data on file becomes more “stale” for a given consumer. Issuers reported that they do not use stated income information that is more than a year old and some issuers reported that they required the information to be even more current.<sup>41</sup> With one exception, issuers that relied on stated income reported shares of active accounts with income information less than one year old that ranged from about 20% to about 60%.<sup>42</sup>

---

<sup>41</sup> There is no Bureau rule that directly states a time limit on using stated income or other ATP data.

<sup>42</sup> The exception was an issuer that did not carry out “proactive” CLIs.

### **THIRD PARTY INCOME**

Almost every issuer we surveyed reported using third-party payroll information to try to obtain income information when a recent consumer statement on income is otherwise unavailable. Issuers did not report using any other source of third-party information for ATP purposes.

### **MODELED INCOME**

When an issuer lacks current income information either from the consumer or a third-party source and desires to consider the consumer for a new account or CLI, the issuer's only remaining option is to use a model designed to estimate income. Multiple commenters noted that the Office of the Comptroller of the Currency (OCC) has restricted the use of income modeling by issuers that it supervises on safety and soundness grounds. These commenters noted that such restrictions have hampered the ability of OCC-supervised banks to provide proactive CLIs.<sup>43</sup> One commenter claimed that following the OCC's imposition of these restrictions in the second half of 2012, CLI frequency at OCC-supervised banks decreased by 50% relative to pre-CARD Act levels.<sup>44</sup> As described in section 4 above, our own monitoring data confirms a significant drop in the share of general purpose accounts obtaining a CLI in this period.

This report does not analyze the relative merits of issuer CLI programs relying on updated stated income, modeled income, or some other alternative. (In addition, we do not assess the overall consumer welfare impact of proactive CLIs.) We note that several commenters contended that modeled income (or at least some income modeling) is as good—and sometimes is a better—indicator of ability to pay than stated income.<sup>45</sup> No commenter contended otherwise. (Commenters did not contend, however, that modeled income better proxies income than stated income does.)

---

<sup>43</sup> See American Bankers Association Comment Letter (May 18, 2015) 6; *see also* American Financial Services Association Comment Letter (May 18, 2015) 5; Auriemma Comment Letter (May 18, 2015) 16-17; Experian Comment Letter (May 18, 2015) 2; Morrison & Forester Comment Letter (May 18, 2015) 9-10.

<sup>44</sup> See Experian Comment Letter (May 18, 2015) 2.

<sup>45</sup> See American Bankers Association Comment Letter (May 18, 2015) 6; *see also* American Financial Services Association Comment Letter (June 17, 2015) 5; Morrison Foerster Comment Letter (May 18, 2015) 9-10; Auriemma Comment Letter (May 18, 2015) 16; Experian Comment Letter (May 18, 2015) 1-2.

Instead, we address the range of practices in this space. Several issuers we surveyed make use of modeled income. Some solicit stated income only for account opening purposes, and use modeled income for proactive credit line increase (PCLI) purposes. These issuers reported having income data, either modeled or stated, less than one year old for effectively their entire customer base. The remaining issuers that use modeled income for CLI purposes do so less uniformly, relying on it only when neither stated income of recent vintage or third-party payroll information is available.

## **ASSETS**

There is considerable variation in how issuers rely—if at all—on assets when making ATP determinations. A significant minority of the issuers we surveyed take some account of a consumer’s assets when determining income for ATP purposes. Most of these issuers add some share of assets to the consumer’s stated income for these purposes. In some cases, they may add that share to income data obtained from third-party sources. Some issuers only consider assets held by the issuer or its affiliates on behalf of the consumer. These issuers tend to impute a smaller share of such assets as additional income. Other issuers consider all assets, imputing significantly higher shares of total assets as additional income. Some issuers do not impute a portion of assets to income, but substitute all consumer assets managed by the issuer for monthly income when determining ATP.

### **5.5.3 Ability to pay calculations**

As described above, the ATP rules require issuers to consider at least one of: the consumer’s debt-to-income ratio; the consumer’s debt-to-asset ratio; or the income the consumer will have after paying debt obligations (we refer to this as “residual income”). Among the issuers we surveyed, residual income was the most common method used, and was sometimes but not always used in combination with debt-to-income ratios. Some issuers used only debt-to-income ratios. No issuer used debt-to-asset ratios directly, although, as noted above, some issuers used assets to help determine income for ATP purposes.

## **RESIDUAL INCOME**

Issuers using residual income ATP determinations require that the difference between a consumer’s income and debt obligations—including the obligations on the relevant credit card account—be greater than a certain threshold. Our survey identified a relatively wide range of



practices in assessing residual income. In some cases, issuers deduct obligations on the credit card account being considered as well as other obligations from the consumer's credit report.

Issuers then use a fixed threshold to determine whether consumer's residual income indicates that he/she has the ability to pay a potential extension of credit. In other cases, issuers do not deduct obligations from the credit card account being considered when they calculate residual income, but instead vary qualifications according to a number of factors, including the APR on the account, the credit line, or the consumer's credit score. For issuers that use both residual income and debt-to-income ratios in ATP determinations, the consumer's debt-to-income ratio may be considered in establishing the required threshold, either in combination with some of these factors, or by itself. Fixed thresholds were not common. Those that were used varied widely.

#### **DEBT-TO-INCOME RATIOS**

Debt-to-income ratios were less commonly used by issuers to assess ATP than residual income. Among issuers using such ratios, there was considerable variation in their use as well. The thresholds used by these issuers varied significantly. Sometimes the required threshold was fixed. Sometimes it varied according to other factors including residual income, stated income, and/or credit score.

#### **ANNUAL INCOME REQUIREMENTS**

Some issuers also used minimum annual income requirements to supplement the approaches above. The required thresholds varied significantly.

### **5.5.4 Additional requirements affecting young consumers**

Reflecting particular congressional concern over the extension of credit to younger consumers who might lack the ability to independently make payments, the CARD Act and its implementing regulations imposed more onerous ATP requirements with respect to consumers under 21 years old.<sup>46</sup> In particular, for consumers under age 21, an issuer must assess whether

---

<sup>46</sup> See, e.g., 155 CONG. REC. S5410 (daily ed. May 13, 2009) (statement of Sen. Robert Menendez) ("I am convinced, having seen my own children, when they were in college and studying but not working, get an incredible number of

the consumer has an “independent ability” to make the required payments on the account and cannot rely upon income of another (*e.g.*, a parent) to which the consumer has access.<sup>47</sup>

Under Regulation Z, issuers are allowed to either apply this “independent ability” requirement to all applicants or to only those under the age of 21. We observed very few issuers applying the “independent ability” requirement to all applicants. Most issuers included language on their credit card application forms stating that if an applicant is over the age of 21, then the applicant may include in their stated income any accessible income which the applicant does not earn but is regularly accessed or used to pay for their expenses.

This age-based distinction continues to elicit negative comments, with several industry trade associations complaining that it has made it harder for younger consumers to obtain credit on consumer credit cards.<sup>48</sup> Given that the Act expressly mandates a tougher ATP standard for younger consumers, however, the Bureau is of the view that this impact was specifically intended by Congress.

---

preapproved credit cards, I could stack them this high, or my State director’s 2-year-old who got a preapproved credit card, if you have a Social Security number and a pulse that, in fact, you can get a credit card.”)

<sup>47</sup> The consumer can only rely on another’s income to the extent that party agrees to assume liability on the account. See 12 C.F.R. § 1026.51(b)(1)(ii).

<sup>48</sup> See American Bankers Association Comment Letter (May 18, 2015) 2; *see also* Georgia CUA Comment Letter (May 14, 2015) 2; Discover Comment Letter (May 18, 2015) 4.

## 6. Deferred interest promotions

As a general matter, the credit card market can be divided between general purpose credit cards and private label cards. General purpose cards carry the Visa, MasterCard, Discover, or American Express brand. As a result, they can be used at a wide range of unrelated merchants. Private label cards can be used only at a single or limited number of related retailers.

In the general purpose market, it is common for issuers to offer a promotional rate—often 0%—to encourage consumers to apply for a particular card or to transfer balances to it. Consumers who accept this kind of promotional offer will be charged the promotional rate during the promotional term, after which any remaining balance will be assessed interest at the standard rate for the particular card.<sup>1</sup>

The private label market also offers 0% promotions, but of a very different form. They offer “deferred interest” financing for a promotional or “deferred interest period.” During the deferred interest period specified in the offer, the card issuer generally does not require a consumer to pay interest charges on the promotional purchase.<sup>2</sup>

As a result, a consumer who pays the full promotional balance during the deferred interest period will not incur any interest charges at all.<sup>3</sup> Such a consumer finances his purchase interest-free. One industry commenter states that this feature makes deferred interest products

---

<sup>1</sup> Many promotional offers involving balance transfers also assess an upfront fee on consumers accepting the offer, typically calculated as a percentage of the transferred balance.

<sup>2</sup> In rare cases, offers may provide for reduced but not zero interest charges during the promotional period. The vast majority of offers, however, provide for zero interest charges on the promotional balance during the promotional period.

<sup>3</sup> In rare cases, the consumer may still incur an upfront fee to participate in the promotion.

“particularly attractive to consumers who must make a large, unexpected purchase (e.g., a replacement refrigerator) and lack savings or available funds.”<sup>4</sup>

If a consumer fails to pay the full promotional balance by the end of the deferred interest period, however, issuers making these offers retroactively assess and charge interest for the entire promotional period at that point.<sup>5</sup> The effect of not paying within the promotional period, therefore, is generally equivalent to the consumer having borrowed all along at the card’s underlying interest rate—which is typically much higher than those available on most general purpose credit cards.<sup>6</sup>

Data available to the Bureau indicate that in 2013 spending under deferred interest programs was equivalent to over a quarter of all spending on private label accounts.<sup>7</sup> The average deferred interest rate applicable to such promotions that year was 24%.<sup>8</sup> Deferred interest assessed to promotions originated in 2013 exceeded 8% of the finance charges on private label accounts that year.

The Bureau’s 2013 credit card market report found that the “payoff rates” associated with deferred interest offers varied by the credit score of the accepting consumer.<sup>9</sup> For deferred

---

<sup>4</sup> See Morrison & Foerster LLP Comment Letter (May 18, 2005) 7.

<sup>5</sup> Some promotions also stipulate that deferred interest will be assessed in the event of a late payment. For the most part, however, issuers do not assess deferred interest based on a late payment, though they will assess a late payment fee. If the consumer makes several sequential late payments, deferred interest may eventually be assessed even before the expiration of the promotion.

<sup>6</sup> Compounding practices, however, may not always be identical across these different card types. Although that can complicate the comparison, the typical deferred interest rate remains significantly higher than the typical general purpose rate.

<sup>7</sup> Not all deferred interest programs are associated with private label accounts. Some network-branded cards also offer deferred interest. To the Bureau’s knowledge, however, these cards always reflect an issuer-merchant partnership of some kind.

<sup>8</sup> This is substantially higher than the average retail APRs on general purpose revolving accounts. Section 6.5 below discusses the effective cost structure of deferred interest promotions in more detail.

<sup>9</sup> 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

interest promotions accepted in 2010, the most recent year for which the Bureau then had data, consumers with subprime credit scores paid the full promotional balance before the end of the promotional period in 57% of such promotions. These consumers, therefore, faced owing a deferred interest lump sum in the remaining 43% of promotions accepted that year—with unknown long-term consequences.<sup>10</sup> In contrast, consumers with higher credit scores had higher payoff rates. For consumers with superprime scores, the Bureau’s prior study reported balance payoff rates of above 88%. The overall balance payoff rate was just over 80%.<sup>11</sup> Observing that a majority of consumers—across the credit spectrum—pay their full promotional balance before the end of the promotional period, a range of industry commenters have urged the Bureau not to take any action with respect to deferred interest.<sup>12</sup>

While deferred interest loans have obvious benefits to consumers who pay before the end of the deferred interest period, consumers who do not do so face a number of potential harms. The deferred interest rate is generally higher than the rate on standard general purpose credit cards. As a result, if a consumer has available credit on a general purpose credit card but chooses a deferred interest product instead and then fails to pay in time, she will pay more than she needed to in order to revolve the same balance.<sup>13</sup> (It is possible, of course, that the use of a general purpose card could cause the loss of a grace period, thereby triggering additional

---

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.” In this report, we are also able to present data about the first measure, which we refer to as the “promotion payoff rate.” In either case, payoff rates focus on the payment of specific promotions. They are not focused on account-level or consumer-level behavior. For example, if a consumer had two accounts, with a single deferred interest promotion on one, and two deferred interest promotions on the other, there would be three payoff data points associated with that consumer, one for each deferred interest promotion.

<sup>10</sup> See CARD Act report, 80.

<sup>11</sup> See *id.*

<sup>12</sup> See American Financial Services Association Comment Letter (June 17, 2015) 3; see also Morrison & Foerster LLP Comment Letter (May 18, 2015) 7.

<sup>13</sup> One commenter provided the example of a consumer who incurred \$1,760 in deferred interest charges at a rate of 29.99% when a general purpose card at a 13% rate would have cost about \$800 in interest. See National Consumer Law Center Comment Letter (May 18, 2015) 2.

interest charges. We explore this issue in section 6.7, and grace periods more generally in section 5.2.2.)

There are other potential consumer risks associated with deferred interest promotions. Many issuers do not include deferred interest charges in minimum payment calculations during the promotional period.<sup>14</sup> Consumers with urgent needs but limited cash flow may be attracted to these offers precisely because the deferral of interest charges can mean lower monthly minimum payments during the promotional period. For such consumers, however, the size of the accrued interest charges that result from failing to repay the promotional balance in full during the promotional period may create a significant post-promotional risk of default. When the promotional period ends, the minimum payment will necessarily increase.<sup>15</sup>

Moreover, consumers who pay only the minimum payment during a deferred interest promotional period can end the promotional period with debt that exceeds the amount of the promotional purchase, even if the card has not been used for any other purchases.<sup>16</sup> The

---

<sup>14</sup> Issuer practices do not appear to be fully uniform as to the calculation of minimum payments for deferred interest balances. At least some deferred interest programs require a minimum payment that is sufficient to cover the deferred interest. When this happens, the deferment of interest does not result in a lower minimum payment than would otherwise be the case. Principal is paid down more quickly, which in turn reduces the amount of deferred interest. Not all deferred interest programs, however, have this feature.

<sup>15</sup> Deferred interest issuers generally capitalize deferred interest at the end of the promotion into the principal balance. This means consumers are not obligated to pay the full amount of the deferred interest in a single billing cycle, but consumers are obliged to pay interest on this additional principal going forward.

<sup>16</sup> Issuer minimum payment and compounding practices—which are not consistent across deferred interest issuers—will impact the likelihood of negative amortization. But such amortization will still occur in any case where the required minimum payment is less than the deferred interest assessed each month. Given the prevalence of \$25 “minimum payments,” this is likeliest to occur for larger promotions. For example, if a deferred interest loan requires a \$25 minimum payment and assesses interest using a 25% APR, any consumer making minimum payments on a loan above around \$1200 will have an account that is negatively amortizing during the promotional period. (Or, to be precise, that account will negatively amortize if the promotion is not paid in full prior to the end of the promotion.) Since promotions of at least \$2000 in size represented over 40% of all deferred interest spending in 2013, a large share of the debt being financed in this market is at least at potential risk of negative amortization.

Furthermore, larger purchases tend to be associated with longer promotional periods. As a result, the loans at greatest risk of negative amortization are also those where negative amortization can persist the longest. More than a quarter of deferred interest offers with promotional periods of at least 18 months are for more than \$2,000, and

phenomenon of building debt on the same balance over time is generally known as negative amortization. Federal regulators generally disfavor the practice. In 2003, the Federal Financial Institutions Examination Council (FFIEC) issued guidance directing lenders to require minimum payments that would amortize consumers' balances over a reasonable period of time, consistent with the "consumer-oriented nature of the underlying debt and the borrower's documented creditworthiness."<sup>17</sup> According to the FFIEC, "[p]rolonged negative amortization ... and other practices that inordinately compound or protract consumer debt and disguise portfolio performance and quality raise safety and soundness concerns." In compliance with this guidance, issuers then generally implemented minimum payment calculations that cover fees and accrued interest, plus 1% of the principal.<sup>18</sup> The general exclusion of deferred interest from these calculations, however, opens the door to negative amortization—and its associated risks—for consumers who fail to pay the promotional balance before the end of the promotional period.<sup>19</sup>

A related and broader risk is that consumers may not fully understand the costs associated with failing to pay the promotional balance in full during the promotion period. For example, they

---

more than two-fifths of offers with promotional periods of two years or longer are for that amount. In the data set we reviewed, promotions not paid in full during the promotional period that exceeded \$2,000 and that had at least an 18 month promotional period were assessed an average of over \$1,300 in deferred finance charges at the end of their promotional periods.

<sup>17</sup> See Federal Financial Institutions Examination Council, *Account Management and Loss Allowance Guidance* (Jan. 8, 2003) 3, <http://www.federalreserve.gov/boarddocs/srletters/2003/SR0301a1.pdf>.

<sup>18</sup> See National Consumer Law Center, *Consumer Credit Regulation* § 8.6.8.1 (2012).

<sup>19</sup> Although the Truth in Lending Act does not have specific minimum payment requirements, its implementing regulation does require issuers to make certain disclosures on the monthly statement when a balance negatively amortizes. For example, the issuer must disclose the following: "Minimum Payment Warning: Even if you make no more charges using this card, if you make only the minimum payment each month we estimate you will never pay off the balance shown on this statement because your payment will be less than the interest charged each month." 12 C.F.R. § 1026.7(b)(12)(ii)(A). These requirements are not directly applicable in the deferred interest context, however, because negative amortization in that context is only temporary—although some deferred interest promotions now last 36 months, creating the potential for negative amortization over an extended period. The CARD Act further requires that the issuer disclose on a statement how long the account will take to pay off if the consumer only makes minimum payments. Even though many issuers exclude deferred interest from minimum payments, the implementing regulations currently permit them to assume that the consumer is making post-promotional minimum payments even during the promotional period. See Appendix M1 to 12 § CFR 1026. Issuers that take advantage of this rule can represent that a consumer making minimum payments will pay the balance to zero faster than is actually the case.

may not understand how these costs vary with different levels of payment through the promotional period.<sup>20</sup> Or they may not understand how their payments will be allocated when there are other balances—non-promotional or promotional—on the same account during the applicable promotional period. (As we discuss in section 6.4 below, with the exception of the two billing cycles prior to the expiration of the promotion period, issuers are generally prohibited from allocating payments to deferred interest balances over non-promotional balances, absent consumer instruction to the contrary.) Prior federal testing suggests that the impact of payment allocation practices in this context may confuse consumers.<sup>21</sup>

To the extent consumers lack a full understanding of these points, the final price of these offers will not be evident to consumers when they decide whether to accept them. As a result, consumer demand for these promotions may be too high—or too low—relative to the demand that would prevail if consumers fully understood the true price involved.<sup>22</sup>

A similarly distorting effect can occur if consumers are unable to predict at the point of acquisition whether or not they will in fact pay the promotional balance in full during the promotional period. If a consumer thinks he will do so, but doesn't, the price he ends up paying is higher—potentially markedly so—than he thought it would be at the time of acquisition. Even if a consumer recognizes some probability that she will not pay on time, to the extent she underestimates that probability, she will thereby underestimate the expected price of the product.<sup>23</sup> The calculation becomes even more complex for the consumer if—as in at least some

---

<sup>20</sup> In focus groups, consumers generally recognized that they would be subject to a significant interest charge unless they paid their full promotional balance during the deferred interest period. However, consumers appeared to have much less understanding of how deferred interest charges would be calculated in the event that the promotional balance was not paid in full in the promotional period.

<sup>21</sup> See section 6.4.3 below.

<sup>22</sup> At least one consumer in our focus groups stated that in the event the full promotional balance was not paid in the deferred interest period, the deferred interest rate would be applied to the entire initial purchase amount for the full deferred interest period—regardless of any amounts paid toward the promotional balance in that period. In fact, that overstates the price of the product because as the balance is paid down interest stops accruing on the paid balance.

<sup>23</sup> Several consumers in our focus groups admitted that they sometimes took promotions even though they were uncertain if they would be able to avoid deferred interest.



cases noted by the Bureau—there is an upfront fee or discount associated with accepting the deferred interest promotion.

The CARD Act eliminated or restricted many forms of “back-end” pricing that were of low salience to consumers—including limits on repricing existing balances and controls on penalty fees. Following these changes, some commenters now point to deferred interest promotions as the main surviving exception to the general shift towards “front-end” pricing that CARD Act rules facilitate.<sup>24</sup>

These commenters also note that prior to the CARD Act, the Federal Reserve Board, the Office of Thrift Supervision, and the National Credit Union Administration formally proposed to prohibit deferred interest promotions as an unfair retroactive credit card interest rate increase.<sup>25</sup> In 2009, these agencies noted that the assessment of deferred interest would be covered by their general prohibition on retroactive credit card interest rate increases because it was “precisely the type of surprise increase in the cost of completed transactions that [it] is intended to prevent.”<sup>26</sup> Overall, the agencies reasoned that any benefits to consumers from receiving an “interest-free” loan did not outweigh the “substantial injury” caused to consumers from the assessment of deferred interest.<sup>27</sup>

In light of such concerns, the Bureau noted in its prior report that it intended to study deferred interest promotions further and to assess whether additional action is appropriate to promote a more fair and transparent market. That analysis remains ongoing. In this section, we present some of our results to date.

The Bureau’s analysis is based on a study of loan-level data obtained from a number of leading issuers that offer deferred interest products. Although these data cover a large proportion of all

---

<sup>24</sup> See National Consumer Law Center Comment Letter (May 18, 2015) 2-4.

<sup>25</sup> *Id.* at 2-3.

<sup>26</sup> 74 Fed. Reg. 5498, 5528 (Jan. 9, 2009).

<sup>27</sup> The agencies did note, however, that institutions could offer plans “where interest is assessed on purchases at a disclosed rate for a period of time but the interest charges are waived or refunded if the principal is paid in full by the end of the period.” *See id.*

deferred interest promotions, they are still subject to certain important limitations. First, this report does not include any results for any particular credit card issuer or product. Instead, all results are from data aggregated across issuers. The general patterns that we observe in the market may not be true—or may not be as true—for every issuer or for every partnering merchant. In addition, the data do not include consumer-level information, which imposes some additional limits on our analysis. To explore consumer understanding and conduct with respect to deferred interest, however, the Bureau has conducted a number of focus groups in this area. Results from those focus groups are included throughout.

The Bureau also received a number of comments about deferred interest in response to its general RFI in connection with this study. Those comments are considered here as well. In addition, the Bureau has met with stakeholders to discuss the operation of deferred interest programs and their impact on consumers and other market participants.

## 6.1 Product use

### 6.1.1 Overall

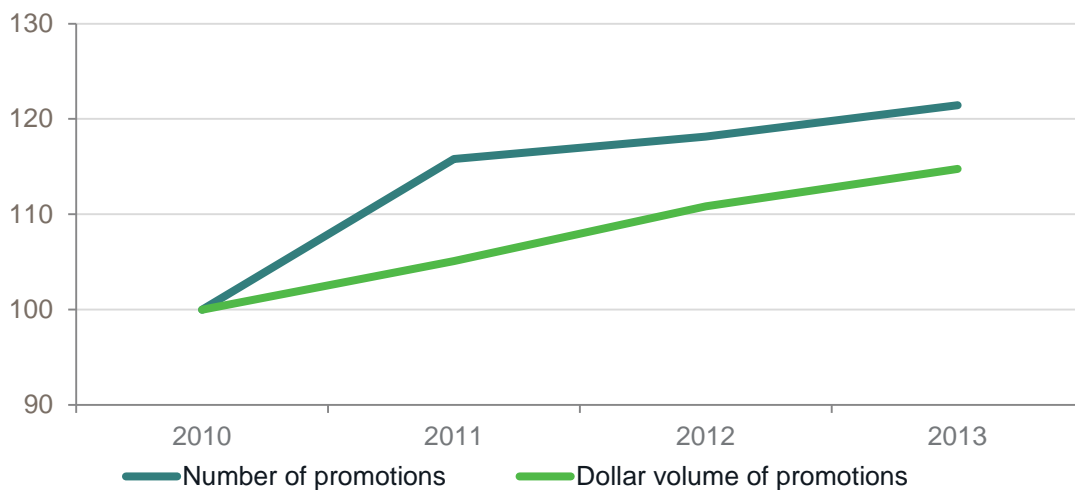
Deferred interest offers are widely used. The Bureau's prior report noted that deferred interest balances held up during the Great Recession. Our more recent data, however, shows a significant expansion in product use from 2010 forward. In 2013, the deferred interest issuers in our data were recording nearly 21% more promotional purchases on an annual basis than in 2010.<sup>28</sup> As Figure 2 shows, the increase in the overall dollar volume of promotional loans was lower, indicating that the overall expansion in the market was largely accounted for by loan

---

<sup>28</sup> The issuers in our data set are the same at every point within our data period. Even so, it is possible that these issuers made portfolio acquisitions or divestments over time. As a result, there is some possibility that data results showing changes over time reflect these kinds of exogenous changes, rather than organic changes to the issuers' existing deferred interest business. For two reasons, however, we do not believe this to be a significant risk. First, portfolio acquisitions generally involve the transfer of data such that even when our data period includes such an acquisition, we have data for that portfolio across the full data period. Second, the merchant or merchant category distributions of deferred interest volume within our data set appear relatively constant over time.

incidence, not larger ticket purchases. In 2013, the purchases represented in our data set comprised over a quarter of all private-label spending recorded in the CCDB.

**FIGURE 1:** ANNUAL INCIDENCE AND DOLLAR VOLUME OF DEFERRED INTEREST LOANS, NORMALIZED TO 100 IN 2010 (DI)



According to retailers, these loans are important to their business models and enable them to sell products “that likely would have been unaffordable to consumers living on a budget.”<sup>29</sup> Particularly for merchants selling larger ticket items, deferred interest sales may represent a large volume of overall sales. In addition, for some merchants, deferred interest sales represent a large share not only of all purchase volume on the merchant’s private label card, but also of their total sales. For example, Best Buy reports that 20% of its total sales are on its private label card, and some 75% of these sales occur on a deferred interest credit plan.<sup>30</sup>

## 6.1.2 Who uses deferred interest promotions?

Deferred interest promotions are largely confined to private label credit cards. As a result, deferred interest users have a similar—though not identical—profile to private label card users.

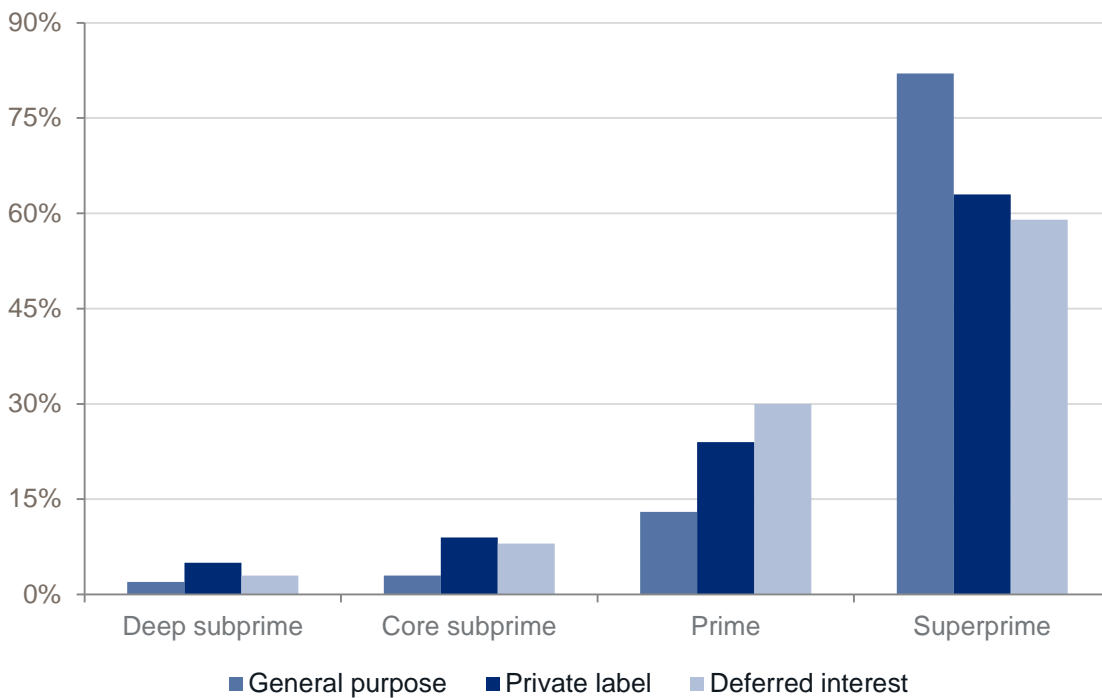
---

<sup>29</sup> See Retail Industry Leaders Association (RILA) Comment Letter (May 18, 2015) 1; *see also* Best Buy Co. Comment Letter (May 15, 2015) 2.

<sup>30</sup> See Best Buy Co. Comment Letter (May 15, 2012) 2.

Figure 2 shows that consumers with subprime and prime scores account for a share of deferred interest promotional purchase volume that is larger than their share of general purpose volume. Only consumers with superprime scores account for a share of general purpose volume that is larger than their share of deferred interest volume. However, consumers with subprime scores—and those with superprime scores—account for a share of deferred interest purchase volume that is smaller than their share of private label spending. Only consumers with prime scores have a share of deferred interest purchase volume that exceeds their share of private label spend.

**FIGURE 2:** CREDIT SCORE DISTRIBUTION OF ALL DEFERRED INTEREST, GENERAL PURPOSE, AND PRIVATE LABEL PURCHASE VOLUME, 2010-2013 (DI, CCDB)



In 2013, consumers with subprime credit scores accounted for 18% of deferred interest offers accepted and 11% of deferred interest promotional purchase volume.<sup>31</sup> In comparison,

---

<sup>31</sup> Since 2009, the risk profile for accounts accepting deferred interest offers has held steady. In 2009, subprime users accounted for 16% of deferred interest loans taken that year and 12% of deferred interest purchase volume.

consumers with subprime credit scores accounted for 17% of private label accounts and 14.6% of purchase volume on private label cards that same year. In line with this data, some issuers report that for purchase volume at a given merchant, the credit profile of consumers using deferred interest promotions is similar, overall, to that of consumers using store cards without promotional terms.

By the same token, of course, these numbers mean that almost all deferred interest offers are accepted by consumers with prime and superprime credit scores. More than 80% of deferred interest offers accepted in 2013, and nearly 90% of the amount spent on such offers that year, were accounted for by consumers in these credit score ranges. When consumer shares of revolving balances are considered, moreover, the concentration of use by consumers with stronger credit scores is still more evident. For private label card use overall, consumers with subprime credit scores accounted for more than 30% of all balances revolved from month to month in 2013. But, consumers in this credit score range accounted for only 12% of the amount spent on deferred interest promotions, even though almost all that spending was revolved for at least some period.

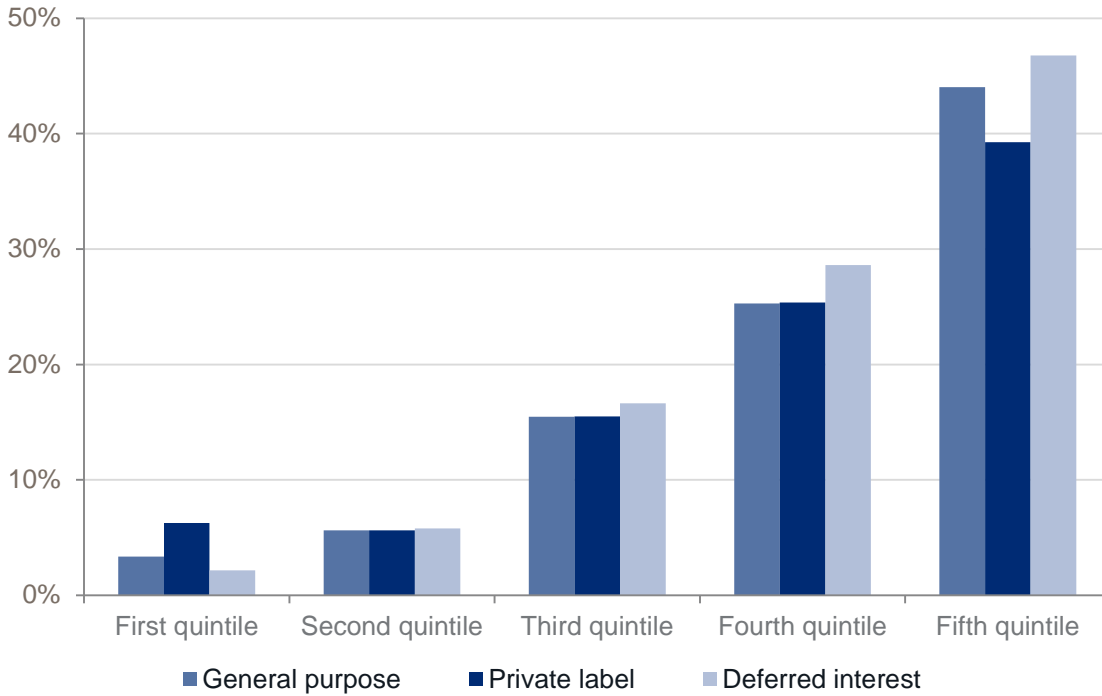
According to the deferred interest data that issuers provided to the Bureau, the average income associated with a deferred interest offer is higher than the average income associated with an open private label account or an open general purpose account. Figure 3 shows that consumers with incomes in the lowest two quintiles accounted for only 8% of all deferred interest loans in our data period.<sup>32</sup> In contrast, 12% of the private label accounts—and 9% of the general purpose accounts—opened in this period were held by consumers in these two quintiles. Nearly half of deferred interest loans are taken by consumers with incomes in the top quintile, and more than three quarters are taken by consumers in the top two quintiles.

---

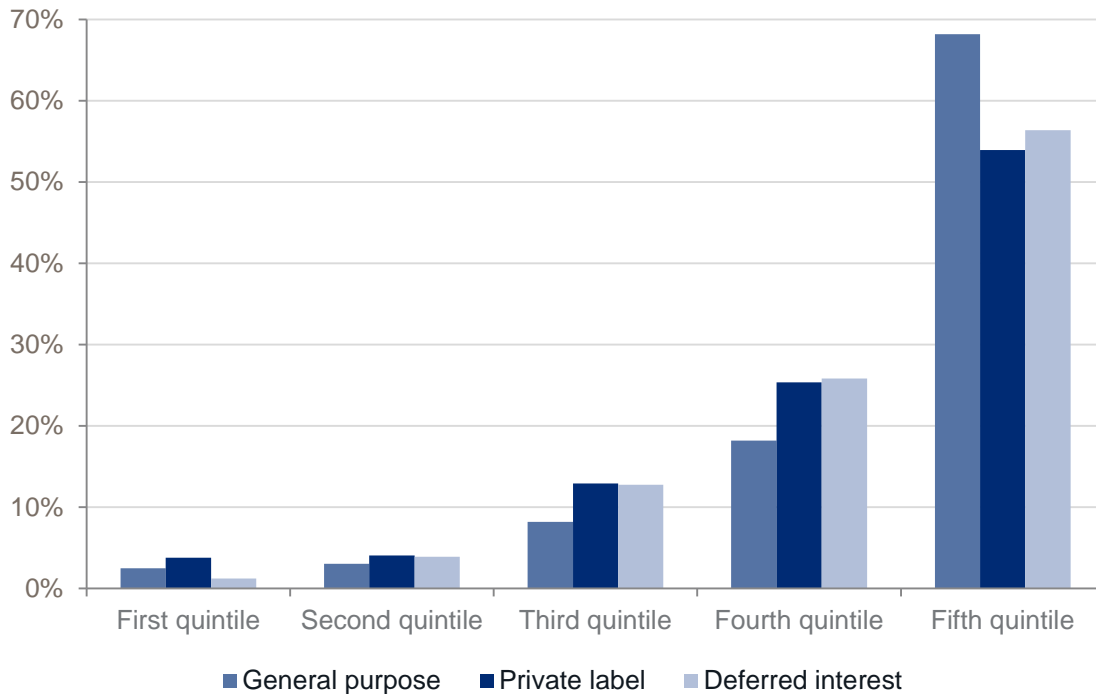
<sup>32</sup> We used the 2011 Annual Social and Economic Supplement to the U.S. Census Bureau's Current Population Survey to construct the following income ranges for the income-receiving population in 2010. These closely approximate income quintiles, so we refer to them as such. The first range, representing almost exactly 20% of the income-reporting population, reported making an annual income of under \$10,000. The second, for a cumulative share of 40%, reported income between \$10,000 and \$19,999. The third, for a cumulative 61% share, reported income between \$20,000 and \$34,999. The fourth, for a cumulative 82% share, reported income between \$35,000 and \$59,999. The final and smallest "quintile," representing the remaining 18% of the income-reporting population, reported making more than \$60,000.

When examining the distribution of spending across income quintiles, however, deferred interest products resemble overall private label cards quite closely. The primary difference is that consumers in the lowest income quintile account for less deferred interest promotional volume than private label spending more broadly. These results are shown in Figure 4.

**FIGURE 3:** INCOME DISTRIBUTION OF DEFERRED INTEREST PROMOTIONS, GENERAL PURPOSE ORIGINATIONS, AND PRIVATE LABEL ORIGINATIONS, 2010-2013 (DI, CCDB)



**FIGURE 4:** INCOME DISTRIBUTION OF DEFERRED INTEREST, GENERAL PURPOSE, AND PRIVATE LABEL PURCHASE VOLUME, 2010-2013 (DI, CCDB)



Industry trade associations report that deferred interest offers serve as an “important tool for consumers to purchase necessities”<sup>33</sup> and “as a crucial lifeline ... when appliances fail.”<sup>34</sup> That is certainly true of some deferred interest users. Given the overall income and credit score profile of deferred interest users, however, this picture is not generally an accurate description of deferred interest use. Most deferred interest use is by consumers whose incomes and credit scores mean that they likely do not have to depend on deferred interest offers for “necessities” or as a “crucial lifeline.”

---

<sup>33</sup> See Consumer Bankers Association and Financial Services Roundtable Comment Letter (May 18, 2015) 5.

<sup>34</sup> See RILA Comment Letter (May 18, 2015) 1.

### 6.1.3 What promotions do they use?

#### **AMOUNT**

The median amount of a deferred interest loan originated in 2013 was \$467. The mean purchase was substantially higher at \$845. Both the mean and the median amount have held relatively steady over the last few years. The increase in the dollar volume of such loans, therefore, primarily reflects an increase in their incidence, rather than an increase in the size of the loans taken.

There is some variation in the median loan amount by the credit score and income of the consumer taking the loan. In 2013, the median loan amount for accounts held by consumers with superprime scores was \$578. It was \$405 for accounts held by consumers with prime scores and just over \$300 for accounts held by consumers with subprime scores. In that same year, the median deferred interest loan taken by consumers in the lowest income quintile was \$323. The median purchase is \$492 for consumers in the middle income quintile, and \$642 for those in the top income quintile. For all these groups, the mean purchase amount substantially exceeded the median.<sup>35</sup>

#### **PROMOTIONAL TERM**

Figure 5 shows the distribution of promotional terms across the years in our deferred interest loan data set. We use ranges in order to allocate all promotional loans into a limited set of categories. Importantly, almost all promotions in the six to 11 month set are for six months and almost all of those in the 12 to 17 month set are for 12 months.<sup>36</sup>

The most common promotional term in 2013—with more than twice as many offers accepted as any other category—was for six months. In marked contrast, the most common promotional term for loans taken in 2009 was 12 months. In the intervening period, on a near consistent

---

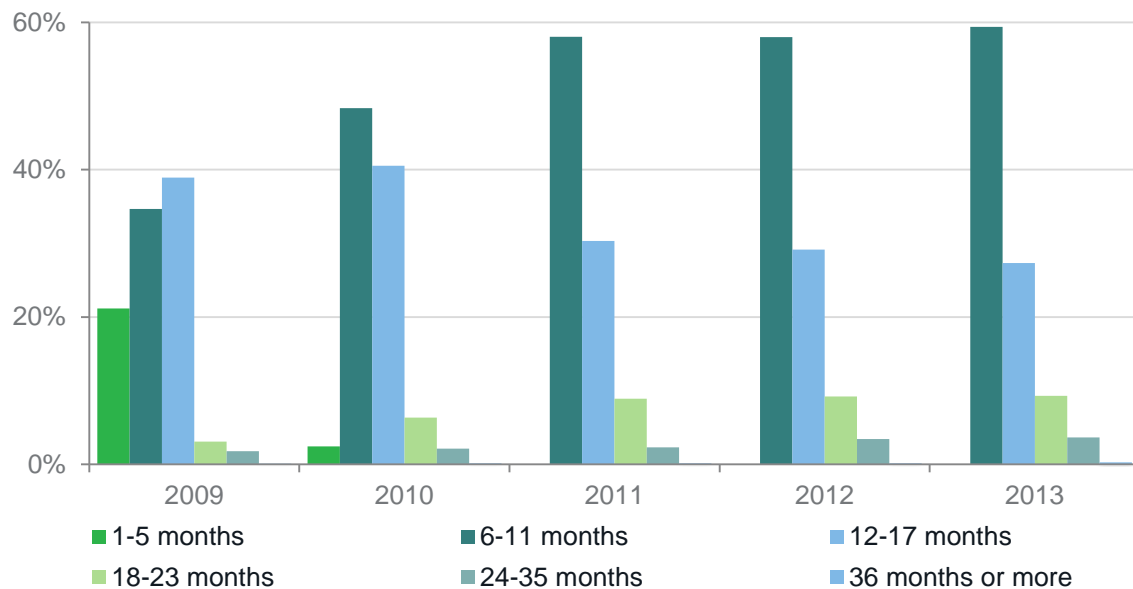
<sup>35</sup> More detailed data showing the correlations between credit score, income, and mean loan amount can be seen in Appendix Figure 9.

<sup>36</sup> For our data period, more than 99% of the promotions in the six to 11 month range were for 6 months. Similarly, 99% of promotions in the 12 to 17 month range were 12 month promotions and more than 99% of those in the 18 to 23 month range were for 18 months. Almost 100% of the 24 to 35 month promotions were for 24 months.



annual basis, the relative frequency of six month terms increased and the relative frequency of 12 month terms decreased.

**FIGURE 5:** DISTRIBUTION OF PROMOTIONAL PERIODS FOR DEFERRED INTEREST PROMOTIONS ACCEPTED IN A GIVEN CALENDAR YEAR, 2009-2013 (DI)



Despite the share decline for 12 month terms relative to six month terms, Figure 5 also shows that terms of 18 months and longer have increased their overall share since the end of the recession. These longer promotional periods are generally associated with larger deferred interest loans. Loans with promotional terms longer than 36 months, however, still remain extremely rare.

Until CARD Act rules became effective, deferred interest loans with promotional periods shorter than six months were prevalent in the market. More than a fifth of the deferred interest loans in 2009 were of this kind. Following CARD Act restrictions on promotions shorter than six months, Figure 5 shows that this category of deferred interest loans no longer exists.<sup>37</sup>

---

<sup>37</sup> These restrictions and other rules are discussed in section 6.2.1 below.

## ITEMS PURCHASED

In all recent years, the most common deferred interest purchases—by incidence or dollar volume—are for household goods, excluding electronics.<sup>38</sup> In 2013, the average deferred interest purchase in this category was for \$939. Electronics, medical services, and home improvement are the other significant deferred interest categories.<sup>39</sup> These latter categories have traded places over the last few years, both in terms of incidence and dollar volume. In 2013, the average deferred interest purchase for home improvement was for \$1,140. The analogous figures for electronics and health care were \$234 and \$842 respectively.

## 6.2 Payoff rates

### 6.2.1 Legal and regulatory framework

Although the CARD Act did not expressly prohibit deferred interest offers, it did require issuers to take a number of steps that may have been intended to improve payoff rates. In particular, the CARD Act requires that payments in excess of the minimum payment in the last two months of a deferred interest promotion be allocated entirely to the promotional balance. It also provides that promotional rate terms for all credit cards, including private label cards, must last a minimum of six months.<sup>40</sup>

---

<sup>38</sup> Consistent with this result, one credit card issuer reports that more than half its deferred interest customers are using this form of financing to replace a broken or worn down household product. *See American Bankers Association Comment Letter (May 18, 2005) 11 n.8.*

<sup>39</sup> A large volume of deferred interest purchases, however, are spread across a range of other merchant categories, but none of these other categories are as individually significant as those identified above.

<sup>40</sup> 15 U.S.C. § 1666c(b)(2); 15 U.S.C. § 1666i-2(b).

Although the CARD Act itself did not specifically address deferred interest products in other respects, the Board rules that went into effect on February 22, 2010, imposed several additional disclosure and marketing restrictions related to deferred interest finance.<sup>41</sup>

- The duration of the promotional period and the deferred APR must be disclosed clearly and conspicuously prior to the commencement of the promotional period, including in any advertising;<sup>42</sup>
- In solicitations and marketing materials, issuers may use the phrase “no interest” or similar term to describe the possible avoidance of interest obligations only if they offer an “if paid in full” caveat in a clear and conspicuous manner preceding the disclosure of the deferred interest period;<sup>43</sup>
- Marketing materials must explain that if the promotional balance is not paid in full during the promotional period, interest will be charged from the date of the promotional purchase;<sup>44</sup>
- Each monthly statement during the promotional period must separately disclose the remaining unpaid promotional balance and the amount of deferred interest accrued to that point;<sup>45</sup> and

---

<sup>41</sup> 75 Fed. Reg. 7658 (Feb. 22, 2010).

<sup>42</sup> 12 C.F.R. § 1026.16(h)(3); 12 C.F.R. § 1026.55(b)(1); 12 C.F.R. § 1026.7(b), Comment 7(b)-1

<sup>43</sup> 12 C.F.R. § 1026.16(h). If the deferred interest offer is included in a written or electronic advertisement, the promotional period and, if applicable, the term “if paid in full” must be stated in “immediate proximity” to each statement of “no interest,” “no payments,” “same as cash,” or similar phrasing.

<sup>44</sup> 12 C.F.R. § 1026.16(h)(4)(i). If applicable, marketing materials must also explain that interest will be charged from the date of the promotional period if the consumer defaults before the end of the promotional period. *See* § 1026.16(h)(4)(ii). These disclosures must be prominent and closely proximate to the first statement of “no interest,” “no payments,” “deferred interest,” “same as cash,” or similar term. *See also* § 1026.16(h)(4).

<sup>45</sup> 12 C.F.R. § 1026.7(b)(14), Comment 7(b)-1 (“Under §1026.7(b)(5), creditors must disclose the balances subject to interest during a billing cycle . . . . Periodic statements sent for [billing cycles in which the deferred interest balance is not subject to interest] should not include the deferred interest balance in the balance disclosed under §1026.7(b)(5). This amount must be separately disclosed on periodic statements and identified by a term other than

- The monthly statement must also disclose—on the front of one of its pages—the date by which the outstanding promotional balance must be paid in full to avoid paying interest.<sup>46</sup>

An issuer may allow its customers to allocate payments in excess of minimum payments to the deferred interest balance rather than to higher-priced balances, notwithstanding the general CARD Act rule governing payment allocation.<sup>47</sup> However, there is no requirement that issuers exercise this discretion and allow consumers any input into payment allocation. The CARD Act also has no requirement regarding how the issuer can allocate minimum payments.<sup>48</sup>

## 6.2.2 Payoff rates overall

Figure 6 shows that the overall payoff rates for deferred interest promotions accepted between 2009 and 2013 were generally in line with the rates reported in our earlier study. According to our data for this report, both the promotional payoff rate and the balance payoff rate lie in ranges between 76% and 82%. The 2013 report identified a range from 74% to 80% for the promotional payoff rate between 2007 and 2010. To the extent our prior report identified a

---

the term used to identify the balance disclosed under §1026.7(b)(5) (such as ‘deferred interest balance’).”; 12 C.F.R. § 1026.7(b)(14), Comment 7(b)-1 (“Under §1026.7(b)(6)(ii), creditors must disclose interest charges imposed during a billing cycle. . . . Periodic statements for billing cycles [in which interest is deferred] should not include in the interest charge disclosed under §1026.7(b)(6)(ii) the amounts a consumer may owe if the deferred interest balance is not paid in full [by the relevant date]. This amount must be separately disclosed on periodic statements and identified by a term other than ‘interest charge’ (such as ‘contingent interest charge’ or ‘deferred interest charge.’”).

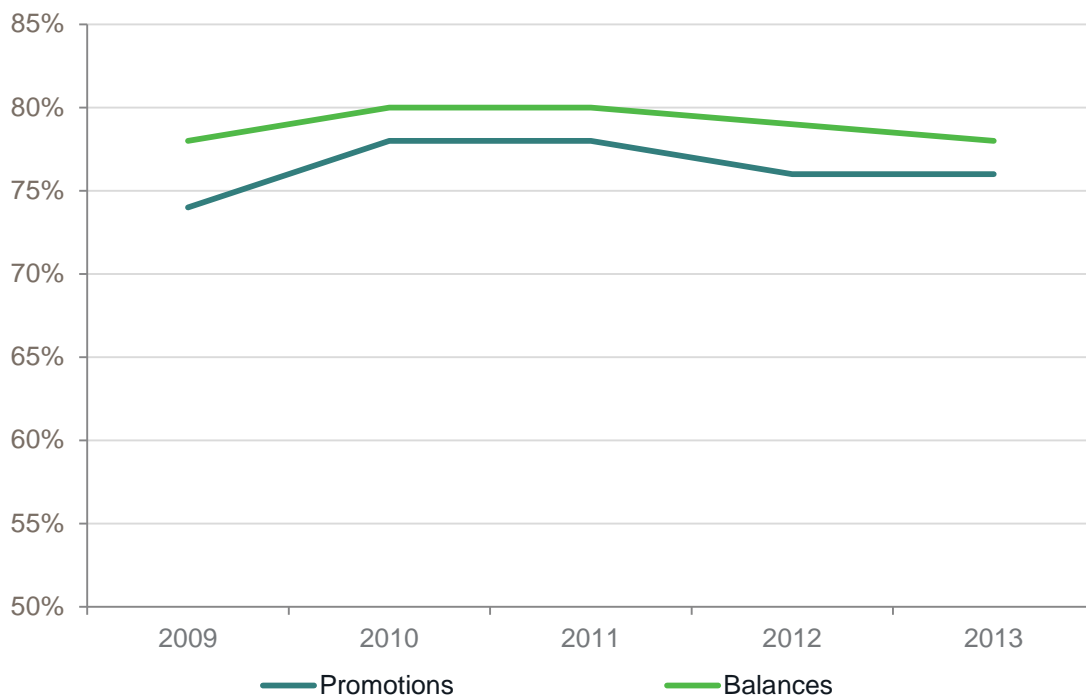
<sup>46</sup> 12 C.F.R. § 1026.7(b)(14), Comment § 1026.7(b) (“Section 1026.7(b)(14) requires disclosure on periodic statements of the date by which any outstanding balance subject to a deferred interest or similar program must be paid in full in order to avoid the obligation for finance charges on such balance. This disclosure must appear on the front of any page of each periodic statement issued during the deferred interest period beginning with the first periodic statement issued during the deferred interest period that reflects the deferred interest or similar transaction.”) This disclosure must be substantially similar to the following: “You must pay your promotional balance in full by [date] to avoid paying accrued interest charges.” 12 C.F.R. §§ 1026.7(b)(14), App. G-18(H).

<sup>47</sup> 12 C.F.R. § 1026.53(b)(1)(ii).

<sup>48</sup> See Jennifer Saranow Schultz, *Watch Out for a Credit Card Act Loophole*, (May 19, 2010), <http://bucks.blogs.nytimes.com/2010/05/19/watch-out-for-a-credit-card-act-loophole>. (“According to the final legislation, only payment amounts over a minimum payment would be applied to the balance with the highest A.P.R. .... This means that credit card companies can apply minimum payments to balances with the lowest interest rates first, which many are doing.”).

trend, however, payoff rates were increasing through 2010. Our current data show a general drop in rates from 2010 for promotional payoff rates and from 2011 for balance payoff rates.<sup>49</sup>

**FIGURE 6:** BALANCE AND PROMOTION PAYOFF RATES FOR DEFERRED INTEREST LOANS (DI)



The results shown in Figure 6 are subject to two qualifiers. First, as we discuss in section 6.2.4 below, longer promotional periods generally have higher payoff rates. For later years, many longer term loans have not yet hit the end of the promotion period and are therefore excluded from the data, causing payoff rates to skew downward. Second, to the extent that longer term loans from more recent years are included in the payoff data, they will disproportionately reflect full—and early—payment. For example, the only 24 month loans originated in 2013 in our

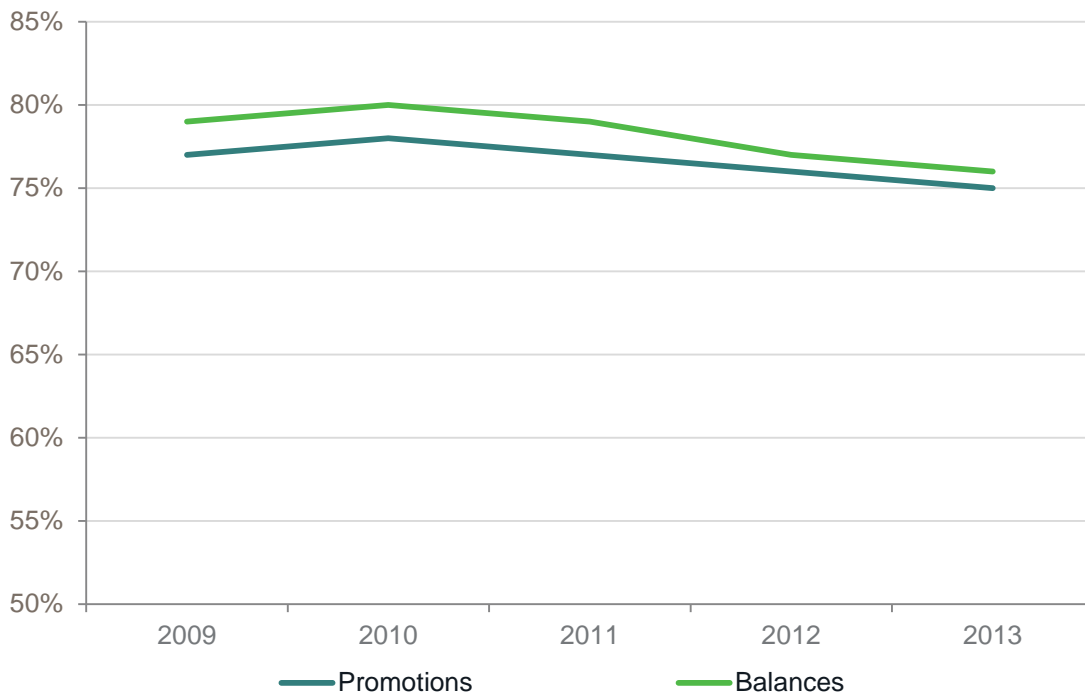
---

<sup>49</sup> As noted, we do not calculate payoff rates on an account basis. It is not uncommon that one account can enter multiple promotions. The payoff rates we use are based on the payoff behavior of promotional balances or promotional offers accepted. We also exclude from our analysis of payoff rates all promotions on accounts that are charged off during the promotional period. The exclusion of these promotions inflates payoff rates but only marginally. In the data we reviewed, promotions on accounts charged-off during the promotional period accounted for under 2% of promotions and promotional spending.

payoff data set would be those that have been paid in full prior to the expiration of the promotional term. These two distortions work in competing directions, so their overall impact on the data is not immediately apparent.

To correct for these distortions, Figure 7 presents payoff rate data for deferred interest loans with promotional terms between six and 17 months in length. As discussed in section 6.1.3 above, such loans represent the overwhelming majority of all deferred interest activity. Even with this limitation, the overall payoff picture is relatively unchanged from the depiction in Figure 6. Figure 7 shows that payoff rates for these shorter-term loans initially increased in this period, but then fell back. From a high of 78% in 2010, the promotion payoff rate had fallen to about 75% by 2013. Balance payoff rates also reached a high in 2010 when they hit 80%. By 2013, they had fallen back to around 76%.

**FIGURE 7:** BALANCE AND PROMOTION PAYOFF RATES FOR DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS (DI)



The Bureau's 2013 analysis identified an increase in payoff rates for 2010 vintages relative to prior years, suggesting that the new disclosures applicable to deferred interest that became effective in early 2010 may have had some effect on payoff rates. The elimination of promotions of under six months may also have improved payoff rates overall, as we discuss in section 6.2.4

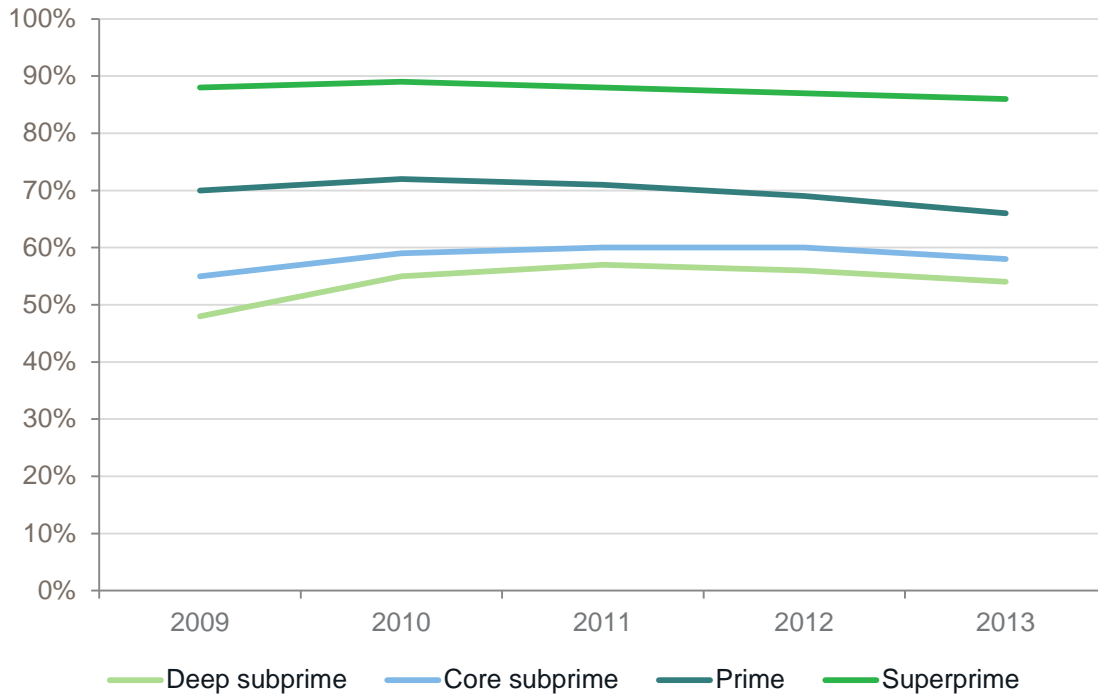
below. The more detailed data available to us for the present study confirm the improvement in 2010 vintages. Thereafter, however, payoff rates trend downwards. On some measures, they fall below pre-CARD Act levels by 2013.

### 6.2.3 Payoff rates by credit score and income

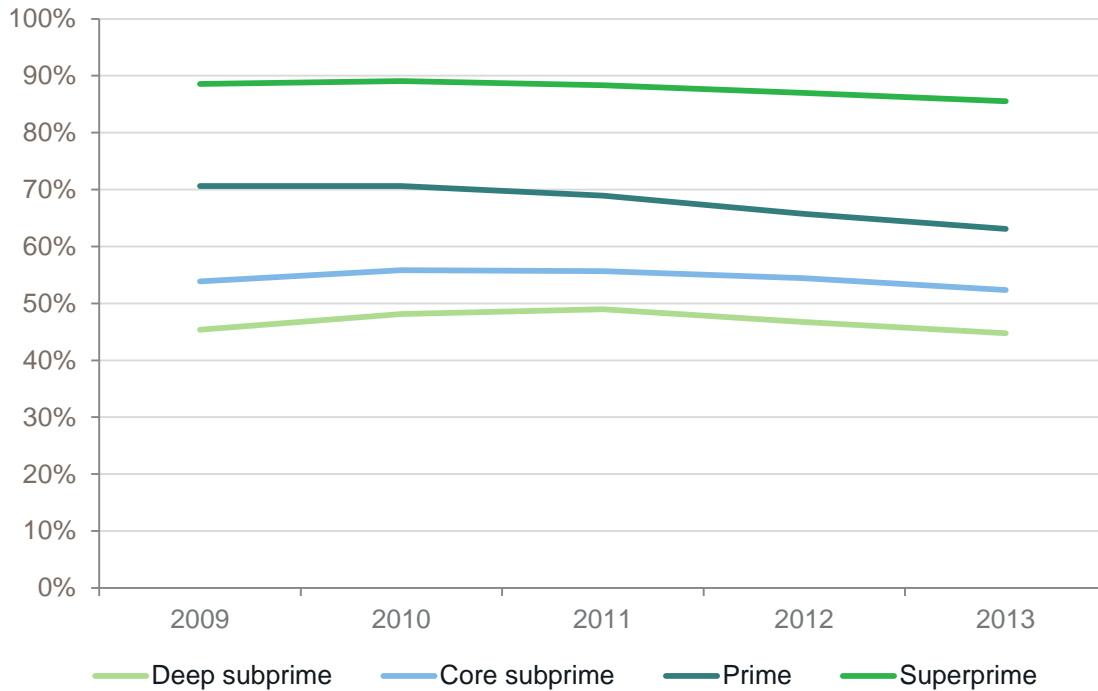
#### CREDIT SCORE

The overall payoff results mask more substantial variation in the payoff rate by credit score and by income. Figures 8 and 9 show balance and promotion payoff rates by FICO score from 2009 through 2013. To address the potential distortions noted above caused by longer term loans at the end of the data period, as well as the ending of promotions under six months following the CARD Act, these figures cover only deferred interest promotions from six to 17 months. As noted above, almost all loans in this range are either for six month or one year promotional periods.

**FIGURE 8:** PROMOTION PAYOFF RATES BY CONSUMER CREDIT SCORE FOR DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS (DI)



**FIGURE 9:** BALANCE PAYOFF RATES BY CONSUMER CREDIT SCORE FOR DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS (DI)



In their comment letters, industry organizations consistently asserted that all credit segments had a majority of consumers paying the full promotional balance during the promotional period and, therefore, avoiding interest charges on the promotion. According to the data reviewed by the Bureau, however, for promotions originated between 2009 and 2013, balance payoff rates uniformly remained below 50% for consumers with deep subprime credit scores. The same consumers also had a promotional payoff rate below 50% for 2009.<sup>50</sup> Issuers have acknowledged to the Bureau that for some larger merchants the payoff rate for consumers with lower credit scores is below 50%.

<sup>50</sup> The Bureau's earlier report noted that for consumers with subprime credit scores the promotion payoff rate was below 50% for deferred interest promotions originated in 2007. See CARD Act report, 80. According to our newer data, which split this group into consumers with core subprime scores and those with deep subprime scores, core subprime loans remained at payoff rates above 50% from 2009 onwards.



Overall, therefore, accounts that incur costs from failure to fully pay off deferred interest products are—to a disproportionate extent—held by consumers with lower credit scores. By the same token, accounts on which deferred interest products are used to secure extended interest-free loans disproportionately belong to consumers with higher credit scores. At one level, of course, this is an unsurprising result. Consumers with lower credit scores are, as a group, less likely to repay their credit card debts than consumers with higher credit scores. As a result, they are presumably less likely to meet any intermediate debt repayment date, even one that is non-binding like the end of a promotional period.

## **INCOME**

Figure 10 shows balance and promotion payoff rates by income for promotions originated in 2012.<sup>51</sup> To correct for the distortions noted above, it is limited to deferred interest promotions from six to 17 months in duration. Payoff rates for both purchases and balances show some increase with income. The variance across the bottom three quintiles is not large, although the lowest income quintile has a slightly lower promotion payoff rate. The highest two quintiles, however, demonstrate clearly higher payoff rates.

---

<sup>51</sup> We focus on 2012 because our income data set is less complete for earlier years. Note that all income figures are reported by the consumer to the issuer. Of the purchases included in the analysis reflected in Figure 10, about a quarter were made by consumers who reported income in the lowest quintile, about a third were made by consumers who reported income at the highest quintile, and the remainder fell into the middle three income quintiles.

**FIGURE 10: PROMOTION & BALANCE PAYOFF RATES BY INCOME FOR 2012-ACCEPTED DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS BETWEEN SIX AND 17 MONTHS (DI)**

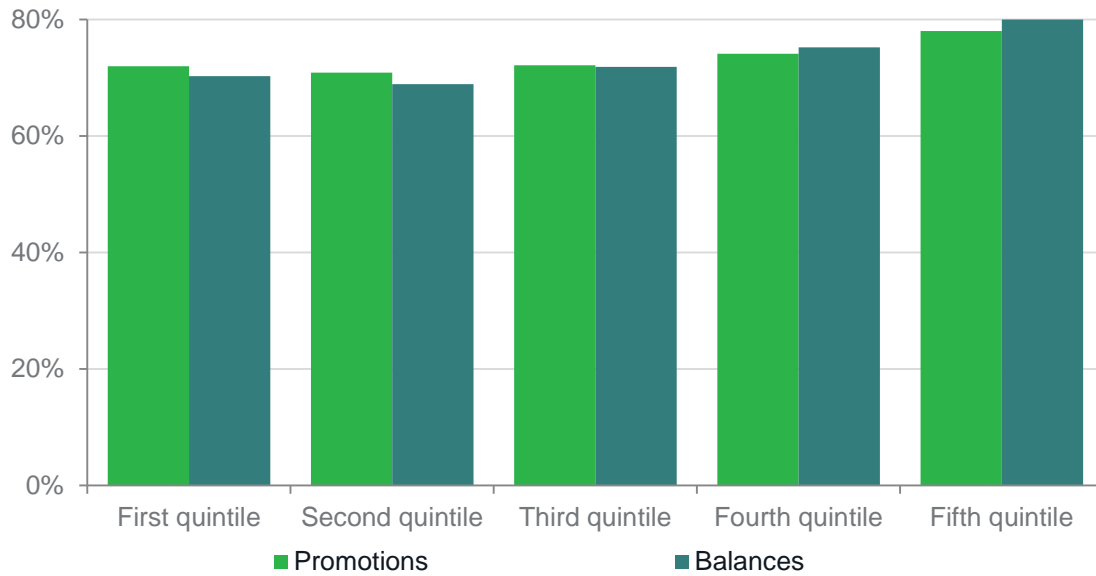
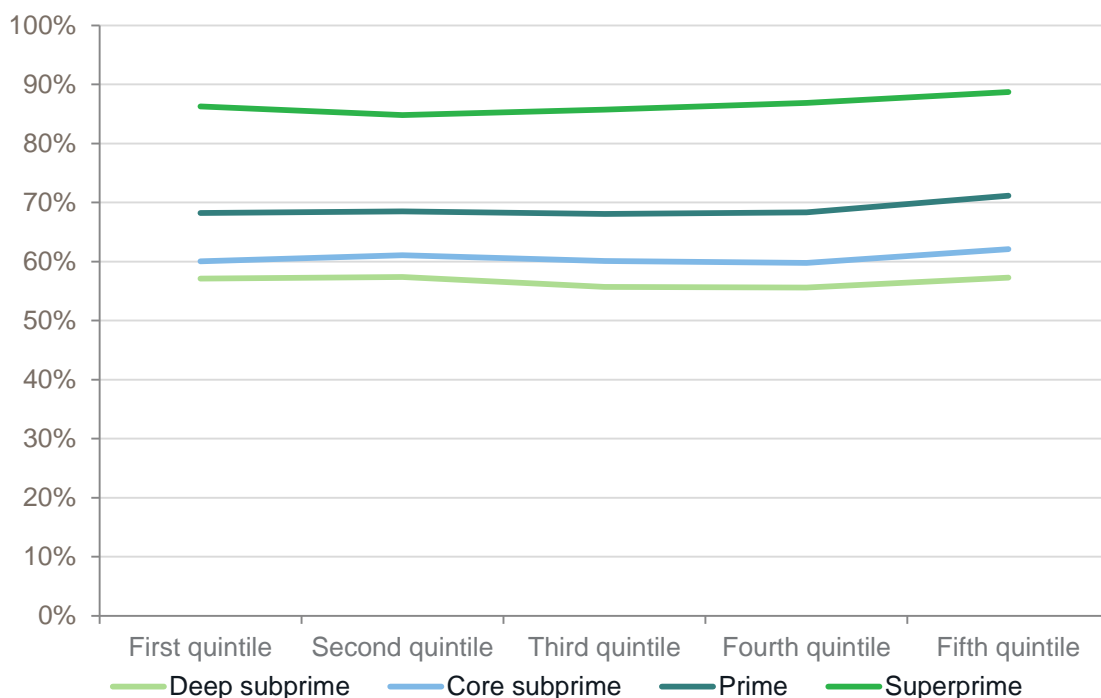


Figure 11 shows promotion payoff rates by income and credit score ranges. In all these cases, there is little change in payoff rates across income quintiles. For accounts held by consumers with deep subprime credit scores, in fact, the payoff rate is nearly flat. For all other credit score ranges, the highest quintile demonstrates slightly higher payoff rates, but otherwise shows no clear pattern.<sup>52</sup>

---

<sup>52</sup> The Appendix contains data on the balance payoff rate by income and credit score. It, too, indicates little variation in payoff rates by income relative to payoff rate by credit score. See Appendix Figure 10.

**FIGURE 11: PROMOTION PAYOFF RATE BY INCOME AND CREDIT SCORE FOR 2012-ACCEPTED LOANS WITH PROMOTIONAL PERIODS BETWEEN SIX AND 17 MONTHS (DI)**

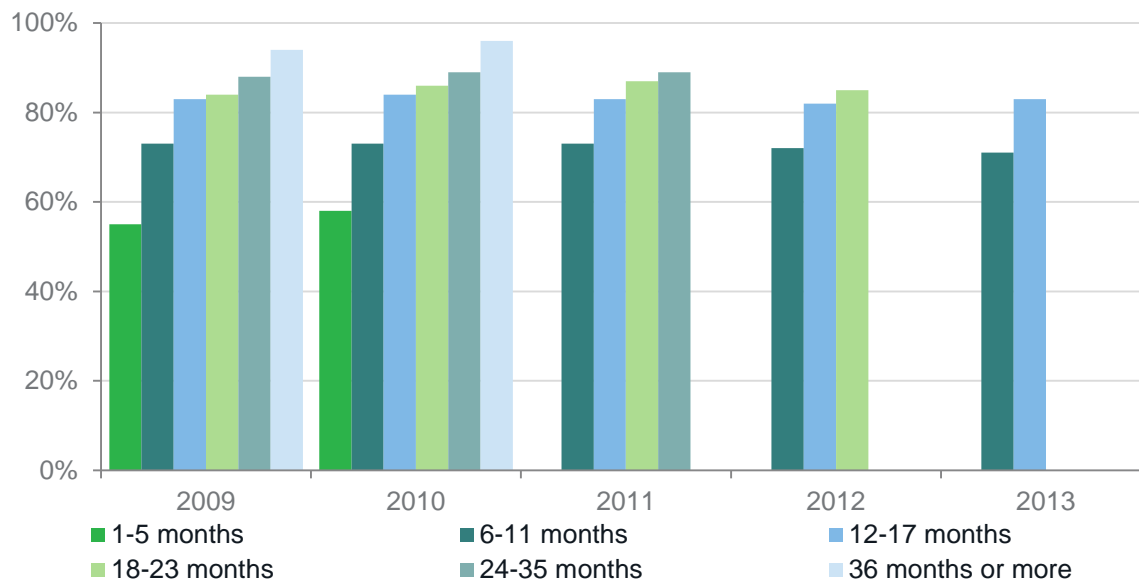


### 6.2.4 Payoff rates by duration and amount

Payoff rates generally improve as the duration of the deferred interest loan gets longer. In 2009 and 2010, short-term promotions of under six months had lower payoff rates than loans with longer terms. The average promotional payoff rate for loans of under six months in those two years was 62%. For loans of six months or longer, it was 78%. The CARD Act’s elimination of shorter-term loans, therefore, may have contributed significantly to the improvement in overall payoff rates from 2009 to 2010.

Figure 12 shows payoff rates for different promotional periods by the year the promotion was originated. For the most recent years, we exclude longer promotions as we do not have full payoff data for loans that are still in their promotional period when our data set stops at year-end 2014. The consistent pattern is that longer promotional periods yield higher payoff rates. To some extent, this pattern may be explained by the credit score of the account holder because higher scores are associated with longer promotion terms. Even when looking within credit score ranges, however, longer promotional periods are always associated with higher payoff rates.

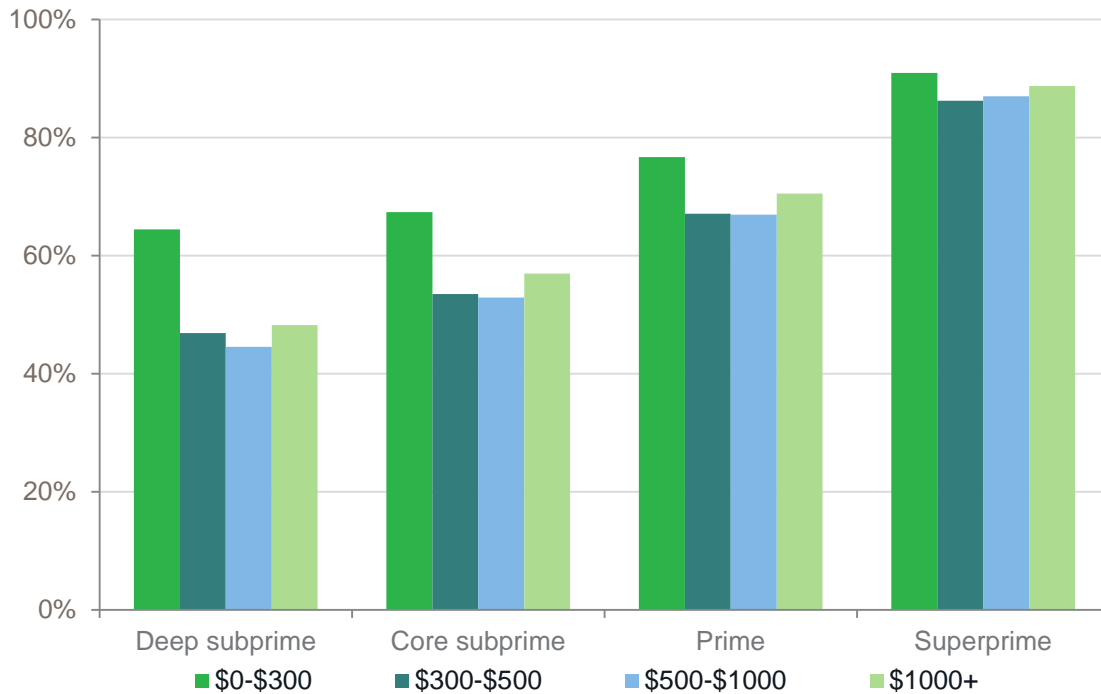
**FIGURE 12: BALANCE PAYOFF RATES BY PROMOTIONAL PERIOD (DI)**



Of course, when a consumer does fail to pay a promotional balance by the end of a longer promotional period, the potential consumer harm is greater than it would be in the event of a shorter period. The longer the promotional period, the more deferred interest can accrue, and the greater the shock of the accrued charges when the promotional period ends. This effect is exacerbated because, as noted, longer promotional periods are generally associated with higher promotional amounts as well.

From 2009 through 2013, the median loan amount was between \$1000 and \$2000 for loans of between 24 and 35 months. For loans of six to 11 months, by comparison, it was between \$300 and \$400. It should not be surprising, therefore, that consumers in our dataset who failed to pay a 24 to 35 month loan that was accepted in 2011 faced an average accrued interest charge of \$1,054 when they failed to pay off before the end of the promotional period. In contrast, the consumers who failed to pay a six to 11 month loan accepted in that period faced an average accrued interest charge of \$65. Even controlling for the different size of the loans, longer loans impose a higher per dollar accrued interest charge. Using the same comparison, the consumer with the longer loan paid \$46 in interest for every \$100 borrowed and the consumer with the shorter loan paid \$13.

**FIGURE 13: PROMOTIONAL PAYOFF RATE BY PURCHASE SIZE, BY CONSUMER CREDIT SCORE, 2009-2013 (DI)**



To analyze the relationship between payoff rates and promotion size, we divided the promotions into four groups. Each includes roughly a quarter of all purchases in the data we reviewed. We then noted the payoff rates within each quartile and by the credit score of the account holder. Figure 13 shows a reasonably clear relationship between purchase size and payoff rates. The relationship is consistent in direction across risk tiers. The smallest purchases tend to have the highest payoff rates in any given risk tier. The largest purchases within any given risk tier tend to have slightly higher payoff rates than medium-sized purchases in that same risk tier.

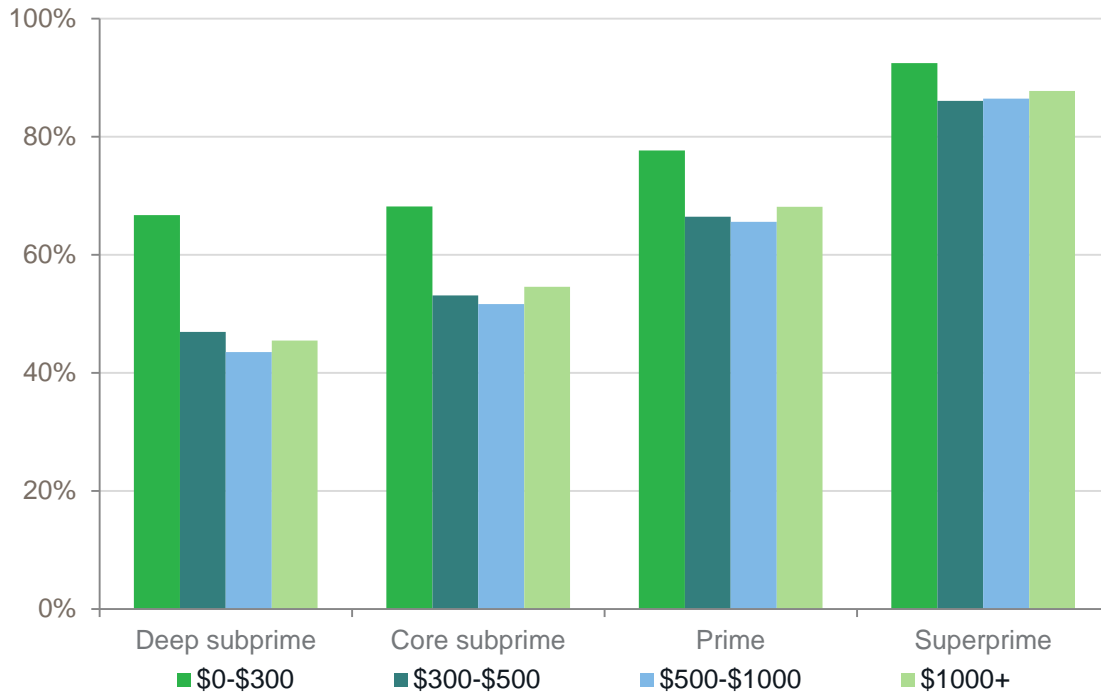
To ensure that this correlation is not explained only by the longer promotional periods associated with larger promotions, we also conducted the same analysis using only promotions that had promotional periods of between six and 17 months. These results, which are shown in Figure 14, are similar.<sup>53</sup> It is possible that part of this result is explained by the income

---

<sup>53</sup> That is also true for balance payoff rates. See Appendix Figure 10.

associated with an account. Across risk tiers, at least half of purchases greater than \$1000 are taken by consumers in the highest income quintile. Only around 1% to 2% are taken by consumers in the lowest income quintile.

**FIGURE 14:** PROMOTIONAL PAYOFF RATE BY PURCHASE SIZE AND CREDIT SCORE FOR DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2009-2013 (DI)



## 6.2.5 Payment behaviors and payoff rates

### PAYMENT BEHAVIOR CATEGORIES

Consumers exhibited a range of different payment behaviors. To explore payment behaviors, we limit our analysis to loans of 12 to 17 months.<sup>54</sup> We examined the payments made to the

---

<sup>54</sup> This promotional term is less common than six to 11 months, as shown in section 6.1.3 above. However, having 12 as opposed to six observed payments for each promotion allowed us to better distinguish between different patterns of payment.

promotional balance.<sup>55</sup> For promotions paid in full during the promotional period, we defined these categories:<sup>56</sup>

- Early payers. These consumers pay 50% of the promotional balance in the first quarter of the loan;
- Equal payers. These consumers make at least half their monthly payments at or within \$20 of an equal monthly share of the full promotional balance;
- Deferred payers. These consumers pay at least 75% of the balance of the promotional amount, less minimum payments, in the last two billing cycles of the promotion; and
- Other payers. These are all the consumers who take these loans and successfully pay the promotional balance during the promotional period, but are not in one of the first three groups above.

For comparative purposes, we also review payment behavior during the promotional period for consumers who did not pay in full before it ended. For these consumers, we follow these same definitions as closely as practical. Some adjustment is needed, however, precisely because such consumers do not pay in full. We use these adjusted definitions:

- Early payers. These consumers make at least 50% of their payments during the promotional period in its first quarter;
- Equal payers. These consumers make at least half their monthly payments at or within \$20 of an equal monthly share of the full promotional balance;

---

<sup>55</sup> For consumers with multiple balances, this may have been less than their full payment.

<sup>56</sup> These groups are not necessarily mutually exclusive. To avoid double counting, we used a methodology that necessarily assigned each promotion subject to this repayment analysis to one and only one group. That assignment was done relying on the order of repayment patterns—early, equal, deferred, other—listed above. A particular promotion was analyzed to determine whether it was or was not an early payer; if it was, it was counted as such, and if and only if it was not, it was subsequently analyzed to determine whether it was an equal payer. This continued until each promotion was sorted into one and only one of the four buckets. It is possible that if all promotions were analyzed according to the first three buckets, some could fall into more than one. We therefore selected the order above deliberately, to ensure that as much potential variation in consumer repayment behavior was observed.

- Deferred payers. These consumers make at least 50% of their payments in the last two billing cycles of the promotion; and
- Other payers. These are all other consumers who fail to pay off during the promotional period.

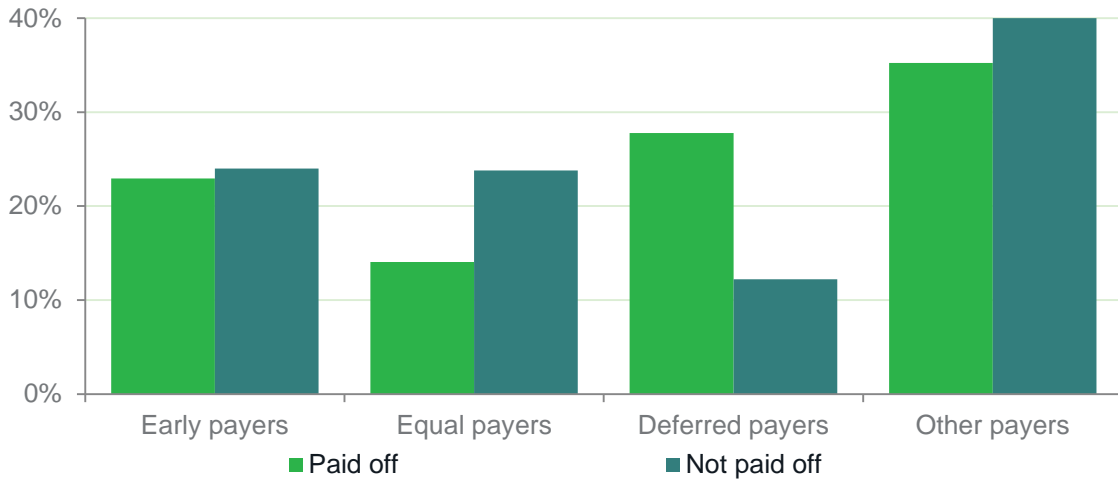
For all consumers, we analyze two other types of payment information. First, we look to see how often consumers paid at or close to the minimum payment amount. Specifically, we look to see how many consumers make more than half their monthly payments within \$10 of the required minimum payment. (For these purposes we assumed that the minimum was the larger of \$25 or 1% of the balance due, plus fees and deferred interest.) Second, we looked to see how many times an account with a deferred interest promotion had a late fee during the promotional period.

## **RESULTS**

Both groups of consumers show significant rates of early payment. Figure 15 shows that nearly a quarter of all consumers who use these products—whether or not they pay in full during the promotional period—pay more than 50% of the promotional balance in the first quarter of the promotion. About a quarter of consumers who do not pay in full in the promotional period make equal payments for at least half of their payments, whereas successful payers place much less reliance on this approach. Conversely, successful payers show a much higher rate of payment in the final two billing cycles of the promotional period, indicating that—intentionally or otherwise—they take maximum value from their interest-free loans. In marked contrast, only 12% of consumers who do not pay in full in the promotional period skew their payments to the final two billing cycles. Over a third of consumers, however, do not exhibit any of these payment patterns. Almost no consumers—whether they paid in full during the promotional period, or did not do so—paid at or near the minimum for half or more of their payments.

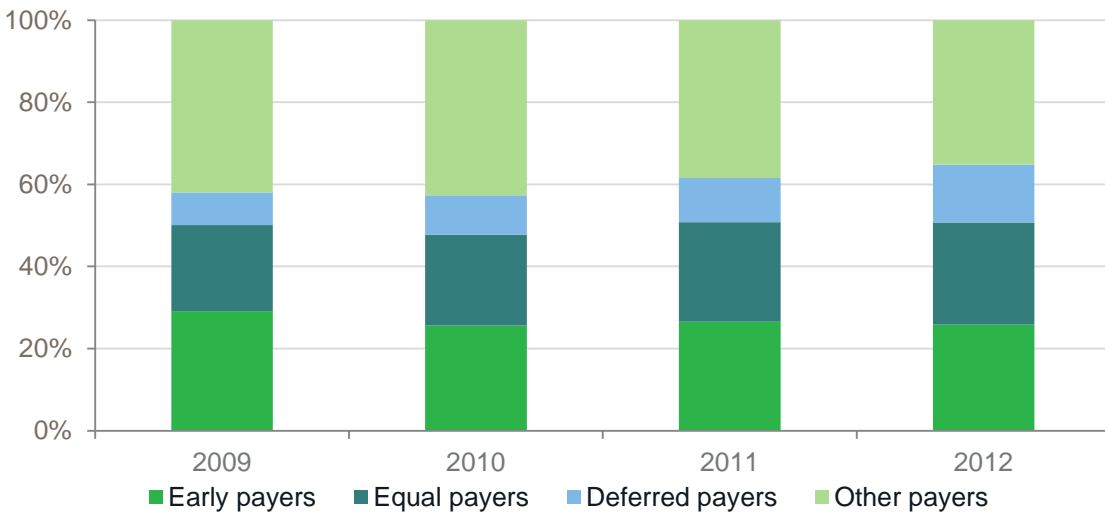


**FIGURE 15: DEFERRED INTEREST PAYMENT PATTERNS, 2009-2012 (DI)**



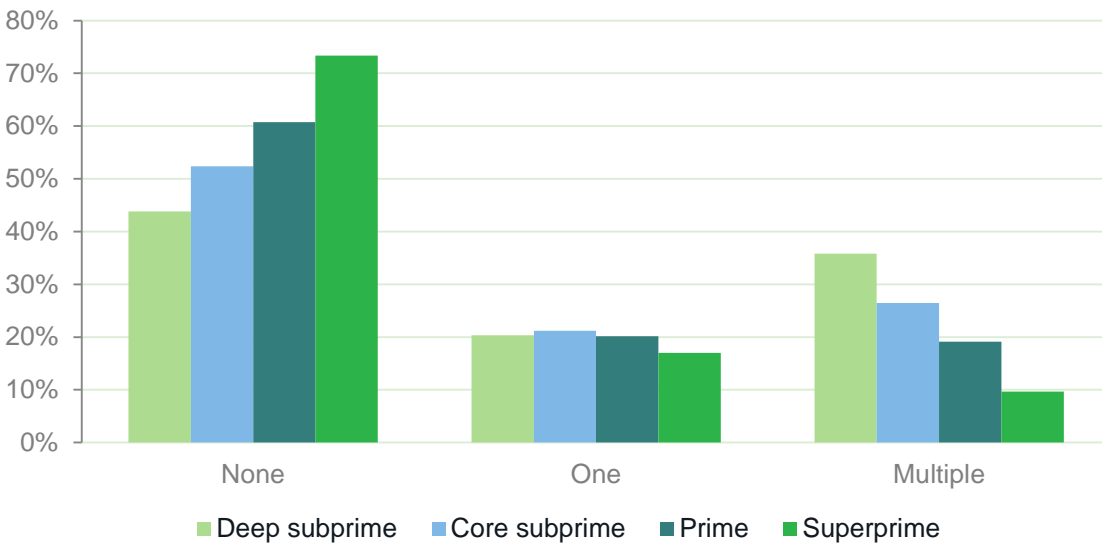
For consumers who paid in full during the payment period, observable payment patterns hold steady over our data period. Figure 16 shows, however, that there were some changes in payment patterns over time for consumers who did not pay in full during the promotional period. Possibly reflecting the impact of certain CARD Act payment allocation rules (that we discuss in section 6.4 below), these consumers increased the rate at which they paid in the final two billing cycles, from 8% to 14%. They had smaller increases in the rate at which they made equal payments that would be sufficient (or close to sufficient) to repay the entire promotion if sustained for its duration—from 21% to 25%.

**FIGURE 16: DEFERRED INTEREST PAYMENT PATTERNS, PURCHASES NOT PAID OFF (DI)**

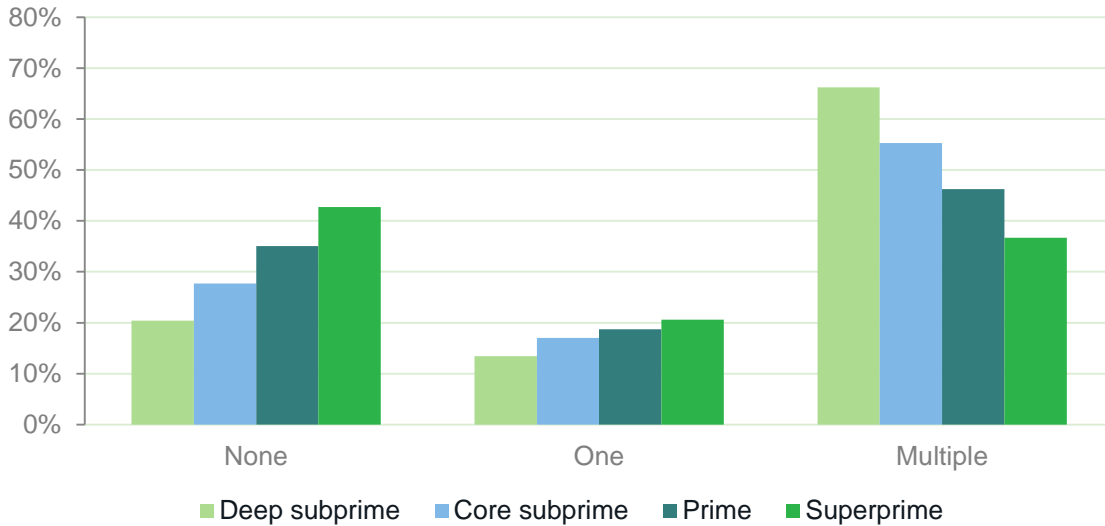


To examine the incidence of late fees during promotional periods, we focused on promotions of 12 to 17 months in duration that were accepted from mid-2012 through mid-2013. Based on that analysis, we identified a strong correlation between late payments in the promotion period and a failure to pay the promotion before it expires. Figure 17 shows the incidence of late fees, by the credit score of the account, for promotions that were paid in full. Figure 18 shows the same data for promotions that were not paid in full. Each of these figures reflects an expected correlation between late fee incidence and credit score. But the correlation between late fee incidence and the basic outcome of the promotion—paid in full in the promotional period or not paid in full in that time—appears even stronger. Unpaid superprime promotions were more likely to experience multiple late fees in the promotional period than paid deep subprime promotions. This high correlation, even controlling for credit risk, could suggest that some consumers who fail to pay before the end of the promotional period may have experienced an exogenous shock that caused late payments and undermined their ability to pay the promotion on time. It could also suggest that these consumers were never able to pay the promotion in the first place.

**FIGURE 17:** INCIDENCE OF LATE FEES, BY CONSUMER CREDIT SCORE, FOR PROMOTIONS PAID IN FULL DURING THE PROMOTIONAL PERIOD, 12-17 MONTH PROMOTIONAL PERIOD LOANS ACCEPTED MID-2012 THROUGH MID-2013 (DI, CCDB)



**FIGURE 18: INCIDENCE OF LATE FEES, BY CONSUMER CREDIT SCORE, FOR PROMOTIONS NOT PAID IN FULL DURING THE PROMOTIONAL PERIOD, 12-17 MONTH PROMOTIONAL PERIOD LOANS ACCEPTED MID-2012 THROUGH MID-2013 (DI, CCDB)**

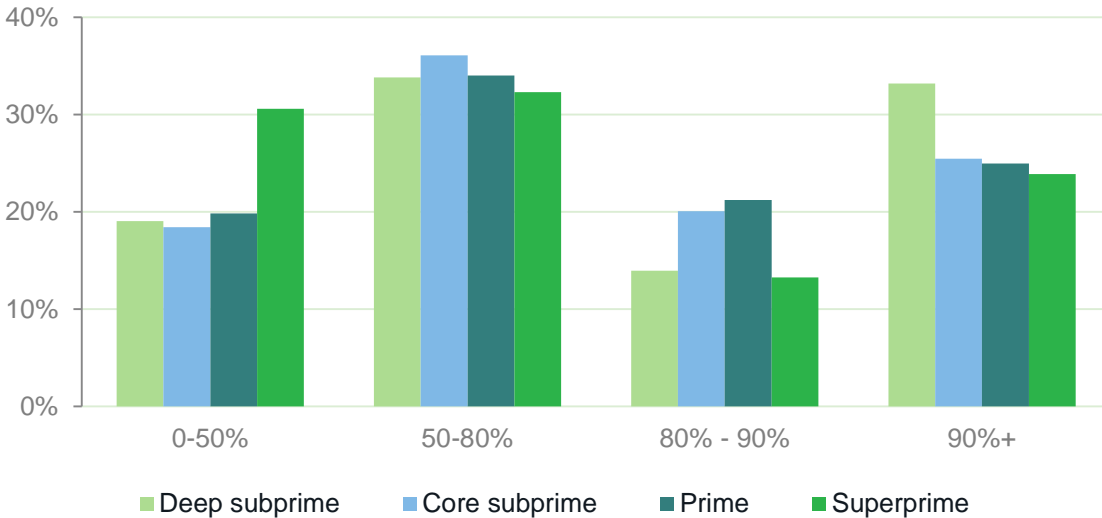


**DEGREE OF FAILURE**

Consumers who fail to pay during the promotional period generally do so by a significant margin. Figure 19 shows the percentage of the promotional balance that remains to be paid at the point that the promotion ends. It only covers consumers who do not pay in full, and includes promotions of all durations.

The overwhelming majority of consumers who do not pay off the promotional balance in full during the promotional period pay less than half of their promotional balance before that period ends. In fact, a near majority of consumers have more than 80% of their promotional balance to pay at the expiration of the promotional period. Those results hold up across consumers in every credit score range except, in part, for consumers with superprime scores, who have a lower incidence of paying less than 80% of the balance by promotion end. A quarter of consumers overall, and a third of consumers with deep subprime credit scores, pay less than 10% of the promotional balance before the end of the promotion.

**FIGURE 19:** DISTRIBUTION OF PROMOTIONS NOT PAID IN FULL BY PERCENT OF DEFERRED INTEREST BALANCE REMAINING TO BE PAID AT PROMOTION END, BY CONSUMER CREDIT SCORE, 2009-2013 (DI)



## 6.3 Repeat use

Even if some consumers do not understand the full implications of not paying a promotional balance in full, the possibility remains that they will improve their payoff rates with repeat use as a result of their experience.<sup>57</sup> Although there is evidence that payoff rates do improve with repeat use, the evidence that this is explained by consumers changing their payoff behavior is much more mixed. At least for consumers with lower credit scores, the preliminary indications are that the higher payoff rates on subsequent deferred interest promotions are *not* explained by change in such behavior. Rather, consumers who have lower credit scores but strong payoff experiences are more likely to accept another deferred interest offer than similar consumers who have worse payoff experiences. In other words, the consumers with better pay-off results “self-select” into the pool of repeat users. This self-selection process may reflect a form of learning, but one different from consumer “trial and error” learning, in which non-paying

---

<sup>57</sup> In the focus groups that the Bureau conducted, several consumers indicated that they had made several deferred interest purchases, sometimes with the same card. Some consumers also indicated that their understanding of deferred interest products improved from the first time they used such a product.

consumers continue making use of deferred interest promotions and experience improved outcomes.

### 6.3.1 Incidence of repeat use

The evidence available to the Bureau provides only a limited window into repeat consumer acceptance of deferred interest offers. We are able to tell if a given account has accepted more than one deferred interest offer in our defined time period but not if that same account had a deferred interest offer outside our time period. In addition, lacking consumer-level data, we cannot tell if the holder of that account—whose identity we do not know—accepted any deferred interest offers on any different account at any time.

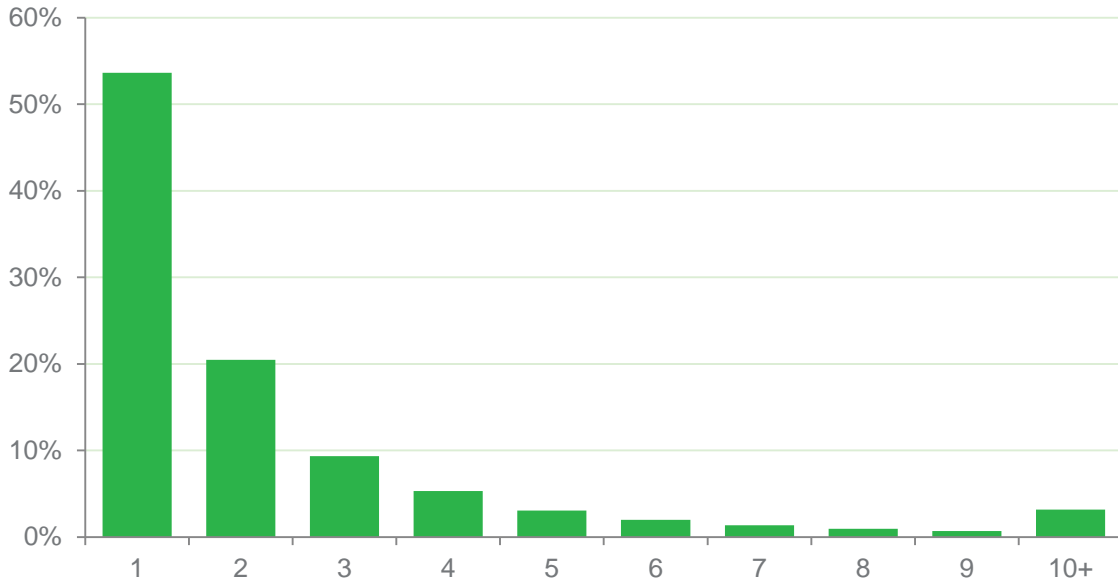
Subject to these limitations, Figure 20 shows the incidence of deferred interest offers taken over our four-year data period for accounts originated in 2010.<sup>58</sup> By definition, these accounts cannot have been used for deferred interest purchases prior to our data period, although the account holders may have made such purchases on other accounts. More than half the accounts in our deferred interest dataset originated in 2010 made only one deferred interest purchase before the end of 2014. More than a third made between two and four deferred interest purchases over this same period. About 10% made five or more such purchases.<sup>59</sup> Accounts that made multiple promotional purchases, however, necessarily represent a disproportionate share of the purchases in our dataset. While a majority of accounts in our dataset only made one purchase, they only made less than a quarter of the purchases in our dataset. Those accounts that made five or more purchases, which were only 10% of accounts in our dataset, nonetheless represented more than a third of all purchases.

---

<sup>58</sup> We have promotional performance data for the five-year period from the beginning of 2010 through to the end of 2014. We have data on the number and type of promotions, however, only for the first four years of this period.

<sup>59</sup> Some commenters suggest that issuers profit from deferred interest products because “these introductory offers lead into long-term customer relationships.” US Chamber of Commerce Center for Capital Markets Competitiveness Comment Letter (May 18, 2015) 6.

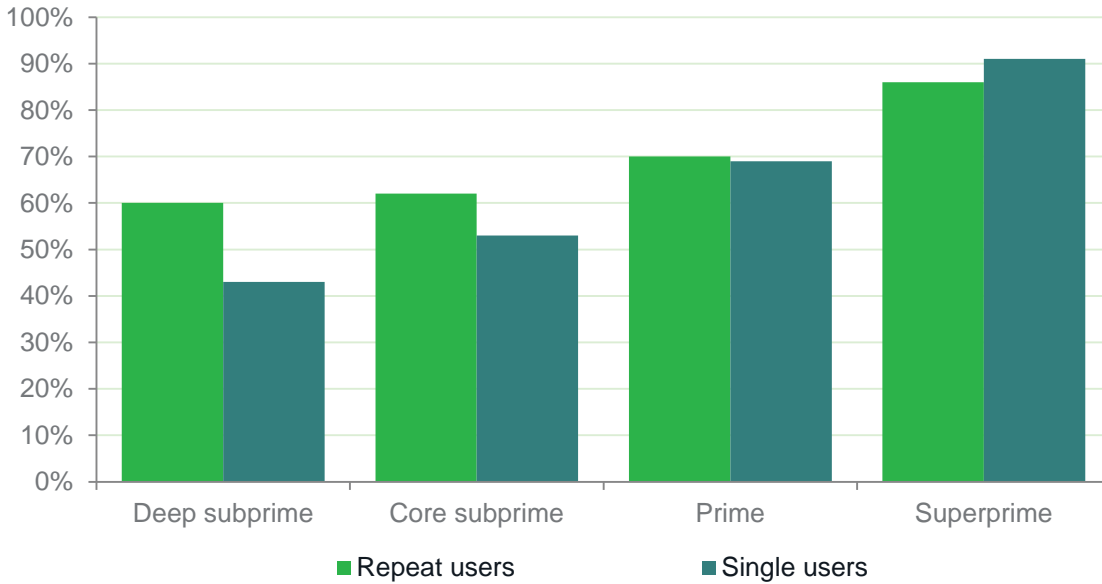
**FIGURE 20:** NUMBER OF DEFERRED INTEREST PROMOTIONS ACCEPTED BY ACCOUNTS ORIGINATED IN 2010 (DI)



### 6.3.2 Correlation with payoff rates

For all but superprime accounts, those that show repeat use of deferred interest loans in our data set have higher payoff rates than those that do not. Figure 21 compares payoff rates for accounts whose single deferred interest use occurred at account origination (“Single Use Accounts”) with payoff rates for accounts with more than one deferred interest balance during our data period (“Repeat Use Accounts”). For Repeat Use Accounts, Figure 21 reflects payoff rates associated with the second or subsequent use, so it does not include payoff rates for first promotions on any account. Superprime Repeat Use Accounts have lower payoff rates than superprime Single Use Accounts. In all other credit tiers, however, repeat use is associated with higher payoff rates than single use.

**FIGURE 21:** REPEAT USE VS. SINGLE USE ACCOUNT ORIENTATION PROMOTION PAYOFF RATES FOR DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2009-2013 (DI)

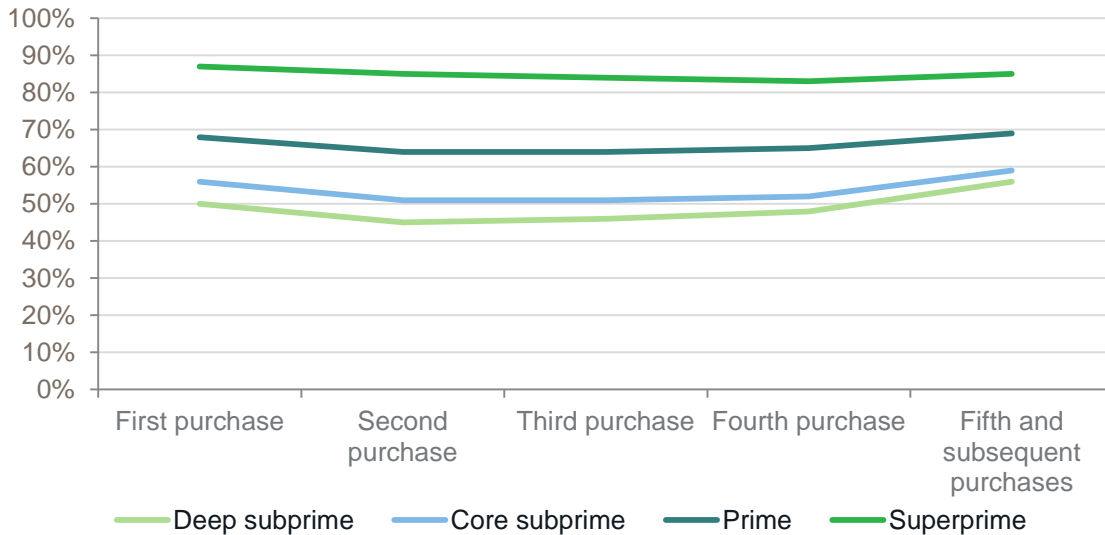


The evidence available to the Bureau, however, suggests that “self-selection” into repeat use by consumers who pay promotions during the promotional period better explains these results rather than the notion that consumers improve their payment performance over time. Figure 22 shows how promotion payoff rates change for Repeat Use Accounts according to the order of a promotion. Within any given credit risk tier, the payoff rates for second, third, and fourth promotions are lower than for first promotions. Only fifth promotions and above have an average payoff rate higher than first promotions, and even that result does not hold across all credit score ranges. This picture appears inconsistent with the hypothesis that consumers effectively learn to improve their payment performance over time.<sup>60</sup>

---

<sup>60</sup> The results are even more striking given that repeat use is correlated with smaller promotions and, in general, smaller promotions have higher payoff rates. See Appendix Figure 11.

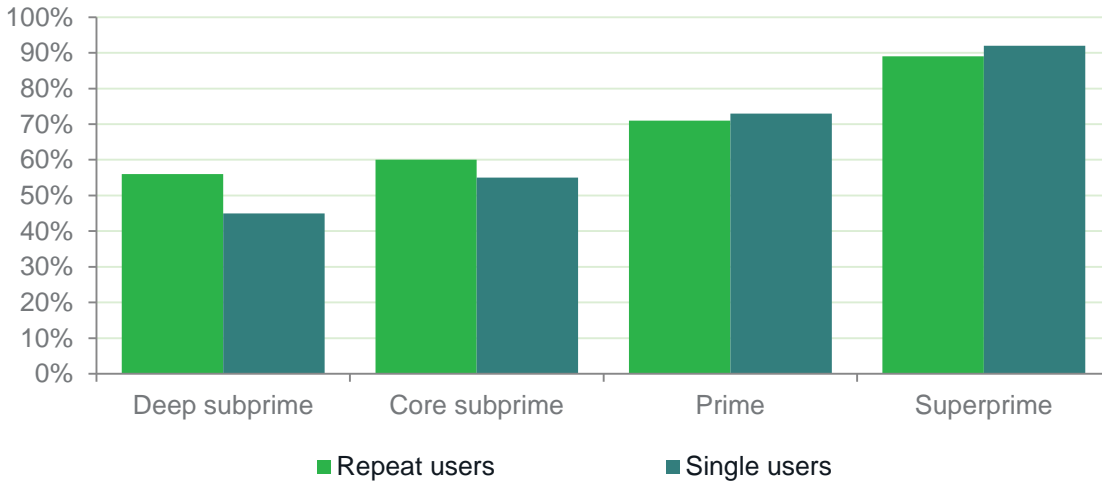
**FIGURE 22: PROMOTION PAYOFF RATES, REPEAT USERS BY PROMOTION SEQUENCE, DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, BY CONSUMER CREDIT SCORE, 2009-2013 (DI)**



To the same effect, Figure 23 compares payoff rates achieved by accounts with only one deferred interest promotion in our data period (“Single Use”) and by repeat users on the first use that we can identify in our data set (“First Use Repeat Use”). For consumers with subprime scores—whether core or deep subprime—First Use Repeat Use has a markedly higher payoff rate than Single Use. That suggests that for consumers in these credit score categories, self-selection explains the results seen in Figure 21.



**FIGURE 23:** PROMOTION PAYOFF RATES FOR FIRST USE REPEAT USERS AND SINGLE USERS, BY CONSUMER CREDIT SCORE, DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2010 (DI)



## 6.4 Multiple balances

### 6.4.1 Types of multiple balance

A consumer may acquire a private label card in order to accept a particular deferred interest offer. Aside from that specific use, the consumer may not otherwise employ the card. Other consumers may use the card for multiple deferred interest promotions.<sup>61</sup> In some cases, these promotional periods may overlap. Other consumers may also use the card for non-promotional spending, which means that the account can have promotional and non-promotional balances on the account at the same time. In our focus groups, consumers mentioned a range of different use patterns, reflecting the potential for accounts to have multiple balances—promotional and non-promotional—at the same time.

---

<sup>61</sup> Some private label cards provide standing deferred interest offers to cardholders, particularly for purchases above a certain threshold.

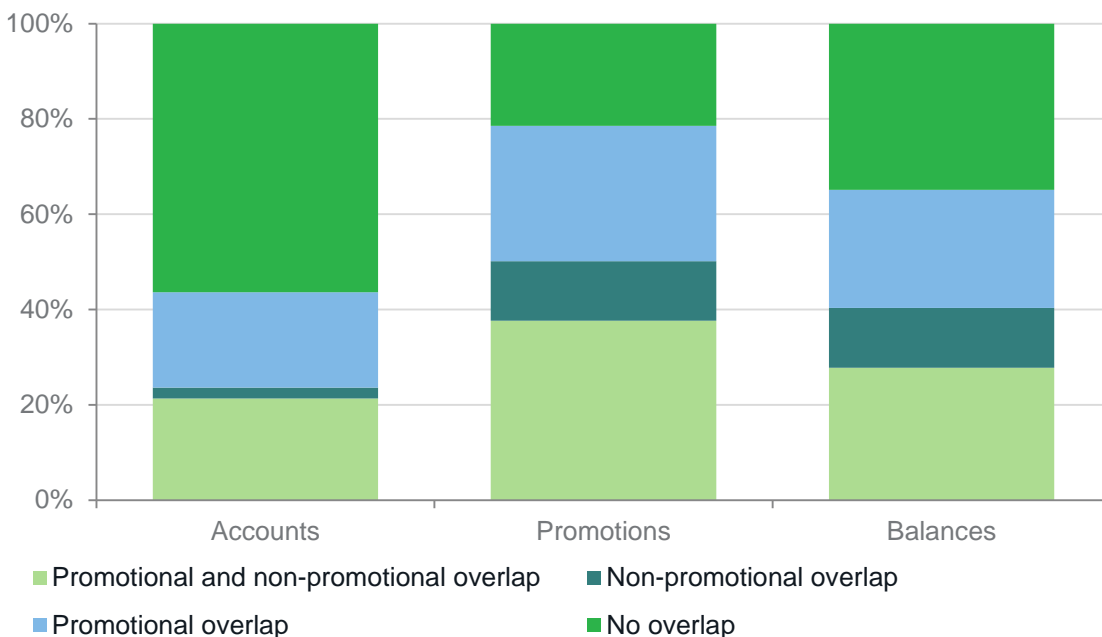
When consumers have multiple balances at the same time, each payment made on an account must be allocated between such balances. Whether those payments are allocated to deferred interest balances or not may in part determine whether that balance is paid in full, or whether the consumer is assessed deferred interest. For that reason, we explore the phenomenon of overlapping balances here.

For the accounts in our deferred interest dataset, just over two-thirds of all spending was under the terms of a deferred interest promotion—which means that nearly one-third of all spending on these accounts was not.<sup>62</sup> The first bar of Figure 24 shows different scenarios under which an account may have multiple balances *at the same time*. We refer to such balances as “overlapping balances.” Figure 24 relies on data about accounts with one or more deferred interest loans originated between 2009 and 2013.

---

<sup>62</sup> The level of non-promotional spending varied substantially by the merchant partner to which particular accounts were tied. Accounts focused on electronics, home improvement, and household goods registered substantial non-promotional spending. Medical accounts registered much lower levels of non-promotional spending relative to promotional spending.

**FIGURE 24:** MULTIPLE BALANCE TYPE SHARES, DEFERRED INTEREST ACCOUNTS, PROMOTIONS, AND BALANCES, 2009-2013 (DI, CCDB)



There are four categories of accounts depicted in the first bar of Figure 24. The categories are mutually exclusive and all accounts with a deferred interest loan fall into one of the categories. “No Overlap” accounts had no overlapping promotional balances or overlapping promotional and non-promotional balances at any point between 2009 and 2013. “Promotional Overlap” accounts had two or more promotional balances at the same time at least once during our observation period, but no overlap between promotional and non-promotional balances at any point we could observe. “Non-Promotional Overlap” accounts had a promotional and non-promotional balance at the same time at least once in this time period, but they never had overlapping promotional balances. Finally, “Promotional and Non-Promotional Overlap” accounts had two or more promotional balances at the same time at least once and, at some point in the time period, overlapping promotional and non-promotional balances. Figure 24 indicates, therefore, that just under a quarter of accounts in the data we reviewed had overlapping promotional and non-promotional balances at least once during our data period. Around 40% of the accounts had overlapping promotional balances at least once in the data period.

Moving from the account to the promotional level, the extent of overlap becomes even more evident. The second and third bars of Figure 24 show the distribution of multiple balance

scenarios at the promotion level and the distribution of promotional dollar volume across these same scenarios. These bars use the same basic definitions as the first bar, but the overlap is defined with respect to the specific promotion or to its dollar volume.<sup>63</sup> More than half the promotions taken in our data period overlap with the presence of non-promotional balances. Promotions which represent just under half the promotional dollar volume overlapped with non-promotional balances at some point. Only about 20% of the promotions have no overlap at all with non-promotional or other promotional balances.

## 6.4.2 Legal framework

The implementing regulations of the CARD Act specifically address situations in which promotional and non-promotional balances overlap. The rules permit an issuer to allocate a consumer's payments in excess of the minimum payment to a deferred interest promotional balance if the cardholder so requests.<sup>64</sup> Absent that request, however, the issuer must follow a default rule that requires the issuer to allocate payments above the minimum to higher-rate balances first.<sup>65</sup> For these purposes, deferred interest rate balances are counted at their promotional rate, not their deferred rate.<sup>66</sup> In the last two months of a promotion, this

---

<sup>63</sup> Thus, "No Overlap" promotions are those where the account has no overlapping promotional or non-promotional balances during that promotional period. "Non-Promotional Overlap" promotions are those where there was a non-promotional balance on the account during the promotional period, but no overlapping promotions. "Promotional Overlap" promotions are those where there was an overlapping promotional balance during the promotional period, but no overlapping non-promotional balances. Finally, "Promotional and Non-Promotional Overlap" promotions are those where there is both an overlapping promotional and an overlapping non-promotional balance during the promotional period.

<sup>64</sup> 12 C.F.R. § 1026.53(b)(1)(ii). Consumer instructions can be made orally, in writing, or electronically. *See* Comment § 1026.53(b)-3.

<sup>65</sup> 12 C.F.R. § 1026.53(b)(1)(ii).

<sup>66</sup> Comment § 1026.53-4 ("However, when a balance on a credit card account is subject to a deferred interest or similar program that provides that a consumer will not be obligated to pay interest that accrues on the balance if the balance is paid in full prior to the expiration of a specified period of time, that balance must be treated as a balance with an annual percentage rate of zero for purposes of § 1026.53 during that period of time.").

presumption is effectively reversed and deferred rate balances *must* be paid before non-promotional balances.<sup>67</sup>

The present rules implementing the CARD Act do not require issuers to offer consumers the ability to overrule the default payment allocation rules.<sup>68</sup> In addition, if the issuer does allow consumers to make this choice, the rules do not require the issuer to publicize the availability of that choice to consumers. Reflecting this open regulatory framework, issuers do not follow a uniform practice on the allocation of payments to promotional and non-promotional balances.

Some issuers, at least on some portfolios, send out monthly statements that provide consumers the written opportunity to choose their allocation across balances. This is still a rare practice, but there are some indications that it may be growing. Two other practices are more common. First, some issuers do not allow any departure from the default allocation rules even if the consumer makes that request. Second, some issuers honor telephone requests for allocations that depart from the default rules. Even issuers that offer the telephone option, however, do not generally publicize that fact, and in at least some cases multiple requests are required for the consumer to effect reallocation in more than one billing cycle.

The default rules, therefore, effectively deprioritize promotional balances except in their last two billing cycles. As a result, they create at least some risk that consumers may assume that their payments are going to pay off a deferred interest balance when that is not, in fact, the case. The risk to consumers may be further exacerbated by issuer practices that generally make it harder—or even impossible—for consumers to allocate payments to promotional balances before the expiration of the relevant promotional period. The focus groups carried out for this study

---

<sup>67</sup> 12 CFR § 1026.53(b)(1)(i). In addition to the allocation of minimum payments, the rules do not specifically address a number of other allocation issues that can arise with respect to deferred interest balances. For example, they do not directly address how to allocate payments across two deferred interest balances. Issuers have developed a range of practices to address these points of discretion. Some use minimum payments for deferred interest balances either uniformly or in certain circumstances; some do so on a pro-rata basis; some never do so. With respect to overlapping deferred interest balances, some issuers prioritize the first expiring promotion, while others prioritize the balance with the highest deferred interest charges, but even these general practices are subject to a number of exceptions and variances.

<sup>68</sup> 12 CFR § 1026.53(b)(1)(ii) (“The card issuer *may at its option* allocate any amount paid by the consumer in excess of the required minimum periodic payment among the balances on the account in the manner requested by the consumer.”) (emphasis added).

revealed some consumer knowledge that telephoned instructions might sometimes enable prioritized payment of a promotional balance. But this information did not appear to be generally known by participants. Some retailers and issuers, while asserting that deferred interest products generally attract few complaints overall, acknowledge that a high share of the complaints they received focus on payment allocation issues.<sup>69</sup>

### 6.4.3 Allocation and payoff rates

To assess the potential impact of multiple balances on the consumer experience of deferred interest products, we conducted a number of analyses. First, we identified deferred interest loans that were not paid before the promotional balance ended and where the account had an “overlapping” non-promotional balance at some point during the promotion.<sup>70</sup> For each such promotion, we assessed how much the consumer had paid on the account during the promotional period as a ratio of the amount of the original promotional balance. For example, a consumer whose total payments on the account during the promotional period (regardless of how such payments were allocated) summed to 60% of the promotional balance, their payment ratio was 0.6.

Figure 25 shows the results. The right-hand bar shows the share of promotions with an overlapping non-promotional balance in different percentage ranges. For promotions with payment ratios above 1, a different payment allocation scheme could have resulted in a changed payoff outcome. More than half the promotions that overlapped with non-promotional balances saw account payments during the promotional period that exceeded the promotion amount. At least 30% saw payment ratios greater than 1.5 – meaning their payments over the promotional period exceeded 150% of the promotion amount.

The left-hand bar in Figure 25 shows baseline data for the promotions that did not pay in full during the promotional period and lacked any overlapping non-promotional balance. Only 13% of these promotions saw account payments during the promotional period that exceeded the

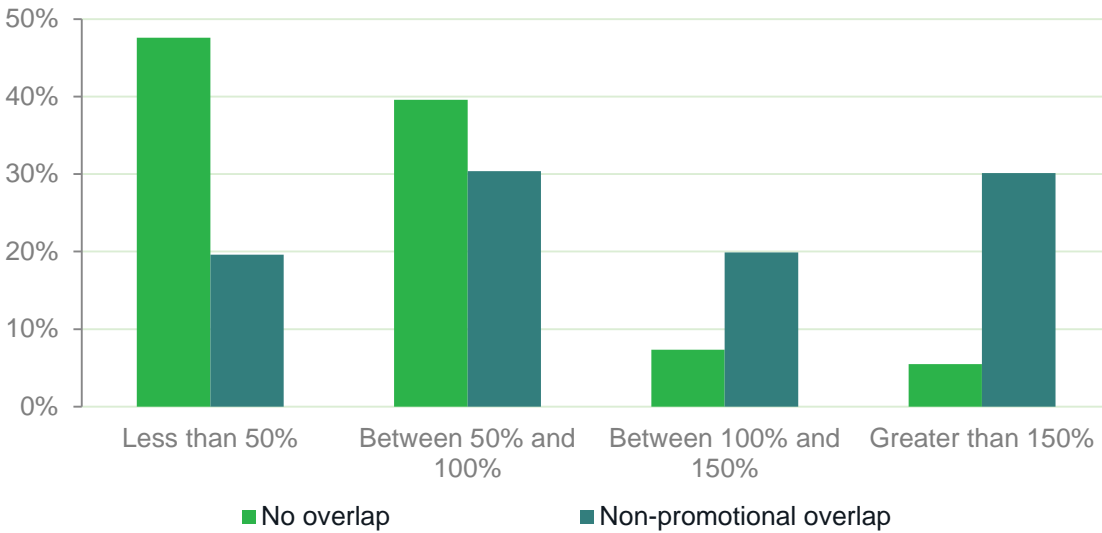
---

<sup>69</sup> Consumer complaints to the Bureau about deferred interest products also identify payment allocation issues as a source of consumer confusion and harm. See Monthly Complaint Report (Oct. 27, 2015) 12.

<sup>70</sup> For simplicity, we limited this analysis to promotions that had no overlap with other deferred interest promotions.

promotion amount, and only 5% saw payment ratios greater than 1.5. These baseline results show that payment allocation to non-promotional balances cannot explain all the results reflected in the right-hand bar—even as that allocation may explain most of the observable results reflected in that bar.<sup>71</sup>

**FIGURE 25:** RATIO OF PAYMENT AMOUNTS TO PROMOTION AMOUNT FOR LOANS NOT PAID IN FULL BY PROMOTION END, DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2013 (DI, CCDB)

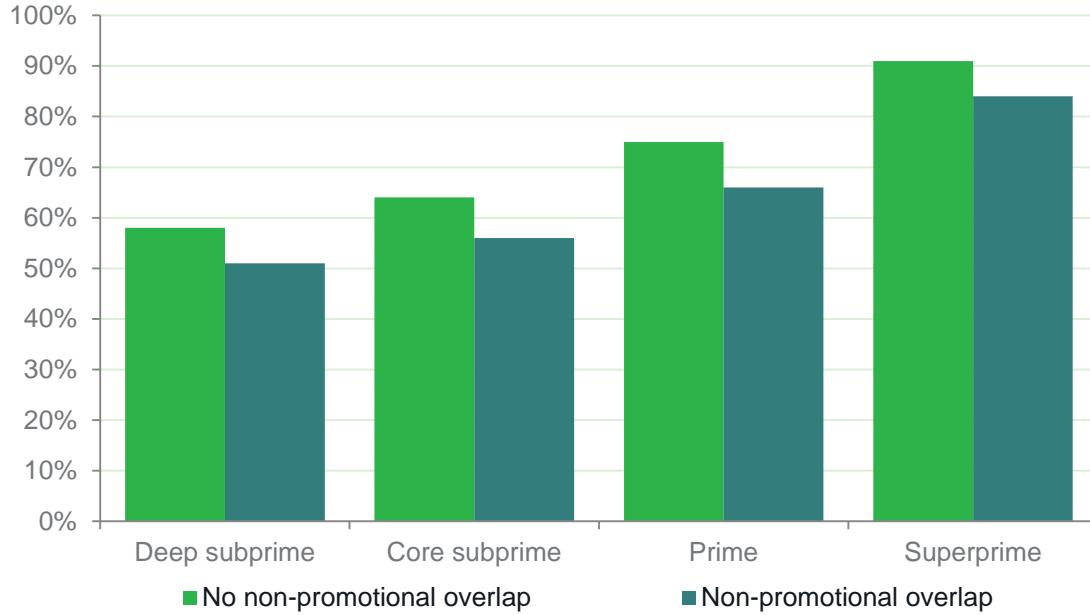


We also compared payoff rates for multiple balance deferred interest loans with payoff rates for non-multiple loans. For these purposes, a deferred interest loan is a multiple balance loan if there is an overlapping non-promotional balance at any stage in the promotion period. Conversely, if there is no such overlap, the loan is a non-multiple loan.<sup>72</sup> To control for the impact of credit score on this analysis, we present the results separately for loans in different credit score ranges. These results are in Figures 26 and 27.

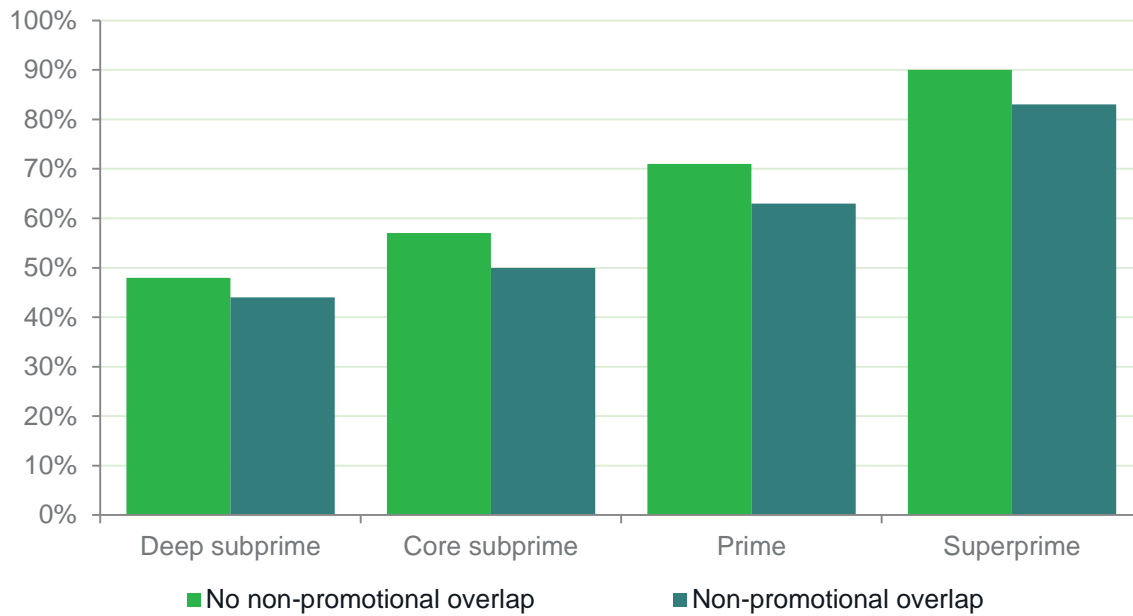
<sup>71</sup> Late and other fees are one possible explanation for the baseline results. If a consumer were assessed fees during the promotional period, payment in an amount equal to the promotional balance would not be enough to escape the assessment of deferred interest.

<sup>72</sup> This analysis sets aside the question of whether promotions overlapped with other deferred interest promotions. It examines promotions solely on the basis of whether or not they had overlapping non-promotional balances.

**FIGURE 26:** PROMOTION PAYOFF RATES FOR PROMOTIONS WITH AND WITHOUT NON-PROMOTIONAL OVERLAP, BY CONSUMER CREDIT SCORE, DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2009-2013 (DI, CCDB)



**FIGURE 27:** BALANCE PAYOFF RATES FOR PROMOTIONS WITH AND WITHOUT NON-PROMOTIONAL OVERLAP, BY CONSUMER CREDIT SCORE, DEFERRED INTEREST LOANS WITH PROMOTIONAL PERIODS FROM SIX TO 17 MONTHS, 2009-2013 (DI, CCDB)





For consumers in every credit score range, both promotion and balance payoff rates are higher for promotions that have no overlap with non-promotional balances. With almost no exceptions, these general results hold across different portfolios and different merchant partnerships within the data set that we reviewed. For deep subprime accounts, promotion payoff rates when there is an overlapping non-promotional balance average 51%, compared to 58% when there is no such overlap. Balance payoff rates when there is an overlapping non-promotional balance are only 44%, compared to 48% absent such overlap. For core subprime accounts, the balance payoff rate falls to 50% for promotions with overlapping non-promotional balances, compared to 57% for those without. Even for prime accounts, balance payoff rates fall from 71% for non-overlapping promotions to 63% for promotions with overlapping non-promotional balances. Payoff rates on superprime accounts remain above 80% even when there is an overlapping non-promotional balance, but there is a seven percentage point gap in payoff rates for promotions with and without that overlap.

These results raise a question as to what steps—if any—might be taken by issuers to improve the allocation of payments for consumers. The issue of payment allocation, however, is complicated by at least two factors. First, it is not straightforward for any party—the consumer or the issuer—to determine the payment allocation that will result in the lowest total cost to the consumer in every context. It is not the case that the consumer is uniformly better off by prioritizing the payment of a deferred interest balance over the payment of a non-promotional balance. For example, if a consumer would retain or reclaim a grace period by prioritizing a non-promotional balance, and that consumer plans to use the card for non-promotional purchases thereafter, he may save enough in non-promotional interest charges to justify deprioritizing the payment of the promotional balance.<sup>73</sup> How likely this contingency really is, however, is an open question. Preliminary analysis suggests that it will only occur in uncommon circumstances.<sup>74</sup>

Second, while in theory the impact of payment allocation to non-promotional balances might be mitigated by giving consumers clear and simple means to allocate payments to promotional balances, prior research raises questions about the effectiveness of disclosures on payment

---

<sup>73</sup> To the Bureau's knowledge, most issuers allow the consumer to revolve a deferred interest balance without loss of a grace period on non-promotional purposes.

<sup>74</sup> See section 6.7.

allocation. Prior to the passage of the CARD Act, the Federal Reserve Board conducted consumer testing of payment allocation disclosures.<sup>75</sup> The Board reported very low levels of consumer understanding.<sup>76</sup> The tested disclosures, however, did not go directly to the issue of consumer allocation of payments, so the relevance of this testing history is not completely clear.

## 6.5 Post-promotion costs

When a consumer fails to pay a promotional balance in full during the promotional period, he will be assessed accrued interest charges. These charges accrue on the amount of the unpaid promotional balance each month, not simply on the amount of the unpaid balance at the end of the promotional period. Some issuers also accrue interest in later billing cycles on deferred interest charges arising in early cycles.

### 6.5.1 Costs at the end of the promotion

For accounts that do not pay the promotion in full during the promotional period, Figure 28 shows the median cost at the end of the promotional period as a share of the original promotional balance. Reflecting the longer periods in which interest can accrue, longer promotional periods are associated with higher median costs. In addition to showing medians, Figure 28 also provides information about the range of costs, demarcating the 20<sup>th</sup> and 80<sup>th</sup> percentiles of finance charges.

Deferred interest rates tend to be about 24% to 26% regardless of a consumer's credit score. Perhaps not surprisingly, therefore, the median costs shown in Figure 28 are similar across accounts, regardless of the credit score of the consumer holding the account. In line with

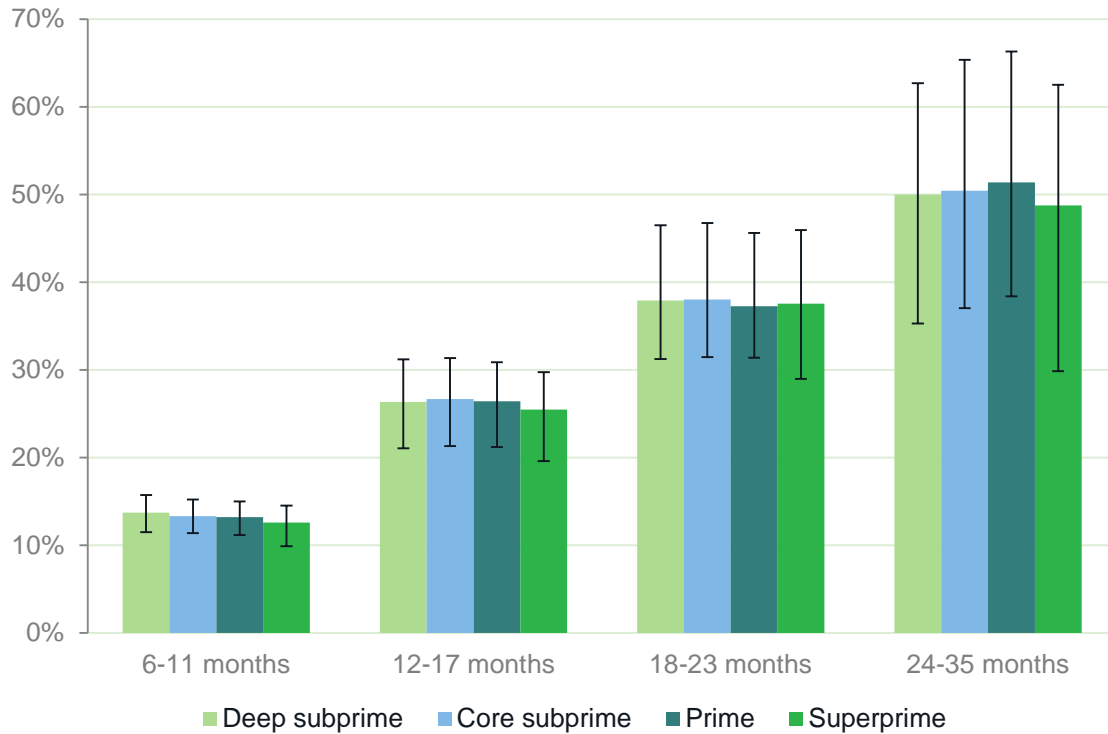
---

<sup>75</sup> See Unfair or Deceptive Acts or Practices, 73 Fed. Reg. 28914, 28915; see also Macro Int'l Inc., *Design and Testing of Effective Truth in Lending Disclosures* (May 16, 2007), <http://www.federalreserve.gov/dcca/regulationz/20070523/Execsummary.pdf>.

<sup>76</sup> See Unfair or Deceptive Acts or Practices, 74 Fed. Reg. 5155 (Jan. 29, 2009); see also Macro Int'l Inc., *Design and Testing of Effective Truth in Lending Disclosures, Findings from Experimental Study* (Dec. 15, 2008), <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20081218a8.pdf>.

prevailing deferred rates, these median costs are generally equivalent—on an annualized basis—to about one quarter of the original purchase.

**FIGURE 28:** ACCRUED INTEREST CHARGES AS A SHARE OF PROMOTIONAL PURCHASE, BY PROMOTIONAL PERIOD, MEDIAN AND MIDDLE THREE QUINTILES, 2009-2013 (DI)



While upfront deferred interest pricing shows little risk-based variation, general purpose card pricing shows significantly more. Average retail APRs for general purpose revolvers go from 15% to 19% across the different credit score ranges—a difference of more than four percentage points. The average rates paid by consumers who fail to pay off deferred interest loans in the promotional period, by contrast, vary across credit score ranges by only about two percentage

points. Furthermore, the general purpose average rates are the product of a much wider overall distribution of rates than the deferred interest rate averages.<sup>77</sup>

But this does not mean that deferred interest products are not effectively priced by risk. It means only that risk-based pricing differences on these products are not upfront and transparent—but are imposed at the back-end of deferred interest transactions. In fact, risk-based price differences for deferred interest products are more extreme than they are for general purpose products. For accounts grouped by credit score ranges, Figure 29 compares average deferred interest costs on deferred interest promotions—both those paid in the promotion period and those not paid in that time—to average interest charges assessed on revolving general purpose accounts.<sup>78</sup>

For both product types, costs decline as credit scores rise. In fact, the decline is markedly steeper for deferred interest products. For consumers with deep subprime scores, the costs are roughly comparable. For consumers with superprime scores, however, the deferred interest product has only a fraction of the cost of the general purpose product. The key difference, however, is that for deferred interest consumers, the cost is assessed only on a subset of users and only on the back-end of the transaction. Conversely, consumers generally pay revolving general purpose balances, and they do so pursuant to generally transparent and upfront interest charges.

---

<sup>77</sup> In 2013, only half the general purpose revolving accounts had an APR that was within 400 basis points above or below the average general purpose rate. In contrast, four-fifths of the deferred interest loans originated that year had an APR in an eight percentage point range around the average deferred interest rate.

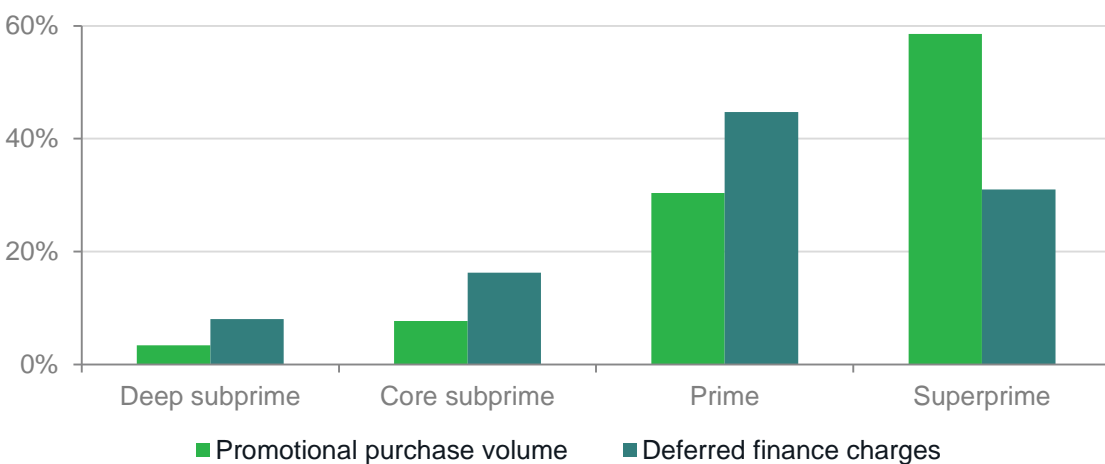
<sup>78</sup> For general purpose accounts, Figure 29 uses our standard TCC calculation with the exception that it excludes fees. For deferred interest accounts, Figure 29 relies on annualized deferred interest charges as a share of the original purchase amount. This comparison somewhat understates the cost of deferred interest products because consumers will pay down all or much of their balance over the course of the promotion. If we were able to use monthly cycle-ending promotional balances for our deferred interest rate calculations, they would show higher deferred interest costs than the estimates in Figure 29.

**FIGURE 29: DEFERRED INTEREST CHARGES AND GENERAL PURPOSE REVOLVER INTEREST CHARGES, BY CONSUMER CREDIT SCORE, 2013 (DI, CCDB)**



Building on the price differences observed in Figure 29, Figure 30 compares the share of promotional purchase volume accounted for by consumers in each credit score range with their share of deferred interest charges. It shows that while consumers with subprime scores comprise only 11% of total promotional spending in our dataset, they incur 24% of the aggregate deferred interest charges. Consumers with prime scores also account for more deferred interest charges—a 44% share—than for promotional spending—a 30% share. Only consumers with superprime scores account for a larger share of spend than of deferred interest charges, and they do so by a large margin. In fact, their share of spend at 59% is nearly double their 31% share of deferred interest charges.

**FIGURE 30: SHARE OF PROMOTIONAL SPENDING AND DEFERRED INTEREST CHARGES, BY CONSUMER CREDIT SCORE, 2009-2013 (DI)**



## 6.5.2 Months to repayment

The data above show cost at the point that a promotion ends without being fully paid. To explore the associated impacts of these costs from that point forward, we reviewed a number of additional data points. First, we examined the number of billing cycles it takes for consumers to pay off the remaining balance and accrued interest after the end of the promotional period.

Industry commenters stated that consumers who do not pay during the promotional period repay rapidly after that period ends. For example, one commenter states that 75% of those not paying in the promotional period repay in full within twelve months thereafter.<sup>79</sup> Other commenters contended that the interest charge “shock” from nonpayment could result in a “cycle of minimum only payments ... the result of which is that the consumer will be paying for an extended period of time.”<sup>80</sup>

The data available to the Bureau show that a significant share of consumers pay the remaining balance associated with the promotion—both principal and accrued interest—within two billing cycles of the end of the promotion.<sup>81</sup> For all accounts combined, Figure 31 reflects that almost one third are paid in full within those two billing cycles. Not surprisingly, this phenomenon is most pronounced for smaller outstanding balances. For example, when the amount left owing is under \$100, some 85% of accounts are paid in the next two cycles. But even at higher amounts outstanding, the effect is still notable. For example, if the remaining balance is greater than \$1,000 but under \$5,000—a category that encompasses around 20% of promotions that are not paid in full—some 12% of accounts still pay the remaining balance within two months. When the remaining balance is over \$5,000, the share of fast payers is 14%.

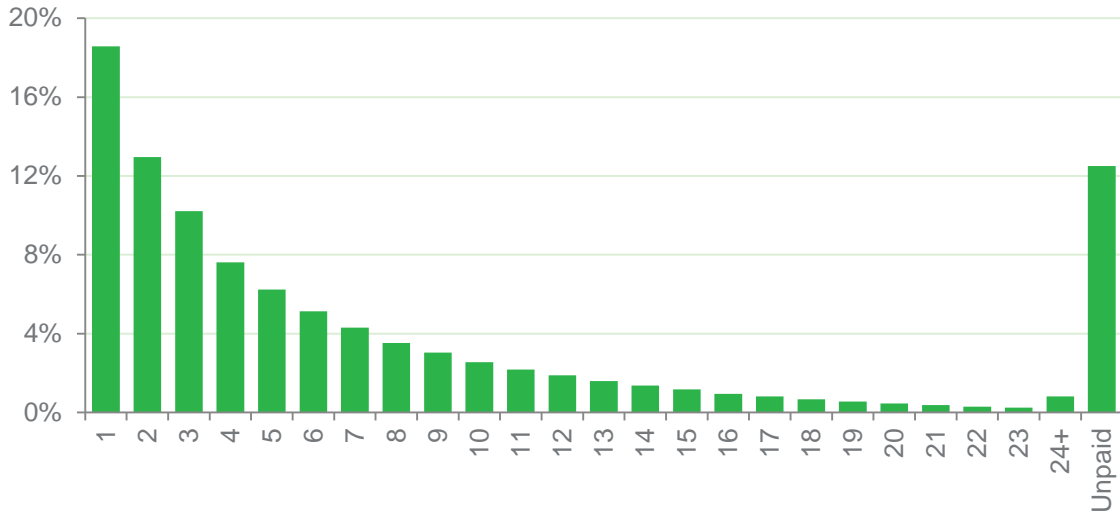
---

<sup>79</sup> See American Bankers Association Comment Letter (May 18, 2005) 11.

<sup>80</sup> League of Southeastern Credit Union and Affiliates (LSCU) Comment Letter, 5.

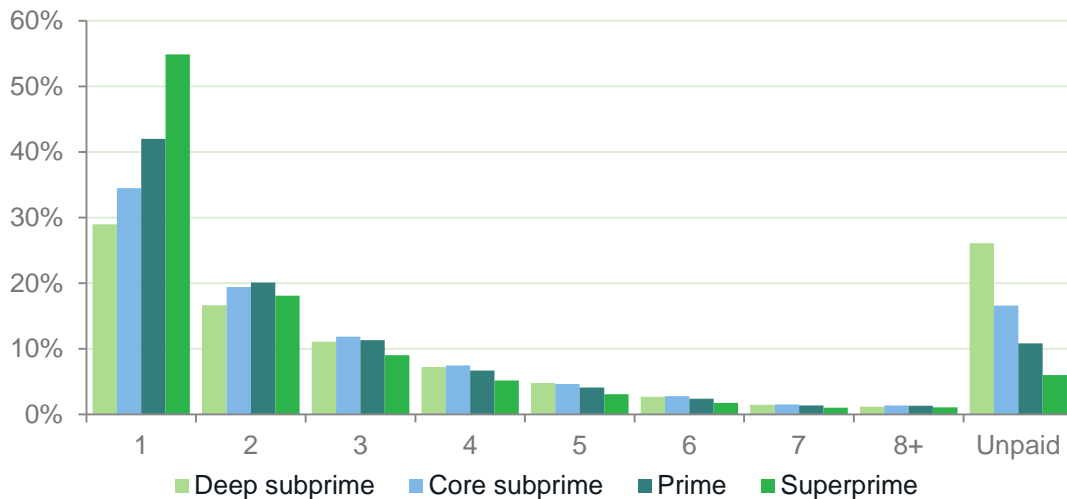
<sup>81</sup> Repayment speed would be even faster if we measured only the time taken to repay outstanding principal. For purposes of convenience we deem payments made to the account to be directed to the outstanding balance. To avoid double counting payments to different promotions, our analysis in this section is limited to accounts that had a single promotional purchase in our dataset. To limit skews, we also limited the analysis to promotions accepted before the end of 2011.

**FIGURE 31: MONTHS TO REPAYMENT POST-PROMOTION, 2009-2011 (DI)**



The effect also exists for loans of different duration, although it is more pronounced for longer loans than shorter ones. Some 26% of loans of 24 months duration or longer that are not paid in the promotional period are paid within two cycles of it ending. For loans between six and 17 months, the share is 32%. Figure 32 shows that consumers in every credit score range have concentrations of payment in the first quarter, though the effect is most pronounced for consumers with superprime scores. Outside of this concentrated payment in the first two cycles, the number of accounts repaying in a given month declines quite evenly over time. All but 13% of loans are fully repaid within two years of the end of the promotional period.

**FIGURE 32: QUARTERS TO REPAYMENT POST-PROMOTION, BY CONSUMER CREDIT SCORE, 2009-2011 (DI)**



The concentration of payment in the first two cycles may have a number of causes. These potential causes may vary across consumers. For any given loan, idiosyncratic factors may explain why the consumer incurs the cost of paying accrued interest charges, even as she is then able to pay the accrued interest and remaining principal in a very short period of time. Viewed as a whole, however, it seems plausible that some significant share of these consumers are making some form of error with respect to repayment of the promotion during the promotional period. They may be unaware that the accrual of interest will take place at that particular date, or they may be aware of it, but not expect it to be so large. When the interest hits, therefore, they move to pay it right away. Or it is possible that they are consciously using the accrual of interest as a reminder to repay the promotional purchase, in which case they are making an error of a different type. If they used the onset of the last two billing cycles before promotion end as that reminder, they would save themselves significant avoidable costs.

Overall, although the data are not determinative on this point, the share of deferred interest loans that are paid within two billing cycles after the promotion ends must call into serious question the notion that consumers understand the way in which the product works. A significant share of consumers appear to be acting in a way that strongly suggests that they do *not* have that understanding.

### 6.5.3 Interest-free equivalence

In contrast to deferred interest offers, some general purpose card solicitations offer “interest-free” terms. Promotions of this kind offer no interest for a defined number of months followed by a post-promotion rate of interest.<sup>82</sup> Interest charges are *not* accrued on a deferred basis during an interest-free promotional term.<sup>83</sup> At various times, some issuers have offered interest-free promotions on store cards as well. For example, until 2003, Sears store card promotions

---

<sup>82</sup> Data from the CCDB suggest that in recent years at least one in five new general purpose cards have been subject to an interest-free promotion for at least some period following origination.

<sup>83</sup> Consumers may still be assessed fees during this period. These promotions, therefore, are not cost-free to consumers.



were generally of the true zero type. One personal finance company—Springstone Financial—recently restructured a deferred interest loan into an interest-free product.<sup>84</sup>

This raises the question of why issuers or merchants (or both) apparently prefer that private label cards offer deferred interest terms rather than interest-free promotional terms. One possible reason is that to impose the same finance charges on consumers, post-promotional rates on interest-free promotional offers would need to be higher. If that is the reason, however, it may raise significant concerns about how well consumers understand pricing under the two different models.

Consumers who pay their deferred interest loans in the promotional period should be indifferent between using a deferred interest or interest-free product. They pay no interest in the promotional period, no matter which form of promotional pricing is used. But a fully-informed consumer who does not pay off in the promotional period also should be indifferent between using a deferred interest product and an interest-free product with a post-promotional APR that results in the exact same overall cost to that consumer. By definition, the costs of each product to that consumer would be the same. And each product carries the same possibility of paying no interest—if the loan is paid in full during the promotional period, the same no-interest option is available to that consumer under either approach.

If consumers fully understood what they would actually pay under both sets of pricing, therefore, issuers would need only offer interest-free promotions with a post-promotional interest rate sufficiently high for consumers to incur equivalent costs in using that product. The challenge for issuers—and presumably for merchants too—may be that “sufficiently high” is, in fact, quite high.

Consider a consumer who fails to pay off a 12 month, 26% deferred interest promotion of \$700. Assuming that such a consumer has made only \$25 minimum payments for 12 months, she will incur \$146 in deferred interest on a promotion-end balance of \$400. On average, the data available to the Bureau indicates that such a consumer will then take about six months to repay

---

<sup>84</sup> This restructuring followed a Bureau enforcement action in which Springstone’s merchant partners “orally provided contradictory or misleading information about the [deferred interest product], causing consumers to misunderstand the product.” See Consent Order, CFPB v. Springstone Financial, LLC, No. 2015-CFPB-0021 (Aug. 17, 2015) 5, [http://files.consumerfinance.gov/f/201508\\_cfpb\\_consent-order-springstone-financial-llc.pdf](http://files.consumerfinance.gov/f/201508_cfpb_consent-order-springstone-financial-llc.pdf).

the remaining balance, including the accrued finance charges. Assuming equal post-promotional payments across the six months, the consumer's overall finance charge cost across the full 18 months is \$188.

For an interest-free promotion to generate the same finance charge revenue over the same period assuming the same consumer behavior (namely 12 monthly payments of \$25 followed by re-payment in full over the ensuing six months in equal installments), the same consumer would need to be subject to a post-promotional APR of 147%.

Post-promotional APRs would need to be even higher on the interest-free product if the consumer made larger payments during the promotion. If the consumer instead made regular \$50 monthly payments during the promotional period, her promotion-end balance would be just \$100, and her overall finance charge cost—including deferred interest—across the full 18 months to repayment would fall to \$127. Because of the lower promotion-end balance amount in this scenario, the same monthly payments during the deferred interest period and identical repayment in the post-promotional period would mean that the consumer would need to be assessed a post-promotion APR of 359% to generate the same finance charge costs as under the deferred interest product.<sup>85</sup>

This analysis is *not* intended to suggest that consumers would, in fact, behave the same in response to deferred interest pricing at 26% and its interest-free APR equivalent. Given the size of the interest-free equivalents, it seems likely that consumers would reduce demand, increase payoff rates, or both. Yet if consumers fully understood what they would pay under each model of pricing, their demand level and repayment behavior should be exactly the same under either model. If they are not the same, that may indicate that some significant share of consumers does not fully understand one or the other price point—or potentially both price points.

---

<sup>85</sup> These examples may understate the “equivalent APR” on an interest-free promotion. About 43% of promotions not paid in the promotional period are paid back—finance charges included—within three months of the end of the promotion period. With that kind of repayment speed, the equivalent APRs for interest-free promotions would have to be even higher than the ones resulting from the examples we provide. There are factors, though, that might lower an equivalent APR. If deferred interest balances can be maintained without loss of a grace period, but interest-free balances cannot, then some consumers will pay additional interest charges on non-promotional spending made with the interest-free product.

That does not mean that consumers do not fully understand the applicable contractual or other disclosure terms. It may mean that they do not have complete information about their own future behavior that impacts the effective price under those terms. Either way, however, the level of consumer demand for deferred interest products—and the rate of repayment in the promotion period—may reflect consumer misunderstanding of one kind or another—or both.

## 6.5.4 Delinquency rates

According to preliminary data reviewed by the Bureau, post-promotional balance delinquency rates are relatively high on accounts that do not pay deferred interest promotions in full during the promotional period. To date, our analysis is limited to 60+ delinquency rates associated with accounts that accepted a 12 month deferred interest offer at account origination between 2010 and 2013. It is further limited to accounts that had only one promotion during our data period.<sup>86</sup> For such promotions, we recorded balance delinquency rates in each of the first 12 months following the end of the promotion—first, for those promotions that paid in full during the promotional period, and second, for those that did not do so. We then averaged these monthly balance delinquency rates for the year.

Accounts on which the promotional balance was paid in full had an average monthly delinquency rate for the first post-promotional year that roughly paralleled a background delinquency rate that we calculated for private label accounts in the CCDB that were originated between early 2010 and late 2013. (Specifically, we looked at private label balance delinquency rates for each month post-origination beginning in month 13.<sup>87</sup> We started at month 13 in order to create rough comparability to the first post-promotional month on a 12 month deferred interest promotion.) The background delinquency rate was slightly higher, but the difference appeared to decline across the year.

---

<sup>86</sup> We used these restrictions for several reasons. First, we wanted to avoid counting multiple delinquencies on accounts with several promotions in our data period. Second, we sought to minimize the potential delinquency impact of balances on the account that pre-dated the acceptance of the promotional offer.

<sup>87</sup> In calculating balance delinquency rates, we exclude accounts that are charged-off—both from the numerator of delinquent balances as well as from the denominator of all balances.

In contrast, accounts on which the promotional balance was not paid in full and deferred interest was assessed had an average monthly delinquency rate over the first post-promotional year that was several times higher than the equivalent rate on accounts that paid the promotional balance in full during the promotional period. According to the data we reviewed, a marked discrepancy in relative delinquency rates exists for accounts in all four credit risk tiers. The gap between these two delinquency rates, therefore, is not simply a product of the credit score composition of the accounts involved.

These preliminary results show only a correlation between delinquency and the failure to pay promotional balances in full during a promotional period. They do not show that the latter causes the former. It is possible, for example, that if there is a causal relationship between these variables, that relationship runs the other way around. In other words, consumers who are more likely to become delinquent self-select into accepting deferred interest loans and then fail to pay them in full during the promotional period. But the association between delinquency and payoff failure at least raises the question of whether the assessment of deferred interest, in and of itself, is impacting the ability of some consumers to pay their bills.

## 6.6 Ability to pay

Given the length of most deferred interest offers and the size of most promotional balances, the minimum payment amount will almost never be enough to pay the promotional balance in full before the end of the promotional period. In the Bureau's focus groups on deferred interest, most consumers said that they understand this point, although there were also indications that some consumers may have believed, wrongly, that the minimum payment would suffice for these purposes. While some consumers may understand the need to pay more than the minimum payment to avoid interest charges at the end of the promotion period, current rules do not require issuers to determine that consumers have the ability to make payments that would

be large enough for these purposes. Rather, Reg. Z requires issuers to assess only whether the consumer has the ability to make each required minimum payment.<sup>88</sup>

In the deferred interest context, of course, finance charges associated with revolving the promotional balance generally are deferred until the end of the promotion. The regulations implementing the CARD Act effectively require issuers to use the deferred rate of interest to calculate the minimum payment for ability to pay purposes.<sup>89</sup> This does not mean that all issuers actually charge this amount as the minimum payment. But it does mean that they must use at least this amount when estimating the required minimum periodic payments under the ability to pay safe harbor.<sup>90</sup> To the Bureau's knowledge, deferred interest issuers avail themselves of the safe harbor when making ability to pay calculations for regulatory purposes.

This regulatory structure creates some risk that deferred interest loans are being issued to consumers who may lack the ability to pay the promotional balance in full before the end of the promotional period. Moreover, the gap between the minimum monthly payment for ability to pay purposes and the monthly payment necessary to pay the promotional balance in full can be substantial, at least for larger purchases.

Consider a consumer who opens a new store card account to make a \$1,000 deferred interest purchase with an 18 month promotional period. Assuming a deferred rate of 24% and a minimum payment requirement of 1% plus interest, the total monthly payments for ability to

---

<sup>88</sup> The CARD Act added to TILA a new Section 150, which states that “[a] card issuer must not open a credit card account . . . , unless the card issuer considers the consumer’s ability to make the required minimum periodic payments under the terms of the account based on the consumer’s income or assets and the consumer’s current obligations.” 12 C.F.R. § 1026.51(a)(1)(i). Section 1026.51(a)(2)(i) requires that card issuers use a “reasonable method for estimating the minimum periodic payments the consumer would be required to pay under the terms of the account.” 1026.51(2)(ii) then provides a safe harbor for estimating the required minimum periodic payments: assuming utilization of the full credit line from the outset, “[t]he card issuer uses a minimum payment formula employed by the issuer for the product the issuer is considering offering to the consumer.”

<sup>89</sup> 12 C.F.R. § 1026.51(a)(2), Comment 51(a)(2)-2 (“For purposes of estimating required minimum periodic payments under the safe harbor . . . the issuer must use the post-promotional rate to estimate interest charges.”).

<sup>90</sup> See *id.*

pay purposes would be just under \$500 across 18 months.<sup>91</sup> Under the rules, the issuer could make that loan to any consumer with the ability to make those minimum payments. But to pay the loan in full during the promotional period, the consumer would need the ability to pay over double that amount in the same period. This potential “ability to pay gap” can become larger for larger loans, especially if those loans are of the more common 12 or six month duration. A \$2,000 loan across a six month promotional period requires that the consumer have the ability to sustain just over \$350 in minimum payments across that period—but she would need to pay nearly six times that amount to pay the loan in full and thereby avoid deferred interest.

## 6.7 Availability of alternatives

As discussed above, deferred interest rates are generally higher than interest rates on general purpose cards. As a result, consumers who fail to pay a deferred interest balance in the promotional period, all other factors being equal, generally would pay less in finance charges had they used a general purpose card instead. In some cases, of course, other factors will not be equal. In particular, the use of a general purpose card may cause some consumers to lose a grace period on that card, with a resulting increase in interest charges on new purchases made with that card.<sup>92</sup>

While we cannot address this hypothetical on a case-by-case basis for every consumer, we can address it in more general terms by considering the general scenarios facing consumers. As noted previously in this report, four-fifths of accounts held by consumers with subprime scores are revolving at any given point. These accounts have no grace period to lose, so the use of a general purpose card in place of the deferred interest product does not cause incremental interest charges from the loss of a grace period. Two-thirds of accounts held by consumers with prime scores are revolving, as are one-quarter of accounts held by consumers with superprime scores. These accounts, too, have no grace period to lose. Moreover, consumers with prime and

---

<sup>91</sup> This example assumes that the issuer has a minimum monthly payment of \$25 if that is larger than 1% plus interest. It also assumes that deferred interest does not compound during the promotional period.

<sup>92</sup> See American Bankers Association Comment Letter (May 18, 2005) 11 n.9 (noting that alternative general purpose cards may be more expensive even for consumers who fail to pay in full during the promotional period).

superprime scores who are transacting on a general purpose account—and therefore do have a grace period to lose—are the very consumers with the greatest range of general purpose alternatives.

Of course, not all consumers who fail to pay for a deferred interest loan in full during the promotional period have available credit alternatives. Several commenters questioned whether consumers have viable alternatives to deferred interest financing.<sup>93</sup> More detailed data review will be required to assess this question fully. There are preliminary indications, however, that alternatives may be available even for consumers with lower credit scores.

Elsewhere in this report, we note that while 18% of U.S. credit cardholders with subprime scores have private label but no general purpose cards, some 38% have one or more private label cards *and also one or more general purpose cards*.<sup>94</sup> (The remainder have only general purpose cards.) We have also noted that in recent years the general purpose cards held by consumers with a deep subprime score generally have an average of \$300 to \$400 in unused line, and cards held by consumers with core subprime scores generally have averages of over double that amount.<sup>95</sup> Given the relatively small size of deferred interest purchases made by consumers with subprime scores, that unused line would finance the majority of their deferred interest purchases. Without closer analysis of the distribution of that unused line across accounts, however, this is at best only suggestive of the availability of alternatives.

---

<sup>93</sup> See RILA Comment Letter, 3.

<sup>94</sup> See section 2.2.1

<sup>95</sup> See section 4.2

# 7. Credit card rewards

In recent years, credit card rewards programs have become a central and ubiquitous feature of the credit card industry.<sup>1</sup> Consumers have been increasingly weighing the benefits of rewards when shopping for a new credit card. In its latest satisfaction survey, J.D. Power finds that just over half of all credit card customers say that they select new cards based on rewards. They also report that rewards redemption and use have significant impacts on the customer experience.<sup>2</sup>

We include a review of these programs in this report because of their importance to how consumers choose and use credit cards. Our review is intended to establish a baseline understanding of this aspect of the credit card market, including how consumers, issuers, and third parties engage and interact in this space. This section first provides a high-level overview of the state of the market. It then lays out our sources and methodology in analyzing rewards programs. In that analysis, we present some preliminary conclusions and identify some areas of future interest.

---

<sup>1</sup> Several commenters note the relative growth of rewards cards in the overall credit card market. *See* American Bankers Association Comment Letter (May 18, 2015) 6; *see also* Morrison Foerster Comment Letter (May 18, 2015) 5; Auriemma Comment Letter (May 18, 2015) 13.

<sup>2</sup> *See* Press Release, J.D. Power, Attractive Rewards and Benefits Drive Credit Card Selection, Satisfaction and Spend (Aug. 20, 2015), [http://www.jdpower.com/sites/default/files/2015137\\_U.S.\\_Credit\\_Card\\_Study\\_PR\\_Final.pdf](http://www.jdpower.com/sites/default/files/2015137_U.S._Credit_Card_Study_PR_Final.pdf).



## 7.1 Overview

### 7.1.1 What are rewards?

Issuers have long offered consumers incentives to open or use credit card accounts. Some incentives are introductory in nature, designed to encourage consumers to apply for or to begin using a credit card. These can include, for example, introductory interest rates, introductory statement credits, or premium goods. Other incentives are ongoing in nature and serve both to differentiate a credit card product and to encourage that product's use. These can include, for example, interest rate reductions that can be earned based on account usage or tenure.

“Rewards,” as the term is commonly used today, are a specific subset of consumer incentives. Programs that are classified as rewards generally share several key characteristics:

- Rewards are quasi-pecuniary and therefore denominated in fungible and equivalent units of value such as “miles” or “points;”
- Rewards can be accumulated over time in an account held either by the issuer or a third-party partner and, subject to conditions imposed by the program, redeemed automatically or at the consumer's discretion for money or for specified goods or services; and
- Rewards are usually earned according to a predetermined formula based primarily on consumers' spending volume. Typically, rewards are based on a percentage of consumer spending, sometimes but not always varying according to certain spend categories. There may also be a lump-sum rewards “bonus” for meeting a specific spend level, often within a defined period after the account is opened.

Incentive or “loyalty” programs with these characteristics predate credit cards. In fact, they continue to exist independently of credit cards. Thus, many merchants offer consumers rewards that are not linked to any payment medium or credit account. Recently, programs in which

consumers can earn rewards based on shopping at a wider group of merchants have increased in prevalence.<sup>3</sup> Rewards programs can also be associated with debit cards as well as prepaid cards.<sup>4</sup>

Merchants and issuers often collaborate on rewards programs. Examples include airline co-brand cards that earn airline miles. Sometimes, however, merchant incentive schemes may compete with issuer rewards. For example, while an issuer may offer rewards to a credit card consumer who spends with its card, a merchant may offer the same consumer different incentives for using a different credit card product—or for using a debit card instead.<sup>5</sup>

Issuer interchange revenue, which helps fund many rewards programs, is a major point of contention between networks and their issuing members on one side and merchants on the other.<sup>6</sup> Many merchants would prefer to pay lower fees to acquirers, asserting that they would use the savings to lower prices for consumers or reward consumers for their loyalty rather than for using a specific credit card.

---

<sup>3</sup> Some programs establish a single “pool” of rewards which, once accumulated, can be redeemed at any of the participating merchants. Other programs create a platform and interface which allows users to access many different rewards programs through a single interface or platform. These latter programs do not allow rewards earned at one merchant to be redeemed at other participating merchants.

<sup>4</sup> For a discussion of debit rewards, See Mercator Advisory Group, *Top 50 U.S. Retail Banks and Credit Unions’ Debit Rewards and Loyalty Programs: 2014 Annual Review* (April 2015), [https://www.mercatoradvisorygroup.com/Reports/Top-50-U\\_S\\_-Retail-Banks-and-Credit-Unions%E2%80%99-Debit-Rewards-and-Loyalty-Programs--2014-Annual-Review/](https://www.mercatoradvisorygroup.com/Reports/Top-50-U_S_-Retail-Banks-and-Credit-Unions%E2%80%99-Debit-Rewards-and-Loyalty-Programs--2014-Annual-Review/). For a discussion of prepaid rewards, See Mercator Advisory Group, *Will Credit Card Style Rewards Work for Prepaid?* (Aug. 2015), <https://www.mercatoradvisorygroup.com/Templates/BlogPost.aspx?id=4842&blogid=25506>.

<sup>5</sup> Some merchants have offered universal discount for the use of debit cards. Others have offered co-branded debit products with associated discounts or rewards.

<sup>6</sup> Many issuers account for rewards costs as interchange “contra-revenue” items. Although issuer revenue is fungible, almost all credit card spending on transacting accounts is on accounts associated with a reward program. These accounts necessarily generate very little in terms of fee or interest revenue, so the funding for the associated rewards program has to come in large part from the main income stream associated with the account, which is interchange. More generally, since almost all rewards costs incurred by issuers are tied to whether an account engages in spending, rather than revolving credit, there is a logical link between rewards and interchange. That link may be one reason why debit cards, which have interchange that is capped by law, feature rewards much less frequently than do credit cards, which are not subject to an interchange cap.

Relatedly, the overall impact of credit card rewards on consumer welfare is also a source of dispute. Some economists believe that the current market structure generates less social welfare than one with lower interchange fees and lower rewards.<sup>7</sup> Other research suggests otherwise.<sup>8</sup> Some commenters argued that, all other factors being equal, consumers benefit from rewards programs, while others pointed out specific consumer risks in this space.<sup>9</sup> None, however, addressed the social optimality of the current relationship between rewards and interchange. Both this dispute and the related controversy over the magnitude of credit card interchange fees are beyond the scope of the present report.<sup>10</sup>

Credit card rewards can take a wide variety of forms, but most can be considered to fall within one of three major categories. These are:

- “Cashback” rewards that consumers can redeem for statement credits, checks, deposits to an asset account, or cash at an ATM;
- Issuer “currency” that consumers can redeem for specific kinds of goods and services, such as travel or gift cards, or for discounts or rebates on such good or services. Redemption can be via an issuer-provided marketplace or at the point of sale. In some

---

<sup>7</sup> See, e.g., Fumiko Hayashi, *The Economics of Payment Card Fee Structures: What Drives Payment Card Rewards?*, (Federal Reserve Bank of Kansas City Economic Research Department, (Working Paper No. 08-07 revised Mar. 2009), <https://www.kansascityfed.org/PUBLICAT/RESWKPPAP/PDF/rwp08-07.pdf>.

<sup>8</sup> See, e.g., David S. Evans, Howard Chang & Steven Joyce, *The Impact of the U.S. Debit Card Interchange Fee Regulation on Consumer Welfare: An Event Study Analysis*, University of Chicago, Coase-Sandor Institute for Law and Economics, (Working Paper No. 658, Oct. 23, 2013), <http://www.law.uchicago.edu/files/file/658-dse-hj-sj-impact-fixed.pdf>.

<sup>9</sup> See American Bankers Association Comment Letter (May 18, 2015) 10; see also National Consumer Law Center Comment Letter (May 18, 2015) 13.

<sup>10</sup> For a more in-depth review of the history and economics of debates around interchange and rewards, see Robin A. Prager, Mark D. Manuszak, Elizabeth K. Kiser & Ron Borzekowski, *Interchange Fees and Payment Card Networks: Economics, Industry Developments, and Policy Issues*, Federal Reserve Board Finance and Economics Discussion Series, (Working Paper No. 2009-23, May 13, 2009), <http://www.federalreserve.gov/pubs/feds/2009/200923/200923pap.pdf>. For recent research on interchange, see Zhu Wang, *Debit Card Interchange Fee Regulation: Some Assessments and Considerations*, 98 Economic Quarterly of the Federal Reserve Bank of Richmond 159 (Q3 2014).

cases, issuer currency may be exchangeable for loyalty points or miles in a third party's proprietary rewards program; and

- Co-branded rewards, in which a credit card issuer partners with a non-financial business to allow consumers to earn rewards in the partner's proprietary rewards program. These are most frequently airlines, hotels, and retailers.

Some rewards programs fall under multiple categories. For example, issuers may offer points that can be redeemed either as “cashback” or for other goods and services. This report uses the term “rewards account” to refer to credit card accounts that have an associated rewards program.

## 7.1.2 How do rewards work?

The proliferation of rewards programs has resulted in a similar proliferation of conditions, mechanisms, and policies specific to individual programs. There is nevertheless an overall structure to rewards programs that can be generalized to almost all programs. They can be divided into three lifecycle phases. The first details how consumers accumulate or “earn” rewards. The latter two encompass potential outcomes from that accumulation: first, redemption, and second, the loss of earned rewards through expiration or forfeiture.

The rules and operations defining rewards programs are effectively controlled by the full terms and conditions of the rewards program specified by issuers and their partners. Prohibitions against unfair, deceptive, and abusive acts and practices apply to rewards programs, but there are no other specific federal regulations establishing rules for rewards programs.

### **EARNING**

The process by which consumers accumulate rewards is generally referred to as “earning.” Earning is generally a linear function of spending volume by consumers. Less commonly, rewards may be based on a consumer's principal payments or even her interest payments.

Even when based solely on spending, earnings formulae vary. In some cases, the linear function by which rewards are earned in relation to spend is a simple one. A consumer earns a fixed quantity of miles, points, or money in invariant proportion to the amount spent. In many other cases, however, consumers earn according to different formulae under different conditions. In the latter model, a consumer may earn either nothing or only a “base” amount if no additional conditions are met, but can earn more if they meet one or more conditions. Those conditions are

often related to spending at particular merchant or a merchant falling under a certain category. These conditions can be permanent features of the program structure or be made available only on a rotating basis (e.g., a different category each season).

The other major form of earning is the “sign-up bonus.” Sign-up bonuses tend to be structured differently as an incentive to consumers both to originate the account as well as to commence using it. This stands in contrast to the linear function of spending that otherwise governs rewards accumulation. The general formula for sign-up bonuses awards consumers a substantial lump sum payment of additional rewards. To receive this payment, consumers must meet a spending target within some period following the origination of the account. This period is usually no more than a few months.

## **REDEMPTION**

Once a consumer has accumulated rewards, they may be able to exchange them for the ultimate object(s) of value. This process is called redemption, and has many facets. Rewards programs are generally categorized by the types of goods and services that consumers can redeem points for.

In some cashback and co-brand rewards programs, redemption can occur automatically, for example when the consumer has accumulated a preset number of points. More commonly, however, consumers must act affirmatively to redeem their points. Additionally, consumers may face limits based on redemption amounts, such as a minimum threshold below which redemption is not permitted.

The lines separating the categories used throughout this chapter to differentiate rewards programs by type, are to some degree arbitrary. This is distinct from a related point, which is that the value consumers obtain from any kind of rewards program can to a certain degree be reduced to a certain benefit-to-spend ratio. Even in more complex programs, weighted averages and other metrics could prove useful benchmarks to consumers in choosing between programs.<sup>11</sup>

---

<sup>11</sup> Multiple commenters stressed the subjective value propositions of many rewards programs, as well as the difficulty of putting a dollar value on non-cashback rewards. See American Bankers Association Comment Letter

Beyond that more fundamental comparison, however, the distinction between different kinds of rewards can be blurrier than common categorizations suggest. Issuer points, for example, may be redeemable to offset the costs of certain kinds of purchases, or exchangeable for a certain airline's miles, as can other third-party reward points. Issuer points and airline miles can be used to directly purchase goods and services at point of sale. Allowing accumulated rewards to be redeemed for a wider variety of goods and services, is, of course, inherently providing more value to consumers. It also makes the distinction between various kinds of rewards programs more difficult to define rigorously.

### **EXPIRATION AND FORFEITURE**

All rewards not redeemed by the consumer are potentially subject to expiration and forfeiture.

Expiration entails the cancellation of rewards earned due to consumer inactivity. While inactivity is not always defined clearly or consistently, in both issuer-managed and third-party-managed programs, activity on the card account is generally sufficient to avoid expiration. Not all issuers have expiration policies, and some explicitly eschew cancelling rewards due to inactivity.

Forfeiture entails the cancellation of rewards for any other reason. Further clarification is difficult since, as we discuss below, issuer policies in this regard tend to be vague and therefore expansive in defining what could constitute cause for forfeiture.

Though distinct terms, expiration and forfeiture both result in functionally equivalent outcomes: negation of rewards, and thus the evaporation of expected and accumulated consumer value. The potential for consumers to lose rewards for unexpected or unpredictable reasons is a substantial consumer risk in this space. This is especially true if the reasonable expectation of earning and redeeming rewards led the consumer to alter their other financial behavior in some way.

---

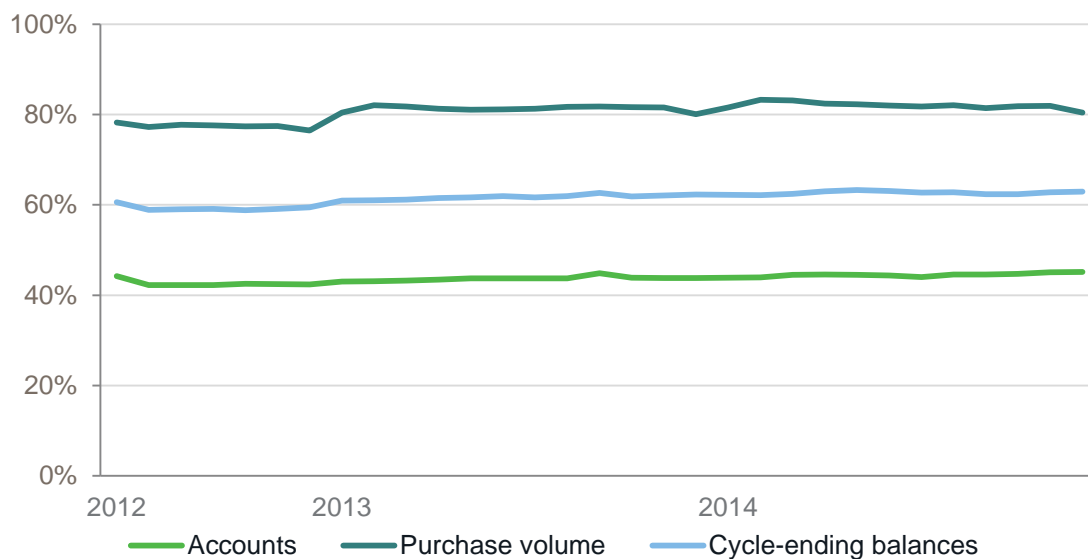
(May 18, 2015) 10; *see also* Morrison Foerster Comment Letter, 6. This is not without merit. Clearly, if a consumer lives near an airport serviced by a particular airline or proximate to certain merchants, they will rationally place more value on those airline or merchant rewards programs, though this is the case whether they are spending rewards or simply money. Additionally, certain factors, such as the range of redemption options, may make apples-to-apples value comparisons challenging. Nevertheless, some issuers and third parties have made recent progress in facilitating consumer comparisons of rewards programs.

### 7.1.3 Basic rewards metrics

#### REWARDS PENETRATION

Rewards accounts are popular, and increasingly so. Our focus groups confirmed that consumers generally like rewards. One analyst estimates that around three-quarters of cardholders participated in a credit card rewards program in 2014.<sup>12</sup> Using data from the CCDB, Figure 1 shows the predominance of rewards accounts in more detail. Although under half of all consumer credit card accounts earn rewards, these are associated with nearly two-thirds of outstandings and four-fifths of spending.

**FIGURE 1:** REWARDS ACCOUNTS AS A SHARE OF OPEN ACCOUNTS, PURCHASE VOLUME, AND CYCLE-ENDING BALANCES IN THE CCDB, MID-2012 THROUGH 2014



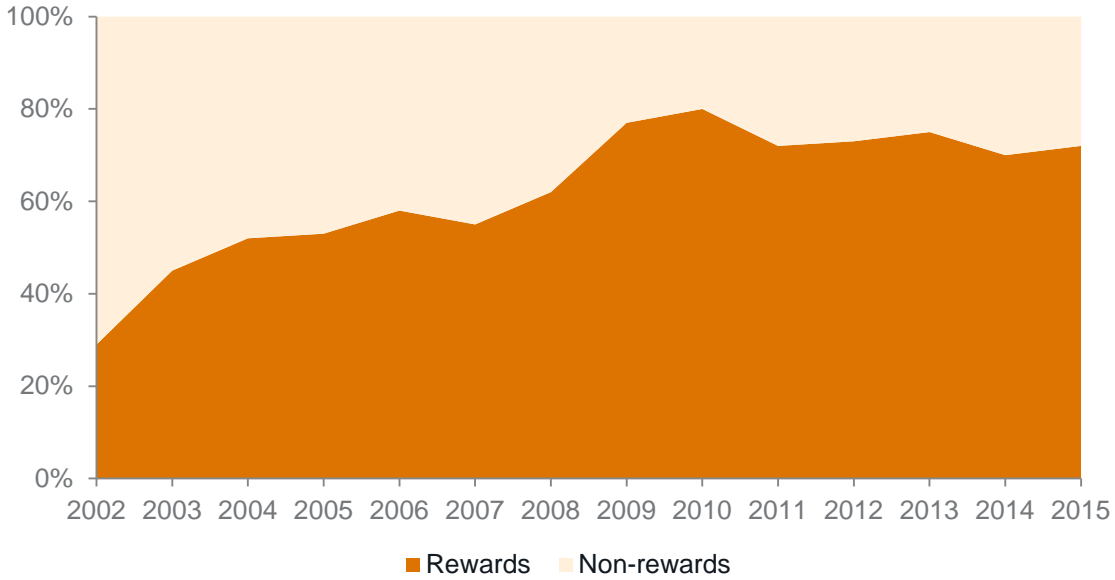
These levels may reflect, in part, an earlier shift in marketing practices. In 2002, Mintel data show that rewards marketing accounted for less than 30% of credit card direct mail solicitation

---

<sup>12</sup> See Mercator Advisory Group, *Consumers and Credit: New Cardholders Demand More Credit* (Jan 2015). The detailed survey data accompanying that report suggest that consumer-level rewards participation is high across credit risk tiers. This is, however, based on qualitative self-reported credit history, and therefore subject to inherent limitations.

volume. By 2010, that had reached nearly 80%, and it now seems to have stabilized between 70% and 80%.

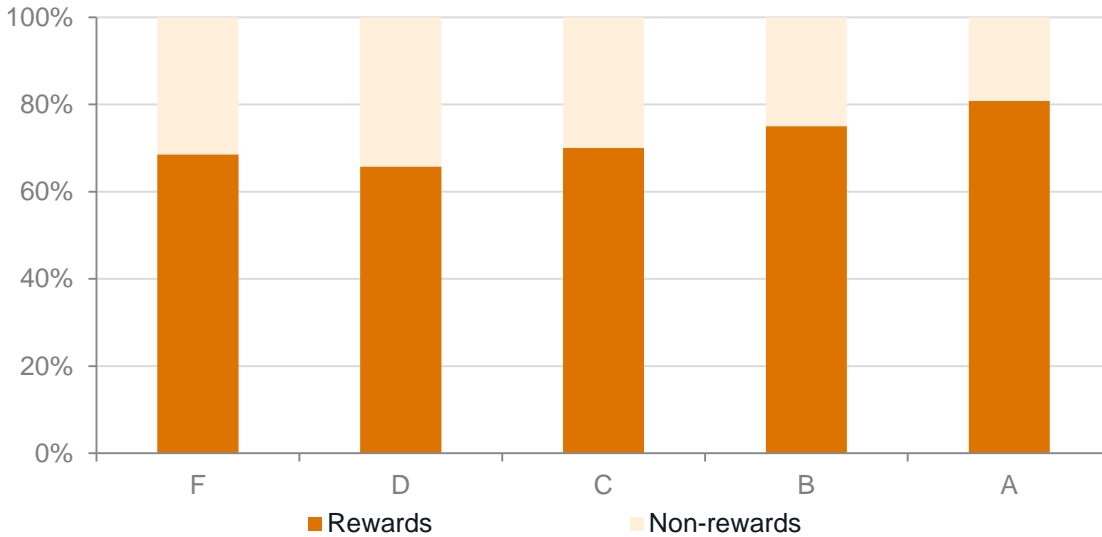
**FIGURE 2:** SHARE OF MAIL VOLUME, REWARDS VS. NON-REWARDS (MINTEL)



The prevalence of rewards into the direct mail solicitation market cuts across credit risk tiers fairly evenly, as Figure 3 shows.



**FIGURE 3:** SHARE OF MAIL VOLUME, REWARDS VS. NON-REWARDS, BY VANTAGE SCORE RISK TIER, 2014 (MINTEL, EXPERIAN)

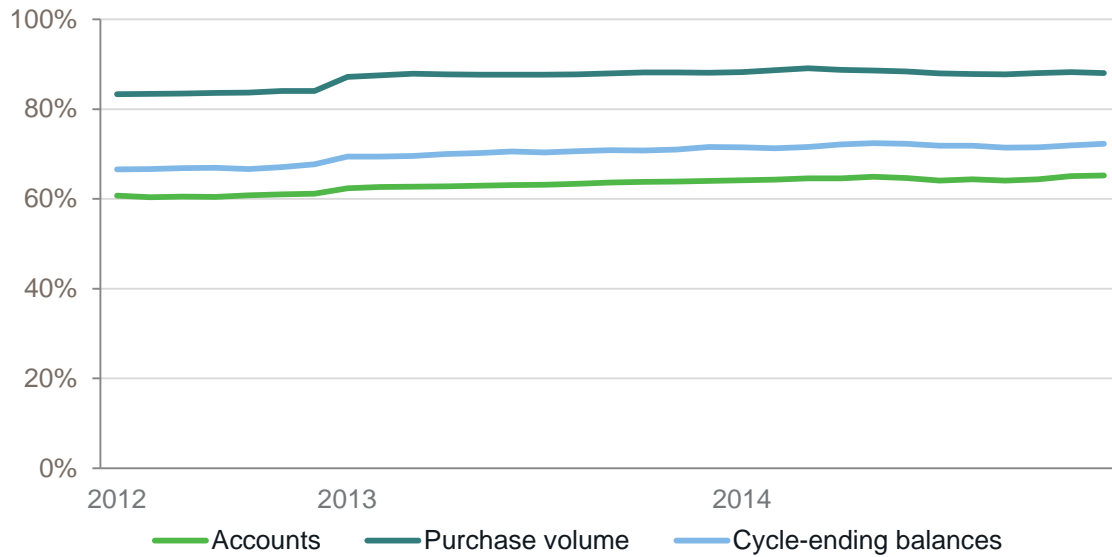


Rewards are especially predominant in the general purpose credit card market. Figure 4 shows that in that market, rewards accounts represent two-thirds of all accounts, three-quarters of balances, and nine-tenths of spending. Most new general purpose accounts are rewards accounts. In contrast, most new private label accounts are not.<sup>13</sup>

---

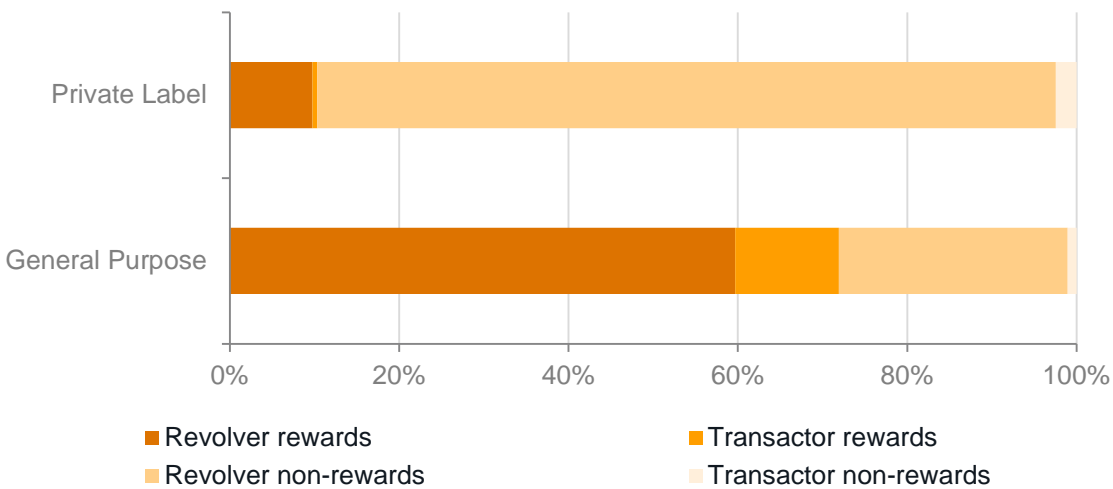
<sup>13</sup> See Appendix Figure 12 for more detail on this point. Note also that “rewards” as defined above and by most industry observers excludes one-time discount origination incentive programs that are more common in the private label space.

**FIGURE 4:** REWARDS ACCOUNTS AS A SHARE OF GENERAL PURPOSE ACCOUNTS, PURCHASE VOLUME, AND CYCLE-ENDING BALANCES IN THE CCDB, MID-2012 THROUGH 2014



For transacting general purpose accounts, outstandings are almost entirely associated with rewards cards. This is shown in Figure 5, which reflects that two-third of outstandings on all revolving accounts are associated with rewards cards. This is driven overwhelmingly by general purpose accounts. (That two-thirds share holds up even with accounts revolving 0% promotional balances excluded.)

**FIGURE 5:** REWARDS ACCOUNT SHARE OF CYCLE-ENDING BALANCES IN THE CCDB, BY ACCOUNT STATUS AND TYPE, YEAR-END 2014



Partly reflecting this transactor-revolver difference, rewards penetration increases with the credit score of the consumer. By the end of 2014, rewards cards accounted for nearly 70% of outstandings on accounts held by consumers with superprime scores. But in the last few years, rewards cards have even come to account for more than half of cycle-ending balances on accounts held by consumers with deep subprime scores. Figure 7 shows these trends in more detail.

**FIGURE 6:** REWARDS ACCOUNT SHARE OF GENERAL-PURPOSE CYCLE-ENDING BALANCES IN THE CCDB, BY CONSUMER CREDIT SCORE, MID-2012 THROUGH 2014

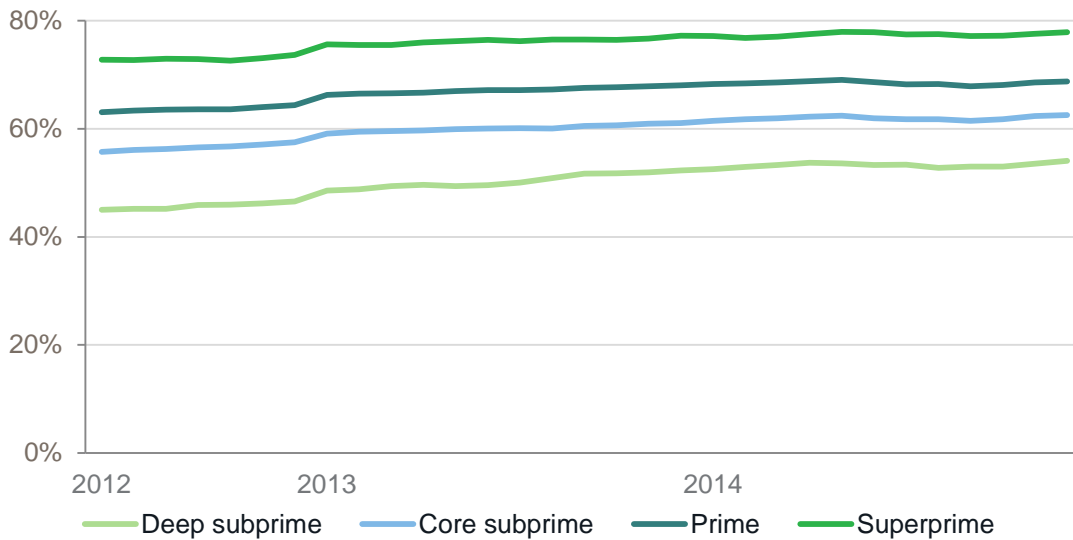
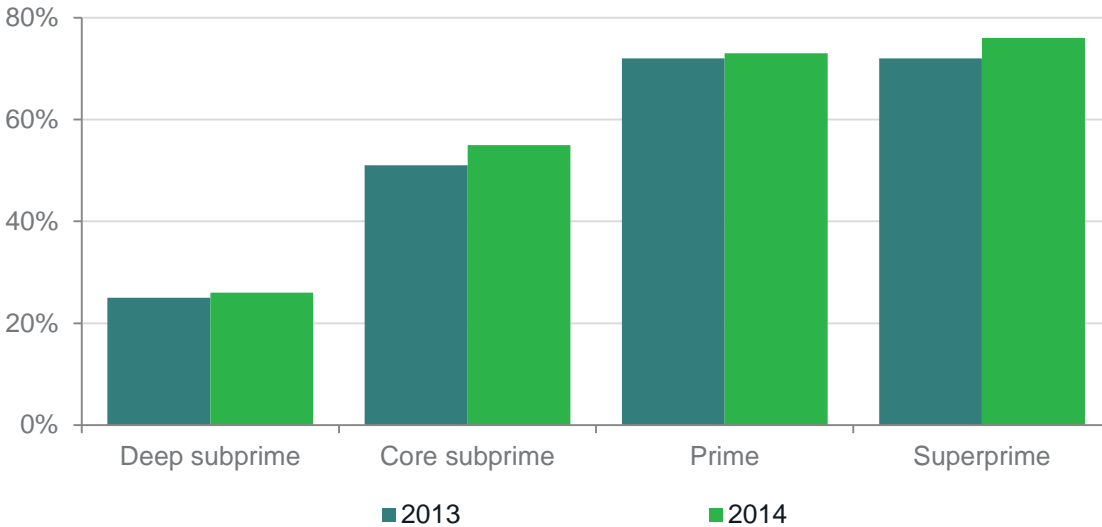


Figure 8 shows the distribution of new rewards accounts across risk tiers. More than a quarter of new accounts opened by consumers with deep subprime scores are rewards accounts, compared to three-quarters of new accounts opened by consumers with superprime scores. From 2013 to 2014, the rewards penetration in originations increased across every credit tier.

**FIGURE 7:** REWARDS ACCOUNT SHARE OF NEW GENERAL PURPOSE ACCOUNTS, BY CONSUMER CREDIT SCORE (CCDB)



#### REWARDS TYPE

The rewards data in the CCDB classify rewards as falling into one of three categories. The first, “cash,” is equivalent to the “cashback” category described at the conclusion of section 7.1.1 above. The second, “miles,” refers solely to rewards programs managed by third-party airline partners. The remainder are classified as “other,” which includes non-cashback issuer-managed programs as well as programs managed by non-airline third parties, such as hotels.

Over the last few years, the mix of accounts in the CCDB by rewards type shows little change, though there has been a slight shift away from miles towards cashback. This is shown in Figure 8. Cashback accounts, however, also appear to be more widely distributed across the cardholding population than other programs. Analysts report that nearly two-thirds of consumers who participate in one or more rewards programs participate in a cashback program.<sup>14</sup> Nearly half named it the most valuable form of credit card rewards program they participated in.<sup>15</sup> According to one commenter, rewards spending is divided nearly equally

---

<sup>14</sup> See Mercator Advisory Group, *Consumer and Credit; New Cardholders Demand More Credit* (Jan. 2015).

<sup>15</sup> See *id.*

between issuer and third-party partner programs, and nearly half of all consumer spending on rewards cards affiliated with a third-party partner is done on cards affiliated with an airline.<sup>16</sup>

**FIGURE 8:** REWARDS ACCOUNT TYPE AS A SHARE OF GENERAL PURPOSE PURCHASE VOLUME IN THE CCDB, MID-2012 THROUGH 2014

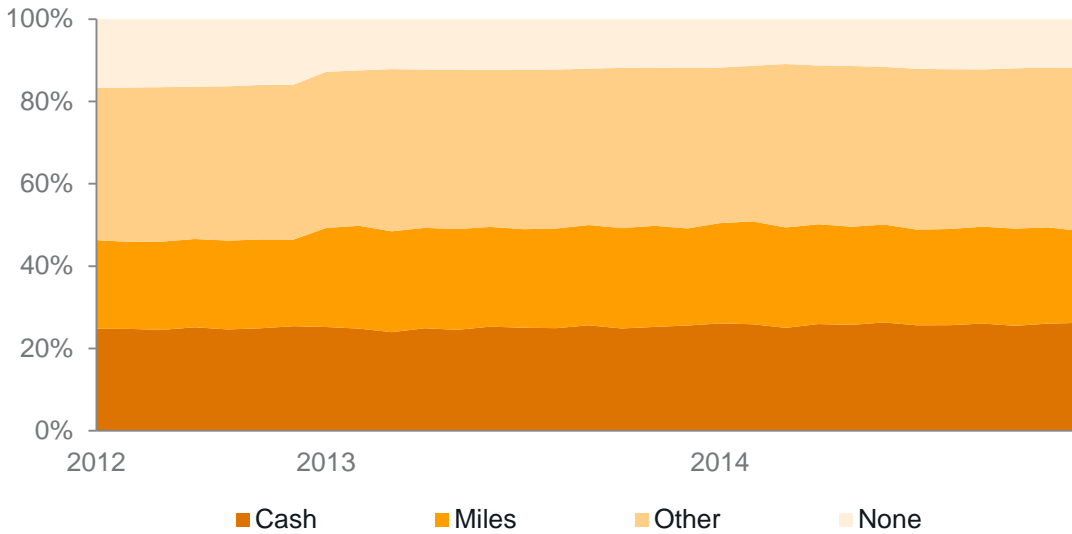
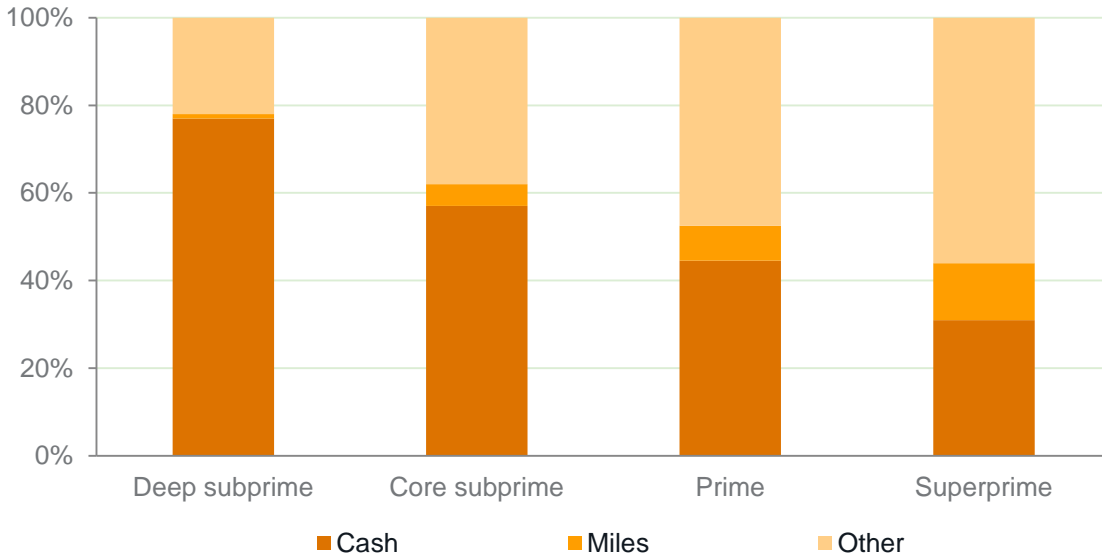


Figure 9 shows the distribution of rewards type for new general purpose rewards accounts for consumers with different credit scores. As credit scores decrease, cashback accounts represent a larger share of originations and miles or points accounts represent a smaller share.

---

<sup>16</sup> See American Bankers Association Comment Letter (May 18, 2015) 8.

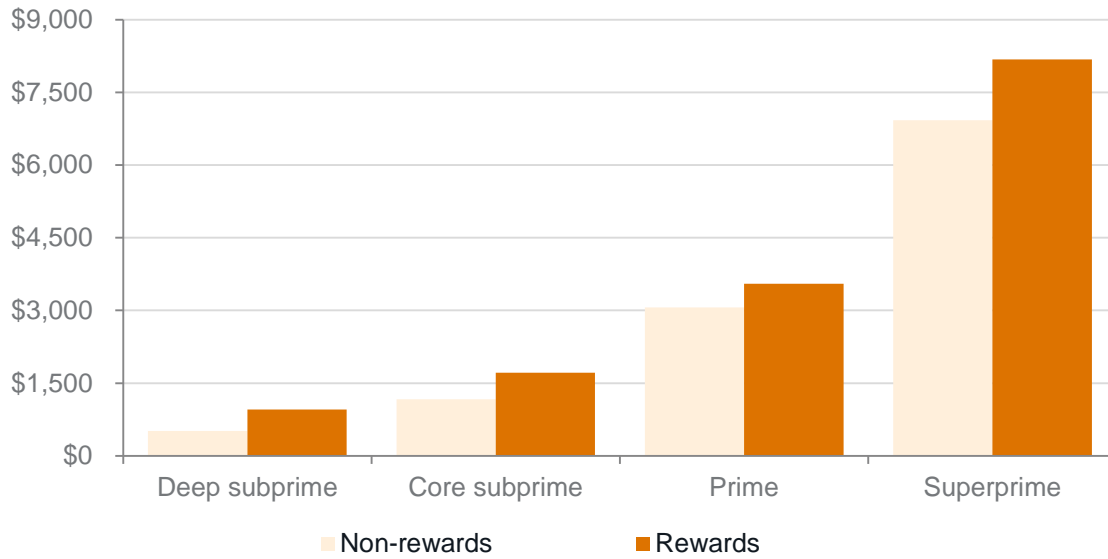
**FIGURE 9:** GENERAL PURPOSE REWARDS ORIGINATIONS BY REWARDS TYPE AND CONSUMER CREDIT SCORE, 2013-2014 (CCDB)



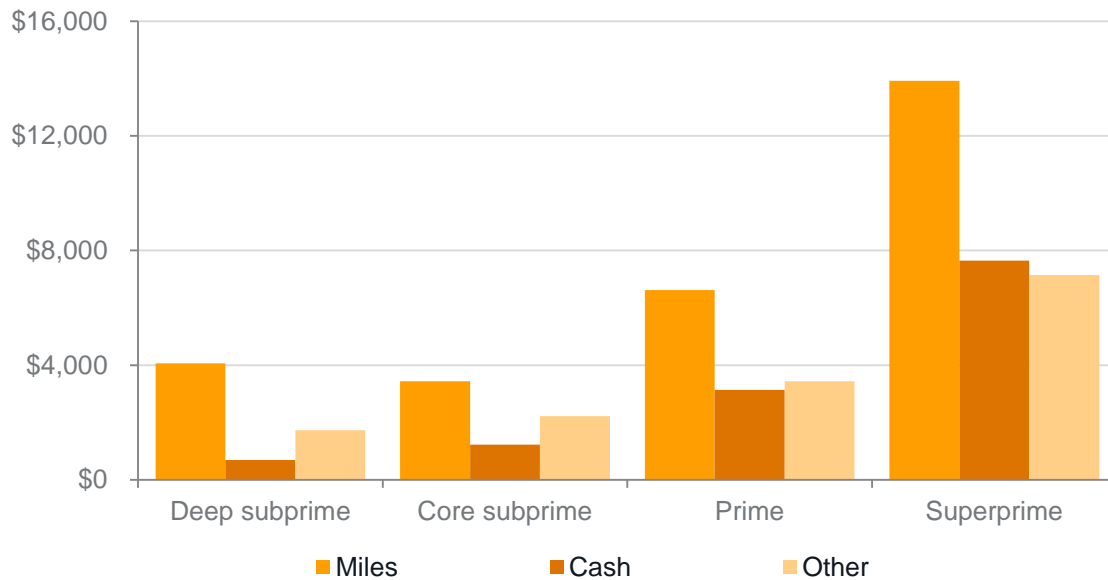
**OTHER ACCOUNT FEATURES**

Within risk tiers, general purpose credit lines are consistently higher on rewards cards. There is considerable line variation, however, by rewards type even within risk tier. In every risk tier, miles cards are associated with the largest lines. These data are shown in Figures 10 and 11 below. Note, however, that in light of Figure 9 in some of the higher risk-tier cases these averages represent a relatively small number of accounts. For example, Figure 9 illustrates how few miles cards were originated in 2013 and 2014 to consumers with deep subprime scores. These cards represented less than 0.2% of all accounts originated to consumers with such scores, and less than 0.5% of all miles cards originated. Therefore, the averages contained in Figure 11 in particular should not be construed to represent the experiences of a large number of consumers absent other contextualizing information.

**FIGURE 10: AVERAGE LINE, GENERAL PURPOSE ACCOUNTS IN THE CCDB, BY REWARDS STATUS AND CONSUMER CREDIT SCORE 2013-2014**



**FIGURE 11: AVERAGE NEW GENERAL PURPOSE LINE, BY FICO AND REWARDS TYPE, 2013-2014 (CCDB)**

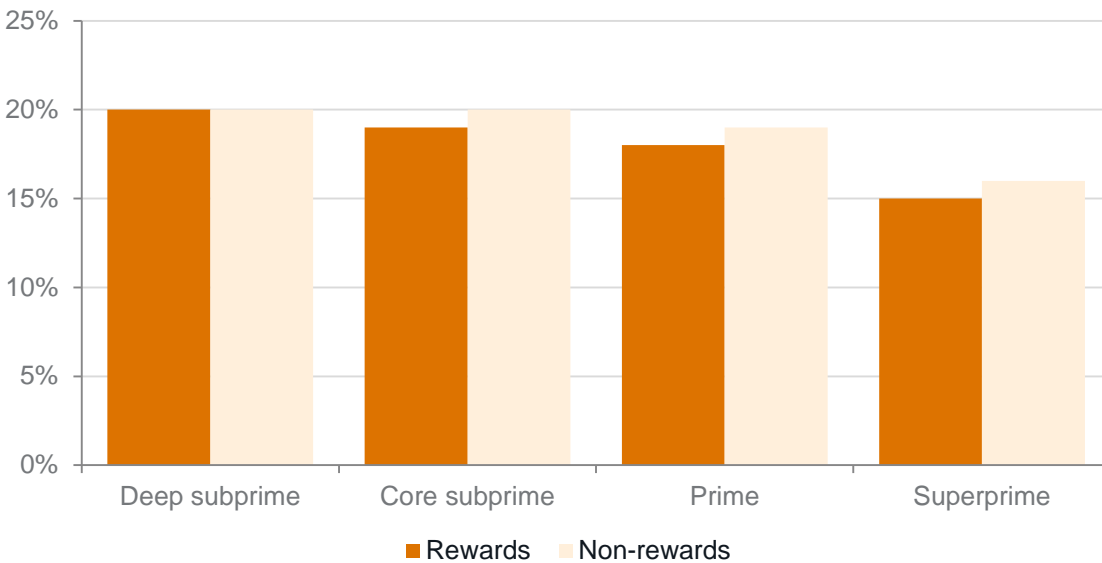


**Examining the interest rates assessed to rewards and non-rewards accounts in the CCDB results in potentially counterintuitive findings.**

According to the data in the CCDB and controlling for credit risk tier, non-rewards revolving accounts have slightly higher retail APRs, on average, than rewards accounts that revolve balances (excepting the deep subprime tier). For consumers with deep subprime scores, we found no difference in the average rates on revolving balances on rewards and non-rewards cards.<sup>17</sup> Overall, we found no marked differences in the total cost of credit on the two types of cards.

Retail APRs on newly originated non-rewards accounts in the CCDB are notably higher than the rates on new rewards accounts for consumers in every credit score range.<sup>18</sup> These results are shown in Figures 12 and 13 below.

**FIGURE 12: AVERAGE GENERAL PURPOSE RETAIL APR, REVOLVING ACCOUNTS IN THE CCDB, BY REWARDS AND FICO, 2014**

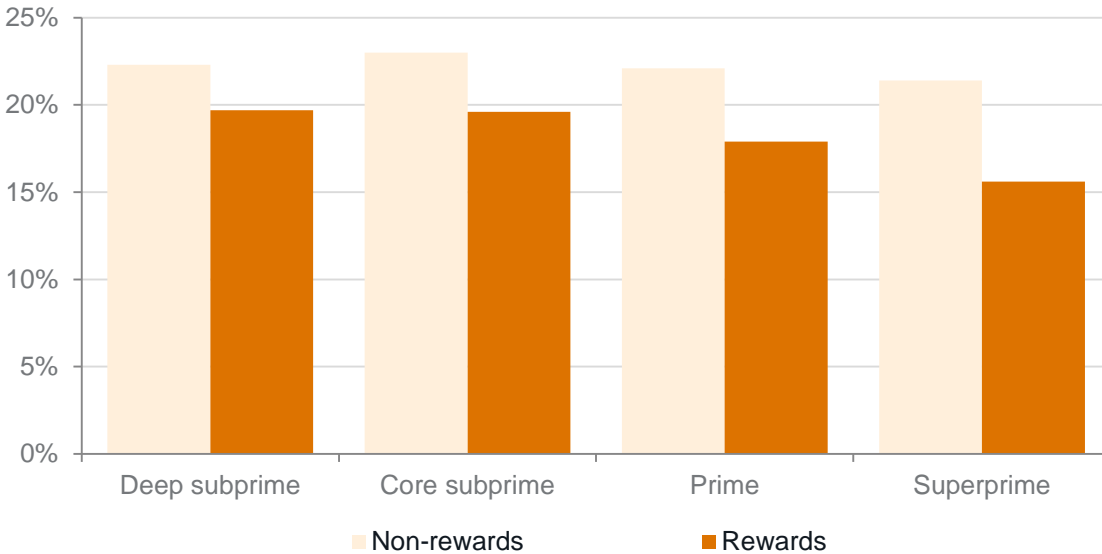


<sup>17</sup> This analysis is based on non-promotional rates. It is possible that promotional rates skew to one or the other category.

<sup>18</sup> Again, this excludes promotional rates from the comparison. Note that we found some variation in APRs by rewards type. Miles cards generally had the lowest APRs. See Appendix Figure 13.



**FIGURE 13:** AVERAGE GENERAL PURPOSE RETAIL APR, NEW ACCOUNTS, BY REWARDS AND FICO, 2013-2014 (CCDB)



The intersection between revolving credit on cards, and incurring costs for doing so, and spending on cards, and accumulating rewards for doing so, is a complex and multi-faceted one. Given the wide range of APRs issuers may offer consumers on a given product, the findings above could be driven by a more complex intersection of consumer self-selection and issuer pricing strategies.<sup>19</sup> The larger lines on rewards products further suggest the possibility that issuer underwriting is more complex than our credit score ranges capture. It is therefore possible that each individual consumer faces a tradeoff between rewards and APR even if this is not reflected in the aggregate data. This result is one we hope to investigate more deeply in the future.

---

<sup>19</sup> For a possible explanation of similar interest rate discrepancies pre-CARD Act, see Hong Ru and Antoinette Schoar, *Do Credit Card Companies Screen for Behavioral Biases?* (April 7, 2015), [https://editorialexpress.com/cgi-bin/conference/download.cgi?db\\_name=AFA2016&paper\\_id=815](https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=AFA2016&paper_id=815).

## 7.2 Rewards practices

### 7.2.1 Data sources

The Bureau relied upon a wide variety of sources—quantitative and qualitative—to review rewards programs in more detail. Although these sources have a number of limitations, which we discuss below, they shed light on a number of rewards practices that may raise some consumer welfare concerns.<sup>20</sup>

#### **MARKETING AND DISCLOSURE MATERIALS FROM ISSUERS**

As part of the survey responses that comprise the mass market issuer data we have relied on throughout this report, the Bureau obtained rewards card marketing materials and program disclosures from several credit card issuers. These issuers collectively represented between 60% and 70% of total credit card outstandings at year-end 2014.<sup>21</sup> Our sample of rewards materials and disclosures covers rewards cards offered by these issuers from July 1, 2013 to July 1, 2014. We selected the issuers and products to reflect the breadth and variety of the consumer rewards experience. Issuers also ranged in size and target market. The products include every major variety of rewards, including cashback, issuer points, and cobrand rewards including airlines, hotels, and retail partners.

We requested marketing and disclosure materials from a variety of channels and media for more than twenty credit card rewards programs. These materials cover the full range of rewards disclosure to cardholders. They include:

- Printed or electronic marketing materials used in connection with rewards program solicitation, (*i.e.*, invitation-to-apply and pre-screen solicitations, take-one brochures, etc.);

---

<sup>20</sup> In addition to the sources identified in the text, we reviewed complaints submitted to the Bureau. We also used information acquired during ongoing marketing monitoring efforts and from other third-party sources. These include research reports published by independent firms, comment letters in response to our RFI, and media reports.

<sup>21</sup> These issuers are not coterminous with the issuers for which we present CCDB data in section 7.1.3.

- Rewards “welcome kits” provided to consumers upon successful application to a rewards program, which generally include a document detailing terms and conditions applicable to the rewards programs;
- Consumer cardholder agreements currently used in connection with new accounts;
- Periodic promotional offers used in connection with a rewards program (*i.e.*, program catalogs, statement inserts, etc.); and
- Communications to cardholders regarding changes in rewards terms and conditions.

For any given rewards product and any given marketing campaign, many issuers put the majority of their resources behind a handful of solicitation approaches, sometimes referred to as ‘champions.’ They also test dozens or even hundreds of variants on, or alternatives to, those marketing materials, usually in much smaller volumes. Therefore, rather than review massive amounts of documentation received by only a small number of consumers, the Bureau in some cases requested only a sample of materials related to the program.

Overall, our process resulted in receiving and reviewing around 4,000 documents related to the rewards programs that we identified.<sup>22</sup> The materials reviewed by the Bureau are not a representative sample of all credit card reward program marketing and disclosure materials. They are designed to cover a range of products from a range of issuers, and accordingly are not randomly selected. The data are intended to establish a baseline for understanding the trends, commonalities and variations in rewards marketing and disclosure practices.

## **FOCUS GROUPS**

In June 2015, the Bureau conducted a series of focus groups discussing credit card rewards. The groups allowed for some exploration of consumer beliefs about and attitudes towards rewards cards. Given the number of consumers involved, however, the groups cannot be seen as representative of the broader cardholding population and the results are not designed to make statistical findings.

---

<sup>22</sup> We further narrowed our detailed review by eliminating materials that were duplicative. For example, if the only differences in the pre-selection offers for a given program were font color, we only reviewed one such offer in detail.

## 7.2.2 Rewards card disclosures generally

Our analysis of rewards programs covers different aspects of the rewards card lifecycle. As a preliminary matter, therefore, we outline that lifecycle as it relates to rewards-related disclosures.

### **PRE-ACQUISITION**

Before a consumer opens an account, he will often receive or be exposed to marketing messages from issuers encouraging him to apply for the account. Some of these messages take the form of general marketing, such as television commercials, print media ads, or various forms of online advertising. Others are more individually targeted. Until recently, individually targeted solicitations were usually a hard copy piece of mail, but email and other targeted digital solicitations are growing rapidly in prevalence.<sup>23</sup>

Mailings generally include an application and marketing materials. They also include at least a summary statement of terms and conditions. In some cases, they include a separate document focusing on rewards terms and conditions.

Unsurprisingly, during this marketing phase, the positive aspects of the rewards card are stressed by issuers. The rewards program is typically first and foremost. If the card offers a sign-up bonus this is usually given special emphasis.

### **ACQUISITION**

After the consumer successfully applies for the card, she receives a “welcome kit” that includes a number of components. These include the card itself, as well as the full cardholder agreement. If rewards are not covered in that general cardholder agreement, a separate document covering rewards terms and conditions is included. In addition, many welcome kits include a rewards “program guide” and a range of related marketing materials.

---

<sup>23</sup> For more on marketing channels see section 4.1.1.

## **POST-ACQUISITION**

Once consumers have begun to use the card, they receive additional materials related to the rewards program. These include monthly statements which may show the earning, balance, and spending of rewards, ongoing marketing materials promoting the use of the card (sometimes promoting specific rewards bonuses), and a range of other promotions, solicitations, and notifications. These can include reminders about payment due dates or notifications about changes in the rewards program.

### **7.2.3 Areas of potential concern**

Marketing campaigns and other issuer disclosures are the primary way that credit card providers communicate the terms and conditions of rewards programs. In examining the rewards card lifecycle, from initial contact to a consumer by marketing, through acquisition and retention, we identified a number of areas of potential concern.<sup>24</sup>

#### **AVAILABILITY, TIMING, AND MULTIPLICITY OF KEY DISCLOSURES**

The number of different disclosures associated with rewards cards, and the timing of when consumers receive them or have access to them, varied substantially across the card programs we examined and emerged as a key area of potential concern. The interaction between these three aspects of disclosure—availability, timing, and multiplicity—can create challenges to consumer understanding. That problem is multiplied because a rewards card is a credit card, which is already a complex financial instrument, married to something resembling a limited-purpose asset account, whose capabilities, value, and relationship to the credit card account may not always be certain, obvious, or clear.

It is not always obvious where consumers can find the full terms and conditions of their rewards programs. They are sometimes included in general agreements, sometimes in a separate document, and sometimes in both. Over half the issuers we examined generally included the rewards terms and conditions in a separate document from the general cardholder agreement.

---

<sup>24</sup> Some commenters assert that consumers fully understand the details of their rewards programs. See American Bankers Association Comment Letter (May 18, 2015) 8-9; see also Morrison Foerster Comment Letter, 6; Auriemma Comment Letter, 13; and Financial Services Roundtable & Consumer Bankers Association Comment Letter, 4-5.

Consumers often receive a rewards “program guide.” These documents, which are generally written in more accessible language and feature more engaging design elements, generally summarize certain features of the rewards program, including many details that fall outside formal terms and conditions, such as the mechanics of redemption. But these guides do not always include all the caveats, conditions, and complications entailed by the full terms of the rewards programs. Even as program guides may provide useful information to consumers, if they are not clearly distinguished from the full terms and conditions, they will also generate the potential for consumer confusion.

Consumers rarely have access to the full terms of rewards programs prior to applying for a credit card. Instead, they will often be provided only a summary of the terms of the general cardholder agreement, which more often than not does not include terms dictating the rewards program. Pre-acquisition, therefore, consumers understanding may be limited to what they can glean from rewards-related marketing materials alone. For example, when offers we examined involved a sign-up bonus, only about one-third of marketing materials we examined included terms and conditions for the broader rewards program.

Sign-up bonuses appear to represent an exceptional area of concern for consumers because they were the largest single driver of complaints to the Bureau regarding rewards credit cards in general.<sup>25</sup> Complaints regarding sign-up bonuses were especially prevalent for those products that involve third-party partners. Nearly half of all complaints regarding sign-on bonuses related to co-brand cards. In addition, while less than a fifth of total complaints related to miles cards, nearly a third of complaints regarding sign-on bonuses related to miles cards.

Consumers, who are often applying for these cards in large part on the basis of the rewards programs, often lack access to key terms and conditions of those programs until after they have become cardholders.<sup>26</sup> And even once they are cardholders, sorting through the panoply of

---

<sup>25</sup> Some commenters contend that consumer complaints regarding rewards cards are on the decline. *See* American Financial Services Association Comment Letter (May 18, 2015) 4; *see also* Auriemma Comment Letter, 14.

<sup>26</sup> This would not be true for third-party programs if the consumer’s enrollment in the program predates the consumer’s acquisition of the credit card. For example, a consumer may already be enrolled in an airline’s “frequent flier” rewards program before signing up for the credit card tied to that rewards program. In that case they have

different documents that accompany the acquisition package to identify potentially important rewards information can prove challenging.

### **BLURRING OF MARKETING AND DISCLOSURES**

Consumers may not always be able to detect the line between disclosure and marketing. Welcome kits generally include rewards program guides, which are designed to be welcoming and easily accessible. Full terms and conditions or cardholder agreements, by contrast, can be daunting documents even to well-informed consumers. Rewards program guides often contain many, but not all, of the same information contained in rewards terms and conditions. A consumer who encounters this document may not realize—or have cause to realize—that the full terms of the rewards program—including important terms relating to forfeiture or to limitations on earning or redemption—are not included in that guide.

### **NON-SPECIFICITY OF TERMS**

Even if consumers locate the terms and conditions of their rewards programs, those terms may be very open-ended. Issuers generally reserve the right to change any term at any time, often without cause or notice. Thus, issuers reserve the right to change consumers' ability to earn or redeem rewards, as well as the right to "revalue" the rewards themselves. Recent public materials available to the Bureau include:

- "We have the right to add, modify, or delete any benefit, service, or feature of your account at our discretion."
- "We may [cancel or suspend any feature on your Account] at our discretion, even if you pay on time and your Account is not in default."
- "[We] reserve the right to cancel, modify, restrict, waive or terminate the [rewards] Program or any aspects or features of the Program at any time without prior notice."
- "We reserve the right to amend or modify ... the [rewards] program at any time and in any way ...."

---

presumably already been given an opportunity to review the terms and conditions of the rewards program at least once already.

- “We may ... close your account or suspend account privileges at any time for any reason. We may do this without prior notice to you ... If we close your Card Account ... you will forfeit any accumulated cash rewards.”

Beyond this, issuers sometimes reserve the right to take action on an account-specific—as distinguished from Program-wide—basis on vague and indeterminate grounds. For example, one disclosure we found states, “If you violate or abuse this program, you may forfeit some or all of your accrued reward dollars.”

### **EXPIRATION AND FORFEITURE**

All issuers whose materials we reviewed had an explicit policy regarding forfeiture. Consumers may be at risk of forfeiting all outstanding rewards upon account closure, either voluntary or involuntary. Involuntary closure can occur entirely at an issuer’s discretion without cause or early notice. Furthermore, consumers who violate the terms and conditions of a credit card account or its rewards program are at additional risk of forfeiting rewards. Issuer policies tend not to offer specifics in this area, noting simply that unspecified violations “may” lead to forfeiture without defining which violations in fact lead to forfeiture. Only half of the issuers we looked at offered consumers the ability to pay to reinstate forfeited rewards. Forfeiture practices are one of the largest drivers of complaints to the Bureau about rewards cards.

Expiration policies were less consistent. Most, though not all issuers, had an expiration policy. Most that did tied expiration to inactivity. “Inactivity,” however, was not defined consistently, ranging from three to nine months of non-usage. Cashback programs were distinctive in this regard. All the cashback programs we reviewed expressly provided that points would not expire, and these no-expiration policies were featured in both disclosures and marketing materials. Some provided for the consumer to receive cashback balances at account closure or following long periods of inactivity. However, as noted above, issuers generally reserved the right to change any of the terms—including, presumably, the no-expiration term.

From the consumer perspective, of course, expiration and forfeiture entail the same outcome—losing rewards. By the same token, it may not always be clear to a consumer that a rewards program protected from expiration—and sometimes heavily marketed as such—may not be protected from forfeiture. Consumer confusion on this point may be compounded by the lack of any marketing around forfeiture, in contrast to the marketing of favorable terms around expiration. Consumers in our focus group never raised this issue even when presented with



relevant information, suggesting a lack of salience. The general blurring of marketing and disclosure materials may also exacerbate the risk of harm on this point.

### **COMPLEXITY, RESTRICTIONS, AND INCENTIVES**

Aside from issues relating to expiration and forfeiture, consumers may encounter additional complexities and unexpected restrictions in earning and redeeming rewards. This concern was echoed in our focus groups, in which consumers expressed frustration with these aspects of rewards programs. The complexity of earning and redeeming terms varied widely across issuers.<sup>27</sup>

Earning policies are a substantial driver of rewards complaints submitted to the Bureau. These complaints disproportionately relate to cashback cards. Some issuers placed overall limits on rewards accumulation. Many issuers offered a wide variety of spending categories that entail extra earning at specified types of merchants. Others offer, either in lieu of or in addition to these fixed categories, extra earnings in categories which “rotate.” Absent such features, some of these programs may offer less value than competitors. Yet in many cases enabling “rotating” categories requires an “opt-in,” which adds complexity to the program and serves little apparent purpose beyond inhibiting consumer use of the feature and correspondingly reducing the cost to the issuer of offering the extra earnings. For example, a program which offers 5% rewards on a certain category but only experiences a 20% opt-in rate would only cost the issuer an additional 1% on spending in that category in aggregate—and only deliver that same aggregate amount of value to consumers.

These categories—both fixed and rotating—sometimes have further limits on how much consumers can earn within them. This makes evaluating comparative rewards value proposition more challenging to consumers, especially because this information may be difficult to access prior to acquisition. The categories themselves may also be vague or subject to unexpected boundaries. For example, a consumer may believe a merchant is of one type only for that merchant to be classified as something else when rewards are calculated. Or a consumer may buy something, such as groceries, that they believe should be eligible, only to learn that they

---

<sup>27</sup> One commenter suggests that content provided in rewards program terms are improving. See American Financial Services Association Comment Letter (May 18, 2015) 3.

bought it at the wrong type of merchant. Cards that did *not* offer rotating categories and had no general or specific limits on earning tended to market themselves on that basis, suggesting that these features are simultaneously enticing and confusing to consumers.

Consumers face other earning complexities. Some programs note in terms and conditions that transactions processed through certain kind of devices and/or mobile applications, including those provided to the merchant by their acquirer and therefore wholly outside of consumer control, may be ineligible for category-specific rewards. Some programs made earning rewards at a certain rate contingent on other financial behaviors, such as owning other financial products offered by the issuer or maintaining minimum balances in linked asset accounts. Our rewards-related focus groups suggested that consumers found earning rewards to be more challenging than they had initially assumed when acquiring their rewards cards.

In at least some cases, rewards are tied not to spending, but to borrowing, offering rewards to consumers based on the interest payments they make. Rewards tied to the cost of revolving credit, however, directly affect consumers' incentives to revolve credit. In some sense, offering rewards for incurring finance charges is equivalent to offering a lower APR. Yet that equivalence is not complete. In light of the CARD Act restrictions on repricing, lower finance charges represent a reasonably fixed benefit to consumers. Higher finance charges counterbalanced by rewards, however, represent a trade-off that can be difficult to value, not least because the rewards can expire or be forfeited under a myriad of broadly-defined circumstances.

Consumers may also find the redemption process more complex, opaque, or time-consuming than they had assumed. This issue was raised in the Bureau's focus groups, especially as it pertained to travel rewards. It was also reflected in marketing materials, some of which stressed redemptions simplicity and ease-of-use. Redemption practices are another major driver of rewards-related complaints to the Bureau. These complaints cut equally across rewards categories. The market appears to be responding to this concern, as issuers are creating and heavily promoting new online portals and other tools to enable consumers to track and redeem rewards. We found their impact reflected in our focus groups as well, where participants mentioned that, when available, such tools improve their experience of redeeming rewards.

Many cards offer consumers sign-up bonuses, which tend to offer consumers a rewards lump sum if they meet a spending target within a certain window, usually within a few months following origination. Some products may even offer multiple bonuses or more complex bonuses. Some of these products may well be confusing to consumers. It is not always clear from

the available materials, for example, when the relevant period starts or ends or exactly how total spending over the period is calculated. As a result, consumers may not know precisely whether or when they have achieved this target, an uncertainty that may further incentivize spending. Consumers may also be ineligible for these bonuses—because, for example, they have benefited from a similar or identical offer in the past—and only realize this when they fail to receive the expected bonus. As noted, detailed terms and conditions specific to sign-up bonuses are rarely included in marketing materials, and sign-up bonuses were a substantial driver of consumer complaints.

### **THIRD PARTY INVOLVEMENT**

Some of the concerns discussed above may be more acute when issuers partner with a third party to enable consumers to earn points which are converted into the currency of the partner's loyalty program. In such cases, the issuers generally control the terms regarding the earning of rewards whereas the partner controls redemption. Such programs thus involve another set of disclosures from a separate entity. Furthermore, card issuers offer these rewards products on the basis of a rewards proposition—and marketing materials—over which the card issuer may exert limited control or influence.

Issues flagged above may become even more confusing in this context. For example, consumers may be marketed a rewards program in which the card issuer has no stated expiration policy—but the third-party manager of the rewards program may have its own expiration policy. Consumers may also be left wondering about the boundaries of forfeiture. It may not be clear to a consumer which, if any, cardholding behaviors may result in some loss of rewards. Even seemingly simple questions, such as which institution a consumer should contact with a question, issue, or complaint, may be ambiguous in this context.

### **VALUE INDETERMINACY AND CONSUMER CHOICE**

Consumers do not always display consistent preferences in engaging with credit card products. This inconsistency may be exacerbated by the prevalence of rewards, which adds additional layers of complexity to the question of a product's overall costs and benefits.

Many participants in our focus groups stated at the outset that APR was the most important variable for them in selecting a credit card, especially those who revolved credit. Yet when presented with five credit card products, four of which had rewards products of varying natures, complexity, and value, and one of which had no rewards but clearly offered the lowest interest

rate, almost no participants selected the latter as their preferred offer. In fact, participants overwhelmingly named the no-rewards low-APR card as their least favorite offer. Most participants noted the higher APRs on the rewards cards. But while this may have influenced which rewards card they selected, it did not lead them to consider a non-rewards card. And no participant even mentioned comparing the value of the offered rewards to the potential interest savings on the low APR no-rewards card.

This is of potential concern given that revolving rewards cards in the CCDB accounted for 60% of all general purpose balances in the last quarter of 2014, as shown above in Figure 5. In fact, in that same quarter, nearly 90% of all purchase volume on revolving general-purpose accounts was done on rewards cards.

In the same focus group exercise, consumers were inattentive to the presence or absence of certain pieces of information that could be quite material in determining the ultimate value received from a particular card. Consumers appeared to be selecting between cards primarily on the basis of rewards, with less regard for non-rewards costs and benefits. For example, none of the participants raised the question of how the APR they would be offered would be decided even though participants were presented with ranges of possible APRs they might receive. Consumers did repeatedly raise annual fees as an especially salient price point, but not other fees.

Participants also failed to raise the question of how more amorphous rewards like “points” or “miles” compared in value to cashback despite being presented directly with a choice between these different types of rewards products. No participant even raised expiration or forfeiture concerns, even though one of the products explicitly mentioned non-expiration as a selling point. Overall, these results suggest that consumers may not comprehensively evaluate competing credit card products on their overall value, instead focusing on a smaller number of highly salient variables without fully considering other trade-offs.

## 8. Credit card debt collection

A consumer who fails to make required payments on a credit card may become subject to debt collection activity. The conduct of debt collectors can present substantial risk to consumers. From January 1, 2014 through December 31, 2014, the CFPB handled approximately 88,300 debt collection complaints. More than one in seven related to credit card debt collection. In addition to evidence of harm from consumer complaints, the Bureau's enforcement and supervision activities have also noted areas where consumers may be harmed by practices of credit card debt collectors.<sup>1</sup>

As part of its market monitoring conducted in connection with this report, the Bureau surveyed a number of large credit card issuers in order to better understand their approach to credit card debt collection and recovery. The survey focused on issuer practices both before and after charge-off. As of year-end 2014, the surveyed issuers accounted for nearly three-quarters of the total amount of credit card balances outstanding. This section presents preliminary results from that survey.

To put those results in context, we first define various terms that are commonly used to describe debt collection practices. Next, we place the consumer credit card debt collection market in the context of the overall market for consumer debt collection generally. Then we describe the range of core practices that may be used in credit card debt collection and recovery, before laying out the more detailed findings from our survey.

---

<sup>1</sup> See, e.g., Press Release, Consumer Finance Protection Bureau, 47 States and D.C. Take Action Against JPMorgan Chase for Selling Bad Credit Card Debt and Robo-Signing Court Documents (July 8, 2015), <http://www.consumerfinance.gov/newsroom/cfpb-47-states-and-d-c-take-action-against-jpmorgan-chase-for-selling-bad-credit-card-debt-and-robo-signing-court-documents/>; see also Consumer Financial Protection Bureau, *Supervisory Highlights (Fall 2014)*, [http://files.consumerfinance.gov/f/201410\\_cfpb\\_supervisory-highlights\\_fall-2014.pdf](http://files.consumerfinance.gov/f/201410_cfpb_supervisory-highlights_fall-2014.pdf).

## 8.1 Definitions

The following debt collection terms are commonly used in the industry currently, and they are not Bureau interpretations of them for purposes of any statute or regulation.

### **DELINQUENCY**

A consumer credit account (including a credit card account) is considered to be “delinquent” once the consumer has failed to make all or part of at least one obligated payment on that debt by the due date.<sup>2</sup> 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. Across accounts, rates of delinquency are most often expressed as a share of the balances on those accounts.

### **CHARGE-OFF**

When an account has been continuously delinquent for a certain length of time, federal regulations require some lenders to declare them as losses. Lenders may also choose to declare an account as a loss for other reasons. (For example, the account holder declares bankruptcy or is deceased.) These loans are “charged-off.” For credit cards, issuers generally must charge off accounts once they have been delinquent for more than 180 days.<sup>3</sup> 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. It may affect, however, how or whether they choose to do so. The effect of charge-off on an issuer’s collection efforts is discussed in section 8.3.

### **COLLECTION AND RECOVERY**

Both “collection” and “recovery” are terms used to describe the spectrum of practices applied by creditors and their agents to secure repayment of debt. The distinction between the two terms is not always clear and may depend on context. For the purposes of this report, efforts to secure

---

<sup>2</sup> Credit card agreements typically use the term “default,” which is defined the same as “delinquent” is here.

<sup>3</sup> See Office of the Comptroller of the Currency, OCC Bulletin 2000-20 (June 20, 2000), <http://www.occ.gov/news-issuances/bulletins/2000/bulletin-2000-20.html>.

payments prior to charge-off will be termed “collections” and those taken after charge-off will be termed “recovery.”

#### FIRST- AND THIRD-PARTY COLLECTION ACTIVITIES

Creditors often make the first efforts to collect on debts themselves, either through in-house collectors or others collecting in the name of the creditor. Firms engaged in such activities generally are known in the industry as “first-party collectors.” If first-party collection efforts are unsuccessful, creditors often engage a firm to try to recover on the debt in its own name rather than the name of the creditor. Firms engaged in such activities generally are known in the industry as “third-party collectors.” Instead of engaging a third-party collector to try to collect on a debt, creditors sometimes sell it 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 if not all credit card issuers will make some effort to collect delinquent debts using their own employees. An estimated quarter million employees work as collectors for creditors.<sup>4</sup> In addition, many creditors contract with third parties to collect debts or sell uncollected debts to third-party debt buyers that then seek to collect the debts. Third-party debt collection in the United States is a \$13.7 billion dollar industry. It employs more than 130,000 workers.<sup>5</sup> These numbers have been relatively stable over the past two years. However, the number of debt collection firms has been declining as the result of industry consolidation. According to ACA

---

<sup>4</sup> See Bureau of Labor Statistics, *43-3011 Bill and Account Collectors* (May 2014), <http://www.bls.gov/oes/current/oes433011.htm>.

<sup>5</sup> See Edward Rivera, *Debt Collection Agencies in the US*, IBIS World (April 2015); see also Robert Hunt and Viktor Fedaseyev & Robert Hunt, *The Economics of Debt Collection: Enforcement of Consumer Credit Contracts*, Federal Reserve Bank of Philadelphia, (Working Paper, Nov. 2015), <https://www.philadelphiafed.org/research-and-data/publications/working-papers/2015/>.

International, which is the largest trade association of debt collectors, there were 6,171 collection companies in 2005.<sup>6</sup> In 2013, that number had declined to 4,615.<sup>7</sup>

Of the 220 million Americans with a credit file, around 77 million have debt in collections reported in their credit files. Such debt may be reported by creditors or by third-party debt collectors. This measure likely undercounts the total number of consumers subject to debt collection because many collection accounts for rent, utilities, retail, and other debts may not be reported to credit reporting companies. In addition, lenders generally report on the status of loans, including delinquent loans, without separately reporting a collections tradeline. Collections trade lines can range from less than \$25 to more than \$125,000, with an average balance of \$5,178 for consumers with at least one collections trade line.<sup>8</sup> Many of these consumers will be actively subject to collections attempts by a debt collector. But some consumers may not even be aware that they have debts in collections until they receive a call or letter from a debt collector or review their credit reports.<sup>9</sup>

As mentioned earlier, third-party debt collection is a \$13.7 billion industry in terms of revenue. Figure 1 breaks down this revenue by the share received from each type of debt. Industry analysis estimates that financial services debt generates the largest single share of revenue, 34.5%, to third-party debt collectors.

---

<sup>6</sup> Ernst and Young, *Impact of Third-Party Debt Collection on the National and State Economies in 2013*, ACA International (July 2014) 16, <http://www.acainternational.org/files.aspx?p=/images/21594/theimpactofthird-partydebtcollectiononthenationalandstateeconomies2014.pdf>.

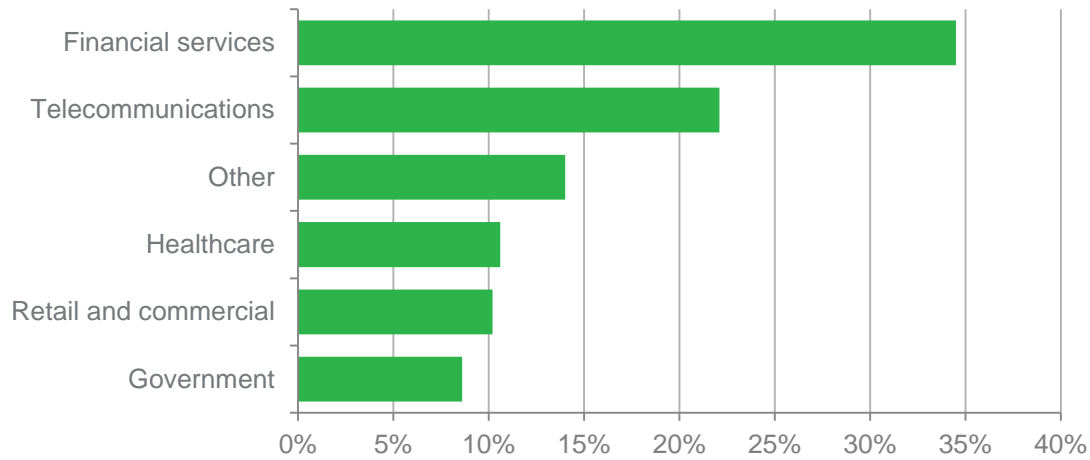
<sup>7</sup> *Id.*

<sup>8</sup> See Caroline Ratcliffe ET AL., *Delinquent Debt in America*, Urban Institute (July 2014) 3, [http://www.urban.org/research/publication/delinquent-debt-america/view/full\\_report](http://www.urban.org/research/publication/delinquent-debt-america/view/full_report). The report updates a 2004 Federal Reserve Summer Bulletin which found that 36.5% of consumers with credit files have reports of debt in collections. Robert B. Avery, Paul S. Calem, and Glenn B. Canner, *Credit Report Accuracy and Access to Credit*, Federal Reserve Bulletin (2004), [http://www.federalreserve.gov/pubs/bulletin/2004/summer04\\_credit.pdf](http://www.federalreserve.gov/pubs/bulletin/2004/summer04_credit.pdf).

<sup>9</sup> Press Release, Consumer Financial Protection Bureau, CFPB Considers Debt Collection Rules (Nov. 6, 2013), <http://www.consumerfinance.gov/newsroom/cfpb-considers-debt-collection-rules>.



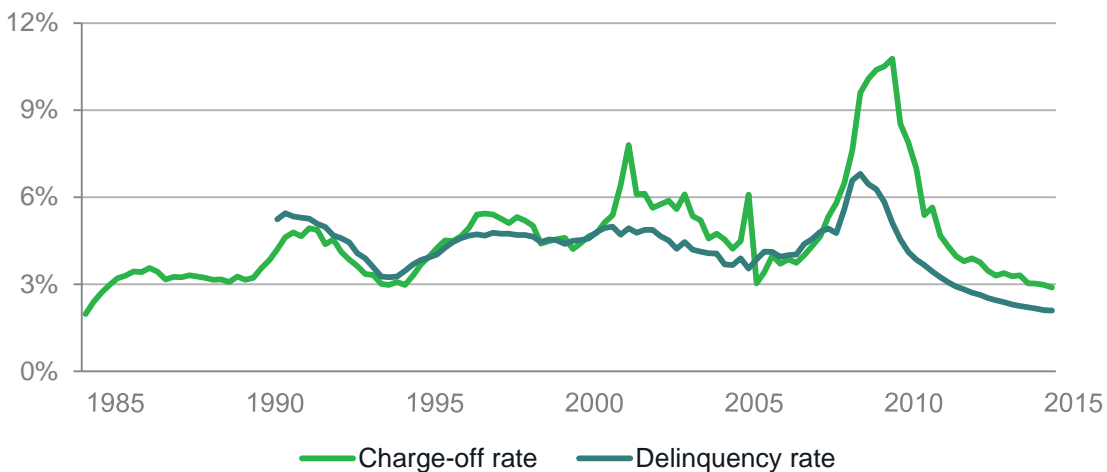
**FIGURE 1: DEBT COLLECTION MARKET SEGMENTS BY SHARE OF REVENUE, 2015 (IBIS WORLD)**



## 8.2.2 Credit card

Credit card debt is the fourth largest source of consumer indebtedness and the second largest that is generally unsecured. (Student loans are first.) Credit card debt is a major driver, therefore, of overall debt collection activity and revenue. At any given moment, the potential market for new credit card debt collection can be sized by examining the rate of credit card delinquency and charge-offs. These are shown in Figure 2.

**FIGURE 2: ANNUALIZED NET CHARGE-OFF RATE AND 30+ DELINQUENCY RATE, ALL COMMERCIAL BANKS, 1985-2015 (FEDERAL RESERVE)**



As of the second quarter of 2015, the “30+” delinquency rate—which represents the share of outstanding credit card balances at least 30 days delinquent—was 2.1% across all commercial banks. That is its lowest level since the Federal Reserve began tracking this metric in 1991. The net credit card charge-off rate for all commercial banks (*i.e.*, annualized charge-offs as a share of outstanding balances) was 2.89%. That is the lowest rate since 1985.<sup>10</sup> Given that this picture reflects a decline from an all-time high of 10.77% just five years ago, there may still be a substantial stock of credit card debt subject to collection—even as the flow of new debt into the collection system has declined.

Although revolving consumer credit balances began to grow after the recession, the amount of debt sold by card issuers has plummeted.<sup>11</sup> As Figure 3 shows, debt sold by credit card issuers has declined significantly since 2007, when sales totaled \$68.2 billion. By 2013, sales had fallen to \$18.9 billion.<sup>12</sup> During this period, the Office of the Comptroller of the Currency (“OCC”) issued a bulletin providing guidance to national banks and federal savings associations engaged in debt sales.<sup>13</sup> At the same time the OCC was developing its guidance, the FTC and the Bureau were focusing their efforts relating to debt sales and debt buyers.<sup>14</sup> We discuss our survey findings regarding credit card debt sales in more detail in section 8.4.4 below.

---

<sup>10</sup> Charge-off rates can be expressed either as gross or net. For net charge-offs, the amount charged off during a period of time is first reduced by the amount recovered in collection efforts. In both cases charge-offs are generally expressed as an annualized rate.

<sup>11</sup> It has fallen so far and so fast, in fact, that *The Nilson Report*, a main source for information on this point, has discontinued its collection of these data.

<sup>12</sup> See HSN Consultants, Inc., *The Nilson Report*, Issue 901, 7 (April, 2008); see also HSN Consultants, Inc., *The Nilson Report*, Issue 1041, 5 (May, 2014), [http://www.nilsonreport.com/publication\\_newsletter\\_archive.php?1=1](http://www.nilsonreport.com/publication_newsletter_archive.php?1=1).

<sup>13</sup> See Office of Comptroller of the Currency, *OCC Bulletin 2014-37, Risk Management Guidance* (Aug. 4, 2014), <http://www.occ.gov/news-issuances/bulletins/2014/bulletin-2014-37.html>. The OCC charters, regulates, and supervises all national banks and federal savings associations as well as federal branches and agencies of foreign banks

<sup>14</sup> See Press Release, Federal Trade Commission, *FTC Alleges Debt Brokers Illegally Exposed Personal Information of Tens of Thousands of Consumers on the Internet* (Nov. 20, 2014), <https://www.ftc.gov/news-events/press-releases/2014/11/ftc-alleges-debt-brokers-illegally-exposed-personal-information>.

**FIGURE 3:** YEAR-OVER-YEAR CHANGE IN DEBT BOUGHT FROM ISSUERS AND REVOLVING CONSUMER CREDIT (THE NILSON REPORT, FEDERAL RESERVE G.19)



## 8.3 Debt collection and recovery practices generally

As previously noted, when a consumer fails to pay a debt according to the terms agreed upon, creditors may employ a variety of tactics and strategies to recoup all or part of that debt, deploying collectors employed by the creditor as well as third-party debt collectors. This section describes collection and recovery activities generally.

### 8.3.1 First-party collection and recovery activities

#### FIRST-PARTY COLLECTION

As described above, creditors often make the first efforts to collect on debts themselves, either through in-house collectors or others collecting in the name of the creditor. Firms engaged in such activities generally are known in the industry as “first-party collectors.” First-party collection can be as simple as mailing a reminder to the consumer to pay a bill or placing a phone call a few days into delinquency. First-party collection companies are typically paid on a “per-full-time-employee” (“FTE”) basis rather than a contingency basis.

## **INTERNAL RECOVERY**

After charge-off, issuers may continue attempts to collect in-house without contracting any kind of third-party. This first-party recovery activity is often referred to as “internal recovery.” An issuer’s internal recovery efforts use many of the methods employed by third-party contingency companies such as calling and sending letters to the consumer.

There are certain advantages to issuers engaging in internal recovery. To the extent the borrower repays the debt, the issuer will get the repayment without having to pay a third-party collection company or a law firm, or to sell the debt at a discount. The issuer also has a higher level of control over its internal recovery activities than it would if it outsourced recovery. This is significant, because depending on the circumstances, issuers can be liable for the unlawful conduct of the third-party service providers with whom they contract. The Dodd-Frank Wall Street Reform and Consumer Protection Act prohibits covered persons (including issuers) and service providers, as defined in the Act, from engaging in unfair, deceptive, or abusive acts and practices.

### **8.3.2 Third-party collection and recovery**

In lieu of internal collections activity, an issuer may turn to a third-party to collect in the third-party’s own name.

## **THIRD-PARTY CONTINGENCY COLLECTIONS**

“Third-party contingency collection” is a term used in the industry to refer to situations in which an issuer engages a firm to try to recover on the debt in the firm’s own name rather than the name of the issuer. This term is used because the third-party’s compensation is contingent on collection success. Third-party contingency collections are the most common recovery tactic issuers utilize for charged-off accounts. However, third-party contingency collections are also utilized for pre-charge-off accounts. Just over half of the broader debt collection industry’s

revenue is generated by collection companies operating under the contingency collections model.<sup>15</sup>

Third-party contingency companies are generally assigned debt for a specified length of time, which may range from several weeks to several years. During this period, they may, with issuer approval, contract with attorneys to litigate. Most attempt to collect from consumers without engaging the judicial system. The most common collection tactic used by third-party collectors is to contact debtors by phone and mail to remind them that debt is owed and ask them to repay.

If the company cannot collect during the specified time period, its agreement with creditors requires the uncollected accounts to be transferred back to the current creditor. The issuer may then contract the accounts out to a different company. This process creates “tiers” of debt 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.” The length of a placement is determined by the creditor. Placement periods tend to lengthen as debt “ages.”

As a given account ages and experiences an increasing number of placements, the expected return falls substantially at each tier. Each failed attempt to collect increases the likelihood that the consumer in question will never 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 fee per account worked. 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 engage multiple companies 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” company that has demonstrated the best collection record to date. The other companies—the “challengers”—attempt to outperform the champion in order to receive a larger share of the issuer’s future collection business. This dynamic can optimize the

---

<sup>15</sup> See Edward Rivera, *Debt Collection Agencies in the US*, IBIS World (April 2015). The following products and services account for the remaining revenue generated the Debt Collection Industry: portfolio acquisition (32.0%), fixed-fee servicing (10.0%), collateral recovery and repossession services (3.5%), and credit rating services (2.5%).

rate of recovery for issuers, which can benefit consumers in terms of decreased cost and increased availability of credit. It may also increase the risk to consumers as collectors compete with each other to prove which one can extract more from often hard-pressed consumers.

### 8.3.3 Litigation

Issuers can and do sue consumers to compel repayment. In deciding whether to initiate litigation, issuers or creditors will review a wide variety of sources, including their own internal records as well as available outside sources to assess their chance of collection. Issuers consider the cost of litigating, which may make litigation not a viable approach for smaller amounts of debt. The FTC reports that “the majority of cases on many state court dockets on a given day often are debt collection matters.”<sup>16</sup>

### 8.3.4 Debt sales

An issuer may also elect to sell the debt entirely. “Debt buyers” purchase accounts at a discount on the face value of the debt owed. The discount is typically determined by the age of the debt. By selling debt, even at a deep discount, issuers gain the benefit of immediate cash in place of delayed and uncertain repayment—and the costs of accounting for and servicing the account. As owners of the debt, buyers keep everything they collect.

Large-scale sale of charged-off debt began with the savings and loan crisis of the late 1980s. It grew along with the increase in consumer use of revolving debt, primarily credit cards, over the following decades. Bank sales of credit card debt directly to debt buyers historically accounted

---

<sup>16</sup> Federal Trade Commission, *Collecting Consumer Debts, The Challenges of Change, A Workshop Report* (Feb. 2009) 55, <https://www.ftc.gov/sites/default/files/documents/reports/collecting-consumer-debts-challenges-change-federal-trade-commission-workshop-report/dcwr.pdf>.

for at least 75% of all debt sold.<sup>17</sup> Revenue from collecting on purchased debts currently represents 32% of total revenue of third-party debt collectors.<sup>18</sup>

### 8.3.5 Warehousing

Issuers may retain charged-off accounts even as they cease all attempts to collect. “Warehoused” debt of this kind is unlikely to be repaid for reasons that may include bankruptcy or death. In general, issuers warehouse an account when the slender possibility of collection is outweighed by the likely cost of collection and/or risk of legal infraction.

### 8.3.6 Activities prior to and after charge-off

Issuers use first-party and third-party collections and litigation prior to and after charge-off. For the issuers surveyed, the channels that are unique to post-charge-off are debt sales and warehousing. All of the issuers surveyed reported having a policy of not selling debt prior to charge-off in the ordinary course of business.

## 8.4 Survey findings

### 8.4.1 Collections prior to charge-off

#### INTERNAL COLLECTIONS

We begin by reviewing the information provided by issuers in response to our survey with respect to the practices of issuers in attempting to resolve delinquent debt prior to charge-off.

---

<sup>17</sup> See Federal Trade Commission, *The Structure and Practices of the Debt Buying Industry* (Jan. 2013) 13, <https://www.ftc.gov/reports/structure-practices-debt-buying-industry>.

<sup>18</sup> Id.

Issuers provided information regarding limits on contacting consumers, software used in their collection activities, and the outsourcing of certain collection functions prior to charge-off.<sup>19</sup>

All issuers surveyed conduct some collections activity in-house and maintain policies that define the frequency with which they telephone, text, leave voicemails, email, and otherwise contact a delinquent customer. We detail the range of issuer limits on consumer contact in Table 1 below. Unless otherwise stated, the limits outlined therein do not extend across other consumer contact channels, so that in any given day, week, or month, a consumer can be contacted the maximum number of times in each channel.

All issuers place a limit of attempted calls per day for each account. That limit can range from four calls to as many as 15. No issuer surveyed allows further calls on the same day as “right party contact,” which is the day that the issuer successfully calls and speaks with the consumer responsible for the debt. The majority of issuers additionally prohibit calls for a longer period following right party contact. This period ranged from one to seven days, with the limit waivable on consumer consent.

---

<sup>19</sup> 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.



**TABLE 1: CONSUMER CONTACT LIMITS (SMALLEST AND LARGEST LIMITS OBSERVED)**

Phone calls allowed per day	Phone calls allowed per week <sup>20</sup>	Phone calls allowed after right party contact	Voicemails per day	Mobile text messages per month	Emails per month	Postal letters per month
4-15 per account	30-42 per account	No additional calls on contact date  1 to 7 day moratorium thereafter	0-2 per account	0-4 per account	1-6 per account	0-2 per account

Among the majority of issuers that place limits on leaving voicemails, it is a nearly uniform practice to leave no more than one voicemail per day. The limits for email and postal letter are exclusive of statutorily required disclosures, such as those required by the FDCPA, Regulation E, and Regulation Z.

The majority of issuers outsource at least some collection activities to first-party collection companies. Half of the issuers outsource collections primarily based on the number of days of delinquency, typically outsourcing to first-party collection companies before 60 to 90 days of delinquency. The majority of issuers mandate that first-party collection companies use the issuer’s case management system and dialers to place and receive calls, as well as to document

---

<sup>20</sup> All issuers provided daily limits, but only some provided weekly limits. Obviously, an issuer that observes a four call daily limit is effectively also observing a 28 calls per week limit. This column only lists explicitly stated weekly limits.

the outcomes of those calls. In general, issuers contractually require first-party collection companies to abide by the issuers' consumer contact limit policies.

First-party collection companies, unlike contingency collectors, are typically paid on an FTE basis. That means their compensation is based on the number of FTEs used per month in collection efforts. The credit card issuers provided the price per FTE per month for onshore and offshore FTEs. Issuers reported that the average price for an onshore FTE was \$4,915 per month. Offshore, it was \$2,285 per month. Offshore locations include India and the Philippines.

### **THIRD-PARTY CONTINGENCY COLLECTIONS**

All issuers work with networks of third-party contingency collectors.<sup>21</sup> A majority utilize the services of these companies prior to charge-off. (Utilization of such services after charge-off is discussed below.) Some issuers place a significant proportion of pre-charge-off accounts with third-party contingency companies. Issuers generally attempt internal or first-party outsourced collections in the early stages of delinquency, and only begin placing accounts with third-party contingency collectors after 60 or 90 days of delinquency.

## **8.4.2 Recovery subsequent to charge-off**

Once an account has been charged off, it can and often does move into one of a variety of channels. Figure 4 details the share of total charged-off debt by the channels utilized right after charge-off. It also shows the largest share of such balances placed in each channel by an individual issuer among the subset of issuers that utilized that channel and also the smallest share for an issuer utilizing the channel. All issuers utilized third-party collections. A majority engaged in internal recovery and litigation. Half of the issuers sold debt.

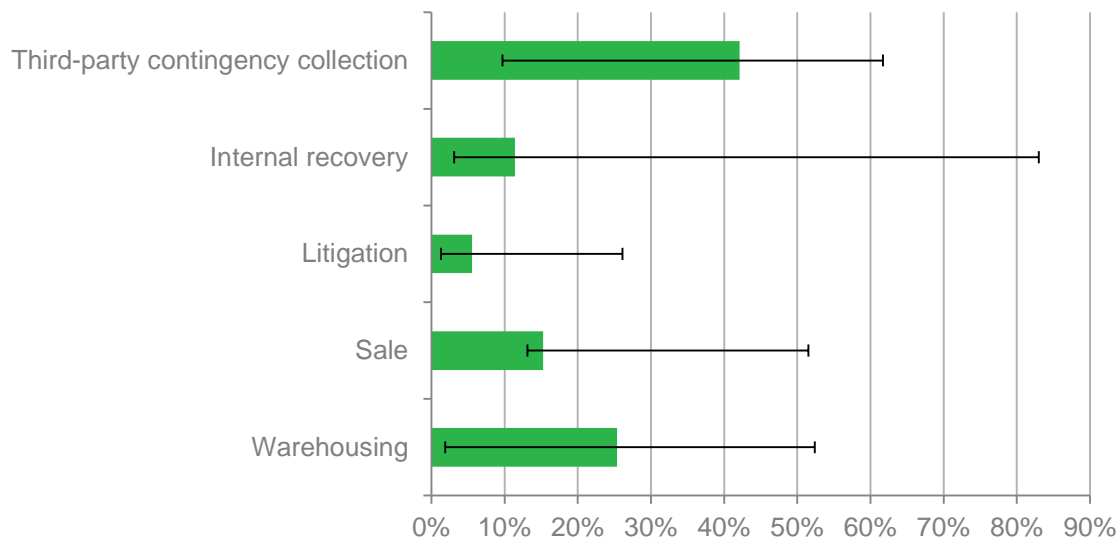
While over 40% of total charged-off debt was placed with third-party collectors and a further quarter simply warehoused, there was substantial variation in issuer practices. Three of the five channels were utilized for over half of all charged-off debt by at least one issuer, and all issuers relied on at least three channels. Several relied on all five.

---

<sup>21</sup> For the purposes of this report only, the third-party contingency collectors (and, as discussed later, attorneys) that form these networks are not related to each other. The contingency collectors' only connection is that the issuer is placing accounts with all of them.

These results should not be construed as implying that all charged-off debts experience one and only one recovery channel. Issuers that exhaust internal recovery efforts often proceed to any of the other channels. One or more issuers retrieve accounts from third-party contingency companies and commence (or resume) recovery efforts in-house whenever they determine internal recovery strategies might be more effective.

**FIGURE 4:** SHARE OF CHARGED-OFF BALANCES BY RECOVERY CHANNEL, 2014 (MMI)<sup>22</sup>



Below we describe our findings relating to four of these channels in detail.

### INTERNAL RECOVERY

Even after accounts are charged-off, issuers may decide to continue recovery efforts in-house or to recall accounts from third-party contingency companies to resume internal recovery efforts. A minority of issuers surveyed retrieves accounts from third-party contingency companies and

---

<sup>22</sup> Black lines running through each bar represents the range of the shares of charged-off balances observed for issuers that used the channel. The share of charged-off balances by recovery channel is based off of where the issuer initially places the account at charge-off. The only exception is for debt that was sold by the issuers. This channel included all debt that was charged off in 2014 and sold, regardless of where it was initially placed. So if the debt was placed with a contingency company and later sold, it would be included in the debt sales channel and not the third-party contingency collection channel.

continues recovery efforts in-house; these companies do so whenever they conclude that internal recovery strategies are more effective. While on average only 10% of charged-off debt was pursued through internal recovery, at least one issuer chose to retain and internally collect over 80% of its charged-off debt.<sup>23</sup>

Most surveyed issuers report that they do not actively collect on accounts that have exceeded state statutes of limitation. These statutes of limitation often prohibit creditors and debt collectors from pursuing debt payments through litigation but generally do not bar other collection attempts. Accounts reach the statutes of limitation after different periods of delinquency depending on the state. The statutes of limitation differ across states. The most common statute of limitation is six years from the last payment or charge on the debt, but some can be as low as three to as high as fifteen years. A minority of issuers actively collect debt from accounts outside the statutes of limitation, except accounts in Wisconsin and Mississippi, which ban the collection of debts outside the statute of limitation, and Massachusetts, New Mexico, and West Virginia, which require additional disclosures.

The IRS considers certain cancelled debt to be taxable income for the consumer. Issuers do have different policies on when and how 1099-C forms are issued to report this income when accounts reach the statutes of limitation and are not being actively collected.

## LITIGATION

When issuers determine that it would be profitable to bring a legal collection action, they will generally refer the account to litigation. Issuers weigh the cost of litigation, which varies by location, against the possible economic returns on a consumer account. While litigation is, on average, even less common than internal recovery when it comes to charged-off debt, the majority of issuers do litigate delinquent accounts, and some issuers place over 25% of charge-offs in the litigation channel.

---

<sup>23</sup> While internal recovery was not observed to be a dominant channel for any one issuer, it was used to some extent by almost all issuers surveyed. The majority of issuers surveyed benchmarked internal recovery performance against third-party networks' recovery performance, allowing issuers to establish recovery standards for the third-party networks or to determine the price at which they were willing to sell debt. Another less-prevalent policy observed was one where issuers did not have an internal recovery process but maintained a control group within the third-party network in order to benchmark recovery performance.

Generally, issuers do not employ their legal departments to litigate debt collection cases, but instead rely heavily on attorney networks across the country to file suits against debtors. However, “pre-legal” collection and recovery actions occur internally, as issuers may notify debtors that their accounts will be referred for litigation in the hopes that such notice may induce repayment. Law firms contracted by issuers may choose to either give consumers notice and a last opportunity to settle the account or immediately request authorization from issuers to take consumers to court.

### **THIRD-PARTY RECOVERY**

All issuers employ third-party contingency collection companies in attempting recovery on charged-off debt, and half of all issuers we surveyed placed nearly half or more of their charged-off balances with such collectors. Again, there is wide variation across issuers, with at least one issuer placing between 20% and 60% of charged-off debt with third-party contingency companies.

Since 2012, half of issuers have drastically reduced the size of their third-party contingency networks. Most of the issuers that downsized their networks reduced them by approximately 50%, while a minority reduced them by approximately 80%. In both 2012 and 2014, all issuers’ networks consisted of at least three such companies. Over the same period, however, the largest single network employed by any issuer we surveyed included 21 separate companies, down from 41. The challenges for issuers in supervising third-party service providers—and risk to consumers from the activities of the third parties—may increase as the size of an issuer’s third-party network increases.

We asked questions concerning the oversight of these companies by issuers, and the broader flow of information between them. Only half of issuers have specialized software to monitor companies’ compliance performance. However, all issuers have limits on consumer contact attempts that they extend to their third-party contingency companies and monitor through various means like routine compliance audits.

Issuers closely follow their third-party networks’ recovery performance in order to determine compensation rates, contract renewals, and debt sale prices. Liquidation rates (that is, the portion of a debt’s face value that is recovered during a certain period) play a significant role in recovery performance evaluations as they represent a company’s or a law firm’s ability to collect delinquent or charged-off balances. This of course adds to the incentive that the third-party

contingency companies have to collect as much as they can from consumers and to do so as quickly as they can, before the debt is recalled.

Collection activity on a portfolio of charged-off debt can occur over a significant number of years. The age of the debt, therefore, is the single largest determinant of its liquidation rate at a given point in time. The tiers of debt described in 8.3.2 are directly related to the age of debt and are indicative of attainable liquidation rates.<sup>24</sup> Once the accounts in a portfolio in primary placement go uncollected, if they are not sold or retrieved for internal collection, they are usually moved to secondary placement. Secondary portfolios of charged-off debt are expected to have lower liquidation rates than primary debt portfolios. This is true of accounts moved from secondary to tertiary placement as well, and so on.

In order to assess the liquidation rates expected from issuers' third-party networks, we asked each issuer to identify primary, secondary, tertiary, and quaternary portfolios placed in January in each year from 2010 to 2014. We then asked them to calculate the cumulative liquidation rate achieved on those portfolios as of December 2014.

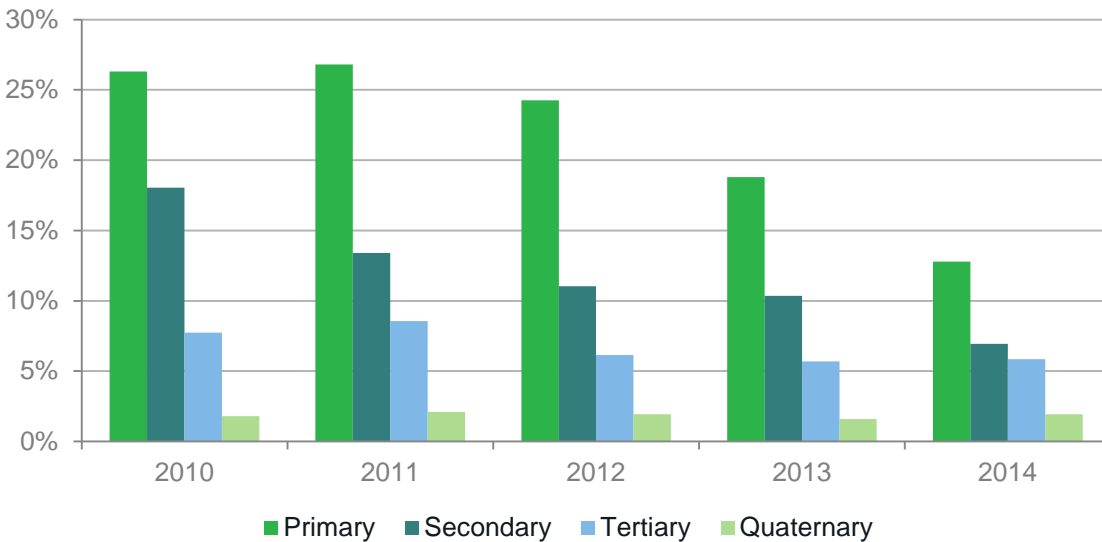
All debt placed in a tier went unrecovered in any prior tier. Each tier's highest liquidation rate, therefore, is the potential liquidation rate of a portfolio with accounts with no prior collection success. The liquidation rates for each tier that we report should *not* be interpreted as liquidation rates of charged-off debt portfolios *while in that tier*. Rather, they are cumulative liquidation rates starting at placement. In other words, the liquidation rates presented in this paper gather subsequent collection efforts up to December 2014.

---

<sup>24</sup> Among the other factors impacting liquidation rates are the scope and nature of pre-charge-off collection activity, the different post-charge-off recovery strategies used by issuers, and the composition of the issuers' portfolios. While age is the single-largest determinant of liquidation rates, different placement strategies implemented by issuers and different underlying characteristics of debt can have substantial effects as well. The liquidation rates of charged-off debt varied greatly by issuer and tier. This variation is explained by the different placement strategies implemented by issuers. For instance, some issuers collect pre-charge-off accounts more actively and at earlier stages of delinquency than others, which then impacts post-charge-off liquidation rates. Additionally, a minority of issuers do not refer accounts for litigation, do not place charged-off accounts with third parties, or recall accounts after first placement. Treatment of accounts prior to charge-off varies greatly among the sampled credit card issuers, further accounting for the variance in liquidation rates by issuer.

Figure 5 below shows the average of the highest liquidation rates of portfolios that were placed in a given tier as of January of the denoted year.<sup>25</sup> Once an account has gone uncollected in a given tier, its expected liquidation rate drops substantially. Figure 5 also shows how long it can take for collection efforts and marginal liquidation rates to diminish. The data for 2014 suggest that, in the course of a year, issuers expect to recover between 10% and 15% of the face value of debt placed that year in primary collections. The 2010 data, however, suggest that over the course of several more years, they may expect to recover an additional 15%, or a total of between 25% and 30% of the face value of the debt.<sup>26</sup>

**FIGURE 5: HIGHEST LIFETIME LIQUIDATION OF PORFOLIOS, BY YEAR AND TIER**



### 8.4.3 Debt sales

The sale and resale of debts have raised concerns about debt data integrity and information flows from creditor to debt buyer to subsequent debt buyers. Debt buyers sometimes resell debt

<sup>25</sup> We averaged the highest rates in order to identify a ceiling on potential recovery when debt reaches a certain tier. The rates are unweighted.

<sup>26</sup> This analysis has some imprecision. Background conditions that change from year to year, including macroeconomic factors, underwriting standards, and many others, can impact liquidation rates.

portfolios, sometimes leading into untraced cycles of reselling that do not safeguard consumer information or guarantee other debt buyers unique ownership of debts.<sup>27</sup> In 2014, the OCC issued a bulletin providing guidance to national banks and federal savings associations engaged in debt sales.<sup>28</sup> The OCC issued supervisory expectations for information exchange, categories of debt that should not be sold, and due diligence practices for debt buyers, among other measures for the application of consumer protection requirements, and safe and sound banking. The issuers surveyed are all regulated by the OCC, and some issuers, as discussed below, ceased or reduced selling debt in the same year that the OCC issued the bulletin.

## VOLUME

The survey asked about debt sales that took place in 2013 and 2014. Half of the issuers we surveyed engaged in sales of charged-off debt in 2013. None sold any debt prior to charge-off. Some issuers ceased selling any debt in 2014 while others that did not sell debt in 2013 recommenced selling debt in 2014. On net, only a minority sold any debt in 2014. Overall, we observed a substantial decline—23.2% year-over-year from 2013 to 2014—in the volume of debt sold. This was largely the result of some issuers ceasing debt sales in 2014. For issuers that sold debt in 2013 and 2014, the volume of debt sold declined by only 2%. The number of debt buyers engaged by issuers has also fallen.

Figure 6 compares issuers that did and did not sell debt in 2014 by their utilization of recovery channels. Of the total debt charged-off in 2014 for issuers that sold debt in 2014, only 29.3% of the charged-off debt was sold to debt buyers. Both sets of issuers relied on third-party contingency collectors equally. Debt sales, therefore, appeared to be an alternative to warehousing. Issuers that sold debt were less likely to litigate, though a minority of issuers that did not sell debt also did not litigate. While no issuer reported plans to increase the share of their charged-off debt sold, some indicated that they planned to decrease their sale volume.

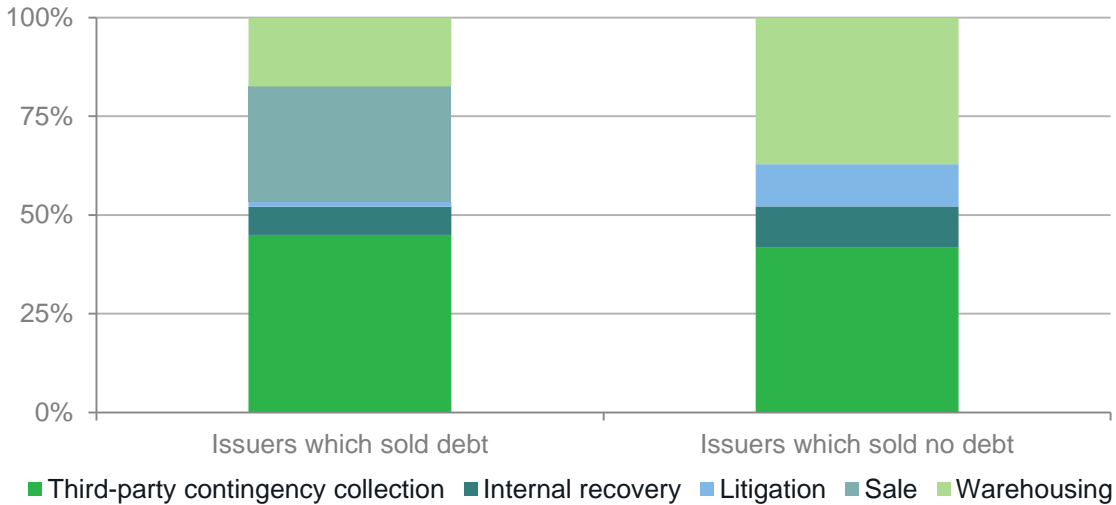
---

<sup>27</sup> “For most portfolios, buyers did not receive any documents at the time of purchase. Only a small percentage of portfolios included documents, such as account statements or the terms and conditions of credit.” Federal Trade Commission, *The Structure and Practices of the Debt Buying Industry* (Jan. 2013) iii, <https://www.ftc.gov/sites/default/files/documents/reports/structure-and-practices-debt-buying-industry/debtbuyingreport.pdf>. This statement applies to sales from creditor to debt buyer. Thus, we can infer that the availability of documents when debt is resold is even more if not equally limited.

<sup>28</sup> See *supra* n.13.



**FIGURE 6:** SHARE OF CHARGED-OFF BALANCES BY RECOVERY CHANNEL, 2014 (MMI)

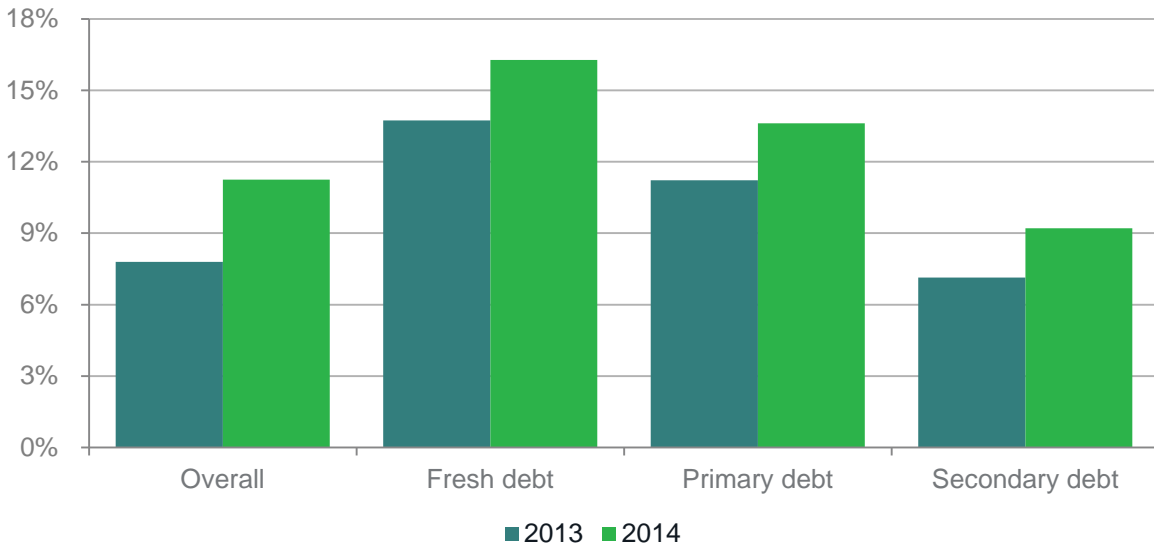


**PRICE**

Debt is generally sold at a deep discount relative to the amount owed, referred to as “face value.” We report the average price of sold debt in Figure 7 below. Two conclusions are clear. First, data from the survey suggests that the age of debt is strongly associated with its price. Second, the price of debt rose substantially—44% overall year-over-year, and that rise was experienced in every tier.

A variety of factors could be affecting the price of debt. A major factor could be the “quality” of the debt. Better account information, better representations and warranties in the sale, and consumers having increasing ability to repay all correspond with increasing expected returns on purchased debt. Supply-side factors could also be at play. Beyond the substantial declines in the gross amount of debt being sold each year, issuers are reducing the number of approved debt buyers (as discussed below) and have generally instituted prohibitions on the resale of debt. While a reduction in overall supply should result in an increased price, the reduction in the number of bidders reduces the demand and should act to decrease the price. The net effect of the issuers restricting the resale of debt is less clear, eliminating the opportunity of the buyer to earn revenue on re-sale while simultaneously depressing the supply of debt available for purchase.

**FIGURE 7:** AVERAGE PRICE OF DEBT SOLD AS A PERCENTAGE OF FACE VALUE, 2013-2014 (MMI)<sup>29,30</sup>



### MARKET STRUCTURE

The debt buying market is highly concentrated. Five debt buyers purchased 89% of the total credit card debt purchased directly from card issuers in 2013.<sup>31</sup>

Issuers that said they sold debt as of 2014 have uniformly reduced the number of debt buyers to whom they sell. Some 27 unique debt buyers purchased debt from the issuers in 2012. That year, individual issuers sold to as few as 12 debt buyers and as many as 20. Only 16 unique debt buyers purchased debt from the issuers in 2014, with issuers selling to as few as a single debt buyer and to as many as all 16.

In addition to reducing the number of approved debt buyers, issuers have placed greater restrictions on whether and under what circumstances those buyers can resell debt. The

---

<sup>29</sup> Fresh debt is debt that has been charged-off but not placed with any contingency company.

<sup>30</sup> The average prices of debt sold are unweighted.

<sup>31</sup> See HSN Consultants, Inc., *The Nilson Report*, Issue 1041, 5 (May, 2014), [http://www.nilsonreport.com/publication\\_newsletter\\_archive.php?1=1](http://www.nilsonreport.com/publication_newsletter_archive.php?1=1).

majority of issuers which sell debt prohibit debt buyers from reselling any debt purchased from that issuer. The remaining issuers allow debt to be resold only if the buyer is dissolving or if the purchasing entity is already approved to buy from the issuer directly. However, most issuers allowed buyers to place purchased accounts with third-party contingency collection companies with which the buyer contracts. The remainder allowed placing accounts only in specific scenarios, such as accounts where the consumer has filed for bankruptcy or has died.

Half of the issuers surveyed condition the sale of debt on buyers forswearing collecting debts on which the statute of limitation (“time-barred debt”) has run. The remaining issuers permit buyers to collect on time-barred debt but explicitly require that they comply with all applicable laws. Some, but not all, issuers that allow the collection of time-barred debt state that they assess whether buyers have procedures and policies in place to manage collection activities on time-barred debt.

Issuers that sell debt generally do so after it has been placed with several contingency companies. The rest, however, have a policy of only selling accounts that have not been previously worked by contingency companies.

#### **REPRESENTATIONS AND WARRANTIES**

As part of our survey, we reviewed recent debt sale and purchase agreements from the issuers that sold debt in the past two years. The agreements were reviewed to see if the following representations and warranties were made:

- The affirmative representation that the seller has title to the accounts;
- The affirmative representation that the seller has complied with all the relevant consumer laws; and
- An affirmative representation as to the accuracy and completeness of the information the debt buyer is purchasing.

Studies have shown that debt sale and purchase agreements prior to 2013 frequently did not make the above affirmative representations or made an affirmative representation with the

caveat that it was “to the best of the seller’s knowledge.”<sup>32</sup> This caveat is significantly less meaningful than a representation as to the existence of a fact. If this caveat is included in any of the above representations, the debt buyers do not have the assurance that they are the actual owners of the accounts, the seller has complied with all relevant consumer laws, or the account information they are getting is accurate. We examined each of these representations in detail. To summarize, while all agreements we reviewed made all of the above representations, a minority of agreements did so subject to the “best of the seller’s knowledge” caveat.

The title to accounts representation generally states that the seller is the unencumbered owner of the accounts in question. Without this representation, the debt buyer does not have assurance that it is buying clear title to the accounts. All of the debt sale and purchase agreements we reviewed gave the affirmative representation that the seller had unencumbered title to the account. These sales contracts state that the seller has, on the transfer date, “title to the accounts, free of all encumbrances.” While the majority of agreements affirmatively state that the seller “will have” the title to the accounts, a minority of agreements continue to state that the seller will own the title “to the best of the seller’s knowledge.”

The affirmative representation that the seller complies with all relevant consumer laws is important because a minority of the debt sale and purchase agreements that we reviewed included in bold language that there are no representations and warranties beyond those “set forth in this agreement.” The affirmative representation of compliance with relevant consumer law may be desired by debt buyers as a way to potentially reduce liability for noncompliance prior to their acquisition of the debt. All of the agreements we received included representations that the seller was in compliance with all relevant laws. However, the “to the best of the seller’s knowledge” caveat was present in a minority of the agreements.

Finally, the representation of accuracy and completeness provides assurance to the buyer that the account information is accurate. None of the agreements included the “to the best of the seller’s knowledge” caveat when making an affirmative representation of the accuracy and

---

<sup>32</sup> See Dalié Jiménez, *Dirty Debts Sold Dirt Cheap*, 52 Harvard Journal of Legislation 120 (2015), <http://poseidon01.ssrn.com/delivery.php?ID=223117004126125093069066117081009018056013034051087067098002119113091078068012013006012058017121015012035003002087099117125115039069054051084086089123126100110095070061093042101069123123084088118072115095109084017072008084104106117024109079022007069124&EXT=pdf>.

completeness of the account information. The majority of agreements we reviewed state that account information is “materially true and correct.” However the remaining agreements state that the account information is “an accurate copy of the seller’s records.” This means that the information is exactly the same as those in the seller’s records. It makes no representation as to the accuracy of the seller’s records. Thus, this form of the representation does not explicitly state that the account information is correct.

## DOCUMENTATION

The provision or availability of accurate and complete account documentation is critical to a well-functioning debt collection marketplace for consumers. While account documentation issues are a concern when issuers outsource debts to first-party collectors and place debts with third-party contingency collectors, owners of these debts issuers may have some incentives to maintain and provide accurate and complete information. Once issuers sell debt to others, these incentives may decrease. Issuers are not always able to obtain documentation requested by debt buyers.<sup>33</sup>

Issuers provided the Bureau with their account documentation policies and procedures as they relate to debt sales. This material provides a snapshot of issuer policy as of mid-2015.

Documentation that issuers provide to sellers includes account statements, the account number, the account holder’s identifying information (such as their Social Security number), written applications, affidavits, cease and desist indicators, attorney representation indicators, and outstanding principal, interest, and fees at charge-off. The OCC expects that national banks and federal savings associations provide buyers with at least 12 monthly statements, or all statements if the account is less than a year old.<sup>34</sup> At least some issuers followed the OCC’s bulletin through a policy requiring the most recent 12 statements to be provided to the buyer at time of sale. Some issuers only required that the last transaction statement be provided as well

---

<sup>33</sup> See Press Release, Consumer Financial Protection Bureau, CFPB Takes Action Against the two Largest Debt Buyers for Using Deceptive Tactics to Collect Bad Debts (Sept. 9, 2015), <http://www.consumerfinance.gov/newsroom/cfpb-takes-action-against-the-two-largest-debt-buyers-for-using-deceptive-tactics-to-collect-bad-debts/>.

<sup>34</sup> See *supra* n.15.

as a “charge-off statement” detailing the final payment made, the remaining balance, and the date of charge-off.

If the debt buyer requests a document that it does not currently have from the issuer, a document retrieval fee may be charged. All issuers provided information on policies regarding document retrieval fees. Half the issuers did not charge document retrieval fees for debt sales made in 2015. For those that did, the fee charged per document tended to be around \$10, with fees ranging from \$5 to \$15 per document. These issuers sometimes, though not always, charged based on the type of document, and sometimes still made some documents available for free.

Among issuers that charged at least some documentation retrieval fees, the determination to provide some documentation without a fee is guided by several factors, including the type of document, the number of documents already requested or provided regarding the account, how recent the sale was, and the total number of accounts purchased. For issuers that made this determination based on the type of document, documents typically provided for free included terms and conditions, statements supporting the balance, and statements illustrating the most recent consumer activity on the account. For issuers that rely on other factors, all documents are provided for free up to a certain threshold, whether it is a certain number of documents per account or up to a certain number of days from the closing date.

Once documentation is requested, a minority of issuers reported having a practice of providing documentation within 60 days. One or more issuers provide expedited processing services at the buyer’s request. The expedited services typically cost an additional \$10.

After accounts have been placed, some issuers continue to provide documentation or account updates to the buyer. Some provide debt buyers with bankruptcy notifications, or pass on any updated consumer information and documents from a source other than the buyer. This would include notices that the consumer is deceased or is represented by an attorney.

## 9. Product innovation

In charging the Bureau with reviewing the credit card market, Congress specifically instructed us to assess “credit card product innovation.”<sup>1</sup> We discuss here how innovation is shaping the credit card marketplace.

At many points in this report, we have discussed individual cases in which innovation on the part of credit card issuers and other market participants is reshaping the market in which consumers acquire and use credit cards, in many cases quite dramatically. In section 4 we discuss the rapid shift of credit card marketing and application activity to the online world, and in section 3 we tentatively discuss how that may further impact how consumers shop for credit. In section 5 we examined the degree to which ongoing account management has also shifted to digital platforms, the fast-growing number of issuers which are joining the open credit score initiative, and what those developments might mean for consumers. And in section 7 we discuss in detail the nearly ubiquitous fusion of credit cards with rewards programs, which have increasingly become central to the value proposition of the credit card market to many consumers and may be subsequently redefining the very scope of that market.

In this chapter, we build upon the discussion in other sections of the report to discuss broader innovations in payments and consumer lending that have the potential to drastically reshape how consumers both pay for and finance their spending. The increasing pace of innovation in both of these areas necessarily impacts the credit card ecosystem, in some cases affecting how consumers use their credit cards, in some cases why they use their credit cards, and in some cases whether they use their credit cards at all.

---

<sup>1</sup> 15 U.S.C. § 1616(a)(4)(D).

We discuss many of those key ongoing changes to the market below, divided into two sections. The first examines changes to how consumers execute payments, which may be primarily driven by concerns about payment system security but has implications for consumer credit card usage that go well beyond. The second examines new competitors to card credit, both at point of sale as well as financing longer-term credit. While the Bureau does not prejudge either the direction of the market or the eventual net impact of new technologies on consumer welfare, we note the trends below in particular as ones that appear likely to have outsized impact on the credit card marketplace, consumer payments, and consumer credit in the years to come.

## 9.1 Security innovations

Although many consumers use credit cards online, the term “credit card” remains associated with a credit card in physical form—an embossed plastic rectangle that stores a consumer’s “payment credentials” as a string of numbers and letters, both visually on the card and encoded in a magnetic stripe on the back.<sup>2</sup> The “mag stripe” became widely used on credit cards in the 1970s.<sup>3</sup> Prior to the adoption of mag stripe technology, virtually every time a customer charged a high-dollar item, the merchant hand-wrote a charge-slip and then made a phone call to authorize the charge.<sup>4</sup> The mag stripe enabled much faster processing of credit card transactions, which was convenient for consumers and efficient for companies. It also offered

---

<sup>2</sup> Most American payment cards, including credit cards, are compliant with ISO/IEC 7810:2003, which specifies card size (ID 1-sized cards are 85.6 by 53.98 mm) as well as a host of other characteristics, including “bending stiffness, flammability, toxicity, resistance to chemicals, dimensional stability, adhesion or blocking, warpage, resistance to heat, surface distortions, and contamination.” ISO/IEC 7810:2003, International Organization for Standardization (Mar. 17, 2004), [http://www.iso.org/iso/catalogue\\_detail?csnumber=31432](http://www.iso.org/iso/catalogue_detail?csnumber=31432).

<sup>3</sup> Jerome Svigals describes IBM’s development of the mag stripe in *The Long Life and Imminent Death of the Mag-Stripe Card*, IEEE Spectrum (May 30, 2012), <http://spectrum.ieee.org/computing/hardware/the-long-life-and-imminent-death-of-the-magstripe-card>. As described by Svigals, magnetic stripe payment technology was initially developed to speed airline and consumer banking transactions.

<sup>4</sup> See id.



some additional protection against third-party fraud.<sup>5</sup> By converting payment credentials to electronic form, networks could use database analysis to check for fraudulent use of stolen or lost cards.

Making payment credentials electronic, however, also made it easier for criminals to steal consumers' payment credentials. When a consumer "swipes" his credit card at the merchant, his payment credentials are transmitted from the card to the merchant via specific point-of-sale hardware, then from the merchant to the payment network by the merchant acquirer. Criminals can intercept, or "skim", these credentials during the transaction in a number of ways, including attaching small, hidden electronic devices to point-of-sale devices. Criminals have similarly attached fake fronts to ATM card readers, paired with thin keypads that sit on top of the ATMs' actual keyboards to record consumers' PINs.<sup>6</sup> Criminals can use the same technology for clandestine attachments to gas pumps' payment interfaces and even the doors to ATM vestibules that require consumers to swipe cards to enter.<sup>7</sup> Criminals can also steal consumers' payment credentials in Internet transactions, where there is no physical card to skim. Rather than hardware, criminals rely on malicious software loaded onto consumers' computers (usually by tricking the consumers into installing software) that record credit card information submitted online.

Payment credential theft, however, is not limited to interception at the time of a transaction. Rather, merchants or other participants in the payment transaction (such as merchant payment processors) frequently store consumers' payment credentials in bulk in their own databases, making them ripe target for "hackers."<sup>8</sup> Merchants may have sprawling data networks with

---

<sup>5</sup> Third-party fraud occurs when payment credentials are used fraudulently by someone other than the authorized user or users on the account. In contrast, first-party fraud occurs when an authorized user runs up charges that he or she has no intention of paying.

<sup>6</sup> See, e.g., Brian Krebs, *All About Skimmers*, Krebs on Security (July 2015), <http://krebsonsecurity.com/all-about-skimmers/>.

<sup>7</sup> See id.

<sup>8</sup> See Brian Krebs, *How Was Your Credit Card Stolen?*, Krebs on Security (Jan. 2015), <http://krebsonsecurity.com/2015/01/how-was-your-credit-card-stolen/>.

varying levels of data security.<sup>9</sup> In 2014 alone, hundreds of millions of consumers around the world had their credit card information compromised in high-profile security breaches of merchants, restaurants, casinos, hospitals, and even states.<sup>10</sup>

Electronic payment credentials not only ease criminal theft of payment credentials, but also criminal use of those payment credentials once they are stolen. Once criminals have stolen consumers' payment credentials, they can then use them in two primary ways. They can use the information to manufacture counterfeit credit cards for subsequent use at a merchant in "card-present" transactions. Instruction videos for creating fake credit cards are easily available on YouTube. The relevant equipment, which is generally not illegal to purchase, is cheap and readily available.<sup>11</sup> In the alternative, criminals can use the credit card account information online or over the telephone in "card-not-present" transactions.<sup>12</sup> By some estimates, counterfeit

---

<sup>9</sup> In the 2013-2014 breach of Target Corp., for instance, hackers first broke into the retailer's network using external network access credentials stolen from a provider of refrigeration and HVAC services. See, e.g., Brian Krebs, *Target Hackers Broke in Via HVAC Company*, Krebs on Security (Jan. 2015), <http://krebsonsecurity.com/2014/02/target-hackers-broke-in-via-hvac-company/>.

<sup>10</sup> See Bill Hardekopf, *The Big Data Breaches of 2014*, Forbes (Jan. 13, 2015), <http://www.forbes.com/sites/moneybuilder/2015/01/13/the-big-data-breaches-of-2014/>.

<sup>11</sup> See, e.g., Lisa Eadiccio & James Fanelli, *Not much to forging a counterfeit credit card, technology readily available*, NY Daily News (Feb. 3, 2011), <http://www.nydailynews.com/news/not-forging-counterfeit-credit-card-technology-readily-article-1.133144> (estimating that the relevant equipment can be purchased for \$500 to \$1,000); Keith Wagstaff, *Massive Target credit card breach new step in security war with hackers: experts*, NBC News (Dec. 19, 2013), <http://www.nbcnews.com/technology/massive-target-credit-card-breach-new-step-security-war-hackers-2D11778083> (citing equipment costs as low as \$100); Kevin Poulsen, *One Hacker's Audacious Plan to Rule the Black Market in Stolen Credit Cards*, Wired (Dec. 22, 2008), <http://www.wired.com/2008/12/ff-max-butler/>.

<sup>12</sup> Credit cards include a three or four digit numerical code, known as a Card Verification Value (often abbreviated as the CVV, CVV2, CVC2, or CID, depending on the payment card network), to help mitigate the risk of card-not-present fraud. See, e.g., Dan Thanh, *Be wary about giving out that security code on your plastic*, The Baltimore Sun (Nov. 13, 2008), [http://articles.baltimoresun.com/2008-11-13/business/0811120089\\_1\\_credit-card-numbers-three-digit-code-card-security](http://articles.baltimoresun.com/2008-11-13/business/0811120089_1_credit-card-numbers-three-digit-code-card-security); Visa Merchant Best Practice Guide for Cardholder Not Present Transactions (undated), [https://www.bs-card-service.com/fileadmin/user\\_upload/com-de/Dokumente/02\\_CONTENT/03\\_Kundenservice/Downloads/Visa\\_Best\\_Practice\\_Guides/Visa\\_Merchant\\_Best\\_Practice\\_Guide\\_CNP.pdf](https://www.bs-card-service.com/fileadmin/user_upload/com-de/Dokumente/02_CONTENT/03_Kundenservice/Downloads/Visa_Best_Practice_Guides/Visa_Merchant_Best_Practice_Guide_CNP.pdf) (last visited Nov. 2, 2015), ("Visa studies indicate that CVV2 is an effective deterrent to fraud in the CNP environment and can reduce fraud in some environments by more than 60%."). Unlike account credentials, merchants are prohibited from storing certain types of Card Verification Codes under the Payment Card Industry Data Security Standard, which makes them more difficult for criminals to obtain as compared to

fraud on credit cards caused \$2.4 billion in system losses and card-not-present credit card fraud caused \$2.8 billion in system losses in 2013.<sup>13</sup>

The increase in payment card fraud is disproportionately American. Between 2007 and 2014, U.S. payment card fraud rates are estimated to have doubled from 0.05% to 0.1%.<sup>14</sup> Today, the United States accounts for nearly half of global payment card fraud even though it is responsible for less than a quarter of total payment card volume.<sup>15</sup> Economists at the Federal Reserve estimated that in 2012 fraud losses accounted for almost four cents of every \$100 transacted in card-present credit card transactions in the United States and for over eleven cents of every \$100 transacted in card-not-present transactions.<sup>16</sup>

Pursuant to federal regulation and the rules of the major credit card networks, consumers who detect fraud and notify their card issuer are generally shielded from the direct financial impact of most fraud relating to credit cards. Specifically, the Truth in Lending Act, as implemented by “Regulation Z” (12 CFR Part 1026), ensures that consumers are liable for only the lesser of \$50 or the total amount of charges for unauthorized card-present transactions at the time that the consumer notifies the credit card issuer. As for card-not-present fraud, the cardholder may not be held liable when the card itself (or some other sufficient means of identification of the cardholder) is not presented.<sup>17</sup> The Federal Reserve observed in 2010, however, that consumers

---

account numbers. *See, e.g.*, PCI Security Standards Council, PCI Data Do's and Don'ts, (Oct. 2008), [https://www.pcisecuritystandards.org/pdfs/pci\\_fs\\_data\\_storage.pdf](https://www.pcisecuritystandards.org/pdfs/pci_fs_data_storage.pdf).

<sup>13</sup> *See, e.g.*, Julie Conroy, *EMV: Lessons Learned and the U.S. Outlook*, Aite Group LLC (June 2014) (estimating that 14% of U.S. credit card fraud is related to lost or stolen credit cards that are subsequently used by criminals).

<sup>14</sup> Julie Conroy, *EMV Lessons Learned and the U.S. Outlook* at 20, Aite Group LLC (June 2014) (Aite's estimate, which includes lost/stolen, counterfeit card, card-not-present, and other U.S. card fraud was based on interviews with card executives from 18 of the top 40 U.S. issuers and payment networks conducted in April and May of 2014).

<sup>15</sup> *See* HSN Consultants Inc., *The Nilson Report*, Issue 1023, 1, 6-7 (Aug. 2013).

<sup>16</sup> *See* The 2013 Federal Reserve Payments Study, Federal Reserve System (July 2014), [https://www.frbervices.org/files/communications/pdf/general/2013\\_fed\\_res\\_paymt\\_study\\_detailed\\_rpt.pdf](https://www.frbervices.org/files/communications/pdf/general/2013_fed_res_paymt_study_detailed_rpt.pdf).

<sup>17</sup> *See* 12 C.F.R. § 1026.12(b) and Comment 12(b)(2)(iii)-3. Note that these rules are specific to credit cards. Regulation E (12 C.F.R. § 1005) addresses erroneous and fraudulent transactions relating to debit cards. Prepaid cards at present are covered by network rules, but generally do not have the full legal protections of the same type. The Bureau has proposed rules that would generally bring prepaid accounts under these provisions of Regulation E.

who notify their issuer of fraud often avoid even the \$50 threshold because “[a]ll of the major credit card networks provide zero liability to cardholders in cases of fraudulent payments.”<sup>18</sup> Of course, consumers must identify fraudulent transactions not detected by the card issuer in order to be compensated. And, while consumers may not ultimately bear the direct financial burden of credit card fraud, payment fraud still can be very disruptive to consumers’ lives. For example, consumers must cancel any payment relationships that utilized the compromised payment credentials, wait for and then integrate replacement payment credentials in their daily lives, and address any issues that may have affected their credit reports. Given that a third of general purpose cardholders possess only a single general purpose card, even a relatively brief gap in the ability to make payments from the account could prove to be a significant financial difficulty.

Merchants and credit card issuers bear the financial brunt of payment card fraud. In response to one survey, merchants self-reported that they lost an average of 0.68% of their revenue in 2014 to fraud, an increase from 0.51% in 2013.<sup>19</sup> The primary driver of the increase appears to be a marked increase in the number of fraudulent transactions, as fraudsters were “bombarding merchants with 61% more attempts at fraudulent transactions – only 55% of which [were] prevented.”<sup>20</sup> Related expenses can range from mandatory forensic examinations, customer notification and credit monitoring, compliance-related fines (by regulators as well as the Payment Card Industry Security Standards Council, which issues data security standards relating to payment card networks), to upgrades or replacements of their point-of-sale systems.<sup>21</sup>

---

<sup>18</sup> Richard J. Sullivan, *The Changing Nature of U.S. Card Payment Fraud: Industry and Public Policy Options*, Economic Review, Q2 2010 (excluding consumer losses from its estimates of fraud-related losses).

<sup>19</sup> See 2014 LexisNexis, Trust Cost of Fraud Study (Aug. 2014), <http://www.lexisnexis.com/risk/downloads/assets/true-cost-fraud-2014.pdf>. Merchants also self-reported that they ultimately paid an average \$3.08 for each dollar of fraud losses.

<sup>20</sup> See *id.*

<sup>21</sup> See, e.g., Small Merchants: The Cost of a Data Breach is Higher Than You Think, First Data Market Insight (2014), [https://www.firstdata.com/downloads/thought-leadership/Small\\_Businesses\\_Cost\\_of\\_a\\_Data\\_Breach\\_Article.pdf](https://www.firstdata.com/downloads/thought-leadership/Small_Businesses_Cost_of_a_Data_Breach_Article.pdf) (estimating that the average cost to small businesses of a data breach is over \$36,000).

Similarly, card issuers bear costs related to fraud like the cost of reissuing cards to consumers, which can cost between \$3 and \$13 per card, or costs relating to customer service calls.<sup>22</sup> In July 2014, the American Bankers Association released a survey of 535 member banks, estimating that the breach of Target, Inc. alone required the reissuance of 8% of respondents' debit cards and over 3% of their credit cards.<sup>23</sup> Similar surveys conducted by the Credit Union National Association estimated that the Target breach cost credit unions nearly \$30 million; a similar breach of Home Depot, Inc. reportedly cost credit unions \$57.4 million, as over 80% of credit unions affected in the latter breach reissued or planned to reissue affected credit cards.<sup>24</sup>

A number of changes in payments infrastructure are now underway to help address payment card fraud. First, "chip cards" will help mitigate the risk of counterfeit cards in point-of-sale transactions.<sup>25</sup> Second, tokenization of payment card credentials can dramatically reduce the value of payment data stolen from merchants and payment networks because any tokens that are stolen in a data breach can only be used for a limited set of transactions. Accordingly, tokenization can attack different types of payment card fraud beyond just counterfeit credit cards, for example card-not-present fraud. Tokenization can also reduce the secondary costs of frauds to consumers and issuers of replacing payment credentials, as discussed further below. Finally, encryption of credit card data, particularly as such data move across the various entities

---

<sup>22</sup> See, e.g., Penny Crosman, *How Much Do Data Breaches Cost? Two Studies Attempt a Tally*, American Banker (Sept. 11, 2014) (estimating card replacement costs for small community banks of \$12.75 per credit card, compared to \$2.99 per card for top-tier banks that can take advantage of economies of scale; also quoting an analyst that estimated that customer service calls were "\$20 a shot."); Mary Thompson, *Credit card fraud jumps, so what's being done?*, CNBC, (Apr. 9, 2014), <http://www.cnbc.com/2014/04/09/credit-card-fraud-jumps-so-whats-being-done.html>.

<sup>23</sup> See American Bankers Association, *Target Breach Impact Survey* (July 2014), <https://www.aba.com/Tools/Function/Payments/Documents/TargetBreachBankImpact.pdf> (prepared by Benchmarking and Survey Research).

<sup>24</sup> Credit Union National Association, *Home Depot Data Breach Cost Credit Unions Nearly \$60 Million*, (Oct. 30, 2014), [http://www.cuna.org/Stay-Informed/Press-Room/Press-Releases/2014-Press-Releases/Home-Depot-Data-Breach-Cost-Credit-Unions-Nearly-\\$60-Million/](http://www.cuna.org/Stay-Informed/Press-Room/Press-Releases/2014-Press-Releases/Home-Depot-Data-Breach-Cost-Credit-Unions-Nearly-$60-Million/).

<sup>25</sup> Chip cards, of course, are not technologically innovative. They have existed for about twenty years, and have been widely adopted outside the U.S. Within the U.S., however, there has been no mass adoption of chip cards until the current year. Accordingly, we analyze this development below.

involved in a payment transaction, reduces the risk that data are compromised in the first place. However, encryption has little impact on the consumer experience in a credit card transaction, so we do not discuss it in further detail below.

### 9.1.1 “Chip” technology

Beginning in August 2011, Visa, MasterCard, Discover, and American Express (“networks”) announced changes to their default rules, so that under the network rules beginning in October 2015 responsibility for fraud relating to counterfeit card-present transactions shifted to the party that has *not* made the transition to “EMV” technology.<sup>26</sup> This shifting of responsibility between merchants and issuers did not affect the right of consumers to recover for unauthorized transactions.

The Europay, MasterCard, and Visa (or “EMV”) standard, often referred to as “chip” or “smart card” technology, is a security standard for credit and debit card transactions developed in the mid-1990s. The technology is most closely identified with a microchip embedded in a payment card, and is already widely used throughout much of the rest of the world outside of the U.S., particularly in developed economies such as Canada, Australia, and western Europe.<sup>27</sup>

---

<sup>26</sup> See, e.g., Press Release, Visa Inc., Visa Announces U.S. Participation in Global Point-of-Sale Counterfeit Liability Shift (Aug. 9, 2011), <http://apps.usa.visa.com/download/merchants/bulletin-us-participation-liability-shift-080911.pdf>; Press Release, MasterCard Incorporated, MasterCard Introduces U.S. Roadmap to Enable Next Generation of Electronic Payments (Jan. 30, 2012), <http://newsroom.mastercard.com/press-releases/mastercard-introduces-u-s-roadmap-to-enable-next-generation-of-electronic-payments/>; Press Release, The American Express Company, American Express Announces U.S. EMV Roadmap to Advance Contact, Contactless, and Mobile Payments (June 29, 2012), <http://www.businesswire.com/news/home/20120629005538/en/American-Express-Announces-U.S.-EMV-Roadmap-Advance>. Transactions relating to automated fuel dispensers are generally subject to a 2017 liability shift. See, e.g., Press Release, Visa Inc., Visa Announces U.S. Participation in Global Point-of-Sale Counterfeit Liability Shift (Aug. 9, 2011), <http://apps.usa.visa.com/download/merchants/bulletin-us-participation-liability-shift-080911.pdf>.

<sup>27</sup> EMVCo, which manages the EMV specification, estimates that as of the fourth quarter of 2014 over 3.4 billion EMV-enabled cards have been deployed world-wide and that nearly one-third of global transactions utilized the specification. See EMVCo, *EMV Chip Deployment Statistics*, [http://www.emvco.com/about\\_emvco.aspx?id=202](http://www.emvco.com/about_emvco.aspx?id=202) (last visited Nov. 19, 2015).

A traditional “mag-stripe” card provides “static” credentials. An EMV-enabled card, on the other hand, generates a unique, dynamic digital signature as well.<sup>28</sup> This makes counterfeiting the card significantly more difficult than reproducing a mag stripe card. The introduction of EMV in other countries has consistently been associated with marked declines in counterfeit credit card fraud.<sup>29</sup>

Adopting EMV technology, however, involves non-trivial costs. Each EMV chip-card costs significantly more than a traditional mag-stripe credit card to produce.<sup>30</sup> Compliance for merchants requires that they invest in new point-of-sale technology that can “read” chip cards. While estimates vary widely, analysts estimate that merchant hardware costs relating to the EMV-upgrade will cost almost \$2.6 billion by the end of 2018. That estimate does not include costs relating to training, software, or maintenance.<sup>31</sup> Nevertheless, credit card issuers are quickly adopting the new technology, with estimates of 32% of credit cards being EMV-

---

<sup>28</sup> While EMV is often associated in consumers’ minds with the use of personal identification number (PIN) verification, this is not in-and-of-itself a part of the EMV technology and standard.

<sup>29</sup> See, e.g., Julie Conroy, *EMV: Lessons Learned and the U.S. Outlook*, Aite (June 2014), <http://aitegroup.com/report/emv-lessons-learned-and-us-outlook>; see also Wells Fargo Merchant Connect, Issue 19 Q2 2013 (Oct. 2013), <https://www08.wellsfargomedia.com/downloads/pdf/biz/merchant/merchantconnect-Q22013.pdf> (“In the U.K., fraud decreased 69% over 5 years after EMV conversion. In Brazil, counterfeit fraud decreased 80%; in Malaysia, fraud declined by 84%.”).

<sup>30</sup> There are about 1.1 billion credit and debit cards in use in the United States. See Patricia Moloney Figliola, *The EMV Chip Card Transition: Background, Status, and Issues for Congress*, Congressional Research Service (Sept. 8, 2015), available at <https://www.fas.org/sgp/crs/misc/R43925.pdf>.

<sup>31</sup> See, e.g., John Stewart, *U.S. Readiness for EMV at a Low Ebb Despite Looming Deadline, Report Warns*, Digital Transactions (May 6, 2014), <http://www.digitaltransactions.net/news/story/4653>. Low-cost terminal options are available for as low as \$49 to \$100. See, e.g., Statement of Stephanie Ericksen, Vice President, Risk Products, Visa Inc. before House Committee on Small Business Hearing on Transition to EMV Chip (Oct. 7, 2015), [http://smbiz.house.gov/uploadedfiles/10-7-2015\\_ericksen\\_testimony.pdf](http://smbiz.house.gov/uploadedfiles/10-7-2015_ericksen_testimony.pdf) (estimating that as of September 15, 2015, chip-enabled devices are in use at over 314,000 merchant locations); see also Statement Scott Talbott, Sr. V.P. for Government Relations, Electronic Transactions Association before House Committee on Small Business Hearing on Transition to EMV Chip (Oct. 7, 2015), [http://smbiz.house.gov/uploadedfiles/10-7-2015\\_talbott\\_testimony.pdf](http://smbiz.house.gov/uploadedfiles/10-7-2015_talbott_testimony.pdf) (“[T]he cost of the conversion of terminals for the average small business merchant is in the \$50-\$500 range, and the cost and complexity vary depending on whether a small business merchant only needs to convert a single terminal, versus those with multiple terminals or terminals with integrated systems that combine payments functions with other functions, like inventory or payroll.”).

compliant in 2014 growing to near 100% by 2018.<sup>32</sup> Merchant adoption of EMV-enabled terminals has been slower, as discussed below.

Adoption of EMV technology is changing the way consumers interact with merchants and their employees. Chip cards are “dipped” to make dynamic transaction messages, rather than “swiped.” The “dip” requires a processing delay that may be noticeably slower for consumers and merchants when compared to mag-stripe transactions.<sup>33</sup> Some consumers and merchants will simply adapt to the change in transaction speed. But for others it will create an incentive to adopt faster payment technologies that can still comply with EMV standards, such as smartphone payments or contactless cards. There is also the risk that slow dipping speed discourages merchant adoption at merchants who put a premium on expediting the checkout process.<sup>34</sup>

The transition may be confusing for some consumers, particularly because merchant acceptance is projected to be uneven in the near-term.<sup>35</sup> Merchants may be slow to upgrade their point-of-sale terminals to equipment that can accept EMV transactions. This is particularly the case with

---

<sup>32</sup> Alex Johnson, *Migrating to EMV: The (Not So) Final Countdown*, Mercator Advisory Group (Aug. 2015). For various reasons, credit card adoption is much further ahead at this point than debit card adoption.

<sup>33</sup> Mercator Advisory Group’s 2015 Customer Monitor Payments survey found that more than half of EMV cardholders surveyed reported that their EMV transactions took longer than magnetic stripe transactions. Alex Johnson, *Migrating to EMV: The (Not So) Final Countdown*, Mercator Advisory Group (Aug. 2015).

<sup>34</sup> For instance, many merchants currently opt to not use Card Verification Value security measures, effectively accepting a higher risk of fraudulent payments when accepting card-not-present transactions in exchange for a faster checkout process. See, e.g., Daniel Miessler, *Why Some Businesses Require You to Sign Your Credit Card Receipt and Others Don’t*, DanielMiessler.com (Dec. 9, 2008) (“Some merchants require the CVV, and others don’t. It’s up to the business; if they want to pay less for credit card business transactions then they’ll have to bother their customer for a CVV on each purchase. The bank charges them less because if someone submits a CVV there’s a higher chance they have the card, and therefore a lower chance that the number has been stolen separately.”), <https://danielmiessler.com/blog/why-some-businesses-require-you-to-sign-your-credit-card-receipt-and-others-dont/>.

<sup>35</sup> See, e.g., Alex Johnson, *Migrating to EMV: The (Not So) Final Countdown*, Mercator Advisory Group (Aug. 2015) (noting that adoption is “likely to be extremely uneven for the next few years”); see also Patricia Moloney Figliola, *The EMV Chip Card Transition: Background, Status, and Issues for Congress*, Congressional Research Service (Sept. 8, 2015), <https://www.fas.org/sgp/crs/misc/R43925.pdf> (estimating that, as of September 2015, 33% of point-of-sale terminals are EMV-compliant).



small and medium-sized businesses.<sup>36</sup> Other merchants may have EMV-compatible point-of-sale terminals, but may not have actually activated those terminals for such use, so that the transaction is actually processed as a mag-stripe transaction. But given the incentives created by the liability shift, analysts project that widespread terminal adoption will almost inevitably follow, particularly at merchants that see any significant volume of counterfeit fraud.<sup>37</sup>

## 9.1.2 Tokenization

Although EMV can be effective in tackling counterfeit credit card fraud, it does little to address fraud relating to e-commerce and other card-not-present transactions.<sup>38</sup> For a chip card to “work”—in other words, for it to deliver dynamic data—the chip must interface with a terminal that accepts the technology. In a transaction where the physical card is not necessary, such as a purchase made online, a consumer using a chip card will provide the same payment credentials that he would if he used a mag-stripe card—typing in or reading over the phone a name, a static credit card primary account number (or “PAN”), an expiration date, and potentially a billing zip

---

<sup>36</sup> See, e.g., Statement Scott Talbott, Sr. V.P. for Government Relations, Electronic Transactions Association before House Committee on Small Business Hearing on Transition to EMV Chip (Oct. 7, 2015), [http://smbiz.house.gov/uploadedfiles/10-7-2015\\_talbott\\_testimony.pdf](http://smbiz.house.gov/uploadedfiles/10-7-2015_talbott_testimony.pdf) (“[A] small business merchant may view the need to convert to EMV terminals – in order to avoid liability for a \$16 dry cleaning bill or a \$10 car wash paid for by a fraudulent card – as a relatively low priority. By contrast a small jeweler’s risk of liability for a fraudulently purchased \$6,000 diamond ring likely provides a greater incentive to convert to EMV terminals as soon as possible. Small businesses will make this risk/reward calculation, and this will cause variation amongst small business merchants in their respective EMV migration rates.”); see also Discover CEO: EMV Rollout Will Be Rocky, PYMNTS.com (Apr. 22, 2015), <http://www.pymnts.com/in-depth/2015/discover-ceo-emv-rollout-will-be-rocky> (noting that small restaurants, in particular, may lack margins to upgrade point-of-sale terminals); see also John Adams, *Target’s EMV Effort Shows How Tight Deadline Is*, American Banker, (Aug. 27, 2015) (“Target’s completion of its point of sale EMV migration puts it ahead of many merchants, particularly smaller retailers that are expected to miss the October liability shift date, perhaps by a wide margin, hamstrung by resource shortfalls and a lack of options.”); see also Kevin Woodward, *10 Tips for Selling Small Merchants on EMV*, *Digital Transactions* (June 2015) (“One estimate is that more than 70% of small merchants in the United States will not have EMV-compliant POS terminals come Oct. 1 [].”)

<sup>37</sup> See, e.g., John Adams, *Target’s EMV Effort Shows How Tight Deadline Is*, American Banker, (Aug. 27, 2015) (quoting payments consulting and analyst: “Eventually the fraud migration will force merchants of all types to convert, but that process could take some time.”).

<sup>38</sup> Indeed, EMV adoption in other countries, such as the United Kingdom, has correlated with at least a temporary increase of card-not-present fraud. See First Data, *EMV and Encryption + Tokenization: A Layered Approach to Security* (2012), <http://www.firstdata.com/downloads/thought-leadership/EMV-Encrypt-Tokenization-WP.pdf>.

and a static three-to-four digit Cardholder Verification Value. But even in an EMV-enabled transaction at a physical point of sale, the terminal captures much or all of this static data as well.

Accordingly, if payment data (even EMV payment data) is stolen from a merchant, it can subsequently be used for fraudulent credit card transactions that do not require the actual physical card. In 2013, card-not-present fraud made up more than half of all credit card fraud losses even though analysts estimate that card-not-present transactions comprised less than 8% of credit card transaction volume.<sup>39</sup> Moreover, retail e-commerce is now projected to grow 16% a year, or about five times the rate of overall retail sales. Analysts project that combined e-commerce sales will exceed \$1 trillion by year-end 2016.<sup>40</sup> That growth will almost inevitably be coupled with increased card-not-present fraud.<sup>41</sup>

Tokenization attacks card-not-present fraud by limiting the usefulness of stolen data. Generally speaking, tokenization substitutes a high-value item with a low-value one—a “token”—that is more limited in the way it can be used. Encryption differs from tokenization because it protects information by applying mathematical rules to *transform* the data into a new value. Once someone determines what those mathematical rules are the transformation could be reversed for any other information encrypted using the same rules. Tokenization, on the other hand, protects information by *substituting* one value for another, like using a codebook to substitute plain text into code text.<sup>42</sup> In the words of one analyst: “There is no formula, only a lookup.”<sup>43</sup> In

---

<sup>39</sup> See Thad Peterson, *E-Commerce and CNP Transactions: Explosive Growth, Explosive Risk*, Aite Group LLC (Feb. 2015), <http://aitegroup.com/report/e-commerce-and-cnp-transactions-explosive-growth-explosive-risk>.

<sup>40</sup> See *id.*

<sup>41</sup> In July 2015, *The Nilson Report* found that losses incurred by card issuers, merchants, and acquirers grew by 19% over 2014. *The Nilson Report* also found that, for four years in a row, losses to fraud outpaced growth in total card volume. See *The Nilson Report*, Card Fraud Worldwide (Jul. 2015), [http://www.nilsonreport.com/publication\\_chart\\_and\\_graphs\\_archive.php](http://www.nilsonreport.com/publication_chart_and_graphs_archive.php).

<sup>42</sup> See, e.g., Ulf Mattsson, *The Difference between Tokenization and Encryption*, Protegrity, <http://www.protegrity.com/2011/11/the-difference-between-tokenization-and-encryption/> (last visited Oct. 13, 2015). For example, a simple encryption method could be protecting a string of numbers by adding one to the value of each digit. So: 203142 would be “encrypted” as 314253. A different value, 111200, could be encrypted as 222311 under the same rules. In contrast, a tokenization method would be protecting that same string of numbers by

the case of credit card innovation, the current focus of tokenization efforts is protecting consumer account credentials, usually raised in the context of enabling consumer purchases via mobile phones (both at the point of sale as a substitute for credit cards and via in-application purchases on phones' operating systems). But the principle of tokenization has existed in the payments context for a very long time. Indeed, casino chips, scrip, or subway tokens are all early examples of tokenized payments.

The early days of Internet commerce provide a good example of how tokenization can protect consumers in digital payment systems. In the late 1990's, PayPal, Inc. offered a solution for facilitating card-not-present transactions in transactions where consumers did not know if they could trust the merchants with their payment credentials. PayPal's solution was to act as a buffer between consumers and merchants. Consumers would store their credit card information with PayPal. When they later made purchases, consumers would not have to provide their credit card information to merchants; instead, consumers only had to give merchants their e-mail addresses and other PayPal account information. This way consumers could be assured that their underlying payment credentials were not at risk if the merchants they were dealing with turned out to be illegitimate – or more likely, if the merchants subsequently suffered data breaches. If those merchants were bad actors or breached, the only consumer data that would have been exposed would be consumers' e-mail addresses and PayPal credentials, the latter of which have little value outside of the PayPal ecosystem.

A number of current credit card-related tokenization initiatives rely on the same principles, in that different tokenization service providers essentially act as “vaults” where payment credentials, on the one hand, are matched to system-specific “tokens” that are then used in merchant-facing transactions. Tokenization standards and specifications have been introduced by the major payment networks and a number of other institutions and trade groups, but a large proportion of merchants has already adopted tokenization initiatives by their merchant

---

substituting it with an arbitrary string of text, like “doge,” and then keeping, in a codebook, a record that “doge” stands for 203142. The different value in our example, 111200, would be “tokenized” using a substitute that is unrelated to the prior token, for example “Strong Bad,” and then recording that association in the token codebook.

<sup>43</sup> Id.

acquirers.<sup>44</sup> For example, online merchants that allow consumers to store their credit card credentials with the merchant for “one-click” purchases (frequently known as “card-on-file” merchants) rely on tokenization to minimize the risk of a breach.<sup>45</sup> The merchants’ acquirers maintain vaults that store credit card numbers securely, mapping those credentials to tokens, which are shared with online merchants. The merchants hold only those tokens in their databases, relying on the merchant acquirer to later re-associate the token with the underlying payment credential.<sup>46</sup> In all of these tokenized payment systems, the only information transmitted to the merchant is a token, which can be limited to re-use in specific locations,

---

<sup>44</sup> Examples of tokenization standards include efforts by the Payment Card Industry’s Security Standards Council, EMVCo; the Secure Remote Payment Council (which drives EFT networks relating to ATMs); The ClearingHouse; the American National Standards Institute Accredited Standards Committee X9; and the Visa, MasterCard, and American Express payment networks. See, e.g., Tim Sloane, *Payment Networks 2.0: The Battle for Tokenization*, Mercator Advisory Group (Oct. 2014); PCI Security Standards Council, *Information Supplement: PCI DSS Tokenization Guidelines* (Aug. 2011), [https://www.pcisecuritystandards.org/documents/Tokenization\\_Guidelines\\_Info\\_Supplement.pdf](https://www.pcisecuritystandards.org/documents/Tokenization_Guidelines_Info_Supplement.pdf); see also Susan Pandy & Marianne Crowe, *Mobile Payments Industry Workgroup Meeting Discussion on Tokenization Landscape in the U.S.*, Federal Reserve Bank of Boston (Sept. 23, 2014).

<sup>45</sup> See, e.g., Press Release, UL Transaction Security, *Ten Things You Need to Know About Tokenization*, (Oct. 27, 2014), <https://www.ul-ts.com/about/newsroom/ten-things-you-need-to-know-about-tokenization/>. See also Press Release, MasterCard, *MasterCard Continues to Define the Future of Digital Payments with Tokenization Support for App, eCommerce and Recurring Payment Card-on-File Program*, (June 15, 2015), <http://newsroom.mastercard.com/press-releases/mastercard-continues-to-define-the-future-of-digital-payments-with-tokenization-support-for-app-e-commerce-and-recurring-payment-card-on-file-programs/>. MasterCard highlighted the critical role that tokenization plays in enabling card-on-file transactions, as it estimates that the “a typical consumer may have their card number stored in five or more locations.”

<sup>46</sup> At least one commentator has noted that the tokens used by merchant acquirers are actually *better* at identifying consumers than their underlying credit card credentials. See Matt Harris, *Tokenization and the Collapse of the Credit card Payment Model*, *Forbes* (Feb. 15, 2013), <http://www.forbes.com/sites/bruceupbin/2013/02/15/tokenization-and-the-collapse-of-the-credit-card-payment-model/>, (“The important irony here. . . is that the tokens being used are actually more authentic than the underlying “real” identity. Historically and generally, tokens are nonsense strings of characters, designed to abstract away from and hide the true goodies, your credit card number. But consider the token that Braintree is using: the fingerprint of your device plus your location plus a password. . . . Remember, the purpose of the payments query that a merchant initiates when you try to pay for something, whether on-line or in-store, is authentication, i.e., are you actually you? This gets done through the inherently flawed mechanism of merely checking the validity of the card that has been presented (or typed in). What Braintree [has] done is create self-authenticating tokens in a natively multi-merchant construct, and that is a frigging big deal.”).

times, transaction amounts, types of purchases, types of mobile devices, or other variables.<sup>47</sup> This means that thieves should have far fewer incentives to intercept payment data during transactions. Similarly, the data that merchants accumulate about transactions are far less attractive targets for hackers because any stolen information would be of limited use.

Furthermore, tokenized payment systems also cut down the transaction costs to consumers and issuers when payment data are stolen. When revised credentials have to be issued, consumers' underlying credit card accounts would not need to be replaced. This means that consumers' accounts would not have to be closed and re-opened with their issuers; issuers would not need to send new payment cards to consumers. Instead, compromised tokens can be de-activated and new tokens can be digitally re-issued with consumers' accounts by their token service providers and transmitted to their payment devices with little delay.<sup>48</sup>

## 9.2 Mobile payments

The improvements discussed above, particularly new network tokenization standards, have ushered in a new form factor for consumer credit card payments: making payments via mobile phone, both at the point of sale but also via in-browser/in-app purchases.<sup>49</sup> Although long

---

<sup>47</sup> See, e.g., EMV, *Payment Tokenization Specification: Technical Framework Version 1.0*, EMVCo, LLC (Mar. 2014), <https://www.emvco.com/specifications.aspx?id=263>; see also Press Release, Visa, Inc., *Visa Enables Internet-Connected Devices to Become Secure Commerce Vehicles* (July 24, 2014), <http://investor.visa.com/news/news-details/2014/Visa-Enables-Internet-Connected-Devices-to-Become-Secure-Commerce-Vehicles/default.aspx>.

<sup>48</sup> In September 2014, the Federal Reserve Bank of Boston estimated that “[i]ssuers can turn off a token and reissue a new one within seconds if fraud is discovered.” See Susan Pandey & Marianne Crowe, *Mobile Payments Industry Workgroup Meeting Discussion on Tokenization Landscape in the U.S.*, Federal Reserve Bank of Boston (Sept. 23, 2014), <http://www.bostonfed.org/bankinfo/payment-strategies/publications/2014/summary-of-mpiw-meeting-june-2014.pdf>; see also Visa Inc. Press Release, *Visa Enables Internet-Connected Devices to Become Secure Commerce Vehicles* (July 24, 2014), <http://investor.visa.com/news/news-details/2014/Visa-Enables-Internet-Connected-Devices-to-Become-Secure-Commerce-Vehicles/default.aspx>.

<sup>49</sup> Smartphones have long been considered a promising platform for payments for their ubiquity and their functionality. Indeed, as long as a decade ago, the New York Times stated that “the promise of phones that double as digital wallets is not new” and detailed interest from banks, networks, and technology companies in the promise of mobile payments. See Eric Dash & Ken Belson, *Ring Up my Bill, Please*, N.Y. Times (March 21, 2006),

discussed, mobile payments are only beginning to enter the American marketplace. Among other impediments, it has been difficult to store consumers' payment credentials on their mobile phones in a safe manner prior to security innovations like tokenization standards. Now, a multitude of mobile phone-based payment options may alter the way consumers interact with their credit card accounts; nudge or more dramatically change the way consumers shop; or even create an opening for other payments companies to compete with credit cards for consumer payments.

In 2014 Apple introduced Apple Pay, which allowed consumers to add participating credit cards to Apple's "Passbook" application using tokens, rather than storing the consumer's primary account number (the "PAN") associated with each issuer.<sup>50</sup> Announcements regarding similar payment innovations from Google and Samsung quickly followed, as well as similar products offered by a large merchant conglomerate and even large banks.<sup>51</sup>

Many of these different payment platforms rely on different underlying technologies and, accordingly, offer consumers different user experiences as compared to "swiping" or "dipping" the credit card they use most frequently. For instance, in 2010 a joint venture of three major telecommunications companies implemented a system where the consumer's PAN (as opposed to a payment token) would be stored within the phone's secure element. With such an implementation, the chip could theoretically be configured so that it would be powered by the magnetic field generated by a merchant's point-of-sale terminal, which means that a consumer could "tap" a phone against a payment terminal and the chip could send an encrypted, tokenized

---

<http://www.nytimes.com/2006/03/21/technology/21cell.html>. But scaling a mobile payments platform, even one that leverages the existing payment card architecture, entails a number of security-related challenges that have only recently been addressed on a widespread basis.

<sup>50</sup> Nathalie Reinelt, *How Tokenization and Encryption Can Take the Wind Out of a Hacker's Sails*, Aite Group LLC (Oct. 1, 2014), <http://aitegroup.com/report/how-tokenization-and-encryption-can-take-wind-out-hackers-sails>.

<sup>51</sup> See, e.g., Press Release, Merchant Customer Exchange, Merchant Customer Exchange Unveils its Mobile Payment Network, (Sept. 3, 2014), <http://www.prnewswire.com/news-releases/merchant-customer-exchange-unveils-its-mobile-payment-network---currentc-273739621.html>; Pali Bhat, *Tap. Pay. Done*, Android Official Blog (Sept. 10, 2015), <http://officialandroid.blogspot.com/2015/09/tap-pay-done.html>; Romain Dillet, *Samsung Launches Samsung Pay in the U.S.*, Tech Crunch (Aug. 13, 2015), <http://techcrunch.com/2015/08/13/samsung-launches-samsung-pay-in-the-u-s/>.

payment message even when the phone was turned off.<sup>52</sup> Apple Pay, on the other hand, depends on software for operation.<sup>53</sup> This means that the phone must be turned on for it to be used as a payment device. But the use of software also allows for additional innovations. For example, a software interface means that consumers can load more than one card to their wallets and flip through them to determine which card they want to use for each transaction.<sup>54</sup> This could one day allow consumers to use their phones to guide them to the card with the lowest APR or the credit card account that provides the most rewards points for that particular type of transaction (e.g., triple points for gas on one card, as opposed to double points for groceries on the other).<sup>55</sup> Similarly, phones could be used to maximize consumers' use of merchant-provided loyalty points. A major coffee retailer, for instance, attributed 20% of its 2015 U.S. in-store transactions to mobile payments, due in large part to its payment application's tight integration with its

---

<sup>52</sup> See, e.g., Tim Sloane, *Defining a Strategic Path for Banks Regarding EMV, Tokens, Apple Pay, and Mobile Apps*, Mercator Advisory Group (May 21, 2015), <https://www.mercatoradvisorygroup.com/Reports/Defining-a-Strategic-Path-for-Banks-Regarding-EMV-Tokens-Apple-Pay-and-Mobile-Apps/>. (“Even if the handset is turned off, the mobile device can still be used to make a payment since the PAN is in the chip, and the chip is powered by the magnetic field generated by the [point of sale] and will communicate the PAN in an encrypted format to the [point of sale].”). AT&T, T-Mobile, and Verizon ultimately sold this technology to Google, Inc. See Jason Del Ray, *Google Strikes Mobile Payments Deal with Big Wireless Carriers, Buys Softcard Technology*, re/code (Feb. 23, 2015), <http://recode.net/2015/02/23/google-strikes-deal-with-big-wireless-carriers-buys-softcard-technology/>.

<sup>53</sup> See, e.g., Tim Sloane, *The Obstacles Facing Android to Enable a Payments Infrastructure that Rivals Apple Pay*, Mercator Advisory Group (Jan. 28, 2015), <https://www.mercatoradvisorygroup.com/Notes/The-Obstacles-Facing-Android-to-Enable-a-Payments-Infrastructure-That-Rivals-Apple-Pay/>.

<sup>54</sup> A software interface also allows for innovation with respect to security features, for example the four-digit personal identification number that can be used to “unlock” a smartphone, Apple’s “Touch ID” fingerprint recognition, eye scans, facial recognition, two-factor authentication, and location-based verification. The use of software for these purposes, however, inevitably introduces new potential security vulnerabilities as well.

<sup>55</sup> The convergence of multiple types of payment cards in one device, however, also runs the risk of confusing consumers. Credit cards and debit cards, for instance, have different error resolution rights relating to fraudulent and erroneous transactions. The payment types may seem interchangeable to consumers, however, due to the user experience of a mobile payments platform. See, e.g., Ruth Susswein, *Emerging tap-and-pay consumer protections*, Consumer Action News (Fall 2015), [http://www.consumer-action.org/downloads/english/fall\\_2015\\_mobile\\_payments.pdf](http://www.consumer-action.org/downloads/english/fall_2015_mobile_payments.pdf). Software-enabled assistance (or automation) of card selection could further complicate this issue, as the software may direct the consumer towards payment options without considering all aspects of the risks of different payment methods.

loyalty program.<sup>56</sup> (The retailer has noted publicly that its reward members spend three times more than its non-reward customers.)<sup>57</sup>

Mobile phone-related payment innovations have the potential to change consumer behavior even further, affecting other behaviors beyond just how consumers pay for goods and services. For instance, that same coffee retailer added a function to its mobile payment application in September 2015 that allowed consumers to order their coffee on their phone and pay before entering the store—an arguably new consumer experience for that type of merchant transaction.<sup>58</sup> In just its first month, mobile order and payment accounted for approximately 5 million transactions.<sup>59</sup> According to the Federal Reserve’s 2015 Survey of Consumers and Mobile Financial Services, smartphones are already changing the way people shop and make financial decisions.<sup>60</sup> Some 47% of smartphone users surveyed reported that in the last year they had comparison shopped using their phone while in a retail store, with 69% of such users reporting that this had caused them, at least once, to decide to make their purchase from a different merchant. Some 63% of mobile banking users checked their account balance with the phone before making a large purchase, with over half of these users deciding against the purchase on that basis. The more mobile phones become adopted as payment devices, the greater the opportunity for consumers to use other functions of their phones to comparison shop for products and for forms of payment. For instance, consumers can make use of

---

<sup>56</sup> See John Kell, *Starbucks wants your phone as much as it wants to sell you coffee*, *Fortune* (July 24, 2015) <http://fortune.com/2015/07/24/starbucks-mobile-investments/>.

<sup>57</sup> See Lisa Jennings, *Starbucks: Mobile ordering, payment ‘off to good start,’* *Nation’s Restaurant News* (Oct. 30, 2015), <http://nrn.com/technology/starbucks-mobile-ordering-payment-good-start>.

<sup>58</sup> See Press Release, Starbucks, Starbucks Mobile Order & Pay Now Available to Customers Nationwide (Sept. 22, 2015), <https://news.starbucks.com/news/starbucks-mobile-order-pay-now-available-to-customers-nationwide>. Jamba Juice also offered a similar prepayment program in conjunction with PayPal in 2013. See, e.g., Chloe Albanesius, *Need a Jamba Juice Fix? There’s a PayPal App For That*, *PC Mag* (Jan. 15, 2013), <http://www.pcmag.com/article2/0,2817,2414316,00.asp>.

<sup>59</sup> See *supra* n.57.

<sup>60</sup> See Board of Governors of the Federal Reserve Board, *Consumers and Mobile Financial Services 2015*, (Mar. 2015), <http://www.federalreserve.gov/econresdata/consumers-and-mobile-financial-services-report-201503.pdf>.



automated text messaging services to provide pre-purchase balance alerts that may ultimately dissuade them from making the purchase at all or otherwise “nudge” their behavior.<sup>61</sup>

As consumers choose between the different options available to them for mobile payments, they may be choosing winners and losers in other ways that they are not aware of. Apple Pay, for instance, works *with* payment and technology incumbents—extending the reach of payment card networks by providing a phone-based form factor and increased security features.<sup>62</sup> In contrast, consumers may adopt payment solutions created by new entrants that could potentially bypass the credit card networks entirely, for example by drawing directly from consumers’ bank accounts.<sup>63</sup> Further, payment methods that look relatively similar in their function and use may actually differ dramatically “under the hood,” for example in how and what data they gather about consumers.<sup>64</sup> They may use that data differently, particularly with

---

<sup>61</sup> See, e.g., Consumer Financial Protection Bureau, *Mobile Financial Services* at 26, 46 (Nov. 2015), [http://files.consumerfinance.gov/f/201511\\_cfpb\\_mobile-financial-services.pdf](http://files.consumerfinance.gov/f/201511_cfpb_mobile-financial-services.pdf).

<sup>62</sup> See, e.g., Schneider & Borra, *The Future of Finance Part 2: Redefining “The Way We Pay” in the Next Decade*, Goldman Sachs (Mar. 10, 2015) at 31, (“Considering that a group of banks accounting for 90% of U.S. credit card purchase volume have already partnered with Apple Pay at launch, we believe Apple Pay will not significantly impact the underlying economics of the payments industry.”); see also Juan Pablo Vazquez Sampere, *Apple Pay is Just a Big Giveaway to Credit Card Companies*, Harvard Business Review (Apr. 14, 2015), <https://hbr.org/2015/04/apple-pay-is-just-a-big-giveaway-to-credit-card-companies> (“It’s easy to assume Apple Pay is one in a long line of disruptive innovations from the master of serial disruption. But this time that’s not the case. Apple isn’t behaving as a disrupter here; it’s acting as a reseller.”)

<sup>63</sup> See, e.g., Josh Constine, *CurrentC Is The Big Retailers’ Clunky Attempt To Kill Apple Pay And Credit Card Fees*, TechCrunch (Oct. 24, 2014) <http://techcrunch.com/2014/10/25/currentc/> (last visited Nov. 19, 2015) (“Walmart has long voiced its disdain for credit card processing fees that drain its slim margins, and even filed an anti-trust lawsuit against Visa and MasterCard over them back in 2003, but rejected the settlement they offered because it wanted more. The idea behind MCX was that if enough retailers teamed up, they could convince consumers to adopt their mobile payment system that would let retailers avoid paying credit card fees in the 2 percent to 3 percent range by processing payments through Automatic Clearing House transactions through bank accounts that have much smaller fees.”).

<sup>64</sup> For example, in describing Google’s entering the payments market, the Visa network’s global head of strategic partnerships explained: “Google didn’t get into payments because they like payments. Google hates payments. . . . They spent a lot of money on payments because they want the data. They want the data to support their underlying business, which is search and advertising.” *Visa’s Next Big Business: Tokens and Data*, Pymnts.com (Sept. 25, 2014), <http://www.pymnts.com/in-depth/2014/visas-next-big-business-tokens-and-data/>. Google altered its approach to mobile payments in September 2015. See, e.g., Andrew Martonik, *What’s the difference between Android Pay and the new Google Wallet*, Android Central (Sept. 17, 2015), <http://www.androidcentral.com/whats->

respect to whether they allow third parties to access the payment data. And while the payment systems may look similar to consumers on their face, if and when a mobile payment offering becomes widely adopted, the network effects may make it very difficult to “undo” any of these underlying issues.

Of course, mobile proximity payment platforms are still young. Apple only introduced Apple Pay in 2014.<sup>65</sup> As of October 2015, analysts estimate that Apple Pay is used for approximately 1% of U.S. retail transactions.<sup>66</sup> While PayPal transacted over \$46 billion over mobile platforms in 2014, it has made limited progress with respect to in-store retail payments.<sup>67</sup> Samsung just formally launched its Samsung Pay product in the third quarter of 2015. Likewise, CurrentC, a payments platform being created by a consortium of large merchants including Walmart, Target, Kohl’s, Dunkin’ Donuts, and Exxon, has yet to launch outside of limited pilots.<sup>68</sup> Nevertheless, while absolute levels of enrollment in and use of such platforms remain low relative to the population of active credit card accounts (or even those populations enrolled in mobile applications), that share is likely to grow rapidly. The leader in merchant mobile point-of-sale applications, Starbucks, reported in mid-2015 that its percentage of in-store mobile payment transactions more than doubled, as compared to two years ago.<sup>69</sup> And in October 2015, Chase announced that, beginning mid-2016, it would auto-enroll 94 million consumers into its own

---

[difference-between-android-pay-and-new-google-wallet](#). It is mentioned in this discussion less as a specific issue in and of itself, but rather as an example of the many different potential approaches to payment platforms as the market continues to innovate and mature.

<sup>65</sup> See Nathalie Reinelt, *How Tokenization and Encryption Can Take the Wind Out of a Hacker’s Sails*, Aite Group LLC (Oct. 1, 2014) <http://aitegroup.com/report/how-tokenization-and-encryption-can-take-wind-out-hackers-sails>.

<sup>66</sup> See Olga Kharif, *Apple Pay Faces Tough Crowd in First Year*, Bloomberg Business (Oct. 6, 2015), <http://www.bloomberg.com/news/articles/2015-10-05/apple-pay-faces-consumer-indifference-in-inaugural-year> (the estimate does not specify whether the percentage is measured by the number of transactions or retail volume).

<sup>67</sup> See, e.g., 2014 Full Year Results, PayPal.com, <https://www.paypal.com/webapps/mpp/about> (last visited Nov. 20, 2015).

<sup>68</sup> See Jason Del Ray, *Apple Pay Competitor CurrentC May Not Launch Until Next Year*, re/code (Aug. 12, 2015), <http://recode.net/2015/08/12/apple-pay-competitor-currentc-may-not-launch-until-next-year/>.

<sup>69</sup> See John Kell, *Starbucks wants your phone as much as it wants to sell you coffee*, Fortune (July 24, 2015), <http://fortune.com/2015/07/24/starbucks-mobile-investments/>.

mobile payments platform, Chase Pay.<sup>70</sup> The proposed mobile payment network would be rolled out to 100,000 merchant locations that are part of the MCX network, as well as technology providers that allow for phone-based payments at gas pumps and order-ahead services accepted at 340,000 locations.<sup>71</sup>

The Bureau will continue to monitor this space to understand the benefits and potential risks to consumers.

## 9.3 New competitors

Outside of credit cards and distinct from mobile payments, new entrants to the consumer lending market have brought new life to consumer credit products that are far older than consumer credit cards: installment loans and credit at the point of sale. These new entrants have been able to quickly enter the marketplace and increase competition with credit card issuers for consumer debt by relying on previously untapped capital pools, low-cost business models, and data analytics, particularly using non-traditional data sources. Some analysts project that these new entrants could, over five to ten years, control as much as 15% of the \$843 billion U.S. unsecured consumer lending market.<sup>72</sup>

### DEBT CONSOLIDATION

Marketplace (sometimes referred to as “peer-to-peer” or “platform”) lending has seen enormous growth, as evidenced by the two market leaders, Lending Club and Prosper. From the fourth quarter of 2009 to the third quarter of 2015, marketplace lending platform Lending Club grew

---

<sup>70</sup> See, e.g., Karen Webster, *Through the Mobile Payments Looking Glass*, Pymnts.com (Nov. 2, 2015), <http://www.pymnts.com/news/2015/through-the-mobile-payments-looking-glass/>.

<sup>71</sup> See *id.*; Chase Pay Mobile Wallet Launches – with MCX as a Partner, Pymnts.com (Oct. 26, 2015), <http://www.pymnts.com/news/2015/chase-pay-mobile-wallet-launches-with-mcx-as-a-partner/>.

<sup>72</sup> See Ryan M. Nash & Eric Beardsley, *The Future of Finance Part 1: The rise of the new Shadow Bank* at 12, 19, Goldman Sachs Equity Research (Mar. 3, 2015) (including \$697 billion in general purpose credit card loans; \$75 billion in consumer finance loans; and \$71 billion in retail loans).

originations from \$26 million to over \$2.24 billion per quarter.<sup>73</sup> As of September 2015, Lending Club has facilitated the origination of over \$13.4 billion in loans.<sup>74</sup> And the rate of growth appears to be increasing. Prosper, for instance, took eight years to reach its first \$1 billion in loan issuance; it took just another six months to reach \$2 billion.<sup>75</sup> Many marketplace lending platforms specifically target credit card debt consolidation; Lending Club, for instance, advertises that borrowers who paid off “high interest credit cards” reported that the interest rate on their marketplace loan was an average of seven percentage points lower than their prior debts.<sup>76</sup> Its users self-report that, as of the second quarter of 2015, around one-fifth of Lending Club’s loans (by the number of loans, as opposed to loan volume) were used to pay off credit card debt and a further one-half were used to refinance other debts.<sup>77</sup>

While specific business models may vary, marketplace lending companies are generally operated as “platforms” that connect borrowers with investors seeking to invest in loans originated on the platform. Individuals may participate as investors, but increasingly loans are funded by institutional investors, such as insurance companies, hedge funds, private equity firms, and banks. After securing commitments from investors, the platforms generally work with their banking partners to fund and disburse loans to borrowers. Subsequently, the platform creates a security representing the right to receive principal and interest payments on the loan. The security is then sold to the investors.

As compared to mainstream credit card issuers, marketplace lending platforms retain minimal credit risk, one factor which allows them to grow to large scale quickly. For instance, credit card

---

<sup>73</sup> Lending Club Statistics, Lending Club, <https://www.lendingclub.com/info/statistics.action> (last visited Nov. 19, 2015).

<sup>74</sup> Id.

<sup>75</sup> See *supra* n.72, 9.

<sup>76</sup> See Lending Club, Personal Loans, Lendingclub.com, <https://www.lendingclub.com/public/credit-card-loans.action>, (last visited Nov. 19, 2015) (“Based on responses from 14,986 borrowers in a survey of 70,150 randomly selected borrowers conducted from July 1, 2014 – July 1, 2015, borrowers who received a loan to consolidate existing debt or pay off their credit card balance reported that the interest rate on outstanding debt or credit cards was 21.8% and average interest rate on loans via Lending Club is 14.8%.”).

<sup>77</sup> See *supra* n.74.

issuers have also taken advantage of securitization to fund loans, which allows them to “re-use” capital to make new loans. However, recent changes in accounting standards have required banks to consolidate these previously off-balance sheet loans back onto their balance sheets, meaning that banks have to hold capital against the total managed loan portfolio and retain the associated credit risk.<sup>78</sup> In contrast, the investors in marketplace loans, rather than the platforms themselves, take on the risk of borrower default. Accordingly, before its initial public offering, Lending Club held 1.7% of tangible equity against its receivables portfolio, well below the 14% to 15% typically held by credit card companies.<sup>79</sup> Furthermore, like Internet-only banks, marketplace lending platforms are able to come to market without the cost and investment of building time required of brick-and-mortar branches.

### COMPETITORS AT THE POINT OF SALE

Distinct from marketplace lending, a new generation of online lending products have begun competing with credit cards on another front: real-time underwriting at the point of sale.<sup>80</sup> As with installment lending, discussed above, underwriting at the point of sale is hardly a new

---

<sup>78</sup> See Ryan M. Nash & Eric Beardsley, *The Future of Finance Part 1: The rise of the new Shadow Bank*, Goldman Sachs Equity Research (March 3, 2015), 13 (describing Financial Accounting Standards 167 and 177, which went into effect in 2010). Other commentators, however, have suggested that marketplace lenders could be affected by regulations approved by the Federal Deposit Insurance Corporation, the Federal Housing Finance Agency, and the Office of the Comptroller of the Currency in 2014 that require securitizers to retain at least five percent of the credit risk of asset-backed securities they issue. See, e.g., Peter Manbeck & Marc Franson, *The Regulation of Marketplace Lending* at 20, Chapman and Cutler LLP (April 2015), [http://www.chapman.com/media/publication/146\\_Chapman\\_Regulation\\_of\\_Marketplace\\_Lending\\_White\\_Paper\\_040815.pdf](http://www.chapman.com/media/publication/146_Chapman_Regulation_of_Marketplace_Lending_White_Paper_040815.pdf) (“In view of the financial impact that risk retention would have on platform operations and the need, of course, to maintain compliance with applicable laws, both Operators and Funding Banks should carefully consider the application of the Final Regulations to their operations and may want to consider asking the Agencies to provide interpretive relief that the Final Regulations do not apply to Platform Notes.”) Likewise, a recent request for information by the U.S. Treasury Department sought comment on whether marketplace lending platforms should be required to use their own capital to back loans they originate, so that they have their own “skin in the game.” Public Input on Expanding Access to Credit Through Online Marketplace Lending, 80 Fed. Reg. 42866, 42868 (July 20, 2015).

<sup>79</sup> See *supra* n.75, 17.

<sup>80</sup> Other non-bank, tech-focused online lenders (“balance sheet lenders”) are similar to, but distinct from, marketplace lending platforms. These lenders generally hold loans, and the associated credit risk, on their own balance sheets for at least several weeks after the loan is funded and made, rather than immediately passing on the credit risk to investors. Both balance sheet lenders and marketplace lending platforms offer a variety of different loan products such as debt consolidation loans, student loans, mortgage loans, or auto loans.

concept. Yet new entrants are able to compete with credit cards for consumer credit at the point of sale by seamless integration with Internet shopping portals and a near frictionless application and approval process.<sup>81</sup> For instance, Affirm, Inc. positions its “Pay Later with Affirm” button as an alternative to entering credit card information via the traditional “checkout” button in an online shopping cart.<sup>82</sup> A consumer enters his name, address, mobile phone number, e-mail address, date of birth, and the last four digits of his Social Security number.<sup>83</sup> Affirm uses its own underwriting models to make real-time lending decisions at digital points of sale, including for purchases enabled by mobile phones. “Within a matter of seconds, Affirm will approve or

---

<sup>81</sup> See, e.g., Yuliya Chernova, *Bessemer Backs Consumer Lending Startup Bread*, WSJ Venture Capital Dispatch (Nov. 9, 2015), <http://blogs.wsj.com/venturecapital/2015/11/09/bessemer-backs-consumer-lending-startup-bread/> (“Bread offers a basic unsecured consumer purchase financing loan, similar to ones from competitors such as PayPal, as well as by Affirm Inc., a startup run by Max Levchin, and Klarna AB. These companies are all competing against credit cards. In Bread’s case, it is specifically going after the customers of private-label credit cards, or those that are branded by retailers such as Best Buy or Macy’s.”)

<sup>82</sup> Affirm, though it works with a banking partner to originate loans, is not a marketplace lending platform in that it ultimately retains those loans on its own balance sheet. See, e.g., Dan Kedmey, *PayPal Co-Founder Takes Aim at Credit Card Industry With New Startup*, Time.com (Sept. 27, 2014), <http://time.com/3430817/paypal-levchin-affirm-lending/>. But marketplace lending platforms have also taken advantage of real-time underwriting technology to compete with credit cards at the point of sale. For instance, at least two major marketplace lending platforms partner with medical providers to offer consumers closed-end financing at the point-of-sale for large medical expenses that may not be covered by insurance plans, such as cosmetic and plastic surgery, bariatric surgery, dental work, and fertility treatment. See, e.g., Jonathan Shieber, *Prosper Marketplace Buys American Healthcare Lending for \$21 Million*, TechCrunch.com (Jan. 27, 2015), <http://techcrunch.com/2015/01/27/prosper-marketplace-buys-american-healthcare-lending-for-21-million/>; Press Release, *Lending Club Launches New Education and Patient Financing Product*, LendingClub (Nov. 12, 2014), <https://www.lendingclub.com/public/lending-club-press-2014-11-12.action>.

Likewise, Europe’s largest online “buy now pay later” provider, Klarna, Inc., has partnered with various US networks, and has recently entered into an agreement with Overstock.com to offer credit at the point of sale. See, e.g., Jonathan Shieber, *The Online Buy Now, Pay Later Service, Klarna Adds AmEx as a Partner*, TechCrunch (Sept. 29, 2015), <http://techcrunch.com/2015/09/29/the-online-buy-now-pay-later-service-klarna-adds-amex-as-a-partner/>; Cade Metz, *Now You Can Buy Stuff Online Without Paying Up Front*, Wired.com (Sept. 2, 2015), <http://www.wired.com/2015/09/now-can-buy-stuff-online-without-paying-front/> (“According to the company, it has already signed 15 American customers, including Overstock. The trick is that when you key in your email address, Klarna almost instantly decides if it can extend you some credit, drawing on public and private data about, well, you. If you qualify, it gives you 14 days (and an additional grace period) to pay your bill.”).

<sup>83</sup> Affirm, FAQs “What is required to have an Affirm account”, Affirm.com, <https://www.affirm.com/faqs/> (last visited Nov. 24, 2015).

deny the loan,” potentially offering the consumer an installment loan with an APR of 10% to 30% over a three, six, or 12 month term.<sup>84</sup>

PayPal (and its banking partners Comenity Capital Bank and WebBank) similarly offers a “PayPal Credit” service, formerly known as “Bill Me Later,” to consumers.<sup>85</sup> In public filings, PayPal explains that “lenders extend credit at the point of sale using our proprietary segmentation and credit scoring algorithms and other analytical techniques designed to analyze the credit risk of specific customers based on their past purchasing and payment history as well as their credit scores.”<sup>86</sup> From a consumer’s perspective, a “PayPal Credit” button appears as an option in an online shopping cart.<sup>87</sup> According to PayPal, approval “takes just seconds.” PayPal advertises that PayPal Credit is available for purchases at “thousands of stores that accept PayPal,” eBay, and “exclusively at thousands of other online stores.”<sup>88</sup> In addition to being used for purchase transactions, the product is also available for person-to-person transfers as well.<sup>89</sup>

---

<sup>84</sup> See John Paul Titlow, *With Affirm, PayPal Cofounder Has a New Way For You to Buy Things Without Credit Cards*, Fast Company (Oct. 27, 2015), <http://www.fastcompany.com/3052796/elasticity/paypal-co-founder-has-a-new-way-for-you-to-buy-things-in-stores> (last visited Nov. 19, 2015) (“Affirm is hoping to court people with thin credit profiles, such as immigrants and millennials who have chosen not to use credit cards. By pulling in what Lin calls ‘thousands of data points’ beyond one’s FICO score, Affirm is able to get a broader, more accurate idea of how likely each applicant is to repay their loans.”).

<sup>85</sup> This year, the Bureau ordered PayPal to repay consumers \$15 million for engaging in unfair, deceptive, and abusive practices in how it promoted and structured its credit offers, as well as how it integrated them into the broader payment process. It also ordered a fine of \$10 million for the same conduct. See CFPB Takes Action Against PayPal for Illegally Signing Up Consumers for Unwanted Online Credit, Consumer Financial Protection Bureau report (May 2015), <http://www.consumerfinance.gov/newsroom/cfpb-takes-action-against-paypal-for-illegally-signing-up-consumers-for-unwanted-online-credit/>.

<sup>86</sup> PayPal Holdings, Inc., Quarterly Report (Form 10-Q) at 51 (July 23, 2015), <http://www.sec.gov/Archives/edgar/data/1633917/000163391715000008/pypl10-qq22015.htm>.

<sup>87</sup> See FAQs (“How do I select PayPal Credit as my payment method?”), PayPal.com (Oct. 2015), <https://www.paypal.com/selfhelp/article/FAQ2870>.

<sup>88</sup> PayPal Credit, FAQs (“How does PayPal Credit Work”) PayPalCredit.com, <https://www.paypalcredit.com/index.html> (last visited Nov. 19, 2015).

<sup>89</sup> See FAQs, PayPal Credit, PayPal.com (Oct. 2015), <https://www.paypal.com/selfhelp/article/FAQ2862> (noting that for person-to-person transactions “[a] flat fee of 2.9% + \$0.30 US dollars (USD) per transaction is included”). As of October 2014, the APR for standard purchases and cash advances was 19.99%, notwithstanding special offers with lower promotional rates.

As of December 31, 2014, PayPal reports that the total outstanding principal balance of consumer receivables was \$3.1 billion, for which the weighted average consumer credit score was in the prime range.<sup>90</sup>

These kinds of services may offer benefits to consumers if they are consistent with the law and their financing is fair, transparent, and competitively priced.<sup>91</sup> These innovations, however, may also pose risks to consumers if any of those conditions are unmet. The Bureau plans to monitor the evolution of these platforms and the way consumers engage with them in coming years.

---

<sup>90</sup> See *supra* n.86, 34. Some 9.3% of the pool of consumer receivables was due from consumers with subprime scores.

<sup>91</sup> Affirm, for instance, touts its transparency as an advantage over credit card issuers, as well as a lack of late fees or other “sneaky” credit card fees. See John Paul Titlow, *With Affirm, PayPal Cofounder Has a New Way For You to Buy Things Without Credit Cards*, Fast Company (Oct. 27, 2015), <http://www.fastcompany.com/3052796/elasticity/paypal-co-founder-has-a-new-way-for-you-to-buy-things-in-stores> (“So why bother with Affirm when credit cards exist? For one thing, Affirm’s director of marketing Ed Lin tells Fast Company, the company aims to be more transparent than their traditional counterparts. Upon making an Affirm-backed purchase, the customer is explicitly shown how much interest they will be required to pay and what the monthly payments will look like.”).

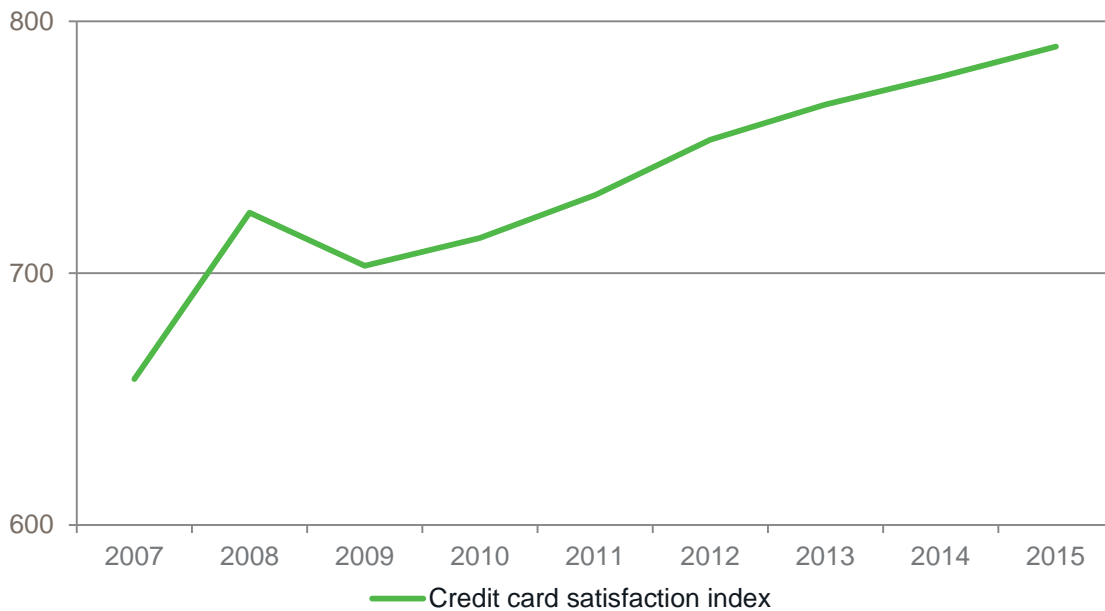


## APPENDICES

# Appendix A: Additional figures

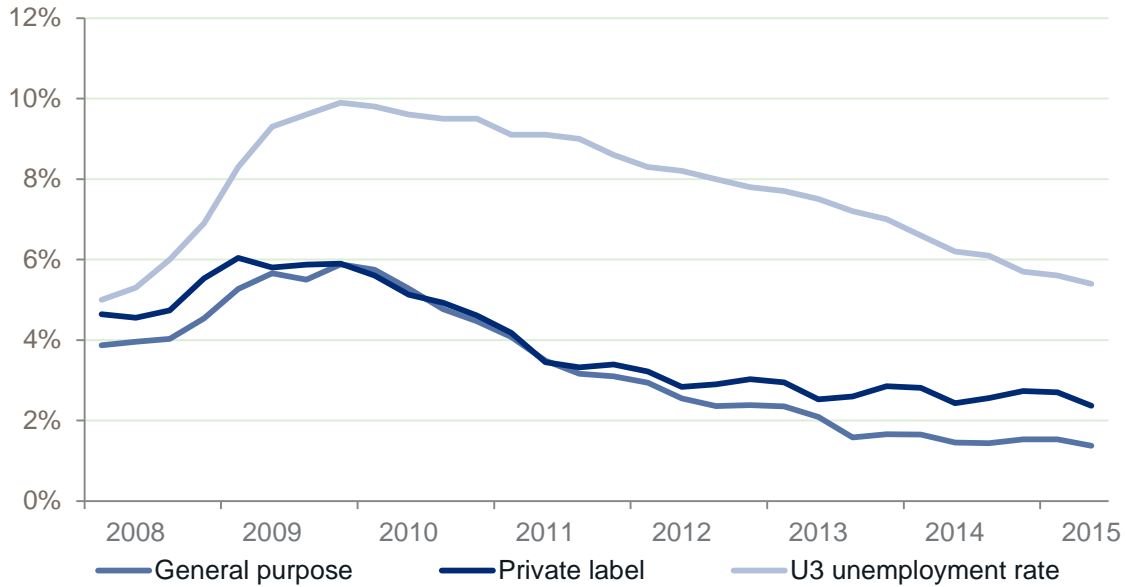
### Executive summary

**FIGURE 1:** J.D. POWER CREDIT CARD SATISFACTION INDEX (BASED ON A 1,000 POINT SCALE)

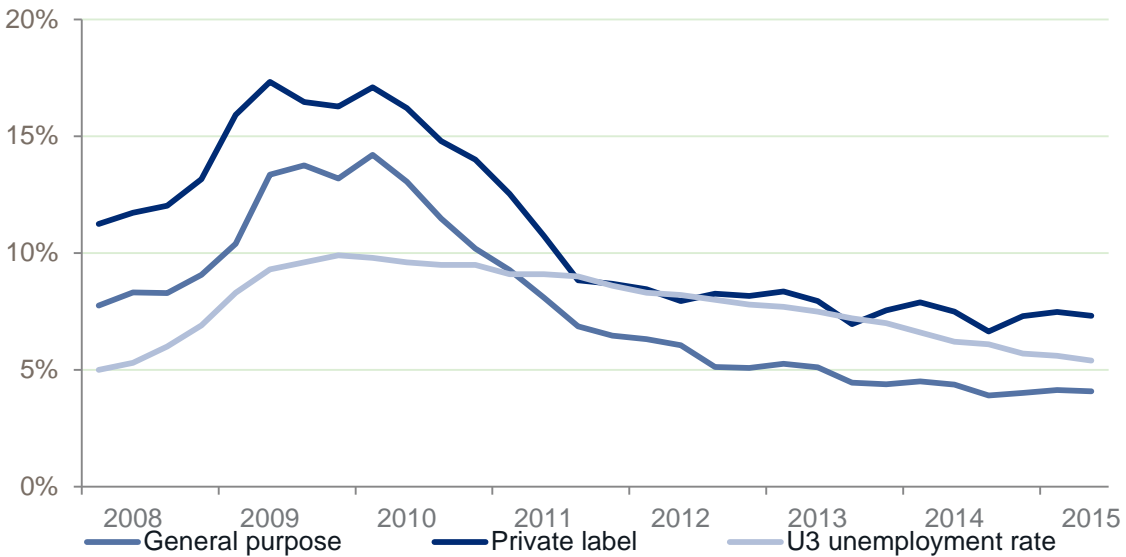


## Consumer credit card use

**FIGURE 2:** SHARE OF BALANCES THREE OR MORE CYCLES DELINQUENT (CCDB), WITH BUREAU OF LABOR STATISTICS U3 UNEMPLOYMENT RATE



**FIGURE 3:** ANNUALIZED GROSS RATE OF OUTSTANDING BALANCE CHARGED OFF (CCDB), WITH BUREAU OF LABOR STATISTICS U3 UNEMPLOYMENT RATE

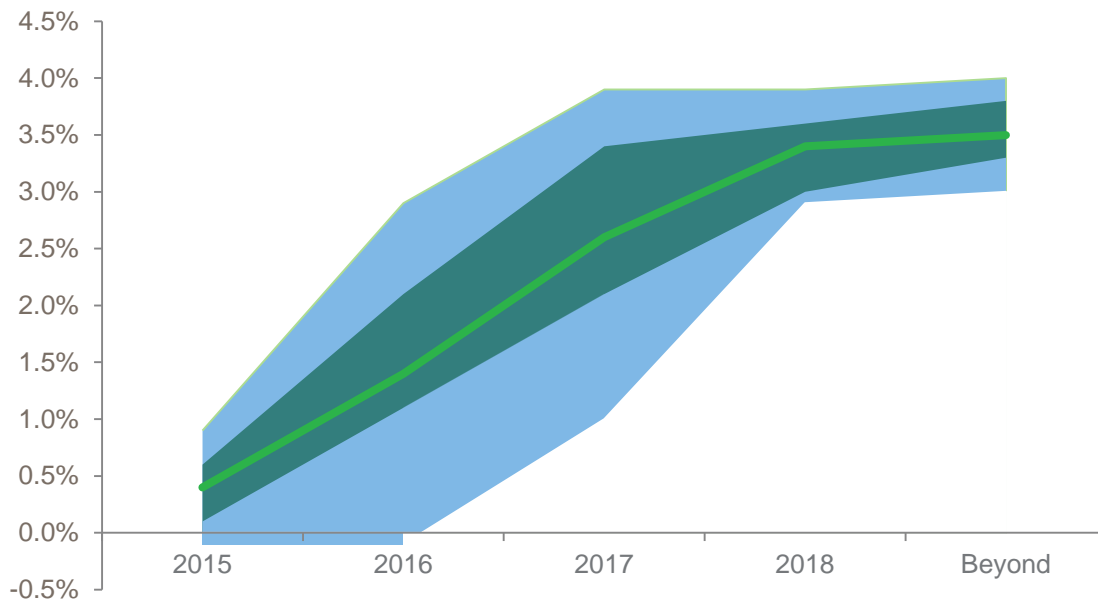


# Cost of credit

**FIGURE 4:** FEDERAL FUNDS RATE COMPARED TO WSJ PRIME RATE

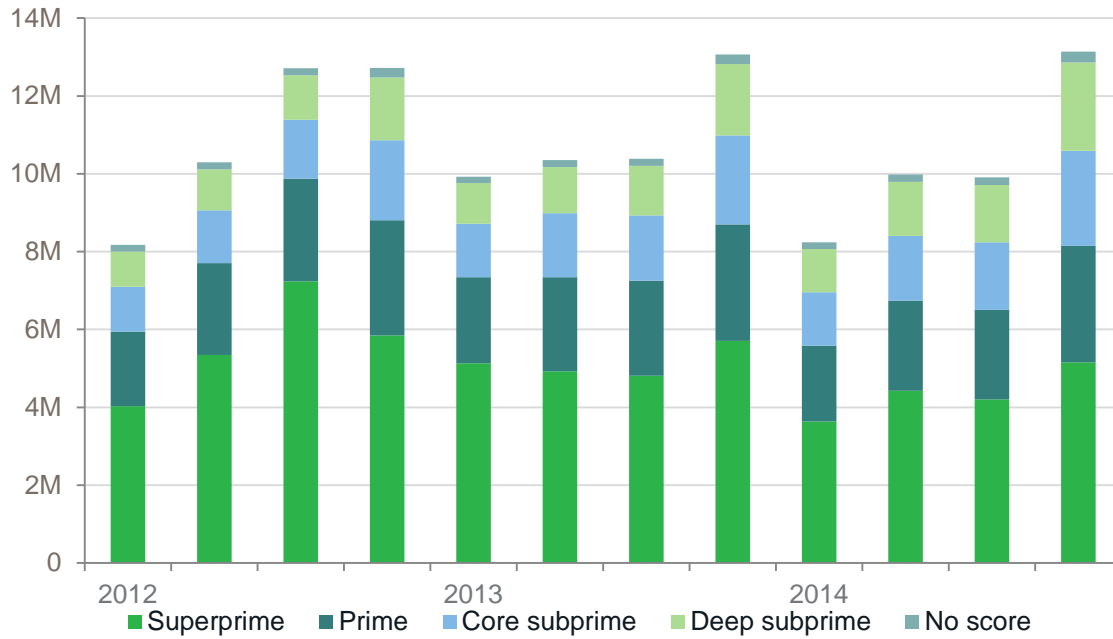


**FIGURE 5:** PROJECTED PATH OF MIDPOINT OF THE FEDERAL FUNDS TARGET RATE RANGE (FOMC)

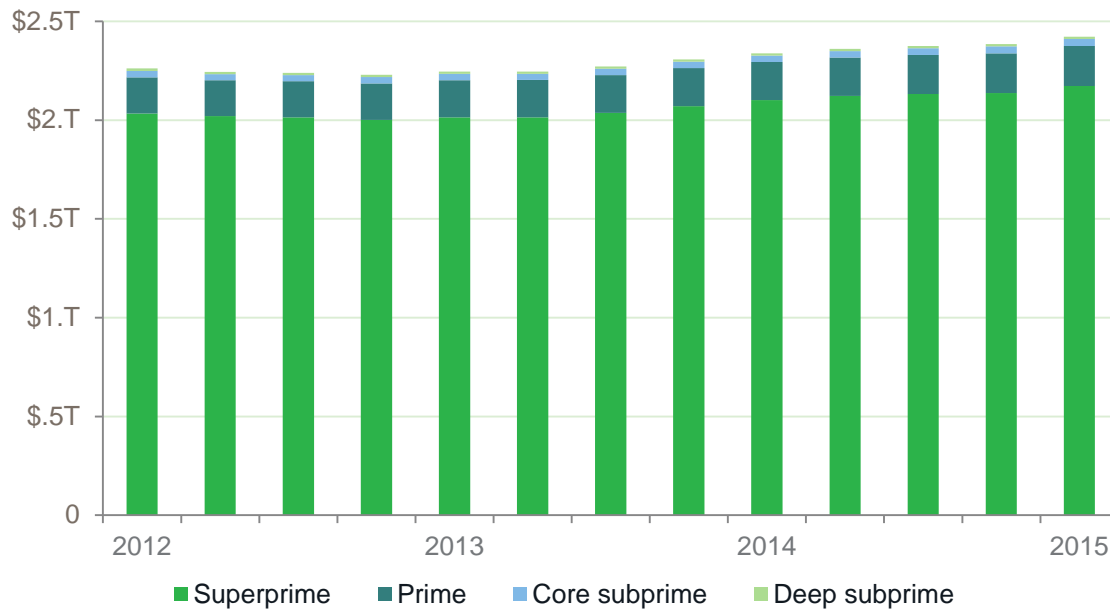


## Availability of credit

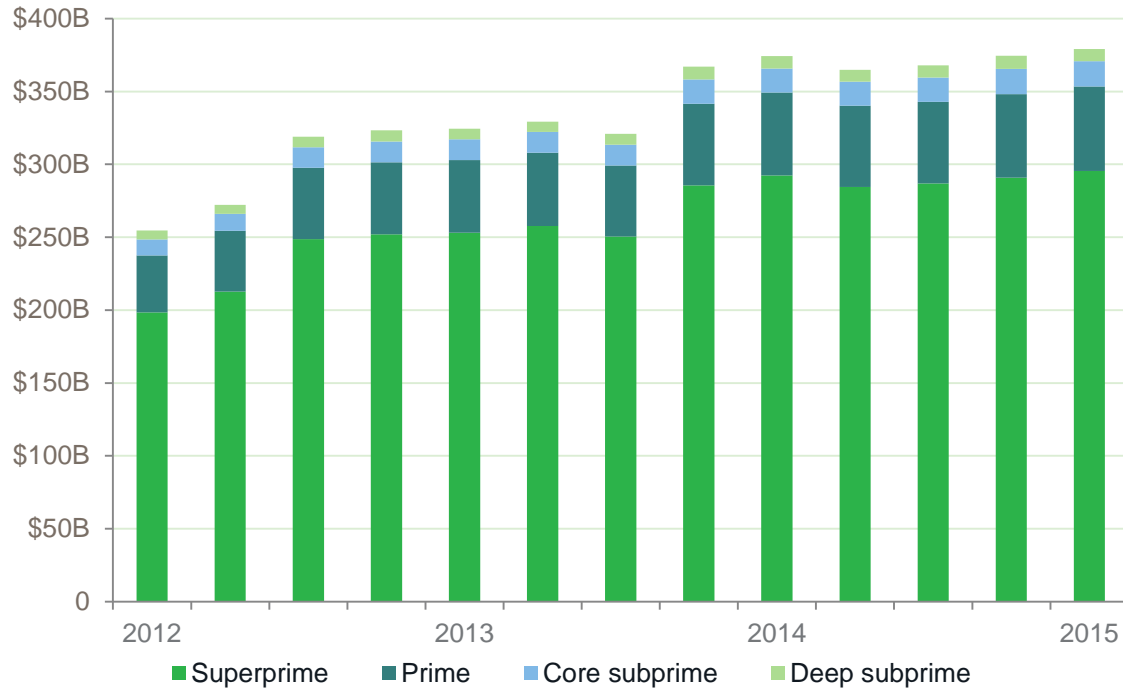
**FIGURE 6:** NEW PRIVATE LABEL ORIGINATION VOLUME BY CONSUMER CREDIT SCORE (CCP)



**FIGURE 7:** TOTAL UNUSED GENERAL PURPOSE LINE BY FICO (CCP)

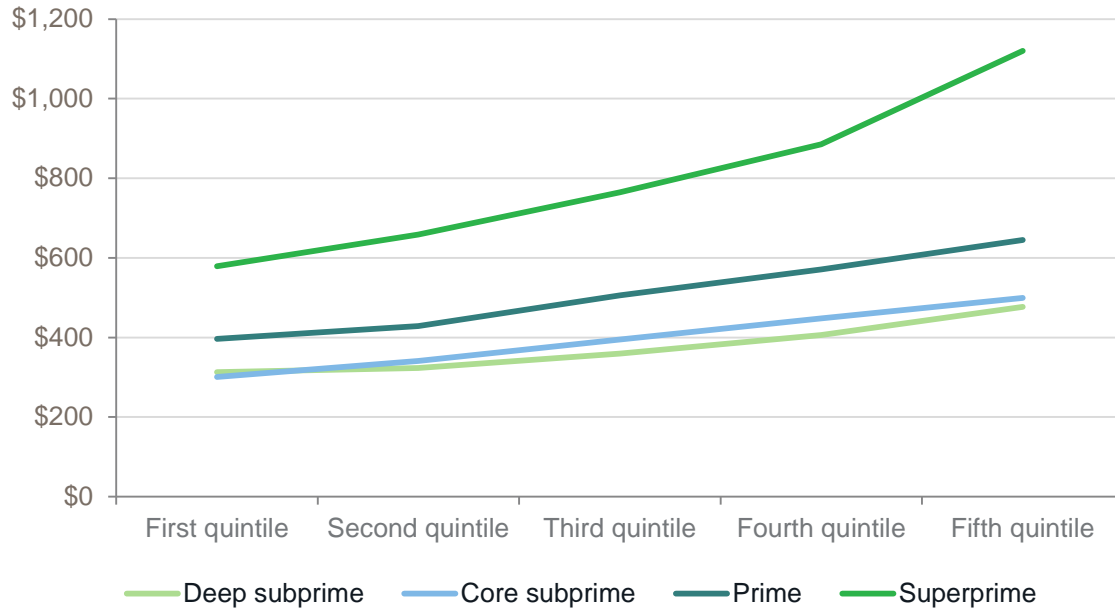


**FIGURE 8:** TOTAL UNUSED PRIVATE LABEL LINE BY FICO (CCP)

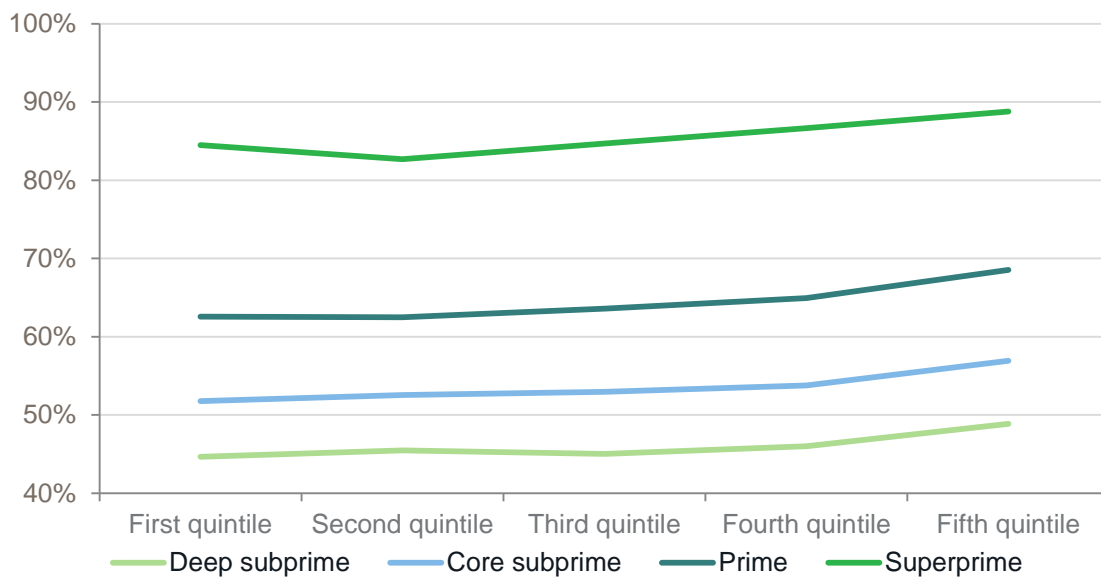


## Deferred interest promotions

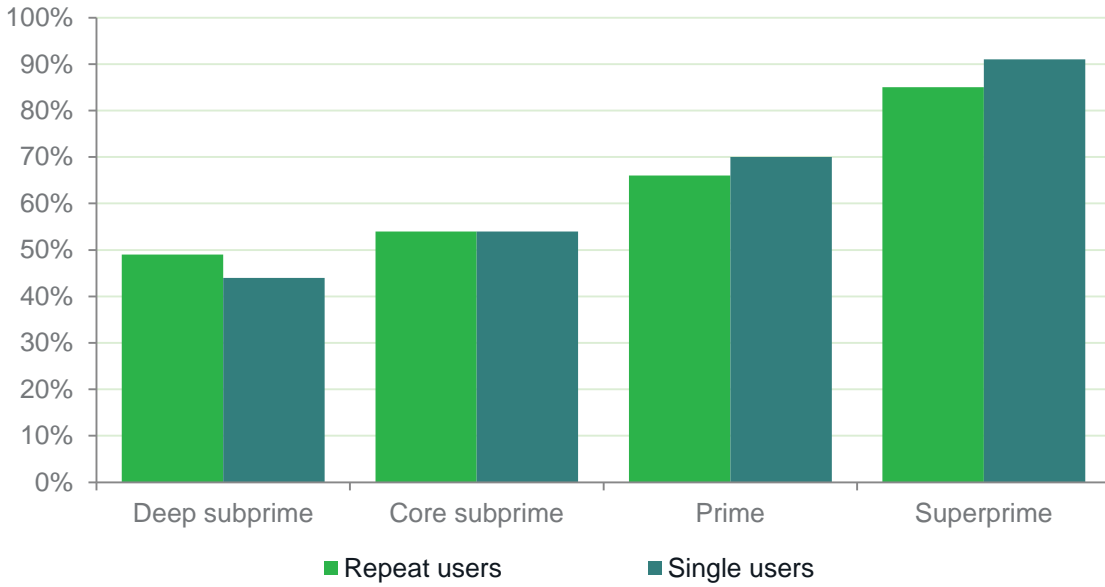
**FIGURE 9:** AVERAGE DEFERRED INTEREST PURCHASE SIZE, BY INCOME AND CONSUMER CREDIT SCORE, 2012 DEFERRED INTEREST LOANS BETWEEN SIX AND 17 MONTHS (DI)



**FIGURE 10:** BALANCE PAYOFF RATE BY INCOME AND CONSUMER CREDIT SCORE, 2012 DEFERRED INTEREST LOANS BETWEEN SIX AND 17 MONTHS (DI)

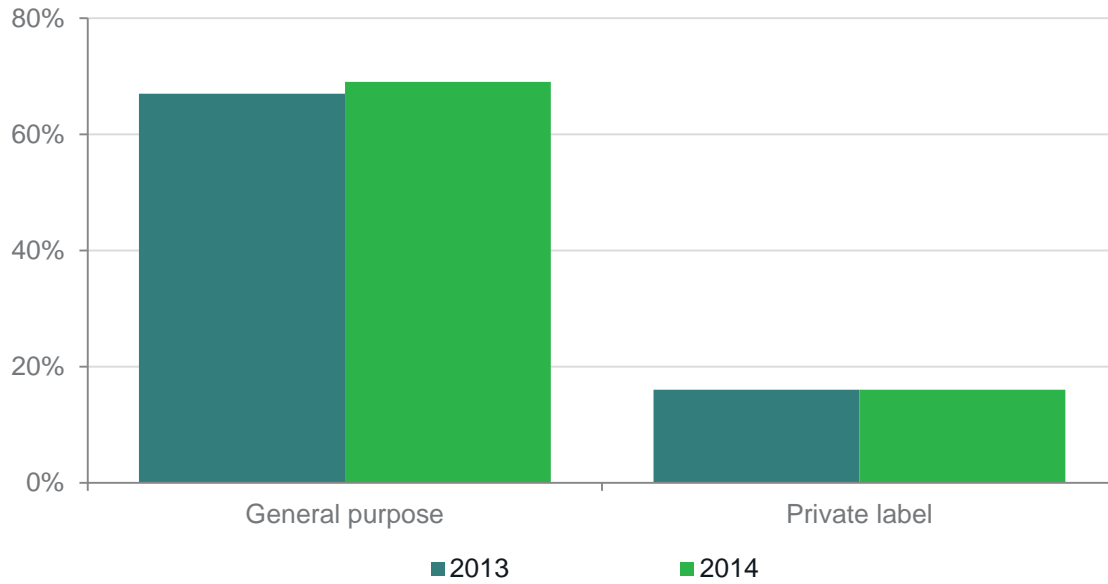


**FIGURE 11: REPEAT USE VS. SINGLE USE ACCOUNT ORIGINATION BALANCE PAYOFF RATES FOR DEFERRED INTEREST PROMOTIONS BETWEEN SIX AND 17 MONTHS, 2009-2013 (DI)**

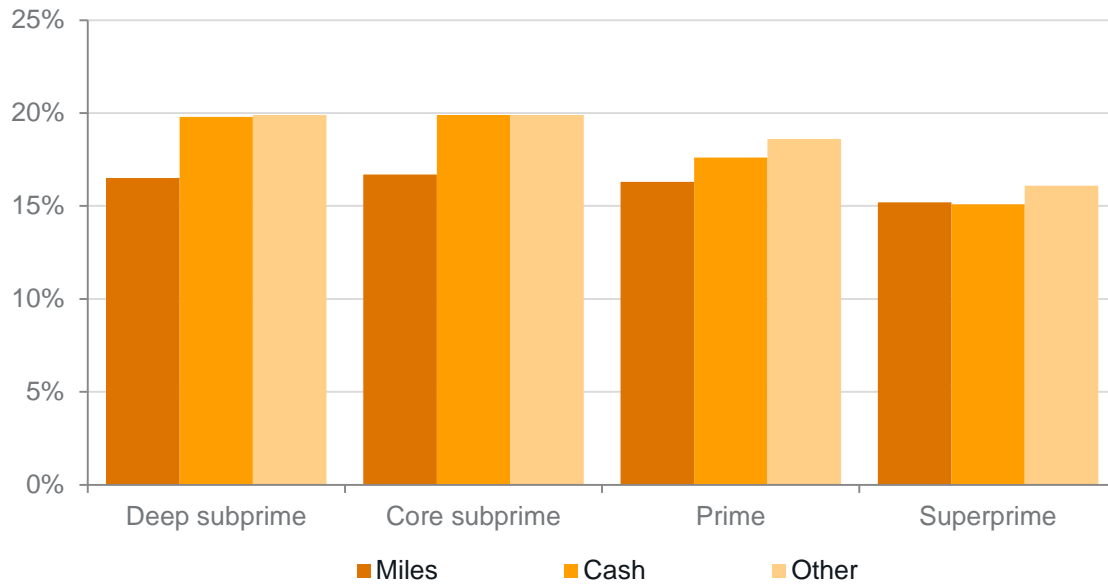


## Credit card rewards

**FIGURE 12:** REWARDS SHARE OF NEW ACCOUNTS, 2013-2014 (CCDB)



**FIGURE 13:** AVERAGE GENERAL PURPOSE RETAIL APR, NEW ACCOUNTS, BY REWARDS TYPE AND CONSUMER CREDIT SCORE, 2014 (CCDB)





# Appendix B: CARD Act timeline

