

June 2018

QUARTERLY CONSUMER CREDIT TRENDS

# End-of-Year Credit Card Borrowing



This is part of a series of quarterly reports on consumer credit trends produced by the Bureau of Consumer Financial Protection using a longitudinal, nationally-representative sample of approximately five million de-identified credit records from one of the three nationwide credit reporting companies.\*

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\* Report prepared by Leonel Drukker and Scott Nelson.

Consumer spending peaks each year during November and December, a period often referred to as the “holiday shopping season.” Nearly 20 percent of annual retail sales occur during these two months each year.<sup>1</sup>

This *Quarterly Consumer Credit Trends* report explores how consumer borrowing evolves around this annual peak in spending. It explores the extent to which consumer debt balances rise during this holiday shopping season and how long balances take to return to their pre-holiday levels. It also studies patterns in consumer delinquencies during this period, in order to help understand some of the financial strain that consumers may experience during or after this time of higher than average expenditure. Additionally, it examines how these experiences differ across consumers with different credit scores and different levels of credit card utilization.

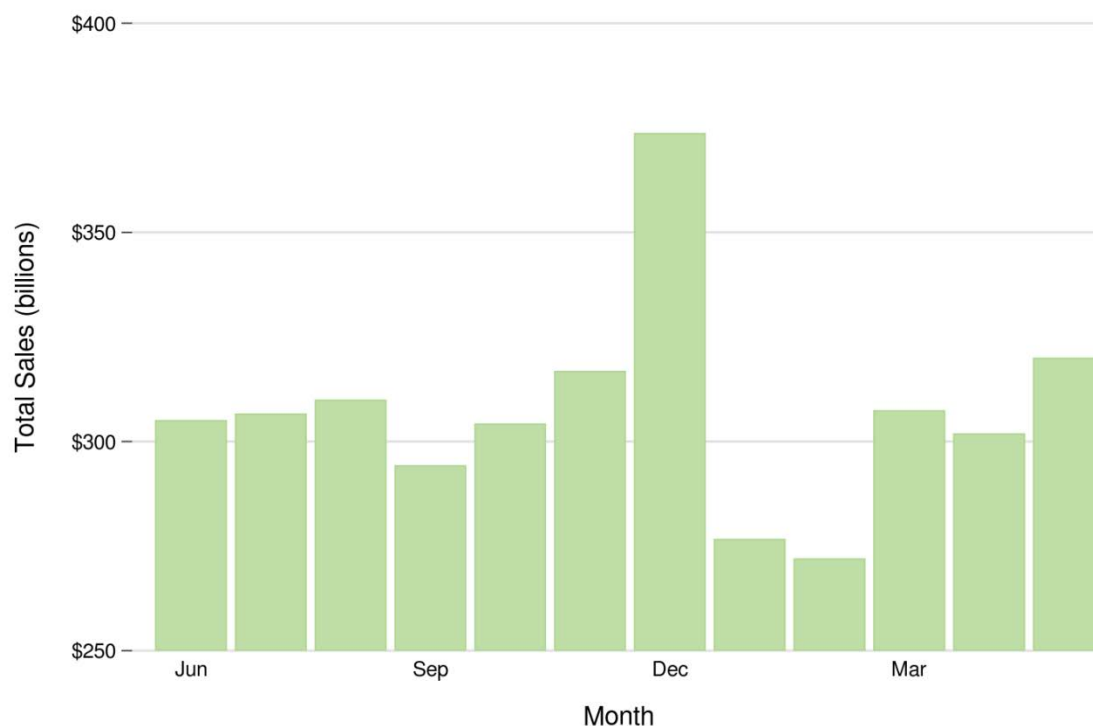
Spending patterns in November and December point to why consumers may choose to make purchases on credit during this time. As shown in Figure 1, retail sales in December are more than \$50 billion higher than they are in any other month. Seasonal peaks in expenditure are particularly pronounced for some categories of durable goods, such as jewelry and household appliances, that can represent unusually large purchases for many households. Furthermore, research from the J.P. Morgan Chase Institute (2015)<sup>2</sup> highlights how such within-year volatility in *expenditures* is typically greater than within-year volatility in *income*: in other words, the holiday shopping season may be a time when consumers have especially high expenses, but not especially high income. Purchases on credit may help make some of these seasonal expenditures possible.

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<sup>1</sup> These figures are from the US Census Monthly Retail Trade Report, available online at <https://www.census.gov/retail/index.html#ecommerce>. Food service sales, as well as motor vehicles and parts, are excluded from the calculation of total retail sales.

<sup>2</sup> Diana Farrell and Fiona Greig (2015). “Weathering Volatility: Big Data on the Financial Ups and Downs of US Individuals.” JPMorgan Chase Institute. Available at <https://www.jpmorganchase.com/corporate/institute/report-weathering-volatility.htm>.

**FIGURE 1: RETAIL SALES BY MONTH**



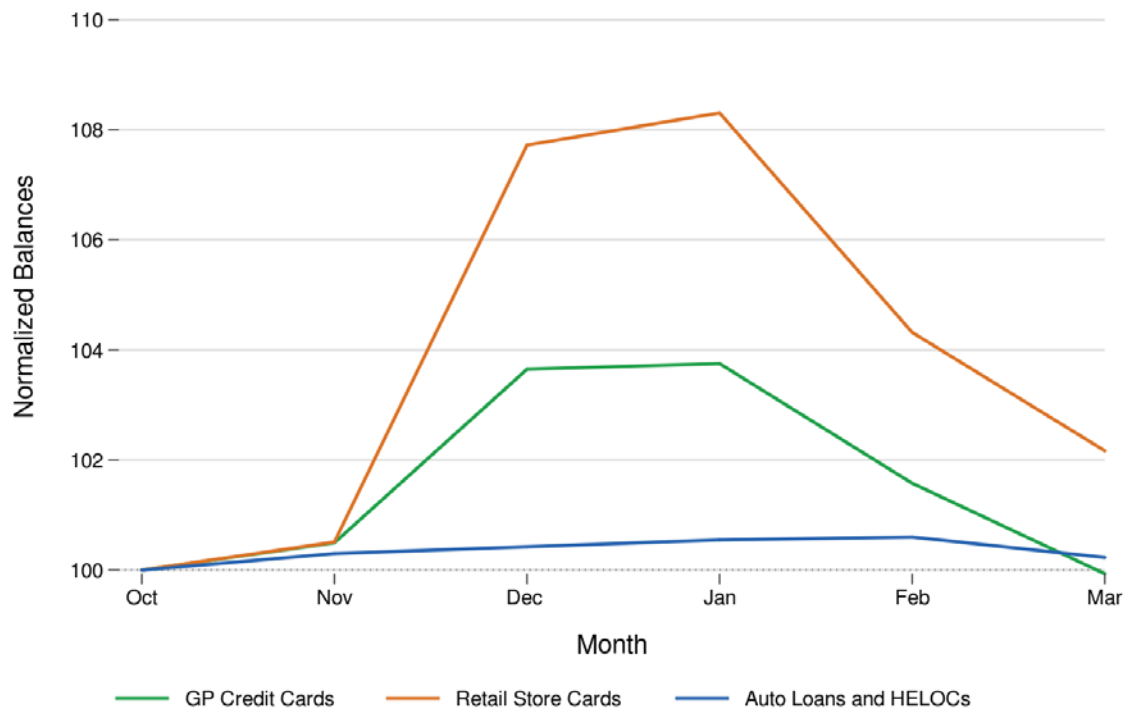
Notes: The figure shows US monthly retail trade sales from 2014-2017. Each bar value reflects its respective average of monthly data points from 2014-2017. Data are drawn from the US Census Monthly Retail Trade Report, available online at <https://www.census.gov/retail/index.html#ecommerce>. Food service sales, as well as motor vehicles and parts, are excluded.

To study consumer borrowing over the holiday shopping season, Bureau staff first examined total, open loan balances each month in the half-year period beginning in October and ending in March, pooling data from the years 2014-2017. These balances are shown below in Figure 2. To facilitate comparison across loan products, aggregate balances are normalized in October of each year to 100, and subsequent months' balances are tracked relative to this October value. As can be seen in the figure, the rise in consumer debt is especially pronounced in two types of credit card: general purpose credit cards, which have broader use wherever their payment network is accepted, and retail store cards,<sup>3</sup> which are credit cards that can only be used at one retailer or at a small group of related retailers. General purpose credit card balances rise nearly

<sup>3</sup> The Bureau's most recent biennial report on the Consumer Credit Card Market (2017) provides a fuller discussion of the differences between retail store cards, also known as private label cards, and general purpose credit cards.

4 percent above their October baseline in an average year by January,<sup>4</sup> and these balances then return to their October baseline by March. Meanwhile, retail store card balances grow more than 8 percent above their October baseline, and these balances take longer to return to their pre-holiday levels.

**FIGURE 2: SEASONALITY IN CONSUMER LOAN BALANCES**



Notes: The figure shows monthly total consumer debt balances for various loan product types from 2014-2017, normalized to 100 by their October levels. “GP” is an abbreviation for general purpose credit cards.

In contrast, two other notable types of loan products, auto loans and home-equity lines of credit (HELOCs), do not exhibit such seasonality. As can be seen in the figure, their balances neither rise during the holiday shopping season nor are repaid faster than usual in subsequent months.<sup>5</sup> These differences between credit cards and other loan products highlight the relatively short-term nature of (some) credit card debt. To the extent that the consumers who take on new credit

<sup>4</sup> Credit reporting companies’ balance data are reported each month for the billing cycle that *ends* in that month; hence these December and January balances reflect billing cycles that span the holiday shopping season in November and December.

<sup>5</sup> The auto loan and HELOC series likewise do not exhibit seasonality over this time period when plotted on their own, rather than as a combined sum.

card debt during the holiday shopping season are the same consumers who repay that debt shortly thereafter in the new year, these patterns indicate that, at least on average, consumers may use new credit card borrowing in November and December as relatively short-term financing. Indeed, consumers who repay their balances within one billing cycle may be charged no interest at all, and in the credit report data used in this study, credit card usage by “transactors” cannot be distinguished from longer-term borrowing by “revolvers.”<sup>6</sup>

Individual consumer experiences may differ in important ways from the aggregate patterns shown in Figure 2. One analysis that sheds light on such heterogeneity across consumers is to decompose the outstanding balances in Figure 2 according to borrowers’ credit scores. Figure 3 illustrates this analysis by plotting the time series of general purpose credit card and retail store card balances separately for consumers with subprime, prime, and superprime credit scores,<sup>7</sup> again normalizing each series’ October value to 100 for ease of comparison.

Panel A of the figure displays consumers’ balances on general purpose credit cards by credit score category. The figure emphasizes how the seasonality in borrowing on general purpose credit cards is most pronounced for consumers with prime and superprime credit scores. Balances belonging to consumers with prime credit scores rise by nearly 5 percent above October baselines in December and January, and balances belonging to consumers with superprime credit scores rise to an even greater extent, by more than 12 percent. Both of these consumer groups then exhibit declining balances from January through March. In contrast, aggregate balances of consumers with subprime credit scores show little change from October through January; their balances then exhibit a modest decline in February and March.

Panel B of the figure displays retail store card balances for the same three credit score groups. Unlike for general purpose credit cards, all three groups show a seasonal pattern in retail store card borrowing: consumers with subprime, prime, and superprime credit scores all have rising balances from October until December or January, and all three groups then gradually repay some of these elevated balances in January through March. The seasonal peak is greatest for consumers with superprime credit scores, whose balances reach over 20 percent of baseline,

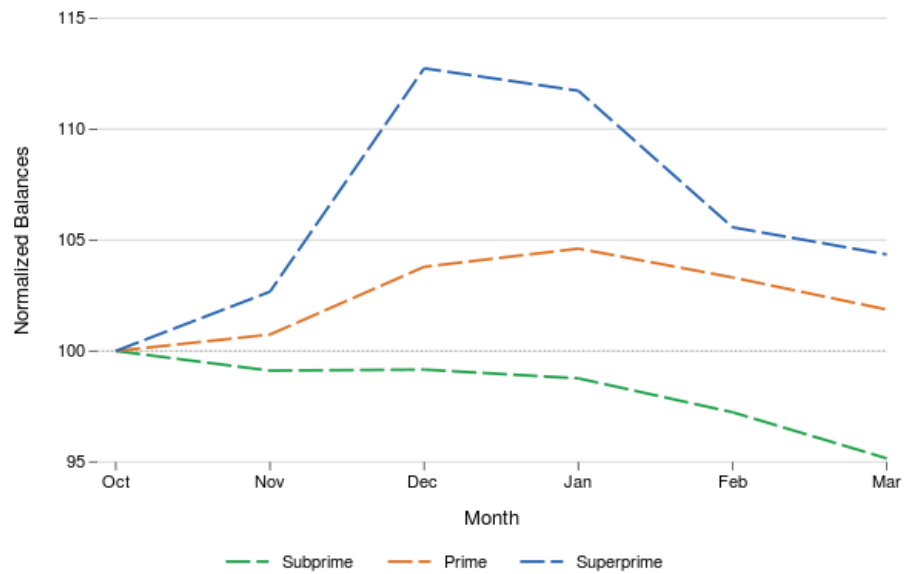
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<sup>6</sup> An important limitation of the data is that the price at which consumers borrow, or whether consumers incur interest charges at all, is unobservable. Consumers who repay their balance in full may be charged no interest at all by maintaining the so-called grace period on their account; such consumers are known as “transactors.” Other consumers might not repay their balance in full but may nevertheless still incur no interest charges in the near term, through no-interest promotional financing.

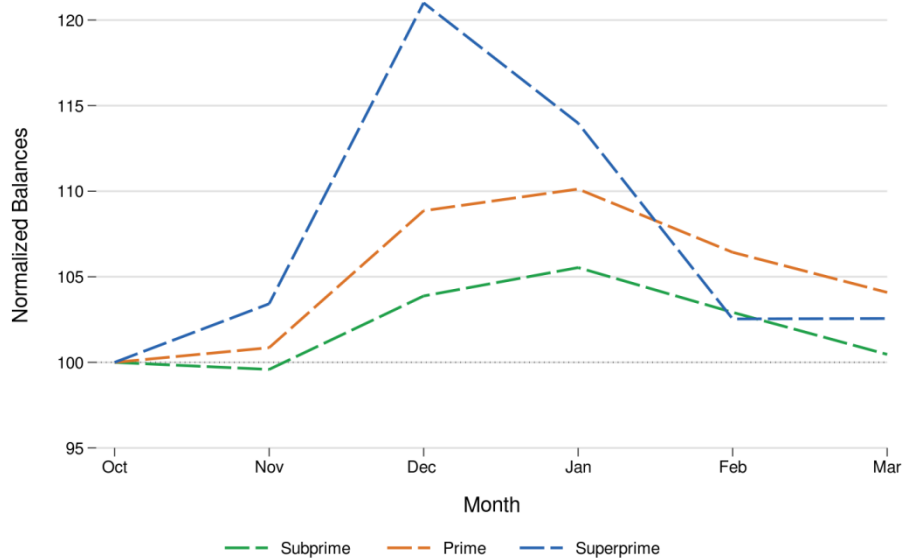
<sup>7</sup> To define these groups, the same convention as in the Bureau’s *Consumer Credit Trends* is used, though to simplify the presentation the various categories of subprime score are combined into one “subprime” group: these consumers with subprime credit scores are those with scores of 660 and below, whereas consumers with scores of 661 to 780 are denoted as “prime,” and consumers with scores over 780 are denoted as “superprime.” Score data are taken from the beginning of October each year, so the composition of consumers in each credit score group does not change over the six months shown in the plot.

**FIGURE 3: SEASONALITY IN CREDIT CARD BALANCES BY CREDIT SCORE**

**PANEL A: GENERAL PURPOSE CREDIT CARDS**



**PANEL B: RETAIL STORE CARDS**



Notes: The figure shows monthly total consumer debt balances for general purpose credit cards and retail store cards from 2014-2017, normalized to 100 by their October levels. Subprime scores are defined as 660 and below; prime scores are defined as 661-780; superprime scores are defined as 781 and above.

highlighting how these consumers' use of retail store cards is especially concentrated within the holiday shopping season each year.

General purpose credit card balances of consumers with subprime credit scores do not exhibit the same seasonality seen for the other series in Figure 3. This difference is at least partly attributable to different utilization rates, or the share of available credit that consumers have already used, as of October in a given year.<sup>8</sup> This finding is illustrated in Figure 4 below. The figure shows consumers' general purpose credit card balances over time by credit score category, separately for consumers with October utilization rates above and below 30 percent. As can be seen, consumers in all three credit score groups have a comparable rise in credit card balances over the holiday shopping season when they have October utilization rates below 30 percent; in contrast, for consumers with October utilization rates at or above 30 percent, their balances exhibit little to no seasonality, again regardless of credit score.<sup>9</sup> As a result, the different patterns across credit score groups seen previously in Figure 3 appear related to the share of consumers in each group who have October utilization rates above 30 percent: more than 80 percent of consumers with subprime credit scores fall above this threshold, whereas fewer than 35 percent of consumers with prime credit scores and 5 percent of consumers with superprime credit scores do so.<sup>10</sup>

The Bureau closes with a note about financial distress that may coincide with higher borrowing and higher than average expenditure during the holiday shopping season. Figure 5 shows that delinquency rates on credit cards rise during and after the holiday shopping season, but also illustrates that these delinquencies differ somewhat between general purpose credit cards and retail store cards. In results not shown, the seasonality in delinquencies appears to be driven by consumers with subprime credit scores.

The first series in the plot shows delinquency rates for general purpose credit cards. This series shows the share of credit-card-holding consumers who are 30 or more days past due on at least

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<sup>8</sup> Utilization rates were calculated across all accounts at the product level: for example, total open balances on general purpose credit cards for a given consumer in October, divided by total credit line on open general purpose credit cards in October for that same consumer.

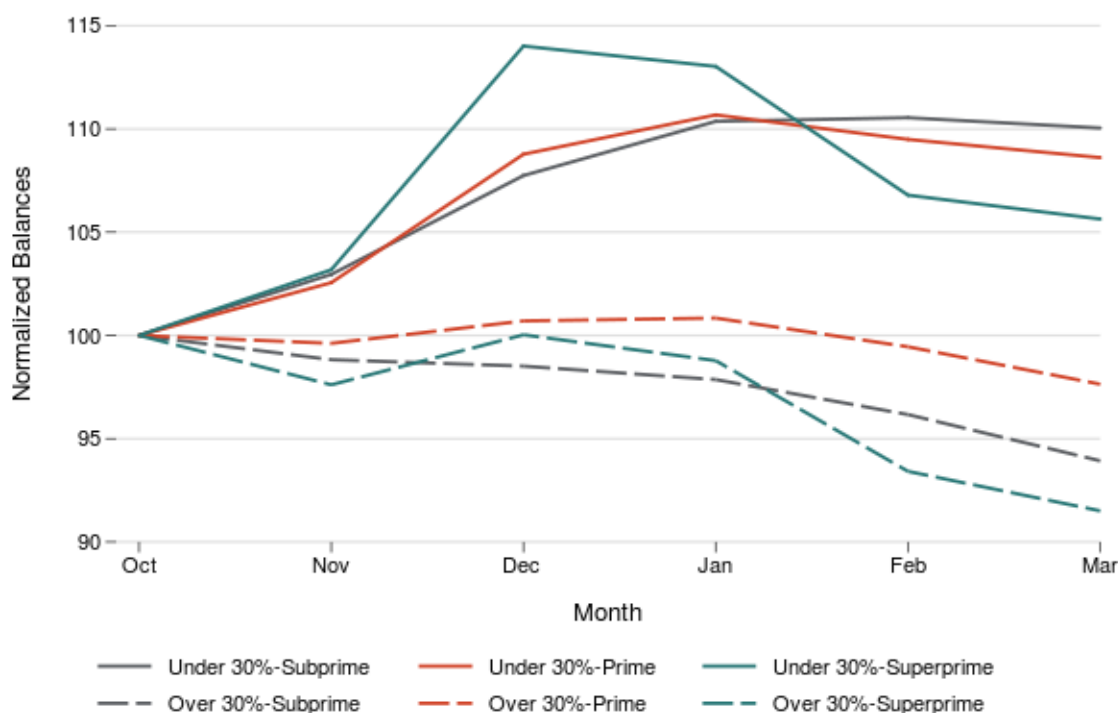
<sup>9</sup> Interestingly this result is true both for relatively low utilization rates over 30 percent (e.g., 30-50 percent utilization) and for relatively high utilization rates (e.g., over 80 percent). In particular, these patterns for consumers with utilization rates of 30-50 percent suggest that demand factors partly play a role in such reduced seasonal borrowing.

<sup>10</sup> In results not shown, retail store card balances exhibit similar seasonality related to credit score and October utilization rates as do general purpose credit card balances. However, the share of consumers with subprime credit scores and below-30 percent utilization is greater on retail store cards: in the years covered in this study, fully 50 percent of consumers with subprime credit scores have retail store card utilization rates below 30 percent as of October, whereas fewer than 20 percent of consumers with subprime credit scores fall below this threshold for their general purpose card utilization rates.



one recently reported account, where this rate is normalized by taking a difference from its October level. As can be seen, delinquencies exhibit a modest uptick of about 0.2 percentage points from October to January and then fall markedly in February and March. These patterns

**FIGURE 4: SEASONALITY IN CREDIT CARD BALANCES BY CREDIT SCORE AND UTILIZATION RATE**



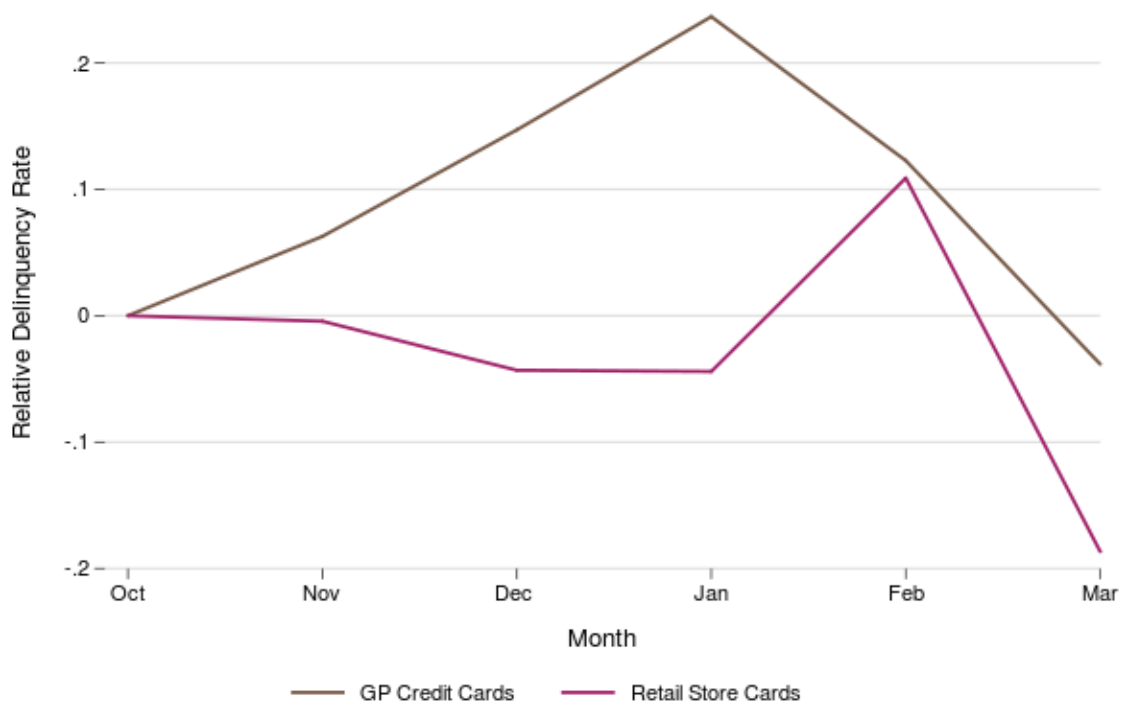
Notes: The figure shows monthly total consumer debt balances for general purpose credit cards from 2014-2017, normalized to 100 by their October levels, separately by credit score group and utilization rate. Subprime scores are defined as 660 and below; prime scores are defined as 661-780; superprime scores are defined as 781 and above. Utilization rates are calculated at the product level: for example, total open balances on general purpose credit cards for a given consumer in October, divided by total credit line on open general purpose credit cards in October for that same consumer.

may indicate financial distress among some credit card borrowers at the end of the year, perhaps as seasonal financial pressures make it more difficult to repay credit card debt. The gradual fall in delinquencies starting in February, however, suggests that at least for some consumers the new year brings a chance to catch up on debt repayment.<sup>11</sup>

<sup>11</sup> Some of this fall in delinquencies may also be attributable to severely delinquent loans being charged off, rather than curing. However, in results not shown, this fall in delinquencies appears for 30-day delinquencies as well as longer-term delinquencies, suggesting that much of this decrease is indeed attributable to cures.

The second series in the plot shows the same delinquency rate for retail store cards rather than general purpose credit cards. Consumers with these cards exhibit an increase in their rates of delinquency on at least one such card in February, and this increase is then more than reversed

**FIGURE 5: SEASONALITY IN RELATIVE DELINQUENCY RATES**



Notes: The figure shows monthly delinquency rates in percentage points on recently reported credit card accounts from 2014-2017, as a difference from their October levels. Recently reported accounts include all open accounts as well as closed accounts that were reported within the preceding 90 days. Delinquency rates are defined as the number of individuals with at least one delinquency of 30 days or more for a given category of loan product, divided by the number of individuals who hold a recently reported account for that category of loan product.

in March. Interestingly the time when these delinquencies ultimately decrease coincides with the period in March when some Americans receive their tax refunds. While it is beyond the scope of this report to study the role of tax refunds in debt repayment or delinquency cures, this pattern is consistent with prior research on the use of tax refunds to pay down debt,<sup>12</sup> the use of

<sup>12</sup> Dan Ariely, Michal Grinstein-Weiss, Krista Holub and Clinton Key (2013). "Refund to Savings (R2S): Insight from the field, 2012." *CSD Research Report*, 13(11). Available at <https://csd.wustl.edu/Publications/Pages/displayresultitem.aspx?ID1=1164>.

tax *rebates* to pay down debt,<sup>13</sup> and the use of tax refunds to otherwise pay for expenses deferred from earlier months.<sup>14</sup>

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<sup>13</sup> Marianne Bertrand and Adair Morse (2009). “What Do High-Interest Borrowers Do With Their Tax Rebate?” *American Economic Review*, 99(2), 418-423.

<sup>14</sup> Diana Farrel, Fiona Greig and Amar Hamoudi (2018). “Filing Taxes Early, Getting Healthcare Late: Insights From 1.2 Million Households.” JPMorgan Chase Institute. Available at <https://www.jpmorganchase.com/corporate/institute/insight-filing-taxes-early.htm>.