The Role of Credit Card Late Fees in Encouraging Timely Repayment Is Essential to Efficient Functioning of the Market

01.18.23

Paul Calem

202.589.2455

Paul.Calem@BPI.com

The imposition of a late fee for failing to pay a bill on time is an established mechanism for incentivizing on-time payment for credit cards, loans, medical debt and other periodic financial obligations such as rent and utilities. The importance of allowing for late payment penalties in credit card lending was recognized by Congress when it passed the Credit Card Accountability Responsibility and Disclosure Act of 2009 (CARD Act). Indeed, the Card Act establishes a framework for card penalty fees, including late payment penalties, that are "reasonable and proportional" to the violation of the cardholder agreement.[1]

The CARD Act also stipulated factors to be considered for determining whether a penalty fee is reasonable and proportional: (1) the cost incurred by the creditor from such omission or violation; (2) the deterrence of such omission or violation; (3) the conduct of the cardholder; and (4) other factors as the Federal Reserve Board may deem necessary or appropriate. It also authorized the Board to establish "safe harbor" limits within which late fees are presumed to be reasonable and proportional (provided they do not exceed the balance owed).[2] Currently the safe harbor limits are $30 for the first late payment and $41 for repeat incidents within a short period of time.

The Board undertook an extensive fact-finding and rulemaking effort to assess the appropriate safe harbor limits. The Board chose to adopt a safe harbor policy in its rules implementing the CARD Act because, the Board reasoned, individualized determinations on reasonableness would be impractical given the complexity of factors involved. The Board also opined that "generally applicable safe harbors will facilitate compliance by issuers and increase consistency and predictability for consumers."[3] Absent the Board's safe harbor, both banks and consumers would have to navigate late fee requirements that could shift dramatically from year to year based upon fluctuating costs or changing deterrence needs.[4]

1. The CFPB's Advance Notice of Proposed Rulemaking Regarding Late Payment Penalties

The CFPB has expressed a desire to address what it has characterized as "junk fees" – indicating that it is "concerned about fees that far exceed the marginal cost of the service they purport to cover, implying that companies are not just shifting costs to consumers, but rather, taking advantage of a captive relationship with the consumer to drive excess profits."[5]

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[1] Notably, the CARD Act' concept of reasonableness and proportionality mirrors federal case law relating to punitive damages, whereby courts "must ensure that the measure of punishment is both reasonable and proportionate to the amount of harm to the plaintiff and to the general damages recovered". See *State Farm Mut. Auto. Ins. Co. v. Campbell*, 538 U.S. 408, 426 (2003).

[2] Implementation of the CARD Act was vested originally with the Federal Reserve Board, but this authority was transferred to the CFPB on July 21, 2011, pursuant to the Dodd-Frank Act).

[3] The Board also noted that "specific safe harbor amounts cannot perfectly reflect the factors listed in new TILA Section 149(c) insofar as the costs incurred as a result of violations, the amount necessary to deter violations, and the consumer conduct associated with violations will vary depending on the issuer, the consumer, the type of violation, and other circumstances." 75 Fed. Reg. 37526, 37540 (June 29, 2010).

[4] For instance, penalty fees might rise in years when collections-related expenses increase due to macroeconomic and other conditions which could create more hardship for consumers. In contrast, an established safe harbor is both predictable and is protected from such fluctuations.

[5] 87 Fed. Reg. 5801, 5802 (Feb. 2, 2022).

In connection with this initiative, the CFPB issued an Advance Notice of Proposed Rulemaking (ANPR) targeting credit card late payment penalties.[6] While the ANPR requested a significant volume of information about card issuers' use of late fees, in remarks given in connection with the ANPR, the CFPB director indicated that the CFPB is in fact focused primarily on revisiting the safe harbor provisions, which he referred to as "immunity provisions." [7]

Until very recently, the CFPB had never articulated in any form, including in any of its biannual credit card reports to Congress, concerns that the current safe harbor limits are harmful to consumers. In fact, the CFPB has indicated exactly the opposite, repeatedly acknowledging the CARD Act's positive impact on consumers and on competition in the credit card market.[8] As recently as last year, the CFPB noted, "CARD Act pricing restrictions have resulted in a substantial decline in overall fee costs to consumers since the pre-CARD Act period."[9] The achievements of the CARD Act have likewise been lauded by nonprofit consumer advocacy organizations as well as Republican and Democratic lawmakers.[10]

This research note explains how late payment fees within the current safe harbor limits are reasonable and proportional because, in addition to covering costs associated with accounts that are not paid on time, they can have important incentive effects that allow the market to function more safely, including by:

- Incentivizing consumers to moderate behavioral biases (such as temptation bias, characterized by impulse spending) that can lead to overspending on their card accounts, thereby mitigating delinquency risk and enabling banks to expand access to card credit.
- Discouraging consumers from acquiring too many card accounts, thereby reducing the risk that they will overextend themselves and enter a debt cycle.
- Incentivizing consumers to only miss payments in unavoidable hardship situations and to work with their bank when late to identify ways to meet these obligations, such as via rescheduling the delinquent payment.

In addition, the note discusses why these incentive effects are difficult to quantify with precision. The Federal Reserve Board was correct in its original assessment that setting late fees based on detailed cost and benefit calculations using each of the required statutory factors, including deterrence, would be impractical, and retaining the safe harbor makes practical sense.

In sum, credit card late fees support a safer credit card market. Lowering the safe harbor limits could render less effective an important pricing component that issuers rely on to mitigate risks and offset costs. Eliminating the safe

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[6] *See* Advance Notice of Proposed Rulemaking re: Credit Card Late Fees and Late Payments, Consumer Financial Protection Bureau (June 22, 2022), available at: cfpb_credit-card-late-fees_anpr_2022-06.pdf (consumerfinance.gov).

[7] In prepared remarks in connection with the ANPR, Director Chopra stated that "the Fed included . . . "special immunity provisions for late fees – which are the fees the CFPB wants to. . . For most credit card companies, it appears to be more profitable to charge consumers – not just a lot more interest – but also the maximum amount in penalties authorized under the Fed's immunity provisions, rather than truly ensuring that their penalties are reasonable and proportional." Prepared Remarks of Director Chopra on Credit Card Late Fees ANPR Press Call (June 22, 2022), available at: Prepared Remarks of Director Chopra on Credit Card Late Fees ANPR Press Call | Consumer Financial Protection Bureau (consumerfinance.gov).

[8] On March 29, 2022, a CFPB press release stated that the CARD Act "created a range of protections for cardholders, including limiting how much credit card companies could charge for penalties such as over-the-limit fees and late fees, as well as limits on interest rate increases. Many of these protections have been effective in reducing the total cost of credit for consumers, improving competition, and creating transparency on pricing." In its biennial credit card report from 2017, the CFPB stated that "we found that all-in costs to cardholders had fallen in the wake of the Act's passage and continued to fall through its implementation." See CFPB, *The Consumer Credit Card Market*, at 6-7 (December 2017), available at: https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2017.pdf.

[9] See CFPB, *The Consumer Credit Card Market*, at 52, n. 94 (Sept. 2021), available at: https://files.consumerfinance.gov/f/documents/cfpb_consumer-credit-card-market-report_2021.pdf.

[10] For example, Valenti (2014) observed: "On the fifth anniversary of the Credit CARD Act's passage into law, the predatory practices that marked the credit card market in the past decade have largely faded. Consumers have saved billions of dollars in interest and fees."

harbor entirely may have the same (or even more significant) effect as lowering the limits, since banks may be unable to quantify and factor in the important deterrence effects.

2. Incentive Effects of Card Late Fees: Conceptual Discussion

Late payment fees incentivize borrowers to make required payments for their card accounts on schedule. This incentive role of late fees mitigates potential adverse effects of consumer behavioral biases and lenders' informational disadvantages on credit card market performance, enabling the market to function more efficiently, with card issuers able to serve a broader range of consumers on the credit risk spectrum. As noted, Congress chose to adopt a "reasonable and proportional" standard for credit card late fees that recognizes both the costs associated with servicing late payments as well as these incentive effects.

Late fees help incentivize better financial decisions. A large and growing literature documents the role of psychological predispositions – or behavioral biases – in consumer decision-making. For example, Stango and Zinman (2022), based on a nationally representative, panel data sample, find that most consumers exhibit multiple behavioral biases. The study also finds that behavioral biases are economically important in that they may materially affect a household's financial well-being.

These psychological predispositions include *present bias,* defined as a tendency to overweight the reward or satisfaction from acquiring something today relative to in the future, even at the cost of sacrificing future well-being. Similar, though not the same, is *temptation bias*, which is characterized by impulsive spending and can also lead to overspending. Another often cited behavioral bias is ov*erconfidence*, which can generate overspending or under-saving due to individuals overestimating their ability to meet future payment obligations.

Evidence shows that behavioral biases can adversely affect consumers' use of card credit. For example, Meier and Sprenger (2010) find that present-biased individuals have significantly higher amounts of credit card debt, controlling for disposable income and other factors.[11] Gathergood (2012) presents evidence that these types of behavioral biases are associated with over-indebtedness and missed credit card payments, based on data from a U.K. household survey.

Using banking data for 10.6 million U.S. consumers, deHaan et. al (2022) find that new users of buy-now pay-later financing for purchases experience rapid increases in overdraft charges and credit card interest and fees. The findings are consistent with the notion that BNPL aggravates impulse spending, with adverse spillover effects on credit card performance, as BNPL payments may be linked to a consumer's credit cards.

Late fees help to counter these tendencies. They help consumers focus on financial consequences of their spending decisions and avoid miscalculations whereby they would be unable to make required payments. This role of late fees promotes better financial decision-making by consumers and reduces banks' exposure to delinquency risk, and thereby allows banks to offer credit to a broader range of consumers across the credit risk spectrum.

Late fees can discourage consumers from accumulating too many card accounts. The credit card market is highly competitive, allowing consumers to shop for the card that offers them the most value for the lowest cost, given their needs and preferences. Some consumers who already have at least one card may decide to shop for an additional one to increase their total available credit, while others may shop to replace an existing account with a new account offering terms they see as more favorable. Some may intend to replace their existing card but end up keeping both the old and new card.

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[11] The analysis relies on data collected from a sample of individuals in Boston based on incentivized choice experiments that elicited their time preferences.

Somewhat paradoxically, shopping for a better deal on a credit card may have a downside. If a consumer ends up with an additional account rather than simply replacing an old one, and is prone to behavioral biases affecting spending behavior, then the consumer's potential for financial miscalculations is exacerbated, increasing the potential that the consumer will overspend. Such a consumer would be better off closing the old account after obtaining the new one.

Just as late fees can incentivize better financial decisions, they also serve as a salient reminder to consumers of the importance of maintaining financial self-discipline when shopping for a card. The fact that a substantial late fee would be incurred if an extra card were used injudiciously might tip the balance in favor of closing the redundant account for a consumer who might otherwise waver.

In fact, a less cautious or attentive consumer population can inhibit the credit card market from being fully competitive. Card issuers may not compete as aggressively for customers to the extent that competition leads to consumers holding too many cards and issuers facing heightened credit risk. In other words, issuers' imperfect information about whether consumers who are shopping intend to replace an old card, or simply add a new one without replacing the old one, can have a dampening effect on competition, as described in Calem and Mester (1995) and Calem, Gordy, and Mester (2006).[12]

Factors that promote financial discipline among consumers mitigate this problem and make the market more competitive. Late fees, along with efforts to improve the general financial literacy and attentiveness of the population, can help to serve this purpose.[13]

Late fees minimize adverse incentive effects associated with renegotiations. If a card borrower encounters temporary financial hardship due to an unexpected interruption in income or an unanticipated expense, and as a result misses a monthly payment or two, often it is in the best interest of the borrower and the lender to reschedule the missed payments. Particularly when the borrower shows an ability to return to a regular payment schedule, lenders typically will renegotiate the payment terms to allow for deferred or gradual repayment of the past due balance, allowing the account to return to good standing.

Such an outcome often is preferable to placing an account into full collection after one or two missed payments. Attempting to collect in full would likely lead to sizeable losses to the lender and seriously damage the borrower's credit standing. A renegotiated schedule is preferable in cases where it would be compatible with internal bank policies as well as supervisory standards and would have a reasonable likelihood of success in returning the customer to good standing.[14]

However, the availability of renegotiation potentially entails adverse incentives, such that borrowers may be less mindful of their debt payment obligations. A borrower might miss a payment or two for avoidable reasons and then seek to reschedule the past due amounts, when that option is available.[15]

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[12] Calem and Mester (1995) also describe an associated adverse selection problem whereby ex-post higher-risk consumers (those more likely to add rather than replace a card) may be more responsive to offers of credit, creating a further impediment to competition.

[13] Improved data and risk modeling, which enable more accurate risk screening of card applicants, also can promote a more competitive market by mitigating informational barriers.

[14] See, for example, OCC guidance on re-aging policies, here.

[15] Adverse incentive effects in a loan renegotiation context are documented empirically in Mayer et. al (2014). This study found that the loan modification policy adopted by Countrywide Financial Corporation pursuant to a legal settlement led to an increase in the number of borrowers missing payments and requesting modified terms.

In this context, it is not difficult to see how late fees, by deterring consumers from paying late for avoidable reasons, can play an important role in enabling banks to offer renegotiation opportunities. With late payments being limited to the more unavoidable, “temporary hardship” situations, banks can offer renegotiations more frequently.

In other words, consumers might be less concerned with paying on time if the penalty fee were lower or non-existent and they believed they could reschedule past due amounts. This adverse incentive effect would, in turn, disincentivize banks from offering renegotiation opportunities in the first place—even to borrowers experiencing unavoidable, unexpected expenses or drops in income. Thus, perhaps counterintuitively, eliminating or reducing late fees potentially could harm the long-term financial health of the borrower population, by curtailing the ability of banks to offer renegotiation options.

3. The Challenge of Empirically Quantifying These Effects

Although intuition suggests that these incentive effects are important, to empirically quantify them is challenging. It is quite cumbersome to estimate these effects, and potential alternative approaches are subject to limitations.

One major challenge is that late payment fees are ubiquitous among card issuers—nearly all credit card agreements incorporate them. Consequently, there is limited scope for conducting empirical analysis of effects of late fees by comparing programs with and without fees. Moreover, the few programs that feature no late fees have other idiosyncratic characteristics and serve niche market segments.[16] Selection into such a program is endogenous, reflecting an individual’s preferences for what the program offers and lessening its usefulness for providing a comparison sample. Factors that drive this selection may also influence consumers’ payment behavior, making it difficult to isolate the degree to which that behavior is affected by the absence of late fees.

Maximum late fees charged by the top 20 issuers are generally in the $36 to $40 range, while many smaller bank issuers and most credit unions offer credit cards with maximum late fees of $25 or less, according to a recent CFPB report.[17] However, for the purpose of analyzing deterrence effects of high versus low late fees, the smaller banks and credit unions do not provide an adequate comparison sample. They typically market their card products to a narrow customer base, not nationally. Thus, as observed above for the zero-fee programs, the smaller banks and credit unions serve niche customer segments which may be unique in ways not easily observed or measured. These unobservable factors may influence consumers’ payment behavior, making it difficult to isolate the degree to which their behavior is affected by the lower late fees.

Further complicating any such comparisons is that the credit card customers of smaller banks and credit unions typically have other banking relationships, including deposit relationships, with the same institution. This may provide advantages for measurement and management of delinquency risk, such as directly observing employment history and monthly income, which may allow the institution to rely more on credit limits and minimum payment amounts and less on late fees for risk mitigation.

Evidence from previous studies. Previous studies offer qualitative evidence that late fees have deterrence effects. Although these studies do not quantify the practical benefits and are limited to specific historical or institutional contexts, the qualitative evidence they present is worthy of consideration.

Agarwal et al. (2008) demonstrate a learning and deterrence effect of late fees based on analysis of a proprietary panel dataset from a large U.S. bank, comprising a sample of credit card accounts followed monthly over the three-

[16] For example, the Apple Card, which has a zero late fee, is oriented toward individuals who use Apple products and offers higher “cash-back” rewards and special financing programs for purchases of Apple products.
[17] See Cohen et. al (2022).

year period January 2002 through December 2004. The dataset includes information on payment, spending, credit limit, balance, debt, purchase and cash advance annual percentage rate (APR), and fees paid from monthly billing statements.

The study finds that incidence of fee payments declines substantially as a new account ages. In the first three years of account tenure, the monthly frequency of late fee payments drops from 36 percent to 8 percent. The analysis attributes this decline is to consumers learning to pay on time after experiencing a late payment fee, although the analysis also indicates some backsliding as memory of the late payment event recedes. On net, however, "knowledge accumulation dominates knowledge depreciation" so that over time, fee payments decline dramatically.

Gathergood et al. (2019) observe a similar deterrence effect of late fees based on more recent data from multiple card issuers in the U.K, comprising a sample of credit card accounts opened during 2013 through 2014. The analysis finds that incidence of late payment fees declines sharply over time for new accounts. Moreover, this effect appears tied to some consumers adopting automatic payments as a preventive measure after experiencing a late payment event.

Grodzicki et al. (2018) examines a random sample of general-purpose card accounts from the CFPB's Credit Card Database, which encompasses over 85 percent of U.S. credit card accounts. This database tracks monthly purchase volumes, revolving balance and late payments for individual accounts and provides monthly updates on account interest rates and fees. The analysis sample is restricted to accounts that are continually present and not in serious delinquency (never more than 60 days past due) between September 2009 and September 2011. The study tests the impact of a change in the late fee on incidence of late payments and on debt levels by comparing account-level outcomes before and after implementation of the cap mandated by the CARD Act, which lowered most accounts' late fee (for first instances of a missed payment) from $39 to $25.

The analysis suggests that cardholders consider the amount of the late fee when making decisions that affect whether they pay on schedule, such as spending decisions that increase their minimum payment amount or induce them to pay late. In particular, the study finds that consumers had a lower likelihood of paying late prior to imposition of the cap, controlling for other risk factors including account age and changes in employment and earnings by county of residence.

As noted, while the findings of these studies provide qualitative evidence of incentive effects of late fees, they do not measure the associated benefits. One factor impeding quantification of these benefits is that the studies do not distinguish how late the payments were. Of course, there is greater benefit associated with deterring longer-term delinquency than with curtailing the incidence of payments being late by a day or two.[18]

Limitations of controlled experiments at individual banks. A potential way to quantify the deterrence benefits of late fees would be for individual institutions to devise and conduct a controlled experiments in which some customers are randomly awarded lower or no fee.[19] Their performance would then be compared to that of otherwise similar customers who are subject to the original, higher fees. However, such experiments would be quite cumbersome and costly to implement. Moreover, the results may not be reliable—even such a controlled experiment has potentially significant limitations.

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[18] Evidence of an incentive effect of late payment penalties from outside of the credit card context is provided in a recent paper examining the effect on taxpayer behavior following adoption in Denmark of a penalty on under-estimation of taxes owed (Skov 2022). Specifically, in 2009 the Danish tax authority introduced a small interest penalty for falling short of the final tax due when making preliminary payments, allowing for a natural experiment type analysis of the effect of such a penalty. Using administrative tax data, the study finds that introduction of the penalty led to a 50-day advancement of payments.

[19] As previously noted, comparisons across institutions with high versus low late fees cannot adequately control for unobservable differences between their customer populations.

For instance, reduction or cancellation of late payment penalties for a random selection of customers might, due to the surprise aspect, elicit different behavior compared to having no late fee from the start. Sudden notification that a late fee has been reduced can make the fee itself more salient; consumers may become more conscious of it, affecting their behavior for some time thereafter. Surprise elimination of a late fee may likewise generate a cautious response—consumers might wonder what the bank's motives are. Moreover, the cancellation may not lead to any near-term change in long-ingrained behavior because habits may adjust slowly—which could allow other factors to arise that could also impact behavior, making it more difficult to isolate the effect of the fee waiver.

4. Conclusion

The current safe harbor policy governing credit card late payment fees was based on thoughtful considerations of cost versus benefit by the Federal Reserve Board. Dismantling the current framework would be disruptive to efficient functioning of the market and have unintended adverse effects for consumers.

Late fees incentivize consumers to overcome or moderate behavioral biases that are potentially harmful to their financial health. Late fees also may incentivize consumers to limit the number of open and active credit card accounts they hold, and a credit card market populated by consumers who are thus more disciplined will allow issuers to compete more vigorously. Finally, late fees encourage customers to only miss unavoidable payments and to work with their bank to identify solutions such as renegotiation opportunities. Compelling banks to reduce their late fees could weaken these incentive effects.

Thus, reducing the safe harbor limits would potentially result in weakened deterrence, the consequences of which would be less financially disciplined consumers and higher costs for issuers. Since late fees also help banks offset the costs of servicing delinquent accounts, reducing the safe harbor limits would force banks to bear more of these costs as well. The higher costs borne by banks would pass through to consumers in the form of tighter credit or higher interest rates. The ultimate outcome would be a less efficient and less competitive credit card market overall.

Eliminating the safe harbor entirely not only could entail substantial regulatory burden on banks, but it also might have the same practical effects as lowering the safe harbor limit. Banks may be compelled to reduce their late fees to align them with just the readily quantifiable costs of servicing late accounts, without consideration of other, less precisely measurable, costs and benefits, out of concern that those less quantifiable costs may be subject to criticism by the CFPB.

Understandably, the CFPB is concerned that some households—those that repetitively fall behind and then catch up on payments—may bear disproportionate financial burden from credit card late fees. However, as laid out here, dismantling the current safe harbor would likely cause far more harm than good. Alternative, more targeted approaches could be considered, such as encouraging expanded use of financial counseling and financial education programs and tools to help consumers.

References

Agarwal, Sumit, John C. Driscoll, Xavier Gabaix, and David Laibson, "Learning in the Credit Card Market." NBER Working Paper No. w13822 (February 2008). Available at: https://ssrn.com/abstract=1093660

Calem, Paul S., and Loretta J. Mester, "Consumer Behavior and the Stickiness of Credit Card Interest Rates." American Economic Review 85(5), pp. 1327-1336 (December 1995). Available at: https://EconPapers.repec.org/RePEc:aea:aecrev:v:85:y:1995:i:5:p:1327-36

Calem, Paul S., Michael B. Gordy, and Loretta J. Mester, "Switching Costs and Adverse Selection in the Credit Card Market: New Evidence." *Journal of Banking and Finance* 30(6), pp. 1653-1685 (June 2006).Available at: Switching costs and adverse selection in the market for credit cards: New evidence - ScienceDirect

Calem, Paul S., Julapa Jagtiani, and Loretta J. Mester, "Bankcard Performance During the Great Recession: A Consumer-Level Analysis." *Journal of Credit Risk* 16(4), pp. 1-41 (December 2020). Available at: Bankcard performance during the Great Recession: a consumer-level analysis - Journal of Credit Risk

Cohen, Joanna, Lucas Nathe, László Sándor, Margaret Seikel, and Wei Zhang, "Credit Card Late Fees." Consumer Financial Protection Bureau Office of Research (March 2022). Available at: Credit card late fees | Consumer Financial Protection Bureau (consumerfinance.gov)

deHaan, Ed Jungbae Kim, Ben Lourie, and Chenqi Zhu, "Buy Now Pay (Pain?) Later." (September 2022). Available at: https://ssrn.com/abstract=4230633

Gathergood, John, "Self-Control, Financial Literacy, and Consumer Over-Indebtedness." *Journal of Economic Psychology* 33(3), pp. 590-602 (June 2012), available at: Self-control, financial literacy and consumer over-indebtedness - ScienceDirect

Gathergood, John, Hiroaki Sakaguchi, Neil Stewart, Neil and Joerg Weber, "How Do Consumers Avoid Penalty Fees? Evidence From Credit Cards." (December 2019). Available at: https://ssrn.com/abstract=2960004

Grodzicki, Daniel, Alexei Alexandrov, Özlem Bedre-Defolie, and Sergei Koulayev, "Consumer Demand for Credit Card Services." Consumer Financial Protection Bureau Office of Research Working Paper No. 2018-03 (March 2018). Available at: https://ssrn.com/abstract=3135421

Mayer, Christopher, Edward Morrison, Tomasz Piskorski, and Arpit Gupta. "Mortgage Modification and Strategic Behavior: Evidence from a Legal Settlement with Countrywide." *American Economic Review*, 104 (9), pp. 2830-2857 (September 2014). available at: Mortgage Modification and Strategic Behavior: Evidence from a Legal Settlement with Countrywide - American Economic Association (aeaweb.org)

Meier, Stephan and Charles Sprenger, "Present-Biased Preferences and Credit Card Borrowing." American Economic Journal: Applied Economics 2(1), pp. 193-210 (January 2010). Available at Present-Biased Preferences and Credit Card Borrowing - American Economic Association (aeaweb.org)
Peer Skov, "The Effect of Late Payment Penalties on the Payment Timing of Owed Taxes." (December 2022). Available at SSRN: https://ssrn.com/abstract=4294842

Stango, Victor and Jonathan Zinman, "We Are All Behavioural, More or Less: A Taxonomy of Consumer Decision-Making." *The Review of Economic Studies* (August 2022). Available at We Are All Behavioural, More, or Less: A Taxonomy of Consumer Decision-Making | The Review of Economic Studies | Oxford Academic (oup.com)

Valenti, Joe, "Protecting Consumers Five Years After Credit Card Reform." Center for American Progress (May 22, 2014). Available at [Protecting Consumers Five Years After Credit Card Reform - Center for American Progress]