Consumers and Class Actions:

A Retrospective and Analysis of Settlement Campaigns

AN FTC STAFF REPORT

Federal Trade Commission
September 2019

Table of Contents

Executive Summary 1

Administrator Study 1

Notice Study 2

Limitations 2

Chapter 1: Background 4

1.1 FTC's Class Action Fairness Project 4

1.2 FTC Consumer Studies and Data Analysis 4

1.3 The Class Action Process 5

1.4 The FTC's Redress Program 7

1.5 The FTC and Past Consumer Studies on Disclosures 8

1.6 Related Research on Class Action Claims and Compensation 9

Chapter 2: Administrator Study 11

2.1 Summary of Results 11

2.2 Data Collection 12

2.3 Description of Outcome Measures 13

2.4 Limitations 16

2.5 Analysis 17

Case Composition 17

General Summary Statistics 20

Method of Notice 23

Claim Form Inclusion and Visibility 27

Success of Delivery 29

Opening Rates 30

Amount of Median Redress 31

2.6 Incidence of Notice and Claim Form Characteristics 33

Notice Characteristics 33

Claim Form Characteristics 38

2.7 Regression Analysis 40

Notice Characteristics 42

Claim Form Characteristics 44
Chapter 3: Notice Study 45
3.1 Summary 45
Introduction 45
Limitations 46
Conclusions 46
3.2 Study Methodology 47
Overview 47
Sampling Frame 47
3.3 Study Design 48
Conceptual Framework 49
Part I: Inbox 49
Part II: Email Body 50
3.5 Results 52
Part I: Inbox Results 52
Questions Posed to Respondents 52
Impact of Sender Information on Opening and Comprehension Rates 53
Impact of Refund Amount in Subject Line on Opening and Comprehension Rates 56
Impact of Subject Line on Opening and Comprehension Rates 59
Sender- Subject Line 62
Analysis of Open-Ended Responses, Inbox Results 64
Part II: Email Body Results 69
Questions Posed to Respondents 69
Impact of Court Seal 71
Impact of Email Format 73
Court Seal – Email Format 75
Analysis of Open-Ended Responses, Email Body Results 77
Discussion 78
Appendix A: FTC 6(b) Order A-1
Appendix B: Additional Tables- Administrator Study B-1
Appendix C: Notice Characteristic Coding Methodology- Administrator Study C-1

Appendix D: Questionnaire- Notice Study D-1
Appendix E: Example Screenshots of Part I Stimuli- Notice Study E-1
Appendix F: Example Screenshots of Part II Stimuli-Notice Study F-1
Appendix G: Additional Tables-Notice Study G-1

Executive Summary

As part of its consumer protection mission, the Federal Trade Commission ("FTC") has examined issues related to the effectiveness of class action settlements for more than a decade. To further the FTC's understanding of these issues and develop information to help improve settlement outcomes for consumers, the FTC staff conducted two studies. First, pursuant to Section 6(b) of the FTC Act,[1] we obtained a sample of 149 consumer class action cases from large class action administrators (the "Administrator Study"). Based on the data collected, we analyzed several characteristics of these settlements, such as notice methods and redress (*i.e.*, compensation) amounts available, and how these characteristics relate to outcomes, including claim filing and check cashing rates. Second, we fielded an Internet-based consumer research study (the "Notice Study") to explore consumer perceptions of emailed class action notices, including whether consumers understand the options provided in such notices. In this preliminary report, we present the results of these studies. The FTC seeks comments on these results and their implications for improving the class action process.

Administrator Study

The results of the Administrator Study revealed several notable facets of claims rates, notice types, check cashing rates, and redress amounts. First, the overall claims rate of the cases in the sample was less than 10% and varied depending on whether class members received notice by packets, postcards, or email.[2] Second, we did not find different claims rates when publication notices were used as a supplement to direct notices. Third, we did not find that changes in median compensation were related to claims rates, but the study did show that check cashing rates were higher as median compensation increased. Finally, in a supplementary examination of qualitative notice and claim form characteristics, we found that the claims rate was higher in cases where the notices used visually prominent, "plain English" language to describe payment

[1] 15 U.S.C § 46(b).

[2] We define "notice packet" as any non-postcard mailed notice, typically consisting of a detailed notice with a claims form. The claims rate for each case was calculated by dividing the number of claims filed by the number of notice recipients. The check cashing rate for each case was calculated by dividing the number of checks cashed by the number of checks mailed to class members. The relationships, or lack thereof, noted here are based on statistical significance testing at the 95 percent confidence level. *See* Chapter 2 for further details.

availability.[3] However, we did not find other notice and claim form characteristics, such as form length and documentation requirements, to be related to the claims rate in our sample.

Notice Study

The Notice Study sought to evaluate whether certain email characteristics – such as the sender's address, phrasing of the subject line, availability of payment amount in the subject line, email body format, and the presence or absence of a court seal – influenced respondents' comprehension, understanding, impressions, and likelihood of opening the email. The results indicate that certain widely used characteristics of emailed class action notices perform better than alternatives on some – but not all – dimensions. For example, including the name of, or a reference to, the class action in the subject line increased respondent comprehension of the purpose of the email but resulted in fewer respondents stating that they would open the email relative to emails with subject lines that did not include this information. Respondents had the highest stated opening rates for emails with subject lines that omitted any reference to a class action. In addition, omitting the amount of compensation from the subject line improved both comprehension and stated opening rates. Finally, using a long-format email with formal, legal writing improved the understanding of the nature of the email while a condensed form of the email improved the understanding of next steps. Respondents were also more suspicious of the condensed form email than the long form emails. Overall, less than half of respondents understood that the email pertains to a class action settlement or a refund rather than representing a promotional email, and less than half correctly understood the steps required to receive a refund.[4] Significantly, several of these results suggest respondents may view class action settlement notices with skepticism – an area that would benefit from further study.

Limitations

Although the Administrator Study is the most comprehensive empirical study of consumer class action settlements to date, readers should consider several limitations when

[3] For the limited purpose of coding the particular notices in the specific context of this study, we defined "plain English" descriptions of payment availability as those that were visually prominent, and used language that was likely to be understood by the typical consumer as signifying a payment, such as "payment," "refund," "money," "cash," "reimbursement," "compensation," or the amount or estimate of the payment listed with "$."

[4] Specifically, across all experimental conditions, 38.2% correctly understood the nature of the email when seeing it in an inbox, 49.3% correctly understood the nature of the email when viewing the actual email, and 40.5% correctly understood the next steps required to receive a refund. *See* Chapter 2 for the definition of the comprehension measures used to calculate these percentages and Appendix Tables G.2 through G.4 for 95% confidence intervals for these figures.

interpreting the results. First, the study examines relationships between notice characteristics and settlement outcomes but does not definitively show that one particular practice performs better than others. Second, class action settlements can take various and often complex forms, making it difficult to compare across settlements and to interpret outcome measures at face-value. Moreover, while we include a broad set of consumer cases in the study, the analysis of this select sample of cases may not be projectable to the entire universe of consumer class actions.

In addition, the Notice Study, which used a voluntary internet panel to gather responses, is not a true probability sample. Therefore, absolute percentages from its findings should not be projected to the national population. Furthermore, the survey platform in the Notice Study did not fully replicate an authentic email experience for respondents and thus may have yielded responses that do not completely capture real-life consumer experiences with email. Nevertheless, both studies provide valuable insight into determinants of consumer class action settlement outcomes and provide a foundation for future research.

Chapter 1: Background

1.1 FTC's Class Action Fairness Project

The Commission has followed developments in class action cases for more than a decade through its Class Action Fairness Project. In maintaining this program, the Commission strives to ensure that class action settlements in consumer protection and competition matters provide appropriate benefits to consumers. As a consumer protection agency, the FTC is concerned about class action settlements that do not adequately compensate injured consumers, either because the settlement provides inadequate redress, such as coupons of questionable or uncertain value, or because the process used in many settlements can create substantial barriers to consumer participation and thus may result in low returns and compensation. As part of this program, the FTC monitors class actions and files amicus briefs or intervenes in appropriate cases;[5] coordinates with state, federal, and private groups to advise them and to seek suggestions on matters that merit FTC attention; and monitors the progress of legislation and class action rule changes.

1.2 FTC Consumer Studies and Data Analysis

As detailed in this report, the FTC has recently taken several measures to further the goals of the Class Action Project. First, the Commission obtained data about recent class action lawsuits from entities that routinely administer the settlements in these cases. Specifically, pursuant to section 6(b) of the FTC Act, the Commission issued orders to seven claims administrators, requiring them to provide information on procedures they use to notify class members about settlements and the response rates for various methods of notification. Second, the FTC staff fielded a randomized, controlled consumer research study to explore consumer perceptions of class action notices, including whether consumers understand the options

[5] *See e.g.*, FTC's Mem. of Law as Amicus Curiae, *Nwabueze v. AT&T, Inc.*, 3:09-cv-1529 (N.D. Cal. Aug. 30, 2013), *https://www.ftc.gov/sites/default/files/documents/amicus_briefs/nwabueze-v.att-inc./130830nwabuezeamicus.pdf*; FTC's Mem. of Law as Amicus Curiae, *White v. EDebitPay, LLC*, 2:11-cv-06738 (C.D. Cal. Aug. 9, 2013), *https://www.ftc.gov/sites/default/files/documents/amicus_briefs/anita-white -et-al.v.edebitpay-l.l.c.et-al.no.211-cv-06738-cbm-ffm-c.d.cal-august-9-2013/130809edebitpayamicusbrief.pdf*; Mot. of FTC for Leave to File Brief as Amicus Curiae, *Moore v. Verizon Commc'ns, Inc.*, 4:09-cv-08123 (N.D. Cal. Aug. 17, 2012), *https://www.ftc.gov/sites/default/files/ documents/amicus_briefs/moore-v.verizon- communications-inc./120817mooreverizonamicusbrief.pdf.*

provided in such notices and the implications of such options. During the process, the Commission sought comment on the studies in several Federal Register Notices.[6]

1.3 The Class Action Process

For decades, class action lawsuits have provided consumers a means to obtain redress in cases where individual suits would be inefficient or impractical. Class action cases address a variety of issues including consumer products, securities, employment, and environmental harms. Typical consumer-related class actions are governed by Rule 23 of the Federal Rules of Civil Procedure. Under this Rule, after a complaint is filed, the court must weigh whether a class action is appropriate given the case's circumstances.[7] If it deems a class action appropriate under Rule 23, the court then certifies the class. In doing so, it must define the class itself, the class claims, issues, and defenses. The court also must appoint class counsel.

After certifying the class, the court must address the issue of notice to the class. Rule 23 contains provisions for notice prior to resolution of the underlying claims as well as notice to class members following a settlement.[8] Since most cases settle well before trial and even prior to certification, notice typically serves to alert consumers of both the proposed class action certification and the settlement.[9] Our research efforts focused on these typical, combined class certification/settlement notices.

The adequacy of notice determines, in large part, the number of consumers alerted and ultimately redressed for the unlawful practices. Under Rule 23(c)(2), the court must direct the "best notice practicable under the circumstances, including individual notice to all members who

---

[6] *See* 80 Fed. Reg. 25676 (May 5, 2015); 80 Fed. Reg. 25677 (May 5, 2015); and 82 Fed. Reg. 32816 (July 18, 2017).

[7] Any class action lawsuit must satisfy the following four prerequisites: numerosity (*i.e.*, the class must be large enough to render joinder impracticable), commonality (*i.e.*, the class must share the question of law and fact), typicality (*i.e.*, the representative parties' claims must be typical of the class), and adequacy of representation (*i.e.*, the representative parties will "fairly and adequately protect" the class's interest). Once these conditions are met, the court must find, in cases involving money damages, that questions of law or fact common to class members "predominate over any questions affecting only individual members," and that a class action is superior to other methods for "fairly and efficiently" addressing the controversy.

[8] *See* Rule 23(b) (general notice provisions) and Rule 23(e) (settlement-related provisions).

[9] *See*, The Problem of Settlement Class Actions, 82 GEO. WASH. L. REV. 951, 960-62 (2014). The Federal Judicial Center has developed guidance and examples for notices addressing class action certification and settlement simultaneously. *See* "Illustrative Forms of Class Action Notices," Federal Judicial Center, https://www.fjc.gov/content/301253/illustrative-forms-class-action-notices-introduction.

can be identified through reasonable effort." The notice must state the action's nature; the certified class definition; the class claims, issues, or defenses; the option of representation, the right and process to request exclusion; and the action's binding effect on participating class members. Finally, under Rule 23(e)(1), the court must direct "notice in a reasonable manner to all class members who would be bound by the proposal." In approving notice in individual cases, the court has significant discretion in approving the form, content, and method of dissemination in the case.

Although notifying and providing compensation to class members can pose substantial challenges in any class action lawsuit, cases involving consumer injury present particular complications. In some cases, the process can be fairly simple. The class may be well-defined and well-known, especially where the defendants have clear records with customer contact information and purchase details. In those instances, distribution of the award can be straightforward. Case administrators can simply send checks to the affected consumers. In most consumer class actions cases, however, resolution is much more complicated. Frequently, defendants only have contact information for a small portion of affected consumers; or they may have no such information at all. In other instances, they have information for some consumers but no record of what those people purchased and thus no way to know the consumers' injury. Where consumer identities are unknown or individual harm is uncertain, courts have generally approved a "claims-made" process in which the class certification/settlement notice requires consumers to complete and file a claim form to receive redress. Typically, class action administrators review submitted claim forms and any supporting documentation to verify that claimants meet the requirements for participation in the settlement. If a claim does not meet this definition—*e.g.*, if it is incomplete or contains inconsistencies—the administrator may reject the claim or ask for additional information from the claimant.

The details of the claims-made notice process depend on the conditions in individual cases. When consumer contact information exists, courts generally approve some form of direct notice to consumers. But where the addresses of class members are unknown, the settlements usually involve indirect "notice by publication" (*i.e.*, in various media that are likely to be accessed by affected consumers). Some courts approve a hybrid approach, where a combination of direct and publication notice is employed.

Consistent with Rule 23, notices in claims-made cases generally provide detailed information about the case, the settlement, the steps necessary to claim benefits, the right to opt out, and other specifics regarding the matter.[10] Depending on the case, the notice itself can take

[10] Rule 23(c)(2)(B)(v) requires that the notice inform class members that that the court will exclude from the class any member who requests exclusion. By opting out, consumers retain the right to participate in a different lawsuit on the same issues. However, these consumers do not receive payment in the class action.

several forms, ranging from long, text-heavy documents to shorter, more abbreviated advisories. The notice can include, in addition to the standard background information and instructions, a claim form requiring the consumer to provide personal contact information (*e.g.*, mailing address, email address, etc.) as well as information about his or her product purchases related to the case.

In implementing Rule 23 in individual cases, courts have approved a variety of methods to reach consumers. The most traditional approach involves the dissemination of letters or postcards through conventional mail service. Where contact information for class members is unavailable, publication notices generally appear in magazines, newspapers, television, and radio. In recent years, courts have increasingly approved individual notice through email, given its low cost and efficiency; and they have also approved publication notices through banner and pop-up advertisements on websites.[11]

1.4 The FTC's Redress Program

Although the FTC does not participate directly in consumer class action cases, it has extensive experience in consumer redress through its day-to-day enforcement efforts. Specifically, the FTC works to return money to people who are harmed by illegal business practices. To do so, the FTC directs dozens of mailings resulting in millions of dollars in refunds.[12]

Once an FTC lawsuit is final, and the defendants have paid the money ordered by the court, the FTC develops a plan for returning that money to consumers. As in class action cases, FTC success depends principally on whether the agency has a reliable list of customers, including their contact information and the amount of money they spent. The FTC usually has this information, and it mails checks out to a list of known customers. A recent FTC staff report indicated that 67% of eligible recipients cash their checks.[13] In some FTC cases, however, there is no list of known customers or there is insufficient contact information, and the agency must use a claims process to identify people who should receive a refund. In such cases, the people affected must apply for a refund. A claims process typically increases the administrative costs of

[11] For a discussion of various notice methods, *see* Aiken, Alexander, "Class Action Notice in the Digital Age," University of Pennsylvania Law Review, Vol. 165, No. 967, 2017.

[12] *See* 2018 Annual Report on Refunds to Consumers (https://www.ftc.gov/reports/2018-annual-report-refunds-consumers).

[13] Id.

the refund program and decreases participation numbers. In implementing the claims process, the agency conducts a media campaign, using paid advertisements to inform people that refunds are available and to encourage them to visit the FTC website to apply. In other cases, the agency uses whatever minimal data is available, such as a consumer's email address, to tell consumers about the refund process. In these cases, the FTC generally receives claims from 5% to 20% of potential claimants (and about 95% of people who file a claim cash their checks).[14] If there is no customer list and a claims process is not feasible, the agency uses its Consumer Sentinel Database to find eligible recipients.

1.5 The FTC and Past Consumer Studies on Disclosures

The Notice Study tests the impact of various email characteristics—including the disclosure of the refund amount in the subject line and the display of a court seal within the email—on respondent comprehension. The design of this study draws upon the FTC's experience in conducting consumer studies to test the effectiveness of disclosures.

Disclosures are typically used to remedy imperfect information problems, or to help uninformed consumers make better-informed decisions. Several past FTC empirical studies have found that the effectiveness of disclosures is highly dependent on plain English phrasing and the clear presentation of information.[15] For example, in a 2017 exploratory FTC study on consumer recognition of online advertising, we found that several modifications to advertising disclosures helped consumers identify which online content is promotional. For instance, text that is visually distinctive or disclosures that avoid technical jargon (*e.g.*, "Paid Post" rather than "Brand Publishing") appeared to improve respondents' recognition of promotional online content.[16] In another FTC study, Lacko and Pappalardo (2007), using a randomized, controlled research design, found that mortgage disclosures that used easy-to-understand language and highlighted key mortgage costs performed significantly better than the mandated disclosures that were in use

[14] In recent cases where there was a claims process, the average check cashing rate was 90%.

[15] For summaries of consumer studies conducted by the FTC, *see* Janis K. Pappalardo, *Contributions by Federal Trade Commission Economists to Consumer Protection: Research, Policy, and Law Enforcement*, Journal of Public Policy & Marketing, 33(2), (Fall 2014) and Lorrie Cranor, *Putting Disclosures to the Test*, Tech@FTC Blog Post, September 12, 2016, *https://www.ftc.gov/news-events/blogs/techftc/2016/09/ftc-disclosure-evaluation-research-archives*.

[16] *Blurred Lines: An Exploration of Consumers' Advertising Recognition in the Contexts of Search Engines and Native Advertising*, Federal Trade Commission Staff Report (December 2017), *https://www.ftc.gov/system/files/documents/reports/blurred-lines-exploration-consumers-advertising-recognition-contexts-search-engines-native/p164504_ftc_staff_report_re_digital_advertising_and_appendices.pdf*.

at the time.[17] FTC staff also tested alternative approaches to displaying energy efficiency information on EnergyGuide labels—the yellow tag displayed on most appliances that contains information on the energy usage of the appliance—using a randomized, controlled design. That study found that consumers understand energy usage using operating costs better than they understand usage based on a technical, kilowatt hour metric.[18] In addition, a 1998 FTC study by Murphy et al. on food health claims concluded, among other things, that advertising disclosures concerning high levels of risk-increasing nutrients were likely to be more effective if presented in plain English.[19]

The Notice Study's findings suggest that the most effective way to display information to consumers is likely to be context-specific. For example, in contrast to prior research documenting the superiority of plain English phrasing, the Notice Study found that, in the context of the class action settlement notice studied, a long-format email with formal, legal writing improved respondents' understanding of the nature of the email (*i.e.*, they were more likely to understand that the email pertained to a class action settlement or a refund, rather than representing a promotional email). At the same time, our study also found that an email using a bulleted list with easier-to-understand language improved respondents' understanding of next steps required to receive settlement compensation.

1.6 Related Research on Class Action Claims and Compensation

Several recent studies have addressed consumer outcomes in class action settlements. However, FTC staff has not identified any attempts to conduct an empirical analysis of consumer class actions at the scope and scale presented in this report.[20]

---

[17] James M. Lacko and Janis K. Pappalardo, *Improving Consumer Mortgage Disclosures: An Empirical Assessment of Current and Prototype Disclosure Forms*, Federal Trade Commission Bureau of Economics Staff Report (2007), *https://www.ftc.gov/reports/improving-consumer-mortgage-disclosures-empirical-assessment-current-prototype-disclosure*.

[18] For a discussion of this research, *see* Joseph Farrell, Janis K. Pappalardo, and Howard Shelanski, *Economics at the FTC: Mergers, Dominant-Firm Conduct, and Consumer Behavior*, Review of Industrial Organization, 37 (4), (2010).

[19] Dennis Murphy, Theodore H. Hoppock, and Michelle K. Rusk, *A Generic Copy Test of Food Health Claims in Advertising*, Federal Trade Commission Bureau of Economics Staff Report (1998), *https://www.ftc.gov/reports/generic-copy-test-food-health-claims-advertising*

[20] While we focus on prior quantitative studies in this section, qualitative examinations of class actions can also provide useful insight into settlement outcomes for consumers. Noteworthy articles include: Alexander W. Aiken, Class Action Notice in the Digital Age. Univ. Penn. L. Rev., Vol. 165, No. 967, 2017; Elizabeth Cabraser, Esq. and Andrew Pincus, Esq., Claims-Made Class Action Settlements, 99 Judicature, no. 3 (2015); Scott Dodson, An Opt-In Option for Class Actions, Mich. L. Rev., Volume 115, Issue 2, 2016; Robert H. Klonoff et al., *Making Class Actions Work: The Untapped Potential of the Internet*, 69 U. Pitt. L. Rev. 727, 731 (2008).

Of the research we reviewed, we found only three empirical studies that examined compensation or claims rates. These studies typically examined a very small number of cases, or had a more limited scope than the current study based on industry focus or data availability. The law firm Mayer Brown LLP conducted a study of putative employee and consumer class actions filed in or removed to federal court in 2009 and used public access to case dockets to construct a dataset.[21] The study was able to identify 40 class actions that resulted in settlement, of which participation rates were available for only six cases.[22] A 2015 study by Fitzpatrick and Gilbert assembled a dataset of fifteen class action settlements related to overdraft fees in consumer checking accounts.[23] Two of these cases required class members to file claims.[24] Finally, as part of its 2015 Arbitration Study, the Consumer Financial Protection Bureau studied class action settlements related to consumer financial products. Using a dataset constructed with public access to court records, the study found that the median claims rate was 8% for the 105 settlements for which data was available.[25]

In comparison, the FTC Administrator Study examines a broad set of cases, spanning various consumer industries, including consumer privacy, product malfunctions, debt collection, and checking account overdraft practices. The sample is large enough to provide meaningful results. Moreover, information obtained by the FTC from class action administrators was significantly more detailed than datasets constructed with publicly available case docket information, allowing for a more extensive analysis of settlement characteristics and outcomes. For example, given the detail in the data, this is the first study to examine how claims rates differ across email and mail notice.

---

[21] Mayer Brown LLP, *Do Class Actions Benefit Class Members? An Empirical Analysis of Class Actions* 7 (Dec. 11, 2013), *https://www.mayerbrown.com/files/uploads/Documents/PDFs/2013/December/DoClassActionsBenefitClassMembers.pdf.*

[22] For the six cases, the participation rates ranged from 0.000006% to 98.72%.

[23] Brian T. Fitzpatrick & Robert C. Gilbert, *An Empirical Look at Compensation in Consumer Class Actions*, 11 N.Y.U. J.L. & Bus. 767 (2015).

[24] These two cases had compensation rates of 1.76% and 7.39%.

[25] Consumer Financial Protection Bureau, Arbitration Study, Report to Congress, pursuant to Dodd–Frank Wall Street Reform and Consumer Protection Act § 1028(a), March 2015.

Chapter 2: Administrator Study

2.1 Summary of Results

This analysis represents the first systematic, empirical examination of a broad set of consumer class action cases, and the findings represent the most reliable quantitative descriptions of consumer class action settlements to date. This study reveals several relationships between aspects of the class action cases in the sample, such as claims rates, notice types, check cashing rates, and redress amounts. Specifically, the study found:

- *Overall Claims Rate:* Across all cases in our sample requiring a claims process, the median calculated claims rate was 9%, and the weighted mean (*i.e.*, cases weighted by the number of notice recipients) was 4%. We calculated these claims rates as a percentage of direct notice recipients.

- *Claims Rates by Method:* The claims rates varied by method. On average, campaigns that primarily used notice packets with claim forms to inform class members about the settlement had claims rates of approximately 10%.[26] In contrast, the average claims rate for campaigns using primarily postcards and email was about 6% and 3%, respectively. Notably, campaigns that utilized postcard notices with a detachable claim form had average claims rates more in line with the 10% notice packet claims rate.

- *Approval, Objection, and Exclusion Rates:* The vast majority (86%) of submitted claims in our sample received approval (*i.e.*, the claims administrator determined that the consumer qualified for compensation). Objection and exclusion rates were miniscule; only 0.01% of notice recipients excluded themselves from the settlement and 0.0003% objected to the proposed settlement.

- *Publication and Direct Notice*: The use of publication notice along with direct notice does not appear to have a significant relationship with the claims rate in our sample.

- *Compensation Amounts and Check Cashing Rates*: Half of the settlements in our sample provided median compensation of $69 or more, and a quarter provided median compensation of $200 or more. There does not appear to be a statistically significant

[26] Throughout the analysis, averages are represented as weighted means where the weights are assigned based on the size of the denominator. For claims rates, weights are equivalent to the number of notice recipients. *See* Section 2.3 for further details.

relationship between median compensation and claims rates, but there is a statistically significant relationship between median compensation and check cashing rates.[27] For cases in our sample that required a claims process, the average check cashing rate was 77%.

- *Notice and Claim Form Language*: In a supplementary examination of qualitative notice and claim form characteristics, we found that visually prominent, plain English language describing payment availability has a significant relationship with the claims rate. Conversely, we did not find a statistically significant relationship between other notice and claim form characteristics, such as form length and documentation requirements, and the claims rate.

2.2 Data Collection

We assembled the dataset with subpoenaed data from seven of the nation's largest class action administrators.[28] We identified the seven administrators using FTC's experience with consumer redress, a review of class action aggregator websites, and consideration of hundreds of class action settlement websites. The submittals included data for the ten largest settlements (gauged by number of notices) from each administrator, in the years 2013, 2014, and 2015. We asked administrators to provide data only from Rule 23(b)(3) class actions that used a claims process, provided direct mailed or emailed notice to at least some class members, and involved consumer issues.[29]

We worked closely with each administrator to understand their unique data and caseload limitations. If an administrator's caseload fell short of ten consumer cases in any of the specified years, we instructed the administrator to supplement their initial production with cases from adjacent years, direct payment cases, and state cases involving consumer issues similar to those covered by federal statutes. The inclusion of these additional cases enabled us to assemble a sufficiently large dataset to allow for statistical analyses while remaining representative of consumer class action settlements.

---

[27] We conduct all statistical significance testing at $p<.05$ using a two-tailed t-test, unless otherwise noted.

[28] To obtain this information, the Commission issued orders pursuant to Section 6(b) of the FTC Act seeking specific class action-related information from the administrators. *See* Appendix A: FTC 6(b) Order.

[29] For purposes of this study, we asked the administrators to define "class actions involving consumer issues" as any class action involving federal or state laws prohibiting (1) unfair or deceptive acts or practices in consumer transactions; (2) consumer credit or leasing (including debt collection, credit reporting, and loan servicing); (3) consumer privacy; or (4) common law fraud pertaining to the sale of goods or services.

Administrators also provided information on the number of unique recipients of class action notices and the breakdown of notice recipients across different notice categories. After conducting a detailed examination of each case, we augmented the dataset by assigning each case to a category, based on the type of practice involved in the lawsuit and the case's qualitative notice and claim form characteristics. In cases where administrators did not provide key data points (*e.g.*, the number of unique notice recipients), we used supplementary data provided by the administrator to approximate those key points.[30]

The final dataset contains 149 cases.[31] In presenting the subsequent analyses, we divided these cases into categories: cases requiring all notice recipients to file a claim to receive compensation (claims made), cases requiring none of the class members to file a claim to receive compensation (direct payment), cases requiring some of the recipients to file a claim and providing other recipients with direct payment (hybrid with subclasses), and cases providing recipients with the option to file a claim to receive more favorable compensation (hybrid with option). We further divided the claims made cases into those with standard documentation requirements (standard claims made) and those with varying documentation requirements (non-standard claims made). Standard claims made up the majority of cases in our dataset, comprising 70% of the overall sample. Section 2.5, below, provides more details on this categorization.

2.3 Description of Outcome Measures

Using the data provided by the administrators, we calculated several outcomes to gauge claims results across the different types of class action cases in the sample. First, we computed the claims, objection, and exclusion rates, all as a percentage of total notice recipients. Second, we determined both the claims approval and denial rates as a percentage of number of claims

[30] For example, if a notice campaign involved multiple rounds of notice, and provided data on the total number of notices sent (but not on the total number of unique notice recipients), we could estimate the number of unique notice recipients if the administrator provided the reason for sending multiple rounds of notice and the counts associated with each round of notice.

[31] Administrators inadvertently provided 17 cases that did not meet the FTC orders' definition of cases involving consumer issues. Additionally, we could not use 27 cases in the analysis because the administrator did not produce useful data points (*e.g.*, because the defendant company—rather than the administrator—handled approval of claims and disbursement of checks, or because the administrator was not able to provide the breakdown between the claims-eligible and ineligible population). Finally, in 6 cases, the vast majority of notice recipients were unlikely to have been eligible to file a claim for monetary relief. These cases primarily involved vehicle repair, where all owners of a particular vehicle received notice due to a malfunction, but only some incurred repair expenses (and were therefore eligible for compensation through the settlement). We excluded these 50 cases from all analyses.

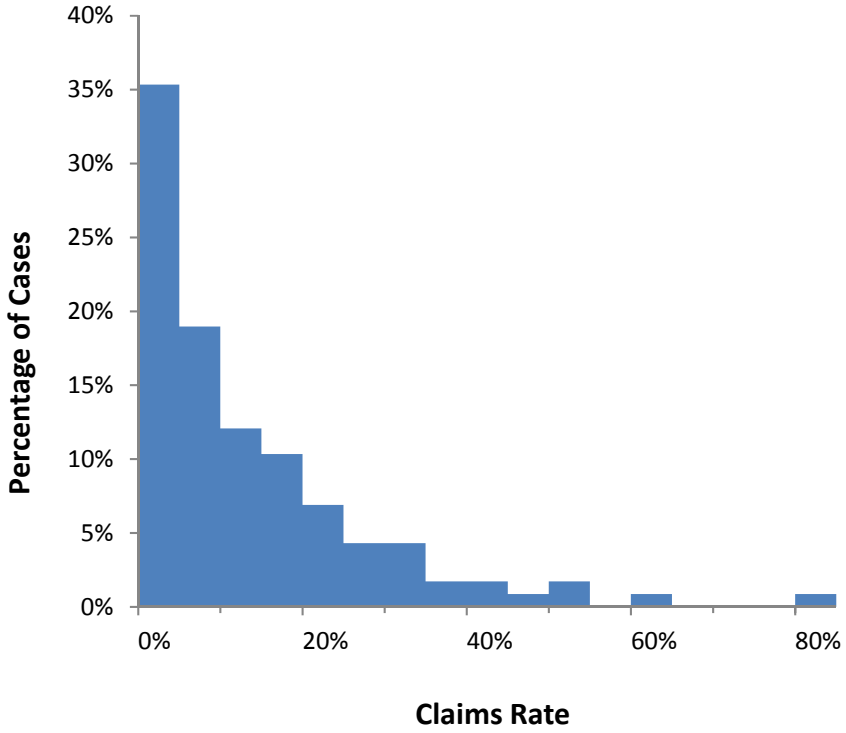
filed. Finally, we calculated the check cashing rate as a percentage of checks mailed to class members.

Figures 1 and 2 display the distribution of cases based on the claims rate and number of notice recipients, respectively. Neither the claims rate nor the recipient number is symmetrically distributed. Given the skewed distributions, we considered whether to describe the results using the mean, median, or a weighted mean.[32] Each of these has its benefits and drawbacks in the context of these data.[33] For example, the mean claims rate is significantly affected by the high, outlier values in Figure 1, which suggests that the median claims rate likely provides a more informative measure. At the same time, however, neither the unweighted mean nor the median reflect the fact that some settlements are arguably more significant than others depending on the number of consumers involved. Additionally, it is not clear whether the weighted mean is perfectly descriptive of the data because it would overwhelmingly reflect outcomes associated with the few settlements involving large-scale notice campaigns, as seen in Figure 2, and, thus, may not be representative of the typical class action settlement. For these reasons, we have presented many of the subsequent analyses using two statistics—the median and the weighted mean—so that the reader can make informed inferences based on these summary measures.

[32] The median value, or 50th percentile, of a distribution is its midpoint. That is, 50% of cases have claims rates that are higher than the median claims rate, and 50% have lower claims rates. The unweighted mean (or average) is calculated by summing the claims rates across all cases and dividing by the total number of cases; thus, each case would contribute an equal share to the final calculated mean. In this analysis, the weighted mean (or weighted average) is calculated by assigning a weight to each case's claims rate equal to the size of the denominator, or the number of notice recipients. Thus, if a case sends notice to twice as many class members, it receives twice the weight in the weighted mean calculation.

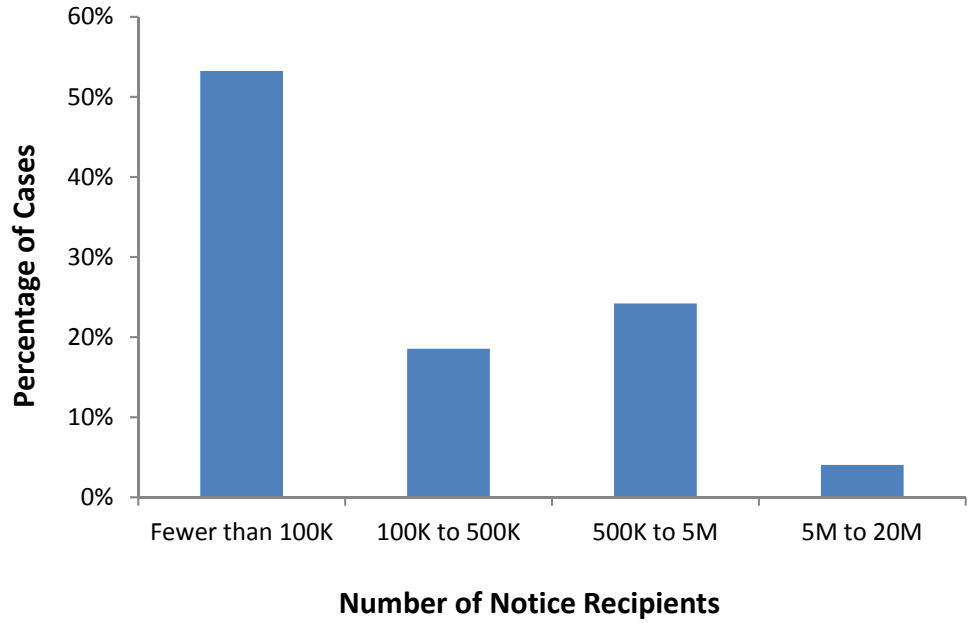
[33] In contrast to symmetric distributions, the unweighted mean and median are not equal in asymmetric distributions. Specifically, in skewed right distributions, the unweighted mean is typically higher than the median.

Figure 1: Distribution of Cases, by Claims Rate



Sample: Cases that require a claims process. Excludes 8 cases where calculated claims rate is greater than 100%. *See* footnote 38 for further details on these 8 cases.

Figure 2: Distribution of Cases, by Number of Notice Recipients



Sample: Cases that require a claims process.

2.4 Limitations

Several caveats and limitations apply to the data analysis. First, our empirical analysis of the administrative data is descriptive. Specifically, differences in outcomes across various settlement characteristics do not reflect *causal* estimates because these characteristics may be correlated with unobservable qualities. For example, we have observed higher claims rates for cases that utilize notice packets compared to those that use email. However, we cannot conclude from the analysis that the use of those notice packets *caused* the higher claims rate because the higher claims rate may simply reflect the fact that notice packet campaigns, for example, involve companies with more detailed customer records or closer relationships with their customers. Additionally, although we conducted supplementary regression analyses that include controls that are available in the dataset, we were not able to control for intangible settlement characteristics, such as severity of injury, defendant company reputation, and availability of consumer contact information.

Second, the claims rate, as well as other outcome measures calculated as a percentage of notice recipients, are unlikely to offer precise measures of consumers' responsiveness. For example, in some settlements, particularly those that utilize publication notice along with direct notice, the calculated claims rate represents an upper bound of responsiveness resulting from direct notice because eligible individuals who filed claims may not have received the direct notice. In other instances, the calculated claims rate may be an understatement of a true measure of claims filing if only a subset of notice recipients was eligible to file a claim, which would happen if, for example, all owners of a defective product received notice, but only those who experienced a malfunction were eligible to file a claim.[34]

Third, while the sample includes economically significant cases involving consumer issues, it does not represent all such consumer class actions administered from 2013 to 2015. For example, administrators often face data limitations (*e.g.*, difficulties with accessing archived, historical data), which prevented some of them from submitting all cases which met the FTC order's specifications.

Fourth, data limitations sometimes prevented administrators from producing every statistic for every settlement requested by the FTC order. Therefore, sample sizes differ across

[34] While we cannot determine the direction of the overall bias nor account for the biasing factors in precise terms, we have presented the results with these limitations in mind. For example, we display claims rate summary statistics separately for cases with and without publication notice, and control for cases that utilized publication notice in the regression analysis. Moreover, we have omitted all cases where it was obvious that a small portion of notice recipients was eligible to file a claim, as explained in footnote 31. Starting with Figure 5, we also exclude the 8 cases where the calculated claims rate is higher than 100%, or where it is almost certain that many more individuals beyond those receiving notice were eligible to file a claim. *See* footnote 38 for further details on these 8 cases.

analyses because they reflect the number of settlements providing that particular statistic. Accordingly, the universe of cases is not always constant across the various figures and tables in this report.

2.5 Analysis

As described above, we assembled a dataset containing 149 settlements that meet four criteria: involve consumer issues, provide sufficient data for the analysis, provide data on the number of notice recipients eligible to file a claim, and do not clearly represent settlements where a small minority of notice recipients meets the claim eligibility criteria.

Case Composition

We arranged the cases by characteristics including: the type of class action (*e.g.*, claims made, direct payment, etc.), the type of practice involved (*e.g.*, misrepresentation, improper payment, etc.), and whether the case was in federal or state court.

Composition of Cases by Type of Class Action: The data for consumer class action settlement characteristics are often difficult to interpret, particularly in determining the number of individuals eligible to file a claim. For example, defendant companies frequently have customer records for some, but not all, individuals affected by the alleged practices. Other times, a class contains multiple subclasses, where some class members receive a direct payment as compensation (*e.g.*, because they are current, active account-holders), while others must file a claim.

To partially address these difficulties, we divided the cases into the categories listed in Table 1 through a detailed examination of the case documents for each settlement.[35] We conducted the bulk of the analysis on the set of cases that require a claims process—standard and non-standard claims made cases and hybrid cases with subclasses—because they provide data that allow for a meaningful measure of consumer responsiveness to direct notice. Standard claims make up the majority of cases in our dataset, comprising 70% of the overall sample. Non-standard claims made, direct payment, and hybrid cases comprise the remaining 30% of our dataset.

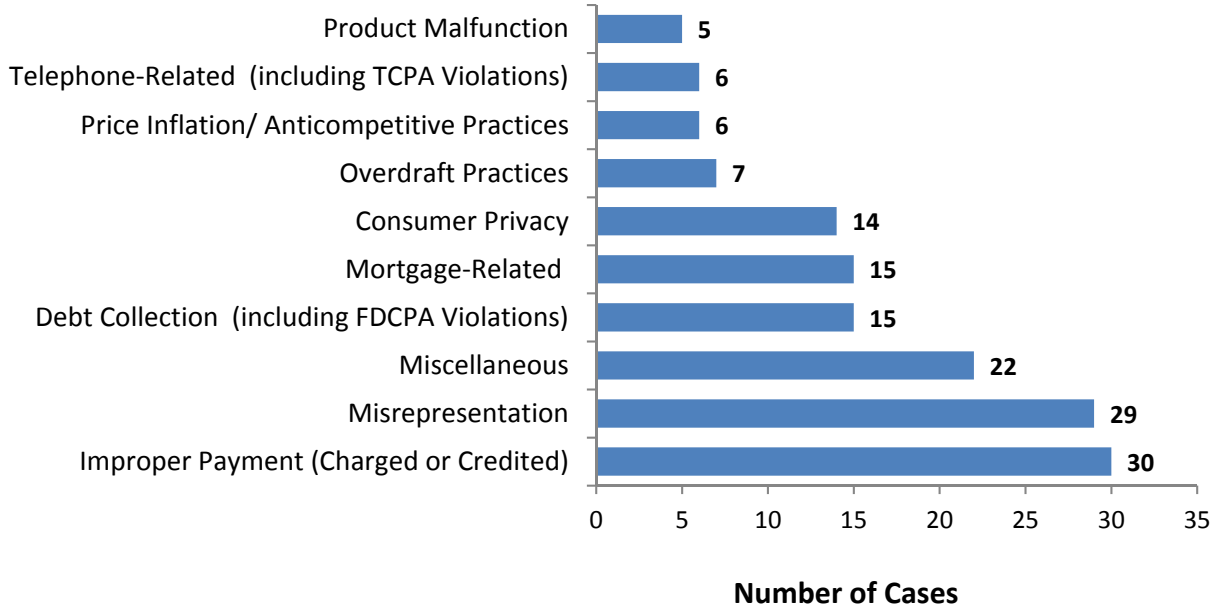
[35] This typically involved referencing the notice(s) sent to consumers, but sometimes also involved consulting court filings.

Table 1: Composition of Cases, by Type of Class Action

Type of Class Action	Description	Count of Cases
Standard Claims Made	All notice recipients are required to file a claim to be eligible to receive compensation. Documentation requirements, if any, are similar for all claimants.	107
Non-standard Claims Made	All notice recipients are required to file a claim to be eligible to receive compensation. Documentation requirements differ significantly across claimants. Includes claims made cases where claimants have the option to submit additional documentation (*e.g.*, to receive more favorable payment or to elect the form of payment), and claims made cases where certain subclasses have more stringent documentation requirements than others.	12
Direct Payment	No notice recipients are required to file a claim to receive compensation. All distribution of compensation is handled automatically, through mailed checks or account credits.	21
Hybrid with Subclasses	Some notice recipients are required to file a claim to be eligible to receive compensation, while others receive direct compensation. *Note: The dataset includes only cases for which data is available on the number of notice recipients eligible to file a claim.*	5
Hybrid with Option	No recipients are required to file a claim to receive compensation. At least some recipients are given the option to submit a claim (*e.g.*, to receive a more favorable payment or to elect the form of the payment).	4
Total		**149**

Composition of Cases by Practice Type: As Figure 3 indicates, the data set contains a variety of practice-categories. Each of the practice-categories typically involves a broad set of practices, which likely resulted in various degrees of consumer harm. For example, the practice category *misrepresentation* includes settlements where the defendant company allegedly misrepresented characteristics of major purchases—such as vehicles or diamonds—while at the same time including cases that involve misrepresentations of relatively minor purchases—such as inexpensive grocery items.

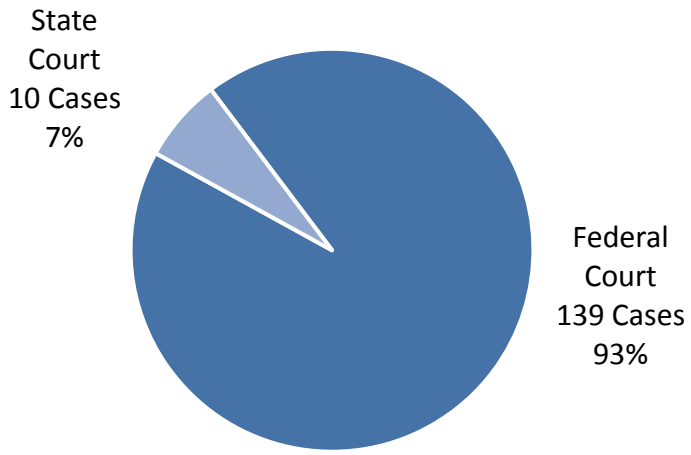
Figure 3: Composition of Cases, by Type of Unlawful Practice



Sample: Claims-made, direct payment, and hybrid cases

Composition of Cases by Federal and State: Figure 4 displays the breakdown of cases in our data set between cases brought in state and federal court. As noted, we solicited state cases from administrators only when their number of consumer-related federal cases fell short of the total number of requested cases (30). We excluded cases that involve practices involving state-specific statutes (*e.g.*, California's Automobile Sales Finance Act and Labor Code). Overall, federal cases represent the vast majority (93%) of the sample.

Figure 4: Composition of Cases, by State versus Federal Court



Sample: Claims-made, direct payment, and hybrid cases

General Summary Statistics

Table 2 displays detailed summary statistics of several key variables in the dataset for the sample of cases that require a claims process.[36] For each variable, the table shows the number of cases providing data and select percentile ranks of the distribution (including the 50th percentile, or the median). The table also displays weighted means for variables that are rates.[37]

Number of Notice Recipients: As we noted earlier, the number of notice recipients differed significantly across the cases in our sample, with the lowest 10% of cases having fewer than 1,877 notice recipients (the 10th percentile) and the highest 10% of cases having more than 2.8 million notice recipients (the 90th percentile). The median number of notice recipients in our sample was 87,195 (*i.e.*, half of the cases in the sample sent notice to fewer recipients, and half sent notice to more recipients). This is consistent with Figure 2, which shows that the majority of cases in the sample had fewer than 100,000 recipients.

[36] For the remainder of the analysis, we define "cases that require a claims process" as: standard claims made cases, non-standard claims made cases, and hybrid cases with subclasses. For hybrid cases with subclasses, measures of consumer responsiveness (claims, exclusion, and objection rates) are calculated as a percentage of the number of notice recipients eligible to file a claim.

[37] Claims, objection, and exclusion rates are weighted by number of direct notice recipients; claims approval and denial rates are weighted by number of claims filed; and the check cashing rate is weighted by number of checks sent.

Table 2: Detailed Summary Statistics on Key Variables

Variable:	# of Cases Providing Data	Percentiles					Weighted Mean
		10th	25th	50th (Median)	75th	90th	
# Notice Recipients	124	1,877	9,822	87,195	584,594	2,813,217	
# Claims Filed	124	174	1,896	10,356	47,252	121,225	
Claims Rate							
All Cases	124	2%	3%	10%	23%	49%	5%
Cases where Claims Rate <100%	116	2%	3%	9%	19%	34%	4%
# Claims Approved	121	159	1,464	7,401	31,361	102,275	
Claims Approval Rate	121	55%	79%	93%	97%	99%	86%
# Claims Denied	119	3	89	917	4,735	14,311	
Claims Denial Rate	119	1%	3%	7%	20%	47%	15%
# Objections	82	0	0	0	2	8	
Objection Rate	82	0.0000%	0.0000%	0.0000%	0.0004%	0.0024%	0.0003%
# Exclusions	118	0	1	12	51	190	
Exclusion Rate	118	0.00%	0.00%	0.01%	0.03%	0.17%	0.01%
Length of Notice Period (in Days)	115	47	60	90	137	215	
Median Amount of Compensation	116	$10	$22	$69	$200	$500	
Mean Amount of Compensation	116	$12	$25	$79	$259	$1,304	
# Checks Sent	114	120	1,179	7,311	33,156	126,109	
# Checks Cashed	112	132	1,281	7,238	32,910	113,373	
Check Cashing Rate	112	80%	90%	94%	97%	99%	77%

Sample: Cases that require a claims process

Claims Rates: Table 2 displays two sets of summary statistics for the claims rate: one for all the claims-requiring cases in the sample and another excluding 8 cases where the calculated "claims rate" exceeded 100%. For the second set, the median claims rate was 9%, and the weighted mean—where each case is weighted based on its number of notice recipients—was 4%.[38] The 10th and 90th percentiles for this set indicate that in the bottom 10% of cases, at most 2% of the recipient pool filed a claim, while in the top 10% of cases, at least 34% of the recipient pool filed a claim.

Approval Rates: Typically, claims administrators evaluate each submitted claim to determine if it meets the requirements for participation in the settlement. They may approve the claim, deny the claim, or ask for additional information from the claimant. The median claim approval rate was 93%, and the weighted mean was 86%. On average, 15% of claims were likely incomplete or inconsistent with the definition of the class, and, thus, denied by the administrator.[39]

Exclusion and Objection Rates: Class members who do not wish to be bound by the terms of the settlement may file an exclusion request. Those who opt-out in this way retain the right to participate in a different lawsuit on the same issues, but they do not receive payment in the class action. Class members also have the right to object to the proposed settlement, for example, if they believe it is unfair or inadequate. Class members who do nothing in response to the notice will automatically become bound by the settlement terms. The percentage of consumers who excluded themselves or objected were miniscule, with weighted averages of these rates hovering at 0.0003% and 0.01%, respectively.

Compensation Amounts: Because settlements provide a range of compensation, which is typically tied to the class member's specific subclass or the claimant's ability to produce documentation, we asked administrators to provide summary statistics on the mean and median

[38] Because we calculated claims rates as a percentage of direct notice recipients, claims rates can surpass 100% if individuals who did not receive direct notice were eligible to file claims. This would be most likely to occur when a class is composed of both known members (who receive direct notice) and unknown members (who do not receive direct notice and are, thus unaccounted for in the denominator). Such cases will typically use a publication notice campaign in conjunction with direct notice, as explained in the "Method of Notice" section, below. While 57 cases use publication notice along with direct notice, and hence could theoretically have claims rates that exceed 100%, only 8 cases have claims rates that reach this level. The calculated claims rates for these 8 cases range from 219% to 3263%, with an average of 1138%. Because it is clear that the calculated claims rates in these cases do not accurately reflect consumer responsiveness to direct notice, we excluded these 8 cases from all subsequent tables displaying claims rates.

[39] The approval rate statistics include claims that the administrator eventually approved after asking for more information from the claimant following the initial claims submission. Table 2 does not display statistics for rates of asking for additional information because the administrators did not submit this data in a consistent manner.

redress amounts given to individuals.[40] In considering these statistics, we concluded that the median likely offers a more meaningful measure of "typical" compensation than the mean because the mean is likely skewed by a small number of class members receiving large amounts. Median compensation in the sample is $69 (calculated using the set of statistics representing the median amount of compensation for each case). While about a quarter of the settlements provided the modest amount of $22 or less in median compensation, the top quarter of settlements provided median compensation of $200 or more.[41]

Check Cashing Rates: Finally, the last row of Table 2 shows that, in claims-requiring cases, the median check-cashing rate was 94% while the weighted average was 77%; this discrepancy may be due to the fact that larger cases (which receive more weight in the weighted mean calculation) typically provide smaller amounts of compensation.

Method of Notice

Class action notice campaigns employ a variety of methods to inform potential class members of their eligibility to file a claim. Usually, campaigns use direct notice when contact information exists and publication notice when such information is absent or exists for only some class members.

The specific method of direct notice (*e.g.*, email, postcard, or notice packets) usually depends on one or more of the following factors: the available consumer contact information, the cost of sending notice to the class, and the defendant company's past interactions with class members (*e.g.*, many defendant companies may use email to reach their customers who purchase online because of its low cost and greater accuracy).

The dataset identifies the number of notices sent via each of the following methods: email, postcard, and notice packet.[42] In 35 cases, the campaigns used both mail and email to reach different groups of consumers, typically because there were different sets of contact information available, or because the first attempt of notice was returned as undeliverable. For

[40] The vast majority of the sample contains cases that provided checks, or the option to elect a check, as compensation. Only 8 cases in the sample provided vouchers, coupons, gift cards, or account credit as compensation to class members (without the option to elect a check). Administrators did not provide redemption data for these forms of compensation, and in all but 2 cases, they did not provide summary statistics such as the median or mean amount of compensation provided by the voucher, coupon, gift card, or account credit.

[41] Mean compensation in the sample of cases was $79 (as calculated using the set of statistics representing the median amount of compensation for each case).

[42] We define "notice packet" as any non-postcard mailed notice, typically consisting of a detailed notice with a claims form.

campaigns that involved multiple methods, for the purposes of simplicity, we grouped together cases where the notice campaign attempted to reach three-quarters or more of the notice recipients via a specific method.[43] For example, if the campaign used email notice to contact the vast majority of recipients, we classify this case as one using email notice, even if some class members received mailed notice.[44]

The data also indicate whether publication supplemented a direct notice in a particular campaign. While publication can take various forms—including general-audience internet banners, newspaper or magazine notifications, and targeted social media or search engine advertisements—we were unable to identify the form such publication notice took for most cases. This inability to assess the effectiveness of specific publication notice types represents one of the limitations of our analysis.

Additionally, because class size information was unavailable for cases involving publication notice, we calculated the claims rate for those cases with an imperfect denominator (*i.e.*, using the same approach for cases that utilize direct notice only—as a percentage of total notice recipients).[45] Therefore, our calculated claims rates for cases that used publication notice likely overstate true class member responsiveness to the campaign because at least some claimants are unaccounted for in the denominator (due to receiving notice through publication rather than direct notice).

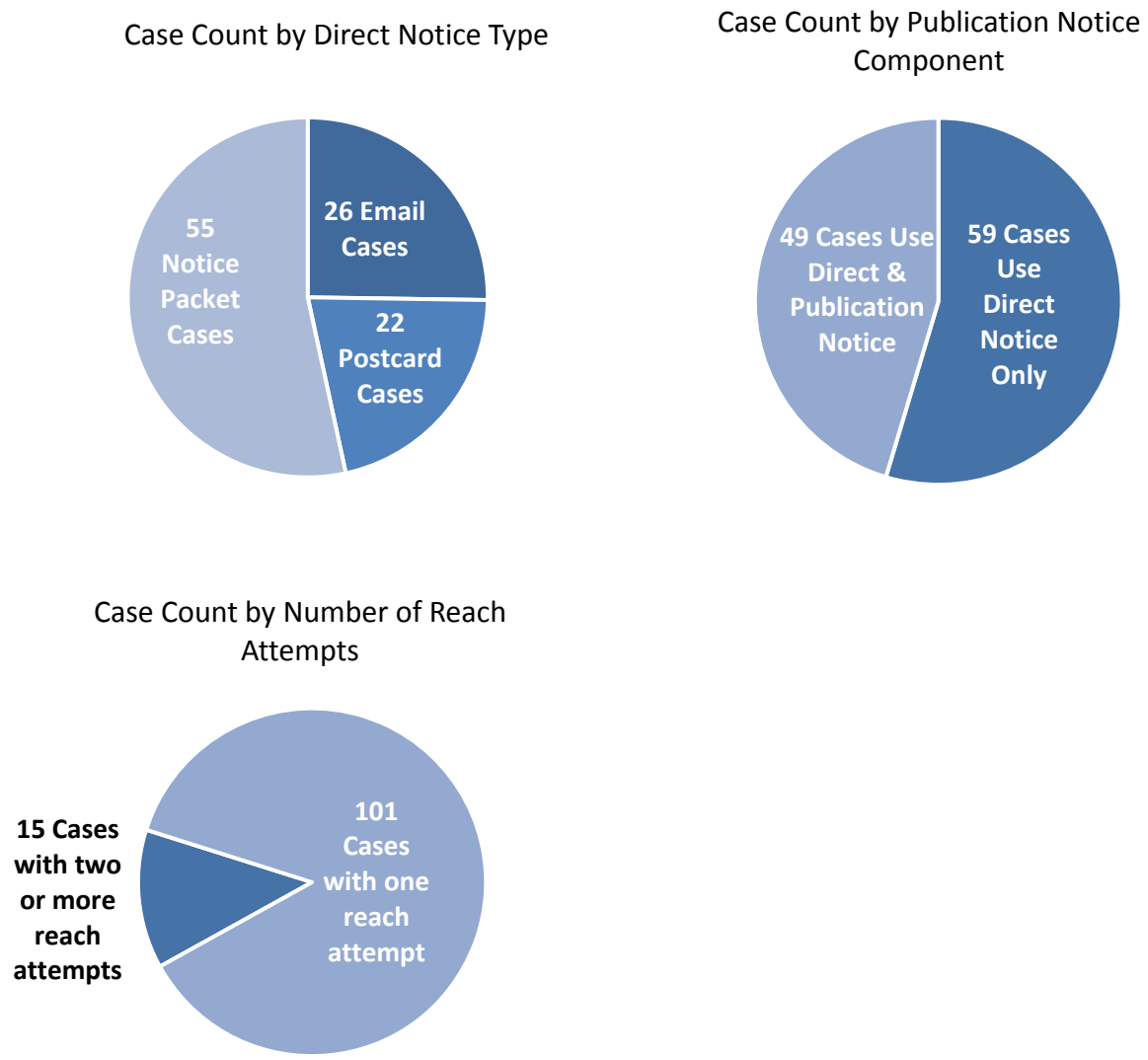
Slightly more than half of all cases in the sample used mailed notice packets to notify class members, with the remainder split between postcard and emailed notice campaigns. A little more than half of the cases provided direct notice only, while the other cases provided direct notice in conjunction with publication notice. Campaigns in only 15 cases, or about 13% of the cases providing data, attempted to reach eligible class members more than once. For these 15 cases, the subsequent notice typically consisted of a reminder postcard or email to potential class members who had not yet filed a claim. *See* Figure 5.

[43] The exception to this is the notice-level analysis in Table 4.

[44] For the analyses that display outcomes across direct notice type, we excluded the 13 cases where the email-mail split was more even than 75/25.

[45] This uncertainty makes it difficult to generate claims rate estimates for such cases because the class typically includes both known class members (those who could be contacted directly) and unknown class members (those who could have seen a publication notice).

Figure 5: Composition of Cases, by Method of Notice



Samples: Cases that require a claims process and provide data on the specified method-of-notice characteristic (which varies across charts). Excludes 8 cases where calculated claims rate is greater than 100%.

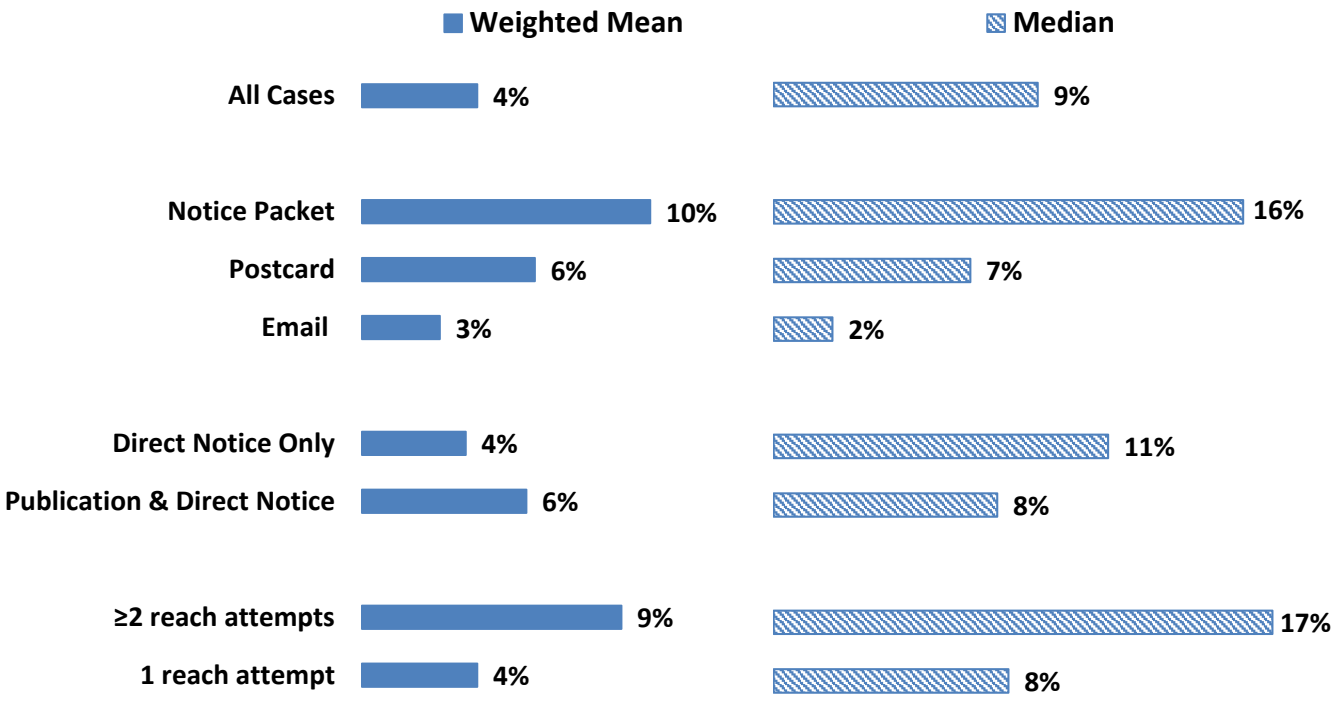
Claims Rates by Notice Method: Figure 6 shows the weighted mean and median claims rates associated with various notice method characteristics. The weighted mean claims rate for all cases requiring a claims process was 4%, and the median was 9%. There are marked differences in the claims rates across notice methods. Claims rates for notice campaigns using notice packets were the highest, with a median claims rate of 16% and a weighted mean of 10%. Notice campaigns that use postcards had lower rates, with a median and weighted mean of about 6% to 7%. Finally, email notice campaigns had the lowest mean and median claims rates of 2% and 3%, respectively.

Claims Rates and Publication Notices: Figure 6 also displays summary statistics of claims rates for cases involving direct notice only as well as for cases that use both direct notice and publication notice. In comparing these two case types, the weighted mean or the median values yielded different results. Specifically, with regard to the weighted mean, cases with a publication component had, on average, claims rates that were 2 percentage points higher than those without it. However, when considering the median claims rate, cases with a publication component performed worse (3 percentage points lower). Because we know that our claims rate measure—when measured as a percentage of notice recipients as we do throughout the analysis—is likely to be an overstatement in cases that utilize publication notice, this finding is somewhat surprising.[46]

Claims Rates and Multiple Notices: The bottom set of results in Figure 6 displays claims rates based on rounds of notice: cases that send multiple communications to class members have average and median claims rates that are more than twice as high as cases that attempt to reach class members just once.

[46] Although, as discussed previously, data limitations do not allow us to estimate the causal impact of publication notice on claims rates, this set of findings indicates that average and median claims rates are within 2 percentage points when comparing across the set of all cases (the first row of Figure 6) and the set of cases utilizing direct notice only (the fifth row of Figure 6). Thus, it appears that, when looking at the sample as a whole, the cases with publication notice are unlikely to be introducing meaningful bias in our measure of claims rates, which Section 2.4 of this report had discussed as a potential limitation of the analysis.

Figure 6: Claims Rate Summary Statistics, by Method of Notice



Sample: Cases that require a claims process and provide data on the specified method-of-notice characteristic. Excludes 8 cases where calculated claims rate is greater than 100%.

Claim Form Inclusion and Visibility

This section examines whether average and median claims rates among the cases in the sample differ depending on whether or not the notification includes a claim form, in addition to case information.[47] For notice packets, we also examine whether the location of the claim form (*e.g.*, on the first or last page of the packet) yields differences in claim rates.

One would expect that noticeable, easy-to-find claim forms not only reduce the recipient's effort to file a claim, but also signal that an action is required to receive

[47] Mailed class action notifications often include claim forms in addition to case information. Claim forms typically require the claimant to provide updated mailing information and to sign a statement attesting that he or she is entitled to compensation based on the class definition. Depending on the case, the claim form may also have a series of additional questions or documentation requirements. Notice packets usually (but not always) include claim forms at the end of the packet, while postcard notices may include claim forms as a detachable postcard.

compensation. Thus, it is reasonable to expect that noticeable, easy-to-find forms yield higher claims rates. As discussed below, the results support this hypothesis.

Post Card Notifications: As indicated in Table 3, postcards that included a detachable claim form had, on average, claims rates that are twice as high as those that did not have this feature. For the cases in our sample, however, administrators used detachable claim form postcards at only about half the rate (8 cases) of the more common practice of sending postcards without claim forms (14 cases).

Notice Packets: Nearly all the cases in our sample that used notice packets included claim forms in the mailing—only 3 of the 55 did not. Although the sample size for this group is too small to draw definitive comparisons, the results from our sample indicate that notice packets that included claim forms had higher average filing rates. Based on the divergence between the median and average mean summary statistics, there does not appear to be a clear difference in claims rates based on the location of the claims form in notice packets that included forms.

Table 3: Claims Rate Summary Statistics, by Claim Form Inclusion and Visibility

Sample:	# of Cases Providing Data	Claims Rate	
		Weighted Mean	Median
Cases Using Postcard Notice	22	6%	7%
A: Postcard Included Claim Form	8	10%	12%
B: Postcard Did not Include Claim Form	14	5%	5%
Cases Using Notice Packets	55	10%	16%
A: Notice Packet Included Claim Form	52	11%	18%
A1: Notice Packet Included Claim Form at the Beginning of Packet or as a Return-Addressed Postcard	8	18%	15%
A2: Notice Packet Included Claim Form at the End of Packet	38	11%	17%
B: Notice Packet Did not Include Claim Form	3	2%	4%

Sample: Postcard and notice packet cases that require a claims process. Excludes 8 cases where calculated claims rate is greater than 100%.

Success of Delivery

Table 4 displays the undeliverable rate across notice types. Unlike the other outcome measures, we calculated the undeliverable rate at the notice-level rather than the case-level because, as noted earlier, 35 cases used multiple methods of notice to contact class members, and 13 of these cannot be clearly categorized as primarily using one type of notice. Thus, we summed the number of notice packets, postcards, and emails sent, as well as the number of each type returned as undeliverable across all cases, and calculated the undeliverable rate in this way. Undeliverable rates were similar across all notice types, ranging from 12% to 15%. Table 4 also reveals that, although only 60% of the cases in the sample use emails and/or postcards to contact class members (*see* Figure 5), the vast majority (92%) of notices in the sample were sent using these methods. Thus, the largest cases were more likely to use email and postcards to contact class members.

Table 4: Percentage of Notices Undeliverable, by Direct Notice Type

Direct Notice Type:	# of Cases Providing Data	# of Notices Sent	# Notices Undeliverable	% of Notices Undeliverable
Notice Packet	64	8,700,895	1,030,414	12%
Postcard	59	40,441,453	4,847,993	12%
Email	43	55,945,497	8,150,638	15%
Total		**105,087,845**	**14,029,045**	**13%**

Sample: Claims-made, direct payment, and hybrid cases. Cases can appear multiple times across rows if they used multiple types of notice to contact class members.

Opening Rates

We received email opening data for 10 cases, 28% of all cases that notify class members via email notice.[48] We received hyperlink click-through data—where the hyperlink is generally the address of the settlement website or a link to the online claim form—for four cases. In these cases, we found that opening and click-through rates were, on average, low. The data show that, for recipients whom the administrator attempted to contact with an email notice ("attempted notices" in the table below), an average of 14% opened the notices, a rate that increased to 17% when only considering delivered notices. The average hyperlink click-through rate was 4% as a percentage of notices sent, and 20% as a percentage of notices opened. These findings suggest that—at least for this group of cases—one driver of the low claims rates may be the fact that few people open and interact with class action email notices.[49] *See* Table 5.

Table 5: Email Interaction Summary Statistics for Select Cases

Statistic:	# of Cases Providing Data	Median	Weighted Mean
Opening Rate			
% of Attempted Notices That Were Opened	10	13%	14%
% of Delivered Notices That Were Opened	10	15%	17%
Click-Through Rate			
% of Attempted Notices That Had Hyperlink Clicked	4	3%	4%
% of Opened Notices That Had Hyperlink Clicked	4	17%	20%

Sample: Select claims-requiring cases providing email interaction data.

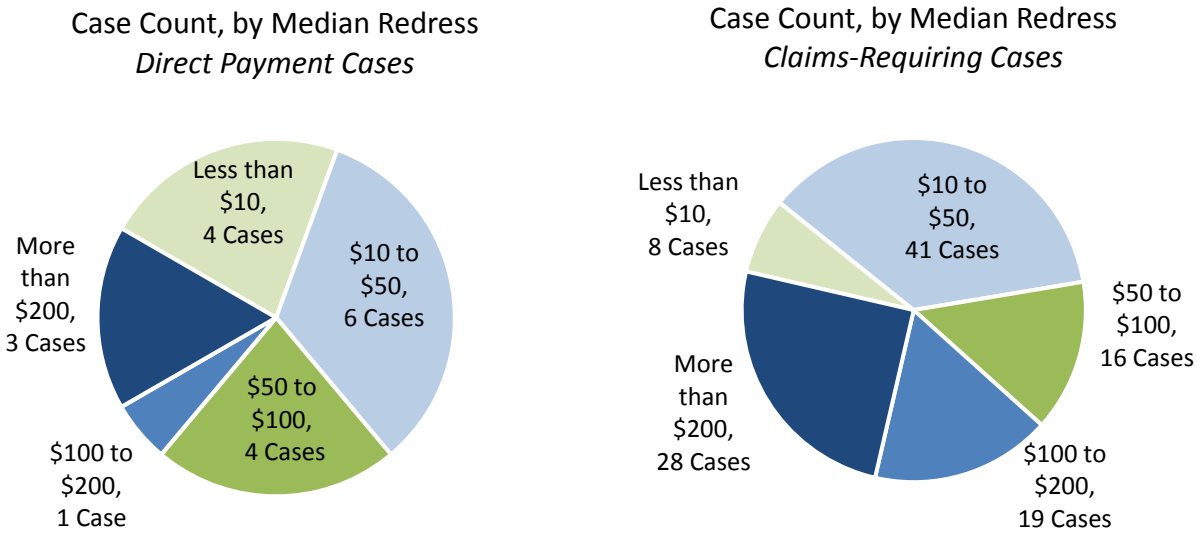
[48] We omitted an extreme value in this analysis, a case which is 13 times larger than the average in terms of number of notice recipients with an email open-rate that is 5 times larger than the average.

[49] Claims rate summary statistics for the limited sample of cases with email opening data are similar to those calculated for the full sample of email cases, as displayed in Figure 6. For the 10 cases with email opening data, the median claims rate is 3%, and the weighted average is 5%. On the other hand, claims rate summary statistics for the cases with click-through data are substantially higher than for the full sample of email case; these 4 cases have a median claims rate of 19% and a weighted average claims rate of 20%.

Amount of Median Redress

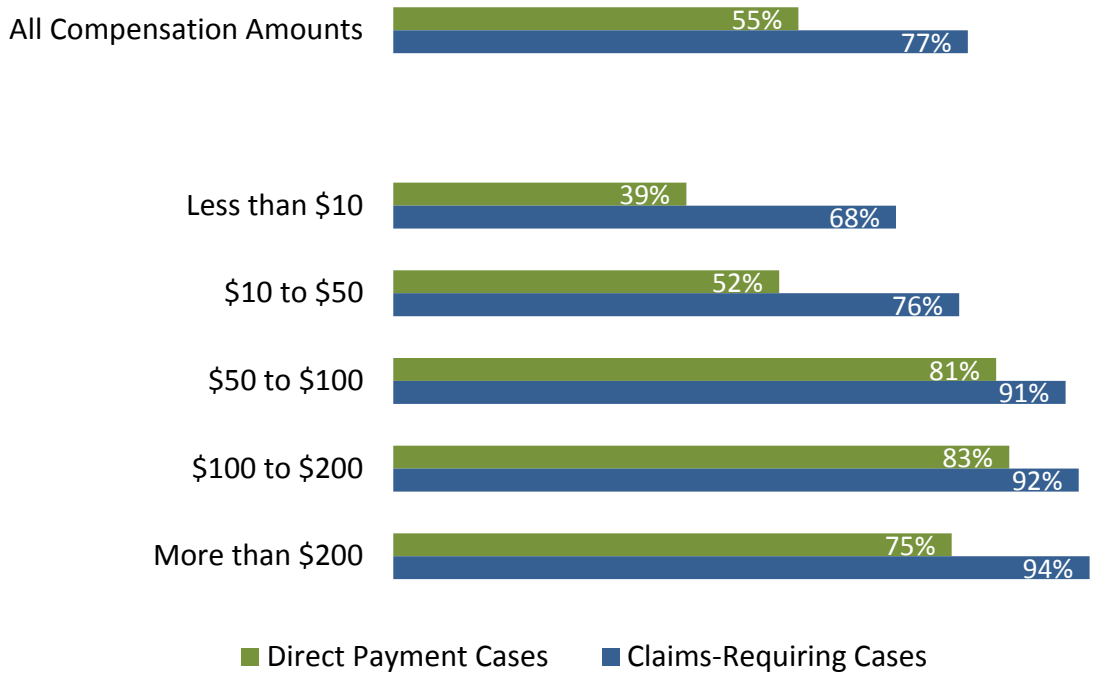
Figure 7 displays cases across various ranges of median redress for both direct payment and claims-requiring cases. For both types of cases in our sample, the most common median redress was in the $10 to $50 range. About a quarter of claims-requiring cases offered median compensation of $200 or more. For cases that entailed a claims process, the smallest number (8 cases or 7% of cases providing data) fell under the category of $10 or less in median compensation.

Figure 7: Composition of Cases, by Median Redress



Check Cashing Rates: Figure 8 presents the weighted average check-cashing rates for each of the median redress categories. Check-cashing rates for settlements that provide direct payment were considerably lower (55%) than they were for claims-requiring cases (77%), which one might expect because check recipients for the latter group went through the effort to file a claim. Average check-cashing rates tended to increase as median redress amount increases, with the largest increase occurring at lower values of redress; check-cashing rates remained relatively constant near 80% for direct payment cases and hovered near 90% for claims-requiring cases once median redress reaches the $50 to $100 category.

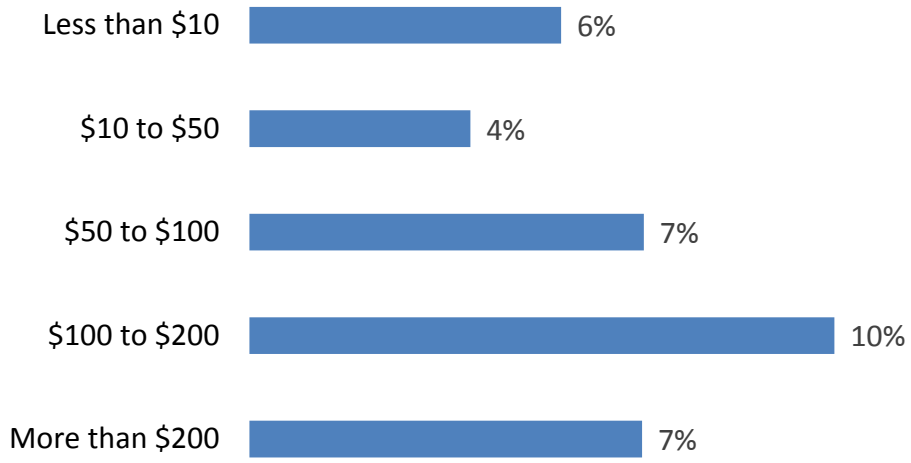
Figure 8: Weighted Mean Check-Cashing Rate, by Median Redress and Case Type



Claims Rate and Redress Amounts: Figure 9 displays the weighted mean claims rate for each median redress category. The results do not indicate a meaningful relationship between a case's level of redress and its claims rate, with the claims rate for the less-than-$10 category only 1 percentage point lower than the more-than-$200 category.[50] When comparing across the lowest redress level (less than $10) and the second highest redress range ($100 to $200, which represents at least a ten-fold increase in redress), claims rates were 1.7 times as high for the latter group. Although this difference is statistically significant, it is only 4 percentage points. The lack of a strong relationship between redress level and claims filing is surprising because it suggests that higher redress amounts may not be more motivating to consumers. However, many consumers may not read the notice carefully, or at all. Also, as illustrated in Figure 10.G. about a third of the notices do not provide any compensation estimate. Thus, many consumers may not file simply because they are not aware of the redress amounts.

[50] In a regression framework controlling for the observable notice characteristics provided by the administrators, there is no statistically significant relationship (p=0.738) between median redress and the claim filing rate, but there is a statistically significant relationship (p=0.009) between median redress and the check cashing rate. Median redress is included as a continuous variable in the regression. *See* Appendix B: Additional Tables – Administrator Study.

Figure 9: Weighted Mean Claims Rate, by Median Redress



2.6 Incidence of Notice and Claim Form Characteristics

In most cases, administrators provided copies of the notices that they mailed or emailed to class members. Additionally, for mail campaigns that included a claim form with the informational notice, administrators typically provided a copy of the form. We independently examined qualitative characteristics of the submitted notices (*e.g.*, the amount of legal information contained at the top of the notice) and claim form characteristics (*e.g.*, the length of the claim form). In this section, we describe the incidence of these characteristics in our sample. In the next section, we examine how these characteristics relate to the claims rate using a regression framework.[51]

Notice Characteristics

An analysis of the notices submitted by administrators reveals substantial variation in the way notices presented information to consumers. We developed a coding rubric to classify various qualitative characteristics of notices: the amount of legal information contained at the top of the notice, whether the notice included a table of options (which typically lists the claims filing deadline, along with other options such as excluding oneself, doing nothing, or attending a hearing); whether the notice used visually prominent, explicit language to describe the

[51] In contrast to the analysis presented in section 2.5, we have not displayed medians or (unadjusted) weighted means across qualitative characteristics because many of these characteristics are highly correlated with each other. Instead, we have used a regression framework to examine differences in claims rates based on the characteristics because such a framework allows us to hold other factors constant.

consequences of doing nothing; whether the notice used visually prominent, explicit language to describe the necessity of filing a claim; whether the notice contained a statement explaining the relevance of the notice to the recipient; and whether the notice used visually prominent, plain English language to describe the amount and availability of payment.[52]

Figure 10 displays the incidence of the various notice characteristics for the 98 claims-requiring cases for which the administrator was able to provide a copy of the notice sent to class members.[53] These characteristics often vary both within and across notice types.

According to Figure 10, Panel A, notice packets in our sample tended to provide more legal information at the top of the notice than email and postcard notices. Less than 10% of notice packet cases provided no legal information at the top of the notice, while approximately half of email and postcard notices provided no such information. This discrepancy is not surprising given differences in space constraints across notice types. A similar trend is evident when considering the inclusion of a table of options (Panel B): notice packets included a table in the majority of notices (60%), while no postcards and only 15% of email notices in our sample included such a table.

The two most common ways in which notices in claims-requiring cases emphasized that class members must take action to receive settlement benefits were: (1) explaining the consequences of doing nothing (*e.g., if you do nothing, you receive no payment from the settlement*); and (2) signaling the necessity of filing a claim to receive payment (*e.g., you must file a claim to receive a payment* or *filing a claim is the only way to receive payment*). About 20% of notices included the "do nothing" explanation prominently (Figure 10, Panel C). In addition, approximately 30% of all cases included an explanation about the necessity of filing a claim (Panel D). Finally, 35% included either explanation prominently.[54]

---

[52] *See* Appendix C: Notice Characteristic Coding Methodology – Administrator Study. Two coders separately categorized each characteristic according to the methodology. We reexamined any deviations in coding before assigning these characteristics to a final category. Prior to resolution, the inter-rater reliability, or the percentage agreement between coders, was above 75 percent for all but two of the coded characteristics. For the "consequences of doing nothing" and "necessity of filing a claim" categories, reliability rates were 62 percent and 54 percent, respectively. The majority of the discrepancies were due to the coder missing a statement, rather than substantive disagreements. Because of the lower level of agreement for these two categories, we created a composite measure when analyzing the impact of these characteristics on the claims rate, which we refer to as "take action language" in Table 8, below. A notice is coded as having "take action language" if it prominently included either language describing the consequences of doing nothing or the necessity of filing a claim. The level of agreement for this composite measure is 67 percent.

[53] For notice campaigns that utilized multiple types of individual notice, and, thus, for which we received multiple copies of individual notices, we coded the notice which the majority of class members received.

[54] We do not display this characteristic graphically in Figure 10. It is the composite of Panels C and D.

Panel E of Figure 10 displays the incidence of notices that signal the relevance of the mailing or email to recipients. We provide a full explanation of this categorization in Appendix C. In general, we categorized cases that contain the phrase, "our records indicate" as containing a relevant statement (*e.g., our records indicate you are eligible for a payment* or *our records indicate you purchased* {misrepresented product}). Cases categorized as not containing a relevant statement usually included an alternative statement containing the words "if" and "could" (*e.g., if you purchased* {product}, *you could receive benefits from a class action settlement*). This language was not always within a notice campaign's control, if for example, company records did not identify definite class members. This would result in a notice campaign using the more vague "if/could" language. Overall, approximately 30% of notices included a statement that signals relevance to the recipient.

Panels F and G of Figure 10 address notice language related to the settlement payment. Panel F displays the incidence of cases that include "plain English" and/or "certain" language. As explained in detail in Appendix C, notices with plain English payment language prominently displayed words such as *money, payment, refund, cash, reimbursement,* or an amount accompanied by the "$" symbol. In general, payment language that we categorized as "certain" included a definite statement about the class member's receipt of payment following filing a claim. About half of the cases in the sample include neither the plain English nor certain language, and only 12% of the cases included both.

Again, the notice campaigns were not always able to list specific, guaranteed payment amounts. For example, in *pro rata* cases, the amount of the payment depended on the number of claims filed. However, any settlement providing cash benefits can employ easily-understood payment language to communicate with recipients who may be unfamiliar with technical language such as *share of the settlement fund* or *settlement benefits*.[55] While 94% of the cases in Figure 10 provide cash benefits,[56] only 40% of the cases used plain English payment language.

[55] We coded these commonly-occurring technical phrases as not "plain English" if they were not accompanied by a prominent statement using more easily-understood language, such as *payment* or *money*.

[56] The remaining 6% of cases provided only coupons or vouchers as compensation.

Figure 10: Incidence of Notice Characteristics, by Notice Type

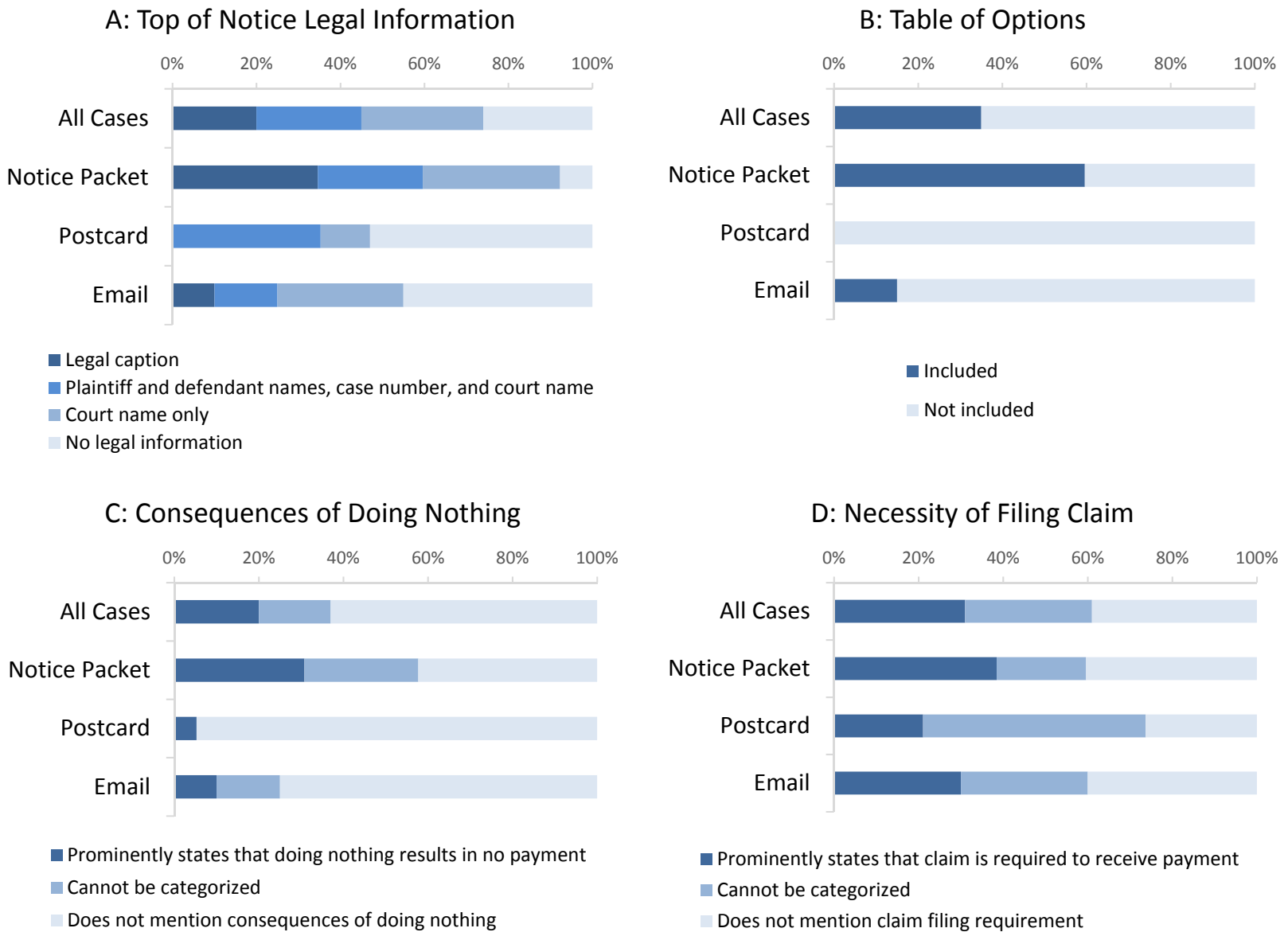
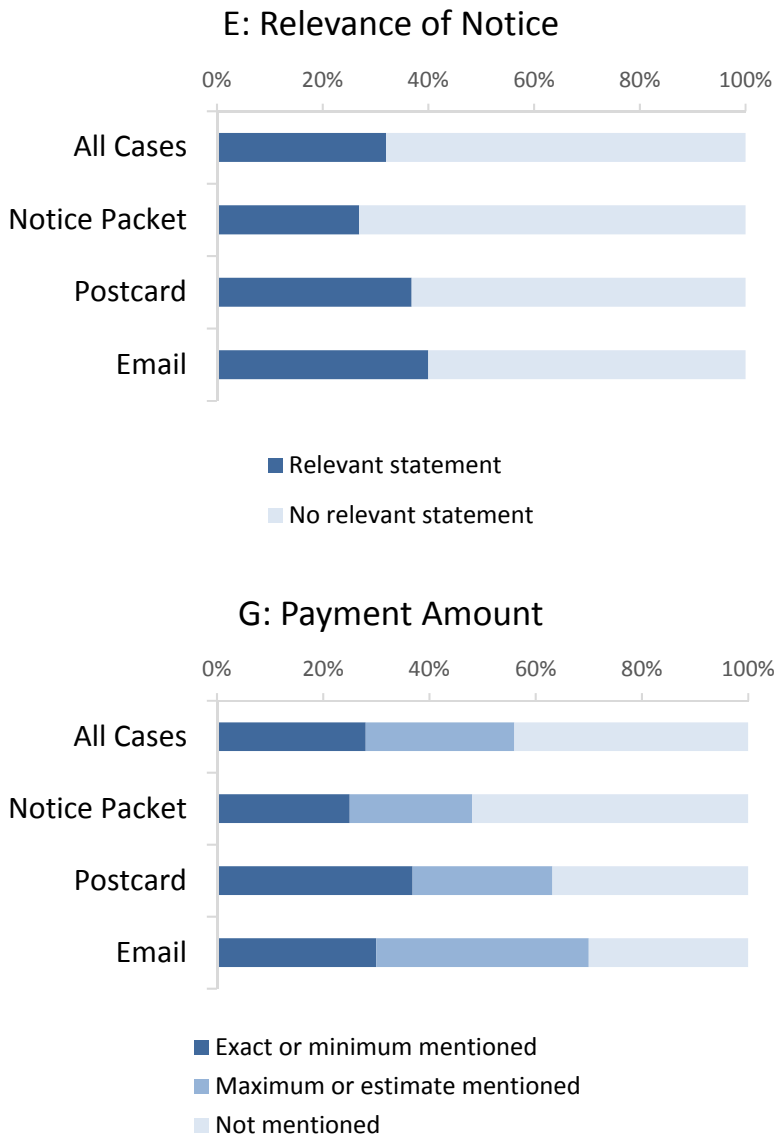


Figure 10: Incidence of Notice Characteristics, by Notice Type (Continued)



Notes: Sample consists of 98 claims-requiring cases for which we obtained a copy of the individual notice in response to the FTC order. *See* Appendix C for details on the categorization.

Claim Form Characteristics

To examine differences in claims-filing requirements across settlements, we reviewed each claim form and, for each, coded: the length of the form; the language used to ask claimants to affirm that they are in the class; the degree of personally identifiable information required to file a claim; and the difficulty of remembering or obtaining documentation requirements, if any.[57] This analysis was limited to the 58 cases that provided a claim form to recipients (and for which administrators were able to provide us with a copy in response to the FTC order).[58]

As seen in Table 6, about half the cases in our sample had claims forms that were one page in length, about a third had 2-page claim forms, and the remaining 15% were longer than two pages. We also examined the language used by the claim form to ask claimants to certify their eligibility to receive a settlement payment. Most claims-requiring cases asked claimants to sign a statement affirming that they fell under the class definition described in the notice. A common phrase that claim forms used in such statements was *under penalty of perjury*. We find that about half the cases in our sample used this language, while the other half used softer language (*e.g.*, *to the best of my knowledge*) or do not require claimants to sign any such statement.

We also examined the degree of personally identifiable information (PII) required by the claim form. We found that the vast majority of cases (80%) asked for no sensitive PII and, instead, only asked for basic contact information such as name and address. In the sample, 7% of the cases asked for moderately sensitive information, such as date of birth and last four digits of claimant's social security number. The remaining 14% asked for very sensitive PII, such as full social security or bank account information.

The last set of findings in Table 6 relate to documentation requirements. More than half (58%) of cases in the sample asked for "very easy" documentation requirements, which we defined as including basic contact information and items that claimants could easily remember or look up, such as driver's license number. Only 5% of cases asked for "very difficult" information such as original receipts. While we did not include this statistic in the table, slightly more than half (52%) of cases in our sample asked for *only* basic contact information such as name, email address, and mailing address without any further PII or documentation requirements (*i.e.*, this is the overlap of cases which asked for "no sensitive PII" and that had "very easy to remember/obtain" documentation requirements).

---

[57] We used the same double-coding technique described in footnote 52.

[58] We do not display incidence of claims filing requirements separately across notice type because the vast majority of notices that provide claim forms are notice packet cases.

Table 6: Incidence of Claim Form Characteristics

Claim Form Characteristic	Examples	Percentage of Cases
Length of Claim Form		
1 page		54%
2 pages		31%
Longer than 2 pages		15%
Requires that claimants sign a statement containing the phrase *under penalty of perjury*?		
Yes		51%
No		49%
Personally Identifiable Information (PII) Required		
No Sensitive PII	*Name, Address, Phone Number, Email Address*	80%
Moderately Sensitive PII	*Date of Birth, Driver's License Number (DLN), Last 4 Digits of Social Security Number (SSN)*	7%
Very Sensitive PII	*Full SSN, Bank Account Number*	14%
Claim Documentation Requirements		
Very Easy to Remember/Obtain	*Current Address, Current Phone Number, Date of Birth, SSN, DLN*	58%
Moderately Easy to Remember/Obtain	*Phone Number or Address at the Time of Allegedly Unlawful Practice*	17%
Moderately Difficult to Remember/Obtain	*Locations of Product Purchased, Last 4 Digits of Credit Card Used to Purchase*	20%
Very Difficult to Remember/Obtain	*Original Receipts, Notarization*	5%

2.7 Regression Analysis

In section 2.5, we examined the relationship between basic notice characteristics and the claims rate by calculating *unadjusted* weighted means. For example, the weighted mean claims rates reported across email, postcard, and notice packet campaigns did not account for other characteristics available in the dataset, such as the level of redress provided by the settlement. If the direct notice type and level of redress (*i.e.*, the independent variables) were related to each other and to the claims rate, controlling for both independent variables in the same framework provides insights about the underlying characteristics that are more directly related to the claims rate.

To account for confounding variables for which the administrators provided data, we examined the relationship between the claims rate and each notice characteristic using a regression framework, which estimates the strength of the relationship, holding the other available independent variables constant. The regression analysis allows us to determine whether the noted relationships (or lack thereof) between notice characteristics and claims rates hold when adjusting for other factors, while testing for statistical significance in the same framework. Table 7 displays these regression coefficient estimates. The regression specification includes most notice characteristics as indicator variables, where the missing category reflects the baseline—*e.g.*, cases delivering notice via notice packet constitute the baseline direct notice type.

The reader should interpret the coefficient on each indicator variable as the estimated difference in weighted mean claims rate for notice campaigns with the specified characteristic compared to the baseline, holding the other variables constant. For the one continuous variable—median redress provided by the case—the reader should interpret the coefficient as the estimated percentage point increase in the claims rate related to a $1 increase in median redress, holding the other variables constant. As noted earlier, because we do not have data on, and hence cannot control for, key unobservable characteristics that may be related to our variables of interest—such as the degree of injury resulting from the practice and quality of available contact information—the reader should not interpret the regression coefficients as causal estimates.

For the most part, the coefficient estimates in Table 7 corroborate trends that we noted previously.[59] For example, holding all else equal, the negative, statistically significant coefficient in the first row (-0.0727) signifies that cases with email notice have a 7.3 percentage points lower claims rate, in comparison to cases that employ notice packets. Conversely, the regression results indicate that, while postcard notice is associated with lower claims rates

[59] This similarity suggests that the independent variables are unlikely to be significantly correlated to one another and/or to the claims rate.

relative to notice packets, the difference in claims rates between the two notice types is not statistically significant. The regression estimation also finds that cases that attempt to reach class members twice or more have claims rates that are significantly higher (5.7 percentage points higher, on average), than those that provide only one round of notice. Finally, publication notice and level of median redress have a negligible relationship with the average claims rates.

Table 7: Regression Coefficient Estimates of the Relationship Between Notice Characteristics and Claims Rate

Dependent Variable: Claims Rate Independent Variables:	Coefficient Estimates (Standard Error)
Indicator for Email	-0.0727*** (0.0185)
Indicator for Postcard without Claim Form	-0.0279 (0.0182)
Indicator for Postcard with Claim Form	-0.00120 (0.0170)
Indicator for Two or More Rounds of Notice	0.0573*** (0.0217)
Indicator for Publication Notice	-0.0000728 -0.0147
Median Redress	-0.00000815 (0.0000249)
Constant	0.100*** -0.0192
Observations	100

Notes: Sample consists of cases that require a claims process, which had a calculated claims rate of less than 100% and provided data for all variables. Regression is weighted by the number of notice recipients and controls for the court (state vs federal), the number of notice recipients, and an indicator for using multiple forms of notice. Robust standard errors in parentheses.
Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Notice Characteristics

In Table 8, we examine the relationship between the notice characteristics, described in section 2.6, and the claims rate in a regression framework.[60] According to the results, the only notice characteristics that were significantly related to the claims rate are those involving payment language. Specifically, notices that included plain English language about payment had claims rates that were about 10 percentage points higher on average. While there may be unobservable characteristics that are correlated with a notice campaign's use of plain English payment language (so we cannot interpret the regression results causally), our findings do provide suggestive evidence that the inclusion of such precise payment language—if the features of the settlement allow for it—could substantially increase claims rates.

[60] As before, the reader should interpret the coefficient estimates as the percentage difference in adjusted weighted average claims rate for notices having that characteristic compared to the baseline, which is the omitted category. For example, the omitted category for the legal information at the top of the notice is "no legal information."

Table 8: Regression Coefficient Estimates of the Relationship between Notice Characteristics and Claims Rate

Dependent Variable: Claims Rate Independent Variables:	Coefficient Estimates (Standard Error)
Indicator for Legal Caption	-0.00529 (0.0421)
Indicator for Plaintiff, Case, & Court	0.0103 (0.0413)
Indicator for Court Name Only	0.00804 (0.0502)
Indicator for Table	0.0398 (0.0432)
Indicator for Take Action Language	-0.0389 (0.0330)
Indicator for Relevant Language	0.00710 (0.0253)
Indicator for Plain English Payment Language	0.105*** (0.0308)
Indicator for Certain Payment Language	0.0380 (0.0398)
Indicator for Plain English and Certain Payment Language	-0.0780 (0.0618)
Indicator for Exact or Minimum Payment	0.0722* (0.0391)
Indicator for Maximum or Estimated Payment	0.0731* (0.0425)
Constant	0.0710 (0.0523)
Observations	82

Notes: Sample consists of cases that require a claims process, had a calculated claims rate of less than 100%, provided data for all variables, and included a copy of the notice in the FTC order production. Regression is weighted by the number of notice recipients and controls for all variables listed in Table 7. "Indicator for Take Action Language" takes on the value of 1 if either the consequences of doing nothing or the necessity of filing a claim are prominently explained. Robust standard errors in parentheses.
Significance levels: *** p<0.01, ** p<0.05, * p<0.1

Claim Form Characteristics

Finally, in Table 9, we use regression analysis to examine the relationship between the claim form characteristics and the claims rate. We find that none of these characteristics are significantly related to the claims rate.[61]

Table 9: Regression Coefficient Estimates of the Relationship Between Claim Form Characteristics and Claims Rate

Dependent Variable: Claims Rate Independent Variables:	Coefficient Estimates (Standard Error)
Indicator for Claim Form Length of 2 Pages	0.000909 (0.0481)
Indicator for Claim Form Length of >2 Pages	-0.0638 (0.103)
Indicator for *Under Penalty of Perjury* Language	-0.0282 (0.0321)
Indicator for Moderately Sensitive PII Required	-0.0469 (0.0291)
Indicator for Very Sensitive PII Required	-0.00854 (0.0445)
Indicator for Moderately Easy to Remember/Obtain Documentation Requirements	0.00991 (0.0366)
Indicator for Moderately Difficult to Remember/ Obtain Documentation Requirements	0.0199 (0.105)
Indicator for Very Difficult to Remember/Obtain Documentation Requirements	-0.273* (0.142)
Constant	0.208*** (0.0265)
Observations	51

Notes: Sample consists of cases that require a claims process, had a calculated claims rate of less than 100%, provided data for all variables, and included a copy of the claim form in the FTC order production. Regression is weighted by the number of notice recipients and controls for all variables listed in Table 7. Robust standard errors in parentheses. Significance levels: *** p<0.01, ** p<0.05, * p<0.1.

[61] More specifically, none were statistically significantly related to the claims rates at p<.05. Given that the regression contains 51 observations and 17 covariates, the regression may lack adequate power to detect statistically significant differences. Some aspects of documentation requirements had a marginally significant relationship with the claims rate. Claim forms that request the most difficult category of documentation—such as original receipts or notarizations—had claims rates that were an average of 27.3 percentage points lower (p=.06) than those that ask for the easiest information—such as current contact information. Despite this large estimated coefficient, cases that have such difficult documentation requirements comprised only 5% of the sample (*see* the "very difficult to remember/obtain" category in Table 6), suggesting that burdensome claims filing requirements were unlikely to be the primary factor leading to generally low claim filing rates across our sample of cases.

Chapter 3: Notice Study

3.1 Summary

Introduction

Staff conducted this study to evaluate whether various emailed class action notice characteristics—sender address, subject line phrasing, compensation amount in the subject line, email body format, and court seal displayed in the email body—influence respondents':

- Stated likelihood of opening a class action settlement email;
- Comprehension of the type of information contained in the email;
- Understanding of the class action claims process as communicated by the email;
- Impressions about the likelihood of compensation from the class action settlement described in the email;
- Impressions of the ease of satisfying requirements to receive compensation through the class action settlement described in the email; and
- Impressions of the time necessary to file a claim for compensation through the class action settlement described in the email.

While class action settlements use a variety of notice methods to reach class members, including mailed notice packets, postcards, and email, this consumer study focused exclusively on email notice[62] for two reasons: first, our interviews with class action administrators indicated they are increasingly using email notifications, especially for large, national classes, thus suggesting our focus on email will have greater long-term utility; and second, given that our study design involved an internet panel and its associated online interface, we determined that visuals of emails would better fit into such an interface than those of postcards or notice packet mailings.[63]

[62] *See* Chapter 1 for general information about class action settlements.

[63] We do not intend for our decision to study exclusively emailed class action notice to be interpreted as an endorsement of this form of notice. As described in Chapter 2, the evaluation of the most effective type of class action notice for consumer claims rates remains an open question.

Limitations

The study provides useful insights into factors that affect consumer perceptions of emailed class action notices. However, several limitations apply.

First, the study used a voluntary internet panel, which did not provide a true probability sample. Thus, absolute percentages from this study's findings should not be projected to the national population. Nevertheless, as explained in Section 3.2, *comparing* responses across scenarios, rather than interpreting absolute percentages, is likely to be informative.

Second, the survey platform did not fully replicate an authentic email experience for respondents. Specifically, the study displayed static images of a fictitious email environment and asked respondents questions related to these images, instructing them to assume they were viewing their personal inboxes and email content. This environment may yield responses that do not completely capture real-life consumer experiences with email. For example, the study's responses are unlikely to reflect fully consumer hesitation to open email that they find untrustworthy. Additionally, consumers may interact with email differently if they recognize the company involved in the class action notice, a proclivity we are unable to account for entirely in this study. Even so, because our conclusions stem from comparisons across scenarios, and because these real-world behaviors are unlikely to affect some scenarios differently than others, differences across scenarios still provide valuable insights into how variations in email components influence consumer perception of class action notices.

Conclusions

The study's findings indicate that certain widely-used characteristics of emailed class action notices—such as legal phrasing of subject lines, omission of the available amount of compensation in the subject line, and long email formats—perform better than others on some, but not all dimensions. In particular, these long-established practices appear to effectively convey to respondents the type of information contained in the email. On the other hand, the study's results suggest that emailed notice campaigns could improve current practices with respect to other outcomes. For instance, the study suggests that rewording subject lines to remove reference to a class action settlement may improve opening rates. In addition, streamlining the instructions for filing a claim may improve consumer understanding of the claims process. However, the study also shows that respondents were more suspicious of bulleted lists than of long format text in emails, suggesting that notice campaigns need to pay

careful attention to conveying the legitimacy of the class action settlement claim process in the emails with streamlined instructions.[64]

3.2 Study Methodology

Overview

We examined whether consumer perception of a class action settlement notice differs across various inbox and email conditions by randomly assigning respondents to treatment groups and comparing their responses across conditions. In doing so, we divided the study into two parts. The first part examined various inbox characteristics (such as the sender address and the subject line), and the second part examined various email body characteristics (such as the format of the notice and the display of a court seal in the email). The study randomly assigned each respondent to one of 108 sender, subject line, and email body cells. Each respondent viewed only one inbox (consisting of a sender and subject line combination) and one email body (consisting of a court seal and email format combination). Each respondent answered the same set of questions related to their likelihood of opening the email, their comprehension of the content of the notice, their understanding of the steps required to receive a settlement payment, and their perceptions of the claims and refund process.[65] Section 3.3 provides further details on the two-part study design.

Sampling Frame

We contracted with Great Lakes Marketing Research, a consumer research firm, to administer the study using an internet panel with nationwide coverage. To recruit participants, Great Lakes contracted with a provider of an internet panel consisting of approximately 6 million individuals drawn from throughout the country, derived from a series of convenience sampling procedures, rather than true probability sampling.

To be eligible for participation in the study, respondents had to be actively enrolled in the internet panel and be 18 years of age or older. The panel recruited respondents so the sample

[64] Despite these specific observations, the study does not yield definitive conclusions about ways to consistently improve consumer perception of emailed class action notices.

[65] More specifically, each respondent was presented with the same survey instrument, including skip patterns, regardless of his or her randomly-assigned treatment group.

would be representative of those who use the internet and email.[66] Respondents who completed the study received an average of $2.20 as an incentive payment.

Great Lakes fielded the study in January 2018.[67] We used a sample of 8,000 respondents based on the number of inbox and email body cells into which we divided the sample and a power analysis. To obtain a final sample of 8,000 completed responses, Great Lakes sent a total of 14,884 email invitations to panelists. Thus, the completed response rate was 53.7%. To ensure consistency in the images presented to each participant, respondents had to take the survey on a desktop, laptop, or tablet (*i.e.*, we did not allow the use of mobile phones).

The study results are not projectable to the general population because the internet panel was assembled through a series of convenience sampling procedures, which did not yield a nationally representative probability sample. Accordingly, the study focuses on comparing respondent interpretations across various inbox and email body scenarios to determine if consumer perception of the class action settlement notice studied is sensitive to differences in the scenario presented. We do not seek to project our quantitative findings to the percentage of the population at large that holds a particular view. Nevertheless, our findings based on comparing results across scenarios provide useful insights into email attributes that influence consumer understanding and willingness to engage with class action notices.

3.3 Study Design

The conduct we studied—consumer interaction with email—inherently involves a two-step process: individuals first see a list of email senders and subject lines in their inboxes and then choose to open and view specific emails. The study simulated this process as closely as possible using a two-part, static design. For both parts of the study, respondents viewed static images of an email platform and were asked them a series of closed-ended and open-ended questions. To mitigate biases from previous experiences with actual companies, we developed a fictitious class action case.[68]

---

[66] *See* Appendix Table G.1 for a comparison of the demographics of the study sample with that of the U.S. population.

[67] Prior to fielding the study, we conducted a pretest with 100 respondents to ensure that respondents easily understood the questions and that the online procedure was sufficient to generate reliable data. The pretest questionnaire included additional open-ended questions asking respondents to report any confusion or difficulties they experienced when answering the questions. Based on our review of these comments, we concluded that the questionnaire wording and design were clear and that additional changes were not necessary.

[68] We selected *Sonoro Technologies, Inc.* as the name of the defendant company, *Jet* as the name of the product, *Lavin* as the name of the plaintiff involved in the class action lawsuit, and $100 as the amount of compensation available through the settlement.

Conceptual Framework

To successfully file a claim, the class action notice recipient must follow a series of steps that likely include the following:

1) The notice reaches the recipient.
2) The recipient opens the notice.
3) The recipient understands that the notice contains information about a refund.
4) The recipient understands that they have to file a claim to receive the refund.
5) The recipient values the expected payoff from filing a claim over the expected costs of filing a claim.

The Notice Study examines whether alternative sender names, subject lines, and email formats are more effective than others in completing the steps listed above.[69] The study includes a series of questions that directly measure several aspects of this process, for example, by asking about respondents' likelihoods of opening the class action email and asking them to rate statements about the nature of the email, as well as any actions they may need to take to receive a refund through the class action settlement. As described in more detail below, the study holds the expected payoff of filing a claim constant across email conditions ($100). In doing so, the study is able to gauge if alternative email formats—for example, by using a bulleted list to describe the claims process— affect respondents' assessments of the "costs" of filing a claim. Specifically, the study includes questions that measure how burdensome the process is, for example, by asking respondents to gauge the difficulty of meeting refund requirements and to estimate how long it will take to complete the process to apply for the refund.

Part I: Inbox

Part I Overview: We designed the first ("inbox") part of the study to examine whether various inbox characteristics influence: (1) respondents' stated likelihoods of opening the studied class action settlement notice email; and (2) their perceptions of the type of information contained in the email.

Part I Visual Displays and Overview of Question Sequence: In Part I of study, we presented respondents with a static image of an inbox and asked them to assume it was their personal inbox containing emails from companies with whom they had done business. The

[69] Because of the static, simulated interface of the study, we did not examine the first step, success of delivery.

inbox contained a total of 10 inbox entries, one of which was a class action settlement notice email about the fictitious company *Sonoro Technologies*. The nine other inbox entries also concerned fictitious companies and had various subject lines, such as subjects regarding promotions or order confirmations. The study randomly assigned the position of the class action email to mitigate bias resulting from the email's location: for approximately half of the participants, it appeared in the third position, and for the other respondents, it appeared in the eighth position. While viewing the image of the inbox, respondents were asked to select the emails, if any, they would be likely to open. Next, while viewing the image of the class action email inbox entry in isolation, respondents were asked to rate a series of statements about the nature of the email on a true-false scale.[70]

Part I Scenarios: The inbox part of the study tested 18 sender address / subject line scenarios. Specifically, it tested three sender addresses (*Sonoro*, *SonoroJetSettlement*, and *classaction@uscourts.gov*) across three subject line prefixes (*Notice of Class Action Settlement*, *Notice of Refund*, and *Lavin v. Sonoro Technologies Class Action Settlement*) and two subject line refund information conditions (presence or absence of the potential refund amount of $100).[71]

Part II: Email Body

Part II Overview: We designed the second ("email body") part of the study to examine whether various characteristics influence: (1) respondents' comprehension of the information contained in the studied class action settlement notice; (2) their understanding of the steps required to receive a refund; and (3) their perceptions of the claims and refund process.

Part II Visual Displays and Overview of Question Sequence: This portion of the study began by instructing respondents to assume that they had opened the class action settlement notice email. Next, the study presented respondents with a static image of an email body, depicting a class action settlement notice. We blurred the sender and subject line so that these components of the email did not drive responses. After viewing the image of the email body,

[70] Appendix D contains the full questionnaire for the study.

[71] Appendix E contains example screenshots of the stimuli presented in Part I of the study. We selected these example screenshots so that all sender names and subject lines are represented. This allows the reader to recreate all 18 sender address/subject line scenarios. Half of the example screenshots list the class action email on the third line, and half list it on the eighth. The reader should bear in mind that this position was randomized for each of the 18 scenarios, meaning that approximately half of respondents viewed the email in the third position and half viewed it in the eight position for *each* scenario.

respondents answered a series of questions about the nature of the email.[72] Next, regardless of their answers to this set of questions, respondents were explicitly told that the email they had just viewed included information on a class action settlement, including information about a refund, and were presented with the same email body image for a second time. Then, respondents were asked what actions they might need to take to receive the refund. Respondents who indicated that one must fill out a claims form to receive the refund were then asked about their personal opinions of the claims and refund process according to the email they viewed.

Part II Scenarios: We tested six scenarios in this part of the study. Specifically, we presented respondents with three email formats across two court seal conditions. The three email body formats were: (1) a typical emailed class action settlement notice derived from notices in various nationwide class action settlements (the "long" version); (2) a condensed settlement notice (the "condensed" version) that we developed and that complies with Rule 23; and (3) a further streamlined settlement notice (the "experimental" version), which was not consistent with Rule 23's current requirements. The two court seal conditions were: (1) the presence of the seal, and (2) the absence of the seal. When presented, the court seal was outlined in blue and was displayed in combination with the text "This is a LEGAL NOTICE approved by the UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA" along with the fictitious case name and docket number.[73]

[72] We removed the image of the email body from the respondent's view when he or she was answering questions.

[73] Appendix F contains example screenshots of the stimuli presented in Part II of the study. We selected these example screenshots so that all email formats and court-seal conditions are represented. This allows the reader to recreate all 6 email format/court seal scenarios.

3.5 Results

Part I: Inbox Results

In Part I of the study, respondents answered two sets of closed-ended questions and one open-ended question about the inbox. We base the analysis on the closed-ended questions, which we supplement with a text-mining analysis of the open-ended responses.

Questions Posed to Respondents

In the first closed-ended question, Q1, respondents were asked to select the emails, if any, that they would be likely to open from the image of the inbox screen. In the discussion below, we refer to the percentage of respondents who indicated they would likely open the class action email as the *stated opening rate*.

In the closed-ended question series, Q3a through Q3d, respondents were shown statements related to the class action email, and they were asked to rate the statements on a scale from definitely true to definitely false.[74] These questions included two correct statements about the email: 1) it provided information on a class action settlement (Q3b); and provided information on getting a refund (Q3d). The series also included two incorrect statements about the email: it was an advertisement (Q3a), and it provided shipping confirmation of an online order (Q3c). We aggregated responses to the question 3 series into a *comprehension rate* to measure whether a respondent indicated that <u>one or both</u> of the correct statements (Q3b and Q3d) were "probably true" or "definitely true" and whether the two incorrect statements (Q3a and Q3c) were "probably false" or "definitely false". In other words, we concluded that a respondent comprehended the information if they understood the email was about a class action or a refund, and that the email was not an advertisement and did not provide shipping confirmation.

In the open-ended question, Q2, respondents were asked to describe why they were likely or unlikely to open the Notice in Q1.

[74] Specifically, when answering questions Q3a through Q3d, respondents viewed the inbox entry for the class action settlement in isolation, with the rest of the email entries cropped out. We randomized the order in which respondents answered this series of questions. We also provided a "don't know" option for this series to minimize bias resulting from random guessing.

Impact of Sender Information on Opening and Comprehension Rates

Figure 1 summarizes the closed-ended results for Part I of the study, separately by the sender name displayed in the inbox scenario.[75] As detailed below, respondents viewing an inbox scenario with the sender *classaction@uscourts.gov* had slightly higher stated opening and comprehension rates than those viewing other scenarios.[76]

Stated Opening Rates by Sender: As seen in Figure 1.A, regardless of the sender name, fewer than half of respondents said they were likely to open the class action settlement email. Respondents who viewed the inbox scenario where the sender of the class action notice was *classaction@uscourts.gov* said that they would be likely to open the email 41% of the time, the highest stated opening rate across all three senders, but not by a large margin. Specifically, the *classaction@uscourts.gov* stated opening rate was 4 and 6 percentage points higher than the stated opening rates for respondents who viewed the inbox entry with the senders *Sonoro* and *SonoroJetSettlement*, respectively. [77]

Comprehension Rates by Sender: Based on the comprehension rates displayed in Figure 1.A, sender name minimally influenced respondent understanding of the nature of the email. Specifically, the results indicate that comprehension rates for all three sender conditions fell within only 2 to 3 percentage points of each other. Overall, a relatively low portion of respondents (less than half) correctly understood the nature of the email. Respondents viewing the inbox scenario with sender *classaction@uscourts.gov* had the highest comprehension rate (40%).[78]

We also examined the individual components of the comprehension rate (*i.e.*, responses to Q3a through Q3d) and found that there are some key differences across sender conditions. As illustrated in Figure 1.B., 65% of respondents viewing *classaction@uscourts.gov* understood that the email provided information about a class action settlement, representing a 13 percentage point increase over respondents who understood this in the *Sonoro* sender condition (52%). In

[75] We analyze main effects (such as the sender, refund information condition, and subject line) by collapsing across levels of the other variables. For example, to calculate stated opening rates for a specific sender (i.e., not accounting for subject line), we average stated opening rates for that sender across all six subject line conditions.

[76] *See* Appendix Table G.2 for 95% confidence intervals and results of joint significance testing across the three sender scenarios.

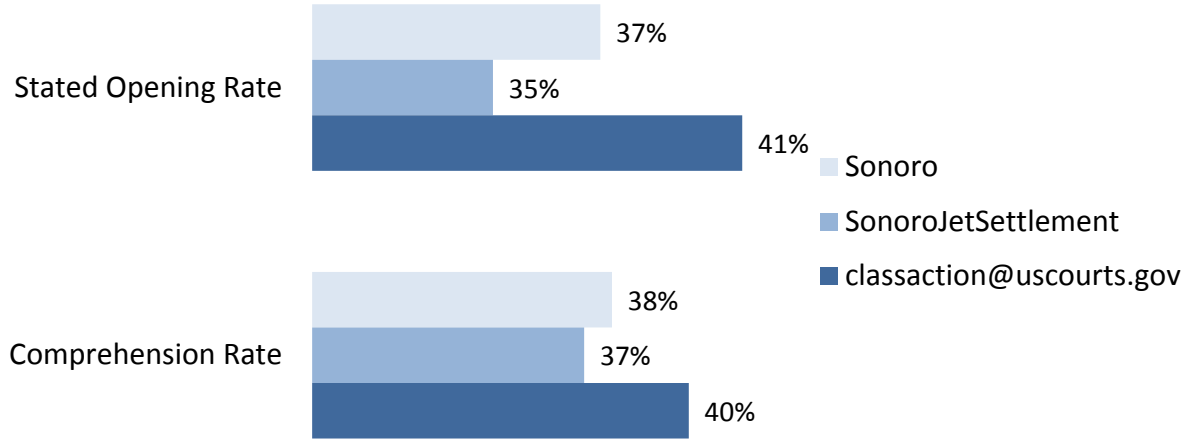
[77] We conduct all statistical significance testing at $p<.05$ using a two-tailed t-test. All differences cited throughout the discussion are statistically significant unless otherwise stated.

[78] Throughout this chapter, we simplify the exposition by referring to responses of "definitely true" or "probably true" to a given statement as respondents saying, or otherwise indicating the content of the statement to be true.

addition, we find that nearly half of respondents (44% to 47%) incorrectly believe the email is an advertisement, while a much smaller percentage of respondents (13% to 14%) incorrectly believe it is a shipping confirmation for an online order. When adjusting for this tendency to identify false statements as correct, we find that differences across sender scenarios in understanding were minimal, as reflected in the overall comprehension rate results described above. The analysis of the individual components of respondent comprehension also suggests that the relatively low overall comprehension rate is driven in part by respondents' belief that the email is promotional.

Figure 1: Inbox Results, by Sender

A: Stated Opening and Comprehension Rates



B: Components of Comprehension Rate

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Sonoro	SonoroJetSettlement	classaction@uscourts.gov
Correct Statements			
Q3b: This e-mail provides information on a class action settlement.	52%	60%	65%
Q3d: This e-mail provides information on getting a refund.	50%	49%	50%
Incorrect Statements			
Q3a: This e-mail is an advertisement.	47%	47%	44%
Q3c: This e-mail provides shipping confirmation of an online order.	14%	13%	13%

Impact of Refund Amount in Subject Line on Opening and Comprehension Rates

Subject lines that contain the specific amount of the refund (*i.e.*, "$100") performed slightly worse than those without the amount of the refund in terms of stated opening rates, and performed considerably worse in terms of comprehension rates. We summarize these results in Figure 2 and provide more detail below.

Stated Opening Rates by Refund Amount in Subject Line: Respondents' answers indicated they were more likely to open the class action email if it did not have a specific refund amount in the subject line. Of the respondents who viewed an inbox scenario that omitted the refund amount in the subject line of the class action email, 40% said that they would open the class action email. Conversely, 36% of those viewing an inbox scenario where the class action email subject line informed respondents of the $100 refund amount said that they would open it (*see* Figure 2.A).[79]

Comprehension Rates by Refund Amount in Subject Line: Respondents' answers indicate that they were much less likely to understand the nature of the class action email when the specific refund amount ($100) appeared in the subject line. In particular, 32% of respondents who viewed a class action inbox entry containing $100 in the subject line correctly understood the type of information contained in the email compared to 44% who viewed a class action inbox entry that did not include the $100 amount, as seen in Figure 2.A. That is, including the refund amount decreased the comprehension rate by 12 percentage points.

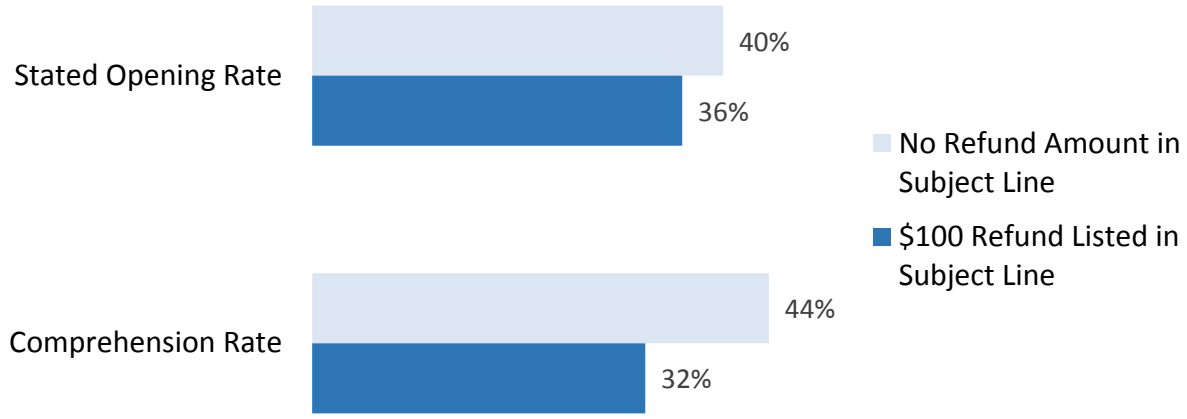
As seen in Figure 2.B, the refund amount information had a large impact on whether respondents believed the email was an advertisement. Figure 2.B displays the results for each question of the Q3 series, which we used to compute the comprehension rate based on refund information. Indeed, 52% of respondents viewing an inbox scenario with the refund amount thought it was an advertisement (an incorrect response), 12 percentage points higher than the percentage of respondents who thought the same when viewing the inbox entry without the refund amount (40%). In comparison, when looking at responses to the correct statements (Q3b and Q3d), the presence of the refund amount in the subject line only modestly reduced (by 6 percentage points) understanding that the email concerned a class action settlement and substantially *increased* (by 10 percentage points) respondent understanding that it provided

[79] The subject lines that omitted the refund amount are: *Lavin v. Sonoro Technologies Class Action Settlement*, *Notice of Class Action Settlement*, and *Notice of Refund*. The subject lines that included the refund amount are: *Lavin v. Sonoro Technologies Class Action Settlement - $100 refund available*, *Notice of Class Action Settlement- $100 refund available*, and *Notice of Refund - $100 Available*. All differences cited throughout the discussion are statistically significant at $p<.05$ using a two-tailed t-test, unless otherwise stated.

information on a refund. This strongly suggests that respondents who viewed the subject lines containing the refund amount had decreased overall comprehension primarily because many believed the email to contain promotional material.

Figure 2: Inbox Results, by Refund Amount Information in the Subject Line

A: Stated Opening and Comprehension Rates



B: Components of Comprehension Rate

Percentage of Respondents Answering "Definitely True" or "Probably True"

	No Refund Amount in Subject Line	$100 Refund Listed in Subject Line
Correct Statements		
Q3b: This e-mail provides information on a class action settlement.	62%	56%
Q3d: This e-mail provides information on getting a refund.	45%	55%
Incorrect Statements		
Q3a: This e-mail is an advertisement.	40%	52%
Q3c: This e-mail provides shipping confirmation of an online order.	14%	13%

Impact of Subject Line on Opening and Comprehension Rates

Figure 3 summarizes the stated opening rates and comprehension rates, separately for each of the six subject lines.[80] Overall, the subject line *Notice of Refund* had substantially higher stated opening rates than other subject lines. When considering comprehension rates, however, the longer subject lines without the refund amount (*Lavin v. Sonoro Technologies Class Action Settlement* and *Notice of Class Action Settlement*) performed better than *Notice of Refund*. These findings imply that, when selecting subject lines for emailed class action settlement notices, there is likely to be a tradeoff between improving opening rates and improving consumer understanding.

Stated Opening Rates by Subject Line: As seen in Figure 3.A, stated opening rates differed across subject line conditions, with *Notice of Refund* (with no specific amount stated) clearly outperforming the other five conditions. Specifically, 52% of respondents who viewed the inbox scenario where the relevant email had this subject line said that they would open this email. This is the only subject line condition in which the majority of respondents selected the relevant class action email to open, and it represents a substantial increase (11 to 27 percentage points) over the other subject lines.[81] The subject lines containing the name of the plaintiff performed the worst: only 26% to 27% of respondents said that they would open the emails that contain the legal language *Lavin v. Sonoro Technologies Class Action Settlement* (with or without the refund amount).

Comprehension Rates by Subject Line: The subject lines *Lavin v. Sonoro Technologies Class Action Settlement* and *Notice of Class Action Settlement* were the most effective in conveying the nature of the email—45% to 48% of respondents correctly understood it. Consistent with the findings described previously, subject lines containing the refund amount performed worse than their counterparts that did not contain this information. While overall comprehension rates are quite low—less than half of respondents understood the nature of the email correctly—the *Notice of Refund - $100 Available* condition performed particularly poorly, with only 28% of respondents having the correct understanding.

Figure 3.B displays responses to the individual questions comprising the aggregate comprehension rate measure. The most striking difference across subject lines relates to respondents' understanding that the email provided information on a class action settlement. The vast majority of respondents viewing the *Lavin v. Sonoro Technologies Class Action Settlement*

[80] *See* Appendix Table G.3 for 95% confidence intervals and results of joint significance testing across the six subject line scenarios.

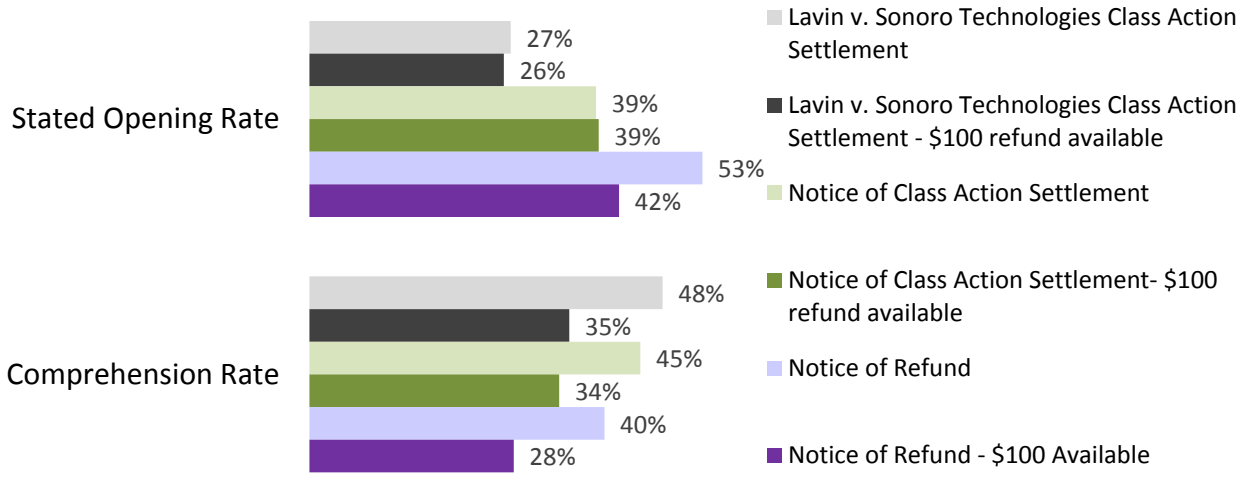
[81] All differences cited throughout the discussion are statistically significant at $p<.05$ using a two-tailed t-test, unless otherwise stated.

and *Notice of Class Action Settlement* subject lines selected a correct answer choice indicating that the email concerned a class action settlement (78% and 72%, respectively). The percentage of respondents in the *Notice of Refund* condition who understood this fact was only 36%. Given the phrasing of the various subject lines, these results are not particularly surprising. For instance, the subject line *Notice of Refund* does not explicitly say anything about a class action settlement.[82]

[82] To put these results in context, readers should note that one-third of the respondents who viewed the *Notice of Refund* subject line viewed it with the sender *classaction@uscourts.gov*, and an additional one-third viewed it with the sender *SonoroJetSettlement*, both of which one might expect to convey class action settlement information. The remaining third viewed *Notice of Refund* with the sender *Sonoro*, a combination which does not convey information about the class action nature of the email.

Figure 3: Inbox Results, by Subject Line

A: Stated Opening and Comprehension Rates



B: Components of Comprehension Rate

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Lavin v. Sonoro Technologies Class Action Settlement	Lavin v. Sonoro Technologies Class Action Settlement-$100 refund available	Notice of Class Action Settlement	Notice of Class Action Settlement- $100 Refund Available	Notice of Refund	Notice of Refund - $100 Available
Correct Statements						
Q3b: This e-mail provides information on a class action settlement.	78%	66%	72%	63%	36%	38%
Q3d: This e-mail provides information on getting a refund.	37%	54%	35%	55%	63%	55%
Incorrect Statements						
Q3a: This e-mail is an advertisement.	40%	50%	42%	52%	37%	54%
Q3c: This e-mail provides shipping confirmation of an online order.	12%	13%	13%	11%	17%	15%

Sender- Subject Line

Figure 4 displays the stated opening and comprehension rates for each of the 18 sender-subject line combinations. In general, we found that the results line up with the main effects analysis presented earlier; that is, sender name appeared to have a similar effect regardless of the subject line, and subject line appeared to have a similar effect regardless of the sender.[83]

The highest percentage of respondents said they would open the email with *Notice of Refund* subject line (52% to 54%). Within this subject line scenario, there were no statistically significant differences based on sender name—*i.e.*, for emails with this subject line, sender name does not appear to have an additional impact on opening rates.

Respondents viewing the subject line *Lavin v. Sonoro Technologies Class Action Settlement* had the highest comprehension rate (as high as 49%), and, again, there were no statistically significant differences in comprehension across sender names within this condition. Furthermore, *Notice of Class Action Settlement*, when displayed with sender names *Sonoro* and *classaction@uscourts.gov*, performed just as well as *Lavin v. Sonoro Technologies Class Action Settlement*, based on statistical significance testing.

[83] In a respondent-level regression, where the outcome is an indicator for selecting the class action settlement email to open, on dependent variables consisting of indicators for each sender, each subject line, and sender-subject line interactions, we found none of the interaction effect coefficients to be statistically significant at $p<.05$. In a similar regression where the outcome is an indicator for comprehending the nature of the email (as defined in the text), we found two of the interaction-effects to be statistically significant at $p<.05$.

Figure 4: Inbox Results, by Sender-Subject Line

Sender	Stated Opening Rated	Comprehension Rate
Lavin v. Sonoro Technologies Class Action Settlement		
Sonoro	27%	49% ^
SonoroJetSettlement	23%	46% ^
classaction@uscourts.gov	32%	49% ^
Lavin v. Sonoro Technologies Class Action Settlement - $100 refund available		
Sonoro	25%	35%
SonoroJetSettlement	25%	33%
classaction@uscourts.gov	29%	38%
Notice of Class Action Settlement		
Sonoro	39%	48% ^
SonoroJetSettlement	33%	42%
classaction@uscourts.gov	45%	45% ^
Notice of Class Action Settlement - $100 refund available		
Sonoro	38%	33%
SonoroJetSettlement	37%	34%
classaction@uscourts.gov	42%	34%
Notice of Refund		
Sonoro	54% ^	42%
SonoroJetSettlement	52% ^	41%
classaction@uscourts.gov	53% ^	38%
Notice of Refund - $100 Available		
Sonoro	42%	20%
SonoroJetSettlement	38%	27%
classaction@uscourts.gov	46%	36%

Notes: ^ denotes maximum percentages (*i.e.*, the highest stated opening and comprehension rates) within each column and percentages that are not statistically different from this maximum, using a two-tailed t-test at $p<.05$. *See* Appendix Table G.5. Subject lines are displayed in bold text.

Analysis of Open-Ended Responses, Inbox Results

At the end of the inbox part of the study (Q2), the study asked respondents why they said they would open or not open the class action settlement email.

Using text processing software, we first tabulated the most frequently-occurring substantive words, separately for respondents who said they were likely to open the email and respondents who said they were not.[84] These results appear in the word clouds in Figure 5. Respondents who said they would likely open the email tended to mention words related to the potential compensation available through the settlement (for example, "refund" is the most commonly occurring substantive word for this set of respondents). Respondents who said that they would not likely open the email often mentioned words that indicate mistrust. For this group of respondents, "spam" is the most frequently-occurring word.[85]

Figure 5: Word Clouds for Most Frequently-Occurring Terms in Q2: Why do you say that you are likely to open /not likely to open this e-mail?

Sample: 38% of respondents who selected email as one they **would be likely to open**

Sample: 62% of respondents who selected email as one they **would not be likely to open**

[84] We cleaned the text of open-ended responses before tabulating the most frequently occurring words by removing "stopwords" (words such as "and," "the," and "that," which primarily serve a grammatical purpose), re-coding various iterations of a word to the same word (*e.g.*, re-coding "emails" to "email"), removing numeric and special characters, and combining the phrases "class action" and "don't know" into a single entity to enhance the visual analysis.

[85] *See* Appendix Tables G.6 and G.7 for sample verbatim responses.

Open-Ended Analysis of Compensation-Related Words: In Figure 6, we examine the percentage of responses across subject-line scenarios that mentioned compensation-related words when asked why they would open the email. [86]

As indicated in Figure 6.A, we found that the appearance of the refund amount in the subject line increased respondents' tendency to mention compensation-related words by 4 percentage points, from 17% to 21%.[87] Figure 6.B summarizes the compensation-related open-ended findings across the six specific subject lines. We found that, of the respondents viewing subject lines *Lavin v. Sonoro Technologies Class Action Settlement* and *Notice of Class Action Settlement,* few said that they would open the email because of the settlement compensation (4% and 8%, respectively). The addition of the refund amount in these subject lines increased the percentage of respondents mentioning compensation-related words by 11 to 12 percentage points (to 15% and 20% respectively). Respondents who viewed *Notice of Refund* mentioned compensation or similar words at the highest rate across all six subject lines (40%). Interestingly, the display of the specific refund amount ($100) for the pair of subject lines beginning with the phrase *Notice of Refund* decreased respondents' tendency to mention compensation-related words by 11 percentage points (from 40% for those viewing *Notice of Refund,* to 29% for those viewing *Notice of Refund- $100 Available*).

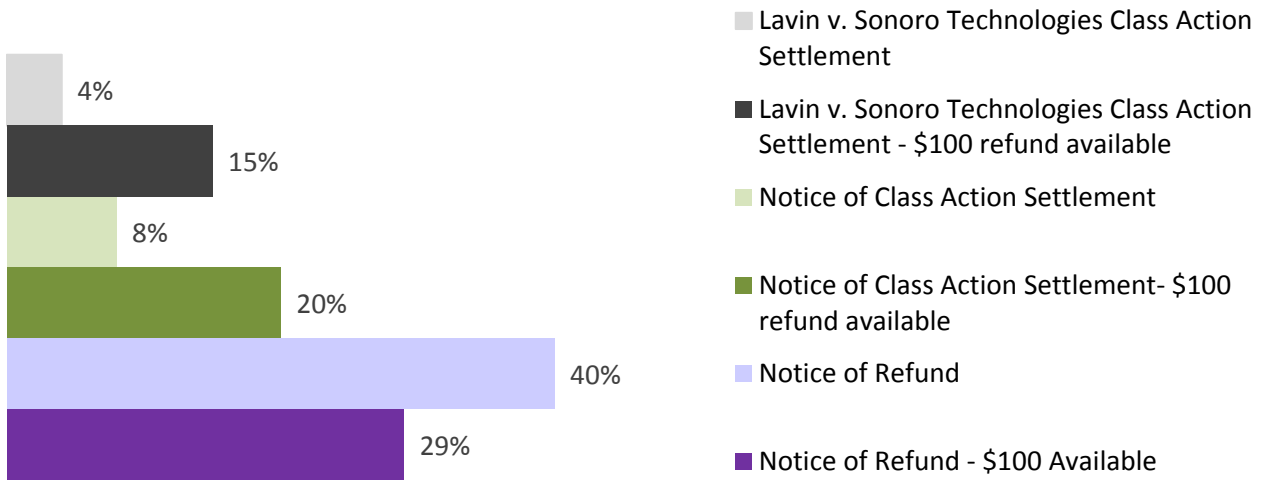
[86] Specifically, we calculated percentages as to the number of respondents who selected the class action email as one they would be likely to open and whose response to Q2 included at least one word related to the settlement compensation (as defined below), divided by the number of respondents who viewed a given scenario. We limited the analysis to subject line scenarios, and did not present the results separately by sender, to simplify the presentation of results. After consulting the tabulations of the most frequently-occurring words, we determined that the words "money," "refund," "payment," "compensation," "check," "dollar(s)," "monetary," and "paid" are common words that respondents use to describe settlement compensation. We also included "hundred," "100," and "$" as compensation-related responses to account for respondents who viewed and mentioned the specific amount of the refund, as well as respondents who used numeric or special characters to describe the payment.

[87] All differences cited throughout the discussion are statistically significant at $p<.05$ using a two-tailed t-test, unless otherwise stated.

Figure 6: Percentage of Respondents Mentioning Compensation-Related Words in Response to: "Why do you say that you are likely to open this e-mail? (Q2)"

A: By Refund Amount Information in Subject Line

B: By Subject Line



Open-Ended Analysis of Mistrust-Related Words: Figure 7 displays open-ended responses related to mistrust. In particular, we investigate whether there are differences across subject-lines in the percentages of respondents who said that they would not open the email because they are suspicious of the email.[88]

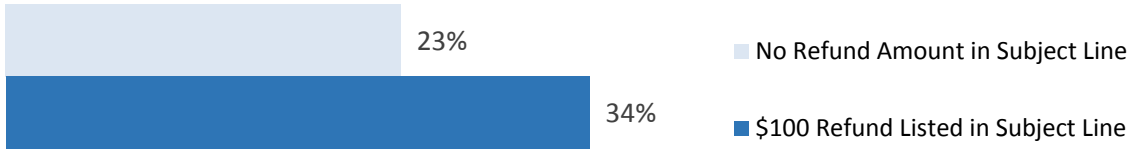
Figure 7.A shows that the appearance of the specific refund amount ($100) in the subject line increased respondents' mention of mistrust-related words: 34% of those viewing a subject line with $100 displayed mentioned words like "scam," "spam," etc. when asked why they were not likely to open the class action email, compared to 23% of those viewing a subject line without the refund amount. This difference of 11 percentage points is nearly three times as high as the difference in the percentage of respondents mentioning compensation, as displayed in Figure 6.A.

Across the six subject line conditions (Figure 7.B), the lowest percentage of mistrust-related mentions was among the group who saw the *Notice of Refund* subject line, which, at 19%, measures 4 to 17 percentage points lower than other scenarios.

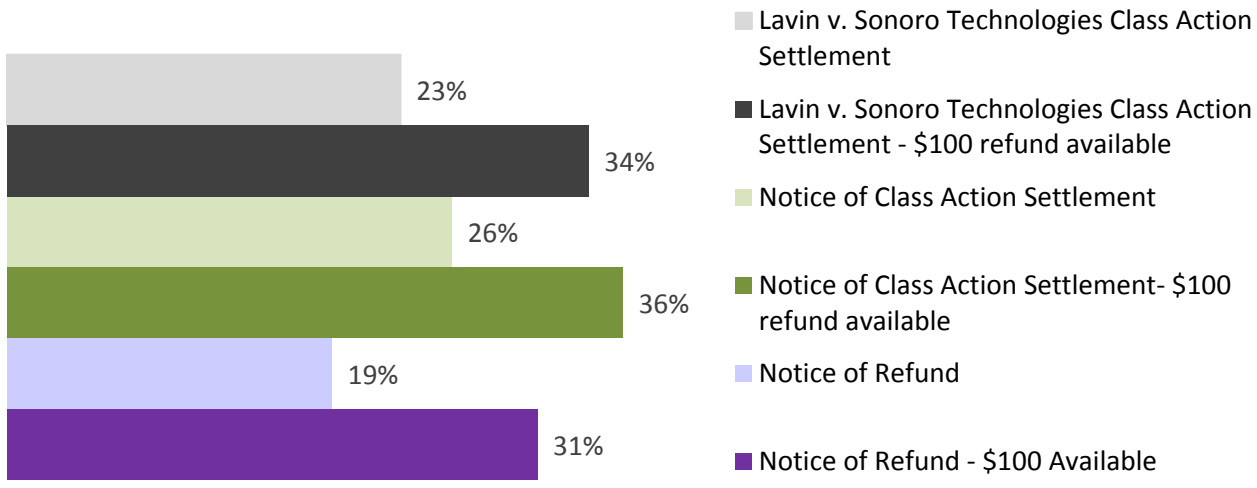
[88] Specifically, we calculated percentages as the number of respondents who selected the class action email as one they would be not be likely to open and whose response to Q2 included at least one word related to mistrust (as defined below), divided by the number of respondents who viewed a given scenario. A review of the tabulations described earlier indicated that respondents described mistrust by mentioning the following words: "scam(s)," "spam," "virus," "phishing," "junk," "fake," "suspicious," "afraid," "legitimate," "fraudulent," "suspect," "malware," "unsolicited," "fishy," "gimmick," "sketchy," and "bogus."

Figure 7: Percentage of Respondents Mentioning Mistrust-Related Words in Response to: "Why do you say that you are not likely to open this e-mail? (Q2)"

A: By Refund Amount Information in Subject Line



B: By Subject Line



Part II: Email Body Results

Part II of the study contained comprehension and opinion questions about the email itself. As explained above, the three email formats were: (1) a typical emailed class action settlement notice (the "long" version); (2) a condensed settlement notice (the "condensed" version); and (3) a further streamlined settlement notice (the "experimental" version). We presented each format with and without a court seal. Again, we focused the formal analysis on the closed-ended responses and supplemented it with an analysis of open-ended responses.

Questions Posed to Respondents

We used two sets of closed-ended comprehension questions. First, after viewing the email body once, respondents answered a series of questions about the nature of the email (Q5a through Q5d).[89] As with questions posed earlier about the nature of the email appearing in the inbox (*i.e.*, the Q3 series), in this series, respondents were asked to rate statements about the nature of the email (*e.g.*, the email provides information about a shipping order, etc.). We presented it in a random order, on a scale of "definitely true" to "definitely false." However, unlike the earlier inbox questions, in these questions (*i.e.*, the Q5 series), respondents were asked to consider the email they had just read (rather than the inbox), and respondents did not view the image of the email while answering the Q5 series. We calculated the *comprehension rate* for the email body portion of the study in the same way as we did for the inbox portion of the study, using responses to the Q5 series rather than the Q3 series.

Next, after viewing a brief statement about the nature of the email and then viewing the email a second time, respondents answered a series of questions asking them to rate various statements - on a scale of "definitely true" to "definitely false" - about the actions necessary to receive a refund based on their understanding of the email. These statements, which appeared randomly in Q7a through Q7d, contained one correct statement (Q7c: that one must fill out a claim form) and three incorrect statements (Q7a: that no further action is required; Q7b: that one must file a customer service complaint; and Q7d: that one should have a personal attorney for court representation). We combined responses to the Q7 series into an aggregate measure called *correct understanding of next steps*, a condition respondents met if they answered "probably true" or "definitely true" to the correct statement (Q7c) and selected answers <u>other than</u> "probably true" or "definitely true" to <u>all three</u> of the incorrect statements (Q7a, Q7b, and Q7d).

[89] As noted in Section 3.3, respondents were instructed to assume that they had opened the email referred to in Part I of the study before advancing to the screen that displayed the email body.

Respondents who correctly answered that a claim form would have to be submitted to receive a refund (*i.e.*, answered probably of definitely true to Q7c) —were then asked a series of closed-ended personal opinion questions related to the likelihood of receiving a refund (Q9) and the ease of the claims process (Q10 series).

We also asked respondents three open-ended questions to supplement their closed-ended responses. Specifically, in Q4, we asked respondents to explain why they received the email; in Q6, we asked respondents the action or actions, if any, they would need to receive a refund; and in Q8, we asked respondents who did not think they would be likely to receive a refund why.

Impact of Court Seal

In general, the presence of the court seal in the email body had only a slight impact on respondents' answers to the various questions. Specifically, the seal's presence slightly improved understanding of the nature of the email and the refund process, as well as perceptions of the likelihood of receiving a refund. Figures 8 displays results for the email body part of the study, separately by whether the email displayed the court seal.[90]

Comprehension Rates by Court Seal: The court seal improved comprehension rates by 3 percentage points, from 48% to 51% (Figure 8.A).[91] As indicated in Figure 8.B, the respondents who viewed an email with the court seal said that the email was an advertisement at a lower rate and said that it provided information about a class action settlement at a slightly higher rate (2 to 3 percentage points), compared to those who did not see view the seal.

Understanding of Next Steps by Court Seal: Respondents who viewed emails with the court seal were more likely to understand the next steps (42% for respondents who viewed the seal and 39% for those who did not). However, the presence of the court seals did not impact whether respondents understood that a claim form was necessary to receive compensation (Figure 8.C.). In fact, under both seal conditions, about 80% of the respondents understood this to be the case. However, many (about 60% under both conditions) also incorrectly thought that either no action, a customer service complaint, or personal attorney representation was required, driving down the aggregate measure of understanding of next steps from Figure 8.A.

Impression of Refund and Claims Process by Court Seal: Based on the closed-ended personal opinion questions (Figure 8.A), the court seal slightly improved respondents' impressions of the likelihood of receiving a refund, by approximately 3 percentage points.[92]

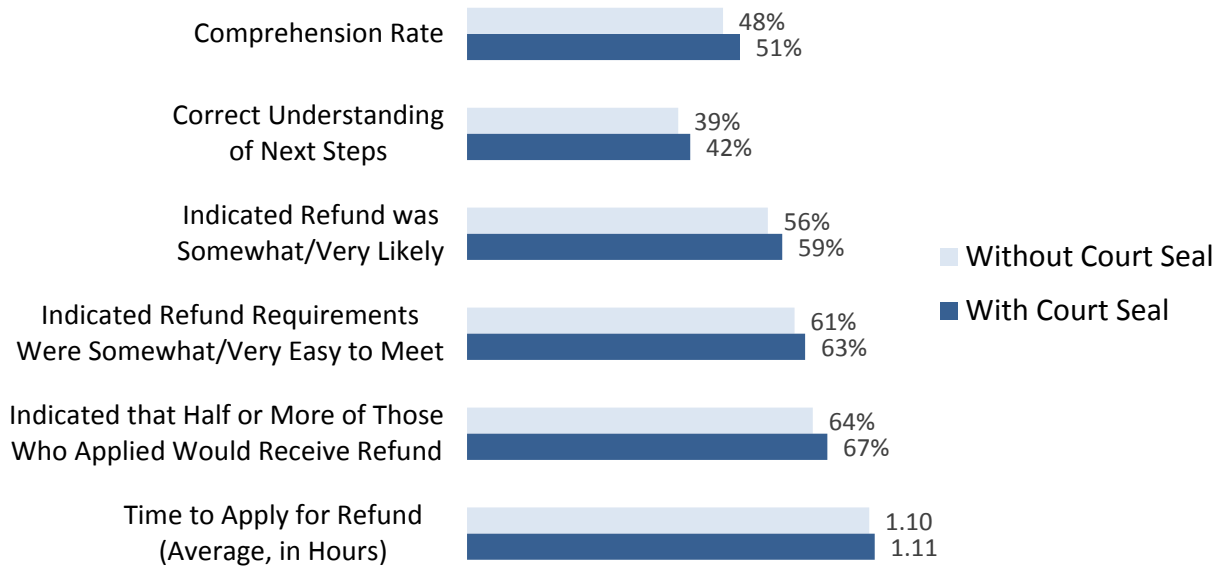
---

[90] *See* Appendix Table G.4 for 95% confidence intervals and results of joint significance testing across the email scenarios.

[91] All differences cited throughout the discussion are statistically significant at $p<.05$ using a two-tailed t-test, unless otherwise stated.

[92] Particularly, the percentage of respondents who said the refund was somewhat or very likely and the percentage who said half or more people who filed claims would receive a refund improved at a statistically significant level when the email displayed the court seal. Conversely, significance tests indicated that the court seal does not impact respondents' impressions of the ease of meeting the refund requirements and the time it would take to file a claim.

Figure 8: Email Body Results, by Court Seal
A: Summary Rates



B: Components of Comprehension Rate

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Without Court Seal	With Court Seal
Correct Statements		
Q3b: This e-mail provides information on a class action settlement.	76%	78%
Q3d: This e-mail provides information on getting a refund.	67%	68%
Incorrect Statements		
Q3a: This e-mail is an advertisement.	39%	36%
Q3c: This e-mail provides shipping confirmation of an online order.	15%	14%

C: Components of Correct Understanding of Next Steps

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Without Court Seal	With Court Seal
To get a refund through the class action settlement....		
Correct Statement		
Q7c: I should fill out a claims form at the website provided in the e-mail.	81%	82%
Incorrect Statements		
Q7a: I should take no further action; I will automatically receive the refund if the class wins the lawsuit.	26%	25%
Q7b: I should file a customer service complaint with Sonoro Technologies, Inc.	37%	35%
Q7d: I should hire a personal attorney to represent me in court	18%	18%

Impact of Email Format

Respondents' comprehension varied by the type of email format viewed (long, condensed, or experimental). In particular, respondents had a substantially better understanding when they viewed the long form. The long version also appears to improve respondents' understanding of the claims process, as reflected in responses related to the ease of the claims process and the likelihood of receiving a refund. On the other hand, respondents viewing the experimental version had the best understanding of next steps required to receive the refund. Figures 9 summarizes these responses.[93]

Comprehension Rates by Email Format: By comparing responses to questions about the nature of the email across format conditions (Figure 9.A), we found that respondents viewing the long version had the highest comprehension rate, measuring 11 and 13 percentage points higher than the comprehension rates of the condensed and experimental email format conditions, respectively. As seen in Figure 9.B, along each component of the comprehension rate measure, a higher percentage of respondents in the long email body condition took away the correct understanding—for example, they were less likely to think that the email was an advertisement and more likely to understand that it provided information on a class action or refund.

Understanding of Next Steps by Email Format: Overall, respondents had a poor understanding of next steps, with less than half of them answering these questions correctly. Respondents viewing the experimental email format understood the next steps required to receive the refund at a higher rate than those viewing the other email bodies—44% of those viewing the experimental email understood next steps correctly, compared to 38% to 39% in the other two email format conditions. Although the percentage saying that one must file a claim form was within 2 percentage points across conditions (81% to 83%), respondents viewing the long format were more likely to say (incorrectly) that no action is needed to receive a refund (by 6 percentage points over the condensed and 8 percentage points over the experimental format). This divergence appears to be the primary reason for the experimental group's increased overall understanding of next steps.

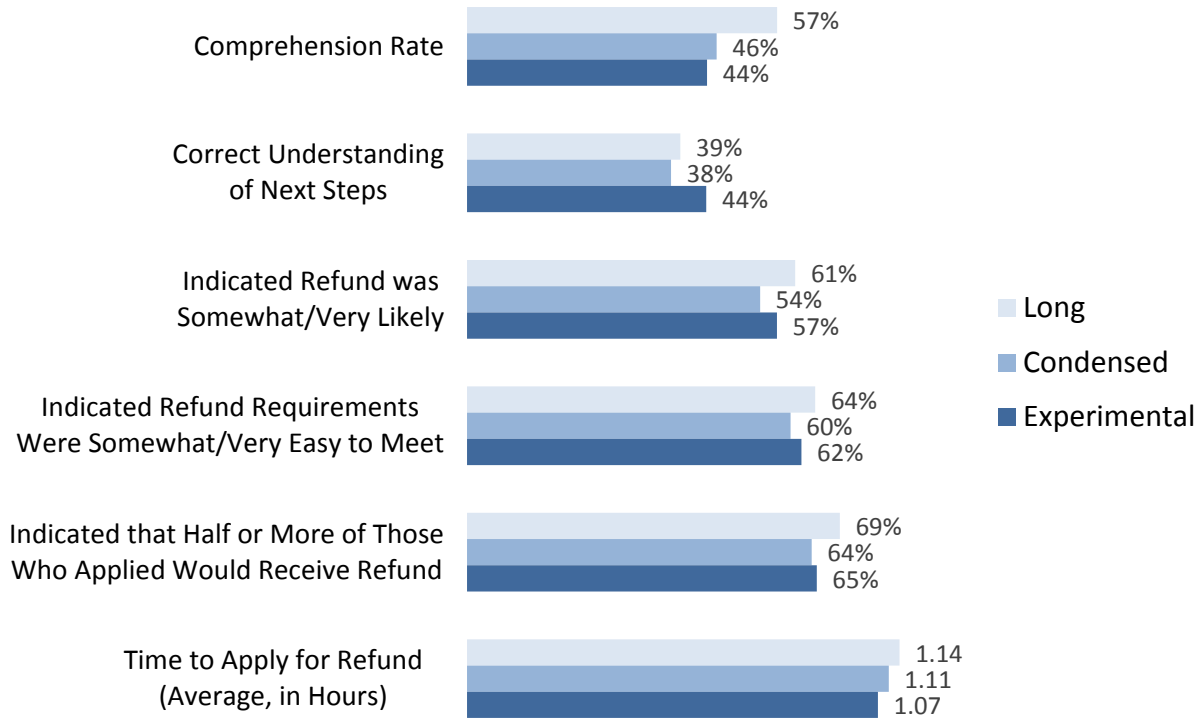
Impression of Refund and Claims Process by Email Format: Overall, those viewing the long version had a slightly better understanding of the ease of applying for the refund and how likely they would be to receive it. In particular, viewers of the long format stated at higher rates that: 1) the refund was somewhat (or very) likely, 2) the refund requirements were somewhat (or very easy) to meet, and 3) half or more people who filed a claim would receive the refund (differences range from 2 to 7 percentage points, as seen in Figure 9.A). There are no

[93] *See* Appendix Table G.4 for 95% confidence intervals and results of joint significance testing across the email scenarios.

statistically significant differences across formats regarding the time respondents thought it would take to apply for the refund: on average, respondents thought it would take a little more than an hour to apply for the refund regardless of the email format.

Figure 9: Email Body Results, by Email Format

A: Summary Rates



B: Components of Comprehension Rate

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Long Format	Condensed Format	Experimental Format
Correct Statements			
Q3b: This e-mail provides information on a class action settlement.	82%	75%	73%
Q3d: This e-mail provides information on getting a refund.	70%	66%	66%
Incorrect Statements			
Q3a: This e-mail is an advertisement.	30%	40%	42%
Q3c: This e-mail provides shipping confirmation of an online order.	15%	17%	14%

Figure 9: Email Body Results, by Email Format (continued)

C: Components of Correct Understanding of Next Steps

Percentage of Respondents Answering "Definitely True" or "Probably True"

	Long Format	Condensed Format	Experimental Format
To get a refund through the class action settlement....			
Correct Statement			
Q7c: I should fill out a claims form at the website provided in the email.	83%	82%	81%
Incorrect Statements			
Q7a: I should take no further action; I will automatically receive the refund if the class wins the lawsuit.	30%	24%	22%
Q7b: I should file a customer service complaint with Sonoro Technologies, Inc.	35%	39%	34%
Q7d: I should hire a personal attorney to represent me in court	15%	21%	17%

Court Seal – Email Format

Figure 10 summarizes select closed-ended responses for each of the six court seal condition- format combinations.

Consistent with the main effects analysis presented above, the court seal improved nearly all measures of consumer takeaway within each email body condition. The court seal's impact, at 5 percentage points, was largest when displayed on the experimental email format and gauging respondents' impression of the likelihood of receiving a refund.

When considering each court seal condition-email format combination listed in Figure 10, we found that the long, court-seal version performed the best for comprehension of the nature of the email, and both versions of the experimental email format (*e.g.*, one with and one without a court seal) performed the best for consumer understanding of next steps required to receive a refund, regardless of the display of a court seal. That is, the court seal had no further effect on understanding of next steps when limiting the analysis to those viewing the experimental version. Responses related to consumer impressions of the refund and claim process revealed that the experimental, court-seal version performed just as well as the long, email body version. In particular, there were no statistically significant differences in the percentage answering that the refund was likely, that the refund requirements were easy to meet, and that half or more of claimants would receive the refund.

Figure 10: Email Body Results, by Court Seal – Email Format

	Comprehension Rate	Correct Understanding of Next Steps	Indicated Refund Was Somewhat/ Very Likely	Indicated Refund Requirements Were Somewhat/Very Easy to Meet	Indicated that Half or More of Those Who Applied Would Receive Refund
Without the Display of a Court Seal					
Long Format	55%	38%	60% ^	65% ^	68% ^
Condensed Format	45%	36%	54%	58%	63%
Experimental Format	42%	44%^	55%	60%	63%
With the Display of a Court Seal					
Long Format	59% ^	41%	62% ^	63% ^	70% ^
Condensed Format	47%	39%	55%	62%	65%
Experimental Format	46%	45%^	60% ^	64% ^	67% ^

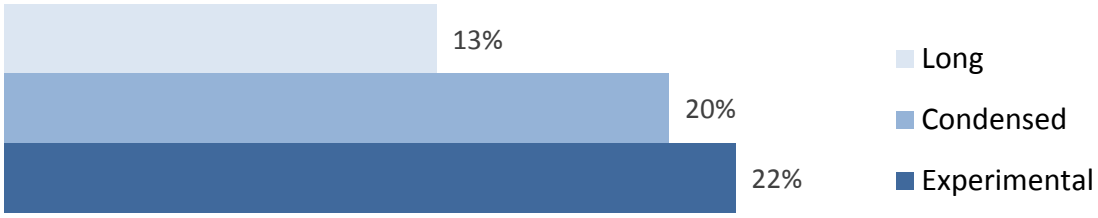
Notes: ^ denotes maximum percentages (*e.g.*, the highest comprehension rate, highest rate of correct understanding of next steps, and so forth) within each column and percentages that are not statistically different from the maximum, using a two-tailed t-test at $p<.05$. *See* Appendix Table G.8.

Analysis of Open-Ended Responses, Email Body Results

As a supplementary exercise, we examined open-ended responses for Q4, which asked respondents to describe in their own words why they thought they had received the email. We focused the analysis on mistrust-related words across email body formats (long, condensed, experimental) because respondents mentioned these words frequently, and because the largest difference in the mention of these words occurred along the email-format dimension (rather than the court-seal dimension).[94]

As seen in Figure 11, respondents who viewed the long email format mentioned mistrust-related words at the lowest rate across all three email formats. Specifically, 13% of respondents viewing the long format mentioned such words, 7 percentage points lower than those viewing the condensed version (20% of respondents viewing the condensed email mentioned mistrust-related words) and 9 percentage points lower than those viewing the experimental version (22% of respondents viewing the condensed email mentioned mistrust-related words).

Figure 11: Percentage of Respondents Mentioning Mistrust-Related Words in Response to: "Why do you think you received this email?" (Q4)



[94] As before, tabulations of the most frequently-occurring words indicated that respondents used the following words to describe mistrust: "scam(s)," "spam," "virus," "phishing," "junk," "fake," "suspicious," "afraid," "legitimate," "fraudulent," "suspect," "malware," "unsolicited," "fishy," "gimmick," "sketchy," and "bogus."

Discussion

The Notice Study examined the importance of various inbox and email body characteristics for consumer perceptions of the studied class action notices. Specifically, in Part I, the goal was to understand whether sender names and subject lines influenced respondents' stated likelihoods of opening an class action email and their understanding of the nature of the email (*i.e.*, that it concerned a class actions settlement or a refund, and did not represent a promotional email). Part II examined whether the email's format (*i.e.*, long, condensed, or experimental) and whether the display of a court seal improved consumer understanding of the nature of the email and steps required to receive compensation, as well as to gauge personal opinions related to the ease of the claims and refund process. The study's findings are based on a fictitious class action environment and a static email interface, and hence, should not be extrapolated to all emailed class action notices. However, the analysis provides useful insights for potential ways to improve consumer interaction with, and understanding of, emailed class action notices.

In Part I, we found that the phrasing of the subject line impacts consumer perceptions to a greater degree than the sender name does. For example, the inclusion of the refund amount in the subject line had a large negative impact on comprehension rates for study respondents. Furthermore, open-ended responses indicated that more respondents who viewed subject lines containing the "$100" refund amount believed it to be an untrustworthy email compared to those who viewed subject lines that omitted the refund amount.

The Part I analysis also demonstrates that opening rates and email comprehension do not go hand in hand. In particular, the subject line *Notice of Refund* had substantially higher stated opening rates than other subject lines, but fewer respondents viewing this subject line understood the type of information contained in the email. On the other hand, the subject lines *Lavin v. Sonoro Technologies Class Action Settlement* and *Notice of Class Action Settlement* had poor stated opening rates, but the highest comprehension rates among all six subject lines tested.

In Part II, the long email format (*i.e.*, a traditional, text-heavy notice conventionally used in nationwide class action settlements) performed the best on most measures of consumer perception in the study. While the streamlined, experimental version was most effective in conveying next steps required to receive settlement compensation, the long version was substantially more effective at helping respondents understand the nature of the email. In addition, respondents viewing the long version were slightly more likely to believe that the claims and refund process would work in their favor. Furthermore, the supplementary open-ended analysis suggests respondents may have viewed the condensed and streamlined versions with suspicion, more frequently describing them as "spam," "scam," or similar words. The Part

II results also indicate the court seal's presence in the notice minimally improves consumer perceptions.

Our findings point to the potential for future research as well as insights into the ongoing discussions surrounding low participation rates in class action settlements. In particular, we find that rephrasing subject lines may help notice campaigns reach more class members. We recommend that future research on this topic explore whether similar findings hold in actual, non-simulated class action notice campaigns. This could be done through randomized, controlled testing, such as A/B testing, where campaigns could compare the effectiveness—in terms of opening rates and claims rates—of multiple versions of subject lines by randomizing subject lines across class members. While this study finds the effects of the sender name on consumer perceptions to be minimal, this result may be particularly reflective of the fictional nature of the study environment (due to respondents being unfamiliar with the company name *Sonoro Technologies*); hence, we recommend that researchers explore the impact of email sender name further within the context of actual class action settlements. Although absolute percentages from this study are not projectable to the population, our findings suggest that even in a controlled internet panel setting, many respondents did not correctly understand the nature of the email and the steps required to receive a refund even after viewing the body of the email. Finally, our results suggest that consumers may not fully understand the value of participating in class action settlements, as indicated by the divergence in stated opening rates between subject lines that contained the phrase "class action settlement" and subject lines that simply stated "notice of refund," without reference to a class action. This may point to the need for broad-level approaches to educating consumers about the potential monetary benefits available through class action settlements.