The Hidden Costs of Financial Services:
Consumer Complaints and Financial Restitution*

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Abstract

Financial disputes are a widespread but understudied feature of consumer financial markets. Using confidential data from the Consumer Financial Protection Bureau (CFPB), we analyze nearly two million consumer complaints filed since 2014, which have led to an average payout of $1,470 per successful complaint. The volume of complaints and total restitution have increased substantially over time, suggesting significant scope for additional compensation. When understanding who secures restitution—and why—we find little evidence that differences across firms systematically drive restitution outcomes. Instead, product complexity and consumer engagement play key roles—consumers with higher income and education (high-SES) are more likely to explicitly request refunds, claim fraud, and submit supporting documentation, making firms more responsive. Leveraging previously unexamined CFPB monitoring reviews, where the agency systematically screens company responses and issues confidential reports highlighting deficiencies, we show that regulatory scrutiny increases restitution but disproportionately benefits high-SES consumers, reinforcing individual-specific mechanisms. Our results highlight the complementary nature of regulatory interventions and suggest that financial sophistication and self-advocacy are critical determinants of consumer redress.

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1 Introduction

Financial services are a fundamental part of economic life, providing individuals with access to banking, credit, and investment opportunities. Unlike purchasing most physical goods, financial services rely on bilateral contracts between companies and consumers, typically requiring complex agreements that unfold over time. These services do not always function as expected—whether due to errors, ambiguous contract terms, or outright misconduct—leading to disputes between consumers and financial institutions. Despite the importance of these disputes, little is known about their prevalence, resolution, and economic significance. This paper provides the first large-scale study of disputed financial services, leveraging confidential complaint data compiled by the Consumer Financial Protection Bureau (CFPB) to systematically examine the market for financial complaints and the determinants of financial restitution.

Economic models of financial services typically assume frictionless transactions, where the costs to consumers are primarily determined by interest rates and fees (Green (1973); Jaffee and Russell (1976); Stiglitz and Weiss (1981); Jappelli and Pagano (1993)). However, in reality, financial disputes represent hidden and underappreciated costs consumers bear when services fail or contractual terms are contested. While regulatory bodies sometimes engage in large-scale enforcement actions against financial companies, and class-action lawsuits occasionally secure mass restitution for affected consumers, these efforts target common issues with specific companies and do not capture the individual disputes that consumers must navigate on their own (Schwemm and Taren (2010); Agarwal et al. (2014); Eisenberg and Miller (2015); Shavell (2016)). Whether and how individual consumers secure redress remains largely unexplored, despite its relevance for the efficiency of the financial sector and consumer welfare.

Our paper starts by documenting that disputes over financial services are both widespread and economically significant. Since 2014, consumers have filed nearly two million complaints with the CFPB, with approximately 7.5% resulting in financial restitution to the consumer.[1] The total volume of complaints has tripled since 2014, reflecting growing consumer awareness of the complaint process. Nonetheless, the proportion of complaints leading to financial restitution has remained mostly stable, indicating that the increase is not driven by an influx of frivolous or unfounded claims. This pattern highlights financial disputes as an underutilized avenue for consumer redress, where many affected individuals may be unaware of the opportunity to seek compensation.

The financial stakes are substantial. Over the course of the sample, companies have returned over $200 million in restitution, averaging approximately $1,470 per successful complaint. Notably, relief amounts have risen significantly over time, indicating considerable scope for additional restitution. To estimate the potential scale of unclaimed compensation, consider the possibility that the 7.5% restitution rate applies to the over one hundred million households who hold at least one financial product (according to the FDIC). Under assumptions about households' reliance on financial products, at least six billion dollars in potential compensation is unclaimed.

Next, we explore the mechanisms that shape financial restitution outcomes. One possibility is that certain companies are systematically bad actors, engaging in overcharging practices and disproportionately targeting vulnerable consumers. Evidence of companies fostering financial misconduct has been documented in specific segments of the financial sector, particularly financial advising (Dimmock et al. (2018); Egan et al. (2019)). Alternatively, financial companies are imperfect and prone to errors, while consumers, facing complex financial products, may struggle to recognize when they are entitled to restitution.

[1]We exclude credit reporting disputes and errors because of their distinct nature and because the credit reporting agencies are not providing in-kind financial service obligations.

This explanation highlights the role of consumer financial aptitude and self-advocacy, as some individuals are more adept at identifying and articulating disputes, making it easier for companies to acknowledge and correct mistakes. Disentangling these explanations is critical for determining whether financial restitution outcomes are primarily shaped by company misconduct or by consumers' ability to navigate the dispute process.

To assess whether some companies systematically engage in unfair practices that should result in financial restitution, we begin by examining restitution rates across different types of financial products. Many financial companies operate across multiple product lines, and if company-level misconduct were the primary driver of restitution outcomes, we would expect similar restitution patterns across a company's various products. However, our analysis suggests otherwise. Using variance decomposition, we find that product type is by far the strongest determinant of restitution outcomes, with significantly more variation explained by the type of financial product than by company identity. Moreover, restitution rates appear to be closely tied to the complexity of the financial product and the ease with which consumers can articulate and substantiate their claims. Complaints related to bank accounts and credit cards, which involve relatively straightforward disputes, have the highest restitution rates, whereas term loans such as mortgages, student loans, and auto loans—which entail more complex legal contracts and repayment structures—result in significantly lower compensation rates. While approximately 17% of banking and credit card complaints lead to monetary relief, less than 5% of consumer loans do. These findings suggest that product complexity plays a key role in shaping restitution outcomes (as in Carlin (2009)), leaving considerable room for consumer awareness and financial sophistication to influence whether complaints result in compensation.

We find substantial evidence to support the mechanism of financial sophistication and self-advocacy. Beyond product-level differences, we document significant differences in financial restitution by consumer demographics. Consumers from high-income and highly

educated areas (high-SES) are approximately 70% more likely to secure monetary relief after filing a complaint. The financial restitution gap is stark. For example, consumers from Census tracts in the top quintiles of income and education receive restitution in approximately 10% of cases, while consumers from Census tracts in the bottom quintiles see relief in just fewer than 6% of complaints. We also document significant differences by race, which we identify using the CFPB confidential data. Asian filers (according to Bayesian Improved Surname and Geocoding algorithms) are the most likely to receive restitution and the largest amounts of restitution. Hispanic filers are the least likely. These results are highly robust to regressions that include time fixed effects and geographic fixed effects, and company fixed effects, product fixed effects, and their interaction.

We identify key mechanisms that help explain this variation. Using the written narratives of their complaints, high-SES consumers are more likely to explicitly request refunds and claim fraud or misconduct, indicating a role for self-advocacy. High-SES filers are also more likely to attach supporting documentation. Both self-advocacy and documentation significantly increase the likelihood of financial restitution, often by as much as a 50%. On the other hand, we do not find much evidence that socioeconomic differences in restitution result from differences in the resources that companies employ to respond to complaints. Using confidential data, we observe separate identifiers for which company employees handle each complaint. Though we do not have personal information about these employees, we can track their levels of experience and the amount of effort they exert toward each complaint. We find no evidence that companies allocate more resources to resolving disputes for high-SES consumers.

In the remaining parts of the paper, we leverage previously unexamined data on the CFPB's internal review of the complaint process and its communications with companies. Since 2020, the CFPB has been conducting company response monitoring reviews to assess whether companies are properly responding to complaints. As part of these initiatives, the

CFPB reviews company responses and continues monitoring a large sample of individual complaints. When companies are found to be improperly addressing a significant fraction of complaints, the CFPB issues confidential monitoring reports highlighting these deficiencies. Nearly fifty companies received these reports during our sample's time frame, some on multiple occasions. Crucially, these reports were delivered at staggered intervals over the sample period, creating an ideal setting for a difference-in-differences analysis of the effect of private regulatory scrutiny on company behavior.

First, we use the CFPB's monitoring reviews to examine whether socioeconomic differences in financial restitution stem from companies treating different consumer groups unequally. The CFPB's monitoring reviews results serve as a benchmark for how complaints should have been handled. We find that complaints from low-SES consumers are more likely to receive an unsatisfactory response. However, the disparity in complaint handling is relatively small compared to the large gap in financial restitution outcomes. Moreover, when controlling for exhaustive fixed effects, the observed socioeconomic differences in how complaints were evaluated by regulators disappear. This suggests that the financial restitution gap is not solely driven by companies failing to process low-SES complaints properly, but rather by differences in how consumers engage with the complaint process.

Second, we explore whether regulatory pressure affects company behavior by analyzing how companies respond to heightened CFPB scrutiny. After receiving a regulatory monitoring report, companies increase the share of complaints resolved with monetary relief by several percentage points. However, this effect is stronger for high-SES consumers, suggesting that regulatory interventions disproportionately benefit wealthier and more educated individuals. Instead of leveling the playing field, heightened scrutiny appears to reinforce pre-existing differences in financial restitution. Companies improve their responsiveness primarily to consumers who are already more likely to secure restitution,

while complaints from low-SES consumers remain less likely to result in compensation. This finding further supports the role of financial aptitude and self-advocacy in determining restitution outcomes—consumers who can effectively navigate the dispute resolution process are best positioned to benefit from regulatory oversight.

Our findings reveal fundamental limits of regulation in safeguarding consumer welfare in financial markets. Consumer protection policies often focus on company misconduct and regulatory enforcement, yet our results suggest that even well-designed interventions may be insufficient to strengthen consumer protections. The complaint resolution process does not function in isolation—companies respond not only to regulatory scrutiny but also to how effectively consumers advocate for themselves. When financial products are complex, and dispute resolution requires self-advocacy and financial sophistication, regulation alone cannot substitute for consumer engagement. More broadly, these results highlight a key challenge in financial regulation: rules designed to protect consumers may be least effective for those who struggle to navigate the system.

Related Literature

Our paper contributes to several strands of research in household finance. While our focus is on individual-level complaints that do not necessarily involve misconduct, our closest parallels lie in the growing literature on financial misconduct toward households. Much of this work centers on financial advisors, whose misconduct tends to affect higher-wealth households. For instance, Gurun et al. (2018); Dimmock et al. (2018); Egan et al. (2019) document the prevalence, persistence, and transmission of misconduct among advisors. Our paper shifts attention from this narrower segment of the financial sector to a broader set of financial services that affect the everyday financial products used by the broad population.

We also build on research studying financial disputes between consumers and companies. Egan et al. (forthcoming) analyzes arbitration outcomes involving uninformed consumers. Specifically, Cheng et al. (2021) and LaVoice and Vamossy (2024) study court judgments on debt collection cases in Missouri. Argyle et al. (2023) and Lee (2024) study bankruptcy outcomes. Compared to these studies, our setting involves a nonjudicial complaint process that spans a wide array of financial products and does not require legal representation. This enables us to speak to a broader set of financial services that apply to the whole population and focuses on mechanisms determining the causes and consequences of such disputes.

Our analysis also contributes to the literature on heterogeneity in financial outcomes. This literature explores how differences in income, education, and race shape financial behavior and outcomes. These papers find differences in risk taking (Beshears et al. (2015); Kuhnen and Miu (2017)), expectations (Das et al. (2020)), and financial literacy (Bernheim and Garrett (2003); Lusardi et al. (2017)). A related line of work focuses on disparities in access to financial services, including Brown et al. (2019) and Akey et al. (2021), and a lengthy literature on mortgage lending.[2]

Finally, we contribute to an emerging literature that uses CFPB complaint data to assess financial service quality and regulatory effectiveness (Sedunov (2020); Fuster et al. (2021); Dou and Roh (2024); Bian et al. (2023); Huang et al. (2024); Butler et al. (2023)). Several papers study the impact of disclosing the written text of complaints (Li (2023); Mazur (2024); Jou et al. (2024); Dou et al. (2024)). Begley and Purnanandam (2021) and Kim et al. (2024) use the volume of complaints to proxy for the quality of financial services.

[2]A particularly rich literature has examined racial disparities in credit access, especially in mortgage lending, including the effects of redlining (Appel and Nickerson (2016); Aaronson et al. (2021)). Seminal studies include: Berkovec et al. (1994); Munnell et al. (1996); Tootell (1996); Berkovec et al. (1998); Ladd (1998). More recent work explores the role of institutional and technological factors, including Bayer et al. (2018); Ambrose et al. (2021); Bhutta and Hizmo (2021); Giacoletti et al. (2020); Fuster et al. (2022); Buchak et al. (2018); Bartlett et al. (2022)). This literature emphasizes supply-side disparities in financial access, whereas our study focuses on what happens after access, when problems arise and redress is sought.

In contrast to these papers, we examine the full spectrum of financial products and focus on the consumer-side outcomes of complaints, especially monetary restitution. We are the first, to our knowledge, to systematically document the heterogeneity in complaint resolution outcomes, the scale of their financial implications, and the effects of private enforcement efforts.

2 Data

Since its inception in 2011, the Consumer Financial Protection Bureau (CFPB) has maintained a portal through which consumers can submit complaints against financial service providers. Approximately 80% of complaints are submitted via this online portal, with the remaining 20% arriving through email, fax, phone, postal mail, or referral. The submission process requires consumers to: (1) identify the relevant product or service, (2) describe the issue using both structured fields and free-form narrative, and (3) specify the company involved, the desired resolution, and provide contact information. The CFPB then forwards the complaint to the company. The company is expected to respond to the complaint within 15 days.

The CFPB publishes a redacted version of these complaints in a publicly available data set. The publicly available data include the consumer's zip code (sometimes truncated to the first three digits), and indicators for whether the filer is elderly or a service member or veteran. The public data includes the company name, product category, issue type, and response type (closed with explanation, closed with non-monetary relief, or closed with monetary relief).

To enable a more comprehensive analysis of the complaint and dispute resolution process, we use the CFPB's internal complaint database. Compared to the public dataset, the internal data offers greater detail on filer demographics, more information about the

complaint, and insight into how the company addresses the complaint. Key differences include, for example, (1) the dollar amount of any monetary relief provided, (2) whether the filer attached supporting documentation, (3) unique IDs for company employees handling each complaint, and (4) login records for both consumers and company representatives. In contrast to the public database, complaint narratives and desired outcomes are always included in the internal data.

Access to filer name and address allows us to merge the complaint data with Census tract-level socioeconomic indicators, including household median income and educational attainment (measured as the share of adults with a bachelor's degree). We also apply Bayesian Improved Surname and Geocoding (BISG) techniques to infer the race and ethnicity (Asian, Black, Hispanic, or White) of filers based on their names and addresses.[3]

We also leverage confidential information about the CFPB's internal review of company complaint responses. Since 2020, the Bureau has been assessing the quality of companies' responses to complaints, specifically, whether companies respond promptly and accurately. When conducting its reviews, the bureau randomly selects a set of past complaints to the company. When the reviewers identify significant deficiencies, the CFPB issues confidential monitoring reports to the relevant companies. Between 2020 and 2024, the CFPB sent approximately 80 such reports to companies, which were delivered staggered over time. Some companies were sent reports multiple times, and these too were delivered at different times. Overall, while the set of companies that received reports is certainly not random, the timing with which they were sent reports was. This setup allows us to use a difference-in-differences framework to test the effect of private regulatory pressure on company behavior.

[3]BISG algorithms have been employed at several government agencies that are tasked with ensuring compliance to fair lending laws, since they have been found to produce proxies that correlate highly with self-reported race in tests and are more accurate than relying only on demographic information from place of residence or surname alone (Elliott et al. (2008), Elliott et al. (2009), CFPB (2014)).

Our analysis includes all non-credit-reporting complaints submitted between January 2014 and December 2024.[4] Since we primarily aim to understand the direct financial costs to consumers, we exclude the "credit reporting" category of complaints. These complaints are primarily directed at the three major credit reporting agencies and typically seek to resolve errors in peoples' credit reports. Though these credit reporting errors can have significant downstream costs—such as difficulties getting a loan—they rarely result in financial redress.

Figure 1 presents the different ways in which companies resolve complaints. Overall, a sizable number of complaints result in the consumer receiving financial compensation: 7.6% of complaints are resolved with monetary relief. The remainder are either closed with an explanation (81.6%) or closed with non-monetary relief (10.8%).

Figure 2 presents trends in the volume of complaints overall and across different product categories. Panel A shows a steady rise in total complaints, from 123,789 in 2014 to 363,838 in 2024, with an average annual growth rate of around 10%. Furthermore, as the overall number of complaints grew, the likelihood of a complaint resulting in monetary restitution remained relatively stable over time (around 7-8%). Panel B shows that the largest product categories in the CFPB complaints are *debt collection* (33.58%), *cards* (debit, credit, prepaid cards) (18.76%), *mortgage* (16.18%), and *accounts* (checking or savings) (15.49%). They are also the fastest-growing categories over time, with debt collection, cards, and accounts witnessing significant increases over the last 5 years.[5] Smaller but still significant categories include issues with money transfers (money transfer, virtual currency, or money service), student loans, car loans, and other loans (payday, title, personal loans).

[4]We exclude the complaints filed before 2014 because the complaint system had not yet incorporated all financial products.

[5]Debt collection complaints doubled in volume in 2024. The sizeable increase appears driven by consumers claiming more debt collection cases linked to erroneous information on their credit reports and using this product category to complain about the three Credit Bureaus. Since debt collection is less prone to receiving monetary relief, this dynamic further explains the lower percentage of complaints receiving monetary relief in 2024.

This breadth makes our study the first to comprehensively examine disputed financial services across the consumer finance landscape.

3 The Scope for Financial Restitution

Over the course of our sample (2014–2024), companies returned over $200 million in monetary relief to consumers who filed complaints with the CFPB. In this section, we describe trends in financial restitution and use these trends to consider the overall scope for mistakes in financial services that result in losses for consumers.

3.1 Trends in Financial Restitution

The CFPB complaint portal has resulted in a substantial amount of monetary relief delivered to consumers. For the 7.61% of complaints that result in monetary relief, companies have paid a total of $205 million in restitution to consumers. Moreover, there are increasing trends in the use of the complaint portal and the total amount of financial restitution delivered to consumers.

Figure 1, Panel A, shows that the volume of complaints nearly tripled between 2014 and 2024, growing from 123,789 to 363,838 annually. Despite this increase, the share of complaints resolved with monetary relief remained stable between 7% and 8%. There is a slight reduction in restitution rates in 2024, falling to 6.22%. However, the reduction results from a disproportionate increase in complaints about debt collection, rarely resulting in financial restitution. Panel B documents that the average monetary relief amount rose from $694 in 2014 to $2,280 in 2024. Hence, the majority of total monetary relief was distributed in the second half of the sample, particularly in recent years.

Panel C explores the distribution of monetary relief across products. Accounts and credit card complaints are most likely to result in restitution, with 17.39% and 17.13% of these complaints receiving monetary relief, respectively. In contrast, student loan and debt collection complaints have far lower resolution rates, at 2.07% and 0.67%, respectively. Generally, term loans, such as mortgages and car loans, have modest rates of monetary relief.

These patterns highlight a growing yet underutilized channel for consumer redress. Although the number of complaints has tripled and average relief amounts have risen, the share of cases resolved with monetary relief has remained remarkably stable. This constancy suggests that a rise in frivolous or unsubstantiated claims has not driven increased usage of the CFPB complaint system.

3.2 Projected Costs of Errors in Financial Services

As the number of complaints has grown considerably since the start of the CFPB and the restitution rate has remained relatively constant, it suggests considerable scope for additional restitution to consumers. Crucially, the financial costs of restitution are considerable when viewed through the lens of the typical American household's finances. According to the Report on the Economic Well-Being of U.S. Households, almost forty percent could not cover a hypothetical $400 emergency expense using cash or equivalents.[6] As such, the average restitution payment of $1,470, or $2,280 in the most recent year of data, would benefit many households substantially. Therefore, it is worthwhile to project the total amount of restitution available to consumers should they identify potential errors in their financial services and file complaints against them.

[6]https://www.federalreserve.gov/publications/files/2022-report-economic-well-being-us-households-202305.pdf.

Before proceeding to project nationwide statistics on the costs of errors and mistakes in financial services, there are important caveats about the numbers we can draw from the CFPB complaint database. Namely, we do not observe the financial redress that occurs when consumers directly contact the customer service representatives of financial service companies. For example, we do not observe when consumers call their bank to have an overdraft charge removed. We presume that these sorts of disputes occur more frequently than those routed through the CFPB, suggesting the total amount of restitution we observe via the CFPB constitutes a lower bound on the total amount of financial restitution consumers receive each year.

To project national statistics, we must consider the number of households with financial products. The most widely used type of financial product is a bank account, with approximately 95% of U.S. households having at least one bank account.[7] Approximately 76% of households had at least one credit card. Mortgages and auto loans are less prevalent but still are held by almost half of all households.[8] Overall, it seems reasonable to assume that between half and three-quarters of all U.S. households non-trivially rely on consumer financial products to fund their livelihood, and are therefore vulnerable to financial errors with their accounts.

Assuming that financial restitution rates are maintained at around 7.5%, we calculate that the total dollar cost of unclaimed restitution ranges from six to sixteen billion dollars, in total. There are a total of $\sim$120 million U.S. households, and we assume that between a half and three-quarters of them meaningfully rely on financial products. Suppose the restitution dollar value ranges from the sample average of \$1,470 per successful complaint to \$2,280 in 2024. Then, on the low range, half of households receiving the average dollar amount would result in \$6.84 billion. For the high range, three-quarters of households

[7] www.fdic.gov/household-survey/2023-fdic-national-survey-unbanked-and-underbanked-households-executive-summary.

[8] www.census.gov/newsroom/press-releases/2024/acs-5-year-homeowners-renters.html.

receiving the 2024 dollar amount would result in $15.91 billion. These numbers appear reasonable since the total net income of commercial banking in the U.S. is around $250 billion annually. Of course, these numbers are projections and require assumptions about the recovery rate. Still, they help illustrate that the magnitude of errors on peoples' consumer financial products has considerable scope to affect the economic well-being of many households meaningfully.

4 Determinants of Financial Restitution

Next, we explore factors that determine which complaints result in financial restitution. Understanding the determinants of financial restitution is crucial because it helps policy makers direct resources toward ensuring that consumers are fairly compensated for errors with their financial products.

On the one hand, certain companies could be systemically bad actors, engaging in dubious practices that disproportionally target vulnerable consumers. The literature has already documented several such instances, especially in specific segments of the financial sector like financial advising (Dimmock et al. (2018), Egan et al. (2019)). This dynamic would result in companies carrying most of the explanatory power of the likelihood of a complaint being solved with monetary relief, with little difference across products since they frequently offer several types of products.

On the other hand, consumers could have trouble understanding when they have the right to restitution, especially regarding complex financial products. For this mechanism, companies are imperfect and prone to mistakes, and market forces do not compel them to rectify errors unless prompted by consumers. This dynamic would translate in the product type carrying most of the explanatory power, with less complex products witnessing higher likelihoods of monetary relief.

Distinguishing which of these two explanations best explains the patterns of financial restitution is crucial to understanding whether financial restitution is mostly coming from company misconduct or from consumers' knowledge and ability to navigate the financial sector and the dispute process. We start by using variance decomposition analysis to estimate what factors have the greatest explanatory power for financial restitution outcomes. Table 2, Panel A, reports the model variance decomposition of regressing *solved wMR*, a dummy variable equal to 1 if the complaint is resolved with monetary relief, on different combinations of quarter fixed effects, company fixed effects, product fixed effects, and county fixed effects.[9] Column 1 highlights how quarter fixed effects and company fixed effects alone explain around 10% of overall *solved wMR* variation, with quarter covering a third of said variation and company two-thirds. However, adding product fixed effects to the regression in columns 2 and 3 increases the explanatory power of the model to 12.18%, of which product fixed effects now carry over 99% of it, significantly overshadowing company and quarter fixed effects. We find similar results when restricting the sample to companies that offer more than one financial product (columns 4 to 6).

Our variance decomposition analysis suggests that financial restitution likelihood is less a result of concentrated company misconduct and more a matter of product complexity and understanding. This is further supported by the previous finding that the complaints receiving the highest restitution rates are those regarding accounts, cards, and monetary transfers (Table 1). These products typically see straightforward disputes, whereas complaints on loan products (mortgage, car loan, student loan, and debt collection, which involve more complex contracts and repayment structures) have lower restitution likelihood.

[9]Decomposition percentages are based on Mean Squares, accounting for degrees of freedom in the explanatory variables.

Since product complexity appears to play a key role in restitution outcomes, consumer awareness and financial sophistication could potentially affect whether complaints result in restitution as well. We explore this possibility by analyzing demographic heterogeneity in financial restitution. Table 2, Panel B, shows marked differences in financial restitution likelihood across consumer demographics. Splitting the raw complaint data into high- vs. low-income subsamples based on whether the complaint was filed from a tract with above vs. below household median income, we find that 8.74% of complaints in the high-income subsample receive monetary relief vs. only 5.67% of complaints in the low-income subsample. Repeating the exercise for education (based on the census tract percentage of the population 25 and older with a bachelor's degree), we find that 8.86% of complaints in the high-education subsample receive monetary relief vs. 6.36% in the low-education subsample. There are substantial differences by race as well, which we estimate using Bayesian Improved Surname and Geocoding (BISG) algorithms based on filer surname and address. 12.80% of complaints from Asian filers result in monetary relief, against 7.75% of complaints from White filers, 6.89% of complaints from Hispanic filers, and 4.37% of complaints from Black filers. Effectively, these results document a demographic gap in rates of financial restitution.

In Figure 3, we analyze whether the likelihood of a complaint resulting in financial restitution is monotonically increasing in socioeconomic status and majority ethnicity. We sort the data into quintiles for census tract household median income, census tract percentage of population above 25 with a bachelor's degree, and census tract percentage of minority (non-White) population. We then plot the share of complaints solved with monetary relief within those quintiles in Panels A to C. Indeed, the likelihood of financial restitution monotonically increases with filer income and education. Complaints in the top quintile of filer tract income/education are $\sim$70% more likely to receive financial restitution than complaints in the bottom income/education quintiles. The financial restitution

likelihood decreases for filers who belong to a minority ethnic group. Complaints in the top quintile of filer minority likelihood are ∼50% less likely to receive financial restitution than complaints in the bottom quintile.

Panel D of Figure 3 explores whether demographic differences in financial restitution are the result of differences in the types of financial products held by households. For example, higher-income households are more likely to have mortgages, and the relatively smaller restitution rate for mortgages might cause differences across demographic groups. The figure plots, for each product, the average of the shares of complaints filed (i) from the bottom quintile of income, (ii) from the bottom quintile of education, and (iii) from the top quintile of minority likelihood. For each product type, the average share is within the 15-25% range, suggesting that low socioeconomic status and minority consumers are not concentrating their complaints on certain products.

Furthermore, we consider whether the demographic differences in financial restitution are driven by marked differences within specific financial products. For example, suppose that lower-income households are more likely to have overdraft fees because of income instability. In that case, low-income households might produce more mistaken complaints, resulting in lower restitution rates. Figure 4 plots differences in the percentage of complaints resulting in financial restitution between the top and the bottom quintiles of socioeconomic status by product. We find socioeconomic differences in financial restitution for most product types. The gap is largest for cards (debit, credit, prepaid cards). Differences are small for debt collection and student loans, and the gap flips for the residual category "other".

Figure 5 plots the total monetary relief amount across socioeconomic statuses and ethnicities. According to Panel A, low-income and low-education complaints have consistently received lower amounts of restitution over time compared to high-income and high-education complainers. Panel B and summary statistics in Table 2 show that Asian

filers are the most successful at obtaining high amounts of monetary relief, followed by Hispanic filers, White filers, and Black filers, respectively.

We use regression analysis to rigorously test for demographic differences in financial restitution (Table 3). We estimate the following general regression specifications:

$$solved\ w/MR_{i,c,r,q,tr} = \gamma_t + \gamma_g + \gamma_c + \beta_1 \times X_{f,t} + \epsilon \tag{1}$$

Across specifications, the dependent variable is $solved\ w/MR_{i,f,c,r,q,tr}$, a dummy equal to 1 if complaint i from filer f in tract tr against company c in quarter q has been solved with monetary relief (by company employee r). The independent variable, $X_{f,t}$ is a vector of filer characteristics. For income and education, we regress $solved\ w/MR_{i,c,r,q,tr}$ on dummies for above median census tract tr income and education or dummies for census tract tr income and education quintiles (Panels A and B). For race, we regress $solved\ w/MR_{i,c,r,q,tr}$ on a minority (non-White) dummy, or separate dummies for Asian, Black, Hispanic filer f (Panel C). Specifications are progressively loading fixed effects: across panels, columns 1 and 4 have quarter and company fixed effects, columns 2 and 5 have quarter and company x product fixed effects, and columns 3 and 6 add the filer's county fixed effects. Even in the strictest specification, a complaint being filed from a tract with above median income (education) results in an 11.41% (11.13%) increase in the likelihood of receiving monetary relief with respect to the unconditional sample mean (Panel A (B), column 3). A complaint being filed from an Asian (Black) (Hispanic) filer results in a 91.85% higher (12.52% lower) (4.34% lower) likelihood of being resolved with financial restitution with respect to the unconditional sample mean (Panel C, column 6). We conclude that the demographic financial restitution gap is highly robust to all these fixed effect combinations.

We repeat the exercise for monetary relief amounts in Table 4, with the dependent variable now being $monetary\ relief\ amount_{i,f,c,r,q,tr}$, the amount of monetary relief granted

to complaint i filed from tract tr against company c in quarter q. Given that the dependent variable is now a continuous variable that is downward truncated at zero, we employ fixed-effects Poisson models to estimate regressions. Estimates show that even under the strictest specification (with quarter, company x product, and county fixed effects) a complaint from a tract with above median income (education) receives 27.1% (23.6%) higher relief amounts than complaints from a tract with below median income (education), while complaints from Asian (Black) (Hispanic) filers receive 14.7% higher (37.9% lower) (14.3% lower) relief amount than complaints from White filers.

Overall, our findings are consistent with product complexity and financial aptitude playing an important role in determining the likelihood of financial restitution. This leaves much room for consumers' understanding of the product and dispute process to influence restitution dynamics, as we find that complaints from low-socioeconomic-status individuals and minorities are less likely to be awarded restitution. In the next section, we investigate the mechanisms that could contribute to these differences in financial restitution.

4.1 Financial Restitution Gap Mechanisms

In this section, we employ the detailed complaint and complaint processing information of the private CFPB dataset to investigate the mechanisms behind the significant disparities in financial restitution across demographics highlighted in the previous section.

Self-advocacy. We start by exploiting the fact that the private CFPB data contain two free-text fields that the filer compiles when submitting the complaint. The first free-text field is called *complaint description*, and filers use it to explain the issue they are complaining about. This field is also available in the public version of the CFPB data, but only since 2015 and only if the filer agrees to its public disclosure. The second

field is called *complaint desired resolution*, and filers use it to explain their desired outcome of the complaint process. We analyze these two fields and create two variables. $I(mention\ of\ refund/fraud\ \&\ similar\ words\ in\ descr.)_{i,f,c,r,q,tr}$ is a dummy variable equal to 1 if the complaint description field contains the words "refund" or "fraud" or other similar words. $I(mention\ of\ refund/fraud\ \&\ similar\ words\ in\ desired\ res.)_{i,f,c,r,q,tr}$ is a dummy variable equal to 1 if the complaint desired resolution field contains the words "refund" or "fraud" or other similar words.[10] These variables proxy for whether or not the consumer is self-advocating for financial restitution upon filing the complaint.

Table 5 regresses these novel variables on consumer demographics to gauge their contribution to the related differences in restitution that we documented in the previous section. We find that complaints filed from above-median-income (above-median-education) tracts are 3.6% (4.1%) more likely to self-advocate in the complaint description than complaints filed from below-median-income (below-median-education) tracts.[11] Black and Hispanic filers are also significantly less likely to self-advocate in the complaint description than White and Asian filers. Self-advocacy in the complaint desired resolution field displays similar patterns and economic magnitudes. Therefore, low-socioeconomic-status filers and Black and Hispanic filers are not only less likely to receive monetary relief but also less inclined to self-advocate while filing the complaint. Self-advocacy appears to be a candidate for the mechanisms behind the demographic differences in restitution highlighted in the previous section.

[10] We target both refund and fraud since monetary restitution is a refund and detecting fraud is part of the CFPB mandate. The similar words we consider include "refunding", "refunded", "refunds", "repay", "reimburse", "reimbursement", "reimbursements", "reimbursing", "reimbursed", "repayment", "repayments", "repaying", "pay back", "paying back", "paid back", "make good", "making good", "made good", "compensate", "compensation", "compensations", "compensating", "compensated", "recoup", "recoups", "recouping", "recouped", "remunerate", "remuneration", "remunerations", "remunerating", "remunerated", "squaring accounts with", "squared accounts with", "square accounts with") or "fraud" and similar words ("deceit", "deception", "trickery", "rip-off", "fake", "con", "impostor", "fraudster", "deceive", "deceiving", "deceived", "defraud", "defrauded", "cheat", "cheating", "cheated", "trick", "tricked", "tricking", "mislead", "misled", "misleading", "misguide", "misguided", "misguiding".

[11] Percentages are expressed in reference to the unconditional sample mean.

Attachments. The consumer can attach supporting documentation when filing a complaint. Based on the private CFPB data, we are able to generate $I(filer;attachment)_{i,f,c,r,q,tr}$, a dummy variable equal to 1 if the complaint has an attachment from the filer. In Table 6, we regress the indicator for having an attachment on the demographics of the filer. We find that complaints filed from above-median-income (above-median-education) tracts are 1.04% (1.58%) more likely to be supported by an attachment than complaints filed from below-median-income (below-median-education) tracts.[12] Black and Hispanic filer complaints are also significantly more likely to be supported by an attachment than White and Asian filer complaints. Therefore, low-socioeconomic-status filers are slightly less likely to attach supporting documentation, while Black and Hispanic filers are slightly more likely to do so. While the tendency to attach supporting documentation varies across demographics, it does not map one-to-one into restitution patterns across demographics as self-advocacy does.

Self-selection. A potential mechanism for the financial restitution gap across demographics highlighted in the previous section is that low-socioeconomic-status consumers and Black and Hispanic consumers self-select into companies that poorly address complaints. We use internal company monitoring reviews at the Bureau to analyze this mechanism. Since 2020, the CFPB has been conducting reviews to assess whether companies are properly addressing complaints. As part of this initiative, the Bureau has reviewed company responses to many individual complaints and flagged whether each and every investigated complaint was poorly addressed. We build a company-level variable capturing how poorly the company handles complaints on average by taking the overall number of company complaints flagged as poorly addressed during reviews and dividing it by the overall number of reviewed company complaints.

[12] Percentages are expressed in reference to the unconditional sample mean.

Because not all reviewed companies poorly address complaints, we use Heckman Sample Selection Models. In the first stage of these models, the company self-selects into poorly addressing complaints. In the second stage, we analyze how many complaints the company gets from below-median-income or below-median-education tracts or White filers conditional on having self-selected into providing poor complaint responses. We do not find significant evidence that companies with higher percentages of poorly addressed complaints attract low-socioeconomic-status and minority filers. Therefore, this mechanism does not seem to explain the financial restitution gap.

Company Resources. Another potential mechanism for the financial restitution gap highlighted in the previous section is that companies allocate fewer resources to low-socioeconomic-status and minority complaints. In the private CFPB data, we have access to information on how many complaints the company employee has ever handled and when the employee logs into the system to actively manage complaints. Based on such data, we build two variables. $Prev.\ exp._{i,f,c,r,q,tr}$ is the natural logarithm of how many complaints company employees r responded to before getting to the current complaint i. $\%Days\ w/login_{i,f,c,r,q,tr}$ is the % of days between complaint filing and resolution that company employee r assigned to complaint i has logged into the complaint system.

We regress these novel variables on consumer demographics in Table 8 to gauge whether company resource allocation could be one of the mechanisms behind the financial restitution gap highlighted in the previous section. We do not find statistical nor economic significance across specifications, so it does not seem to be the case that companies allocate fewer resources to low-socioeconomic-status and Black or Hispanic complaints.

Company employees. Whereas the company itself is not allocating resources differently across complaints, it could be that the single employees within the company drive the ob-

served patterns in financial restitution. To test this mechanism, we add company employee fixed effects (*respondent fixed effects*) to equation 1 (regression of $solved\ w/MR_{i,f,c,r,q,tr}$ on consumer demographics). Table 9 reports the results. Since employee ID is not always available in the data, for reference, we first replicate the baseline analysis of the previous section (Table 3) on the subsample for which employee ID is available in columns 1, 3, and 5; then, we introduce respondent fixed effects in columns 2, 4, and 6. The coefficients of interest barely change with the introduction of the new fixed effects. Therefore, it is not the case that the financial restitution gap highlighted in the previous section is driven by single-employee dynamics.

Takeaways. Finally, we horse race all these potential determinants in the following regression specification:

$$solved\ w/MR_{i,c,r,q,tr} = \gamma_t + \gamma_g + \gamma_c + \beta_1 \times X_{f,t} + \beta_2 \times FM_{i,c,r,q,tr} + \beta_3 \times X_{f,t} * FM_{i,c,r,q,tr} + \beta_4 \times CM_{i,c,r,q,tr} + \epsilon \quad (2)$$

In this specification, the dependent variable is $solved\ w/MR_{i,f,c,r,q,tr}$, a dummy equal to 1 if complaint i from filer f in tract tr against company c in quarter q has been solved with monetary relief (by company employee r). For the independent variables, $X_{f,t}$ is the vector of filer demographics (income, education, race dummies), $FM_{i,c,r,q,tr}$ is the vector of potential filer mechanisms (self-advocacy, attachment dummies), and $CM_{i,c,r,q,tr}$ is the vector of potential company mechanisms (previous experience of the respondent, daily logins of the respondent, respondent fixed effects).

Table 10 presents the regression estimates. Since employee ID is not always available in the data, for reference, we first replicate the baseline analysis of the previous section (Table 3) on the subsample for which employee ID is available in columns 1, 3, and 5, then

we introduce the mechanisms and their interactions with demographics in columns 2, 4, and 6.

Comparing columns 1 and 2 of Table 10, we deduce that controlling for the possible mechanisms reduces the coefficient on the main variable of interest $I(above\ med.\ hh\ med.\ income)_{q,tr}$ from 0.00925 to 0.00368. Therefore, complaints from above-median-income tracts are now only 4.84% more likely to get financial restitution with respect to the unconditional sample mean, while the negative differential with the previous estimate of ((0.00925-0.00368)/0.0761=) 7.32% is now explained by the mechanisms introduced above. Furthermore, while both self-advocating for financial restitution and attaching supporting documentation positively influence the likelihood of financial restitution (positive and significant coefficients on $I(des.\ res.\ adv.\ mon.\ rel.)_{i,f,c,r,q,tr}$ and $I(filer\ attachment)_{i,f,c,r,q,tr}$), the influence is even greater in the case of complaints from above-median-income tracts (positive and significant coefficients on their interactions with $I(above\ med.\ hh\ med.\ income)_{q,tr}$).

Comparing columns 3 and 4 of Table 10, we deduce that controlling for the possible mechanisms reduces the magnitude of the main coefficient of interest on $I(above\ med.\ \%\ pop.\ w/higer\ ed.)_{q,tr}$ from 0.00902 to 0.00348. Therefore, complaints from above-median-education tracts are now only 4.57% more likely to get financial restitution with respect to the unconditional sample mean, while the negative differential with the previous estimate of ((0.00902-0.00348)/0.0761=) 7.28% is now explained by the mechanisms introduced above. Furthermore, while both self-advocating for financial restitution and attaching supporting documentation positively influence the likelihood of financial restitution (positive and significant coefficients on $I(des.\ res.\ adv.\ mon.\ rel.)_{i,f,c,r,q,tr}$ and $I(filer\ attachment)_{i,f,c,r,q,tr}$), the influence is even greater in the case of complaints from above-median-education tracts (positive and significant coefficients on their interactions with $I(above\ med.\ \%\ pop.\ w/higer\ ed.)_{q,tr}$).

Comparing columns 5 and 6 of Table 10, we deduce that controlling for the possible mechanisms reduces the magnitudes of the main coefficients of interest (the dummies for Asian, Black, and Hispanic filers). Here again, while both self-advocating for financial restitution and attaching supporting documentation positively influence the likelihood of financial restitution (positive and significant coefficients on $I(des.\,res.\,adv.\,mon.\,rel.)_{i,f,c,r,q,tr}$ and $I(filer\ attachment)_{i,f,c,r,q,tr}$), the influence is even greater in the case of complaints from Asian filers (positive and significant coefficients on their interactions with the dummy for Asian filer) and even smaller in the case of complaints from Black and Hispanic filers (negative and significant coefficients on their interactions with the dummy for Balck filer and the dummy for H filer).

The only other mechanism that seems to matter for financial restitution in this horse race beyond self-advocacy and attachments is $\%\ days\ w/login_{i,f,c,r,q,tr}$, which displays negative and significant coefficients across all specifications in Table 10. However, this might be capturing some mechanical effects that stem from the fact that employees at larger companies deal with more complaints at once and log into the system more often.

Overall, even controlling for potential mechanisms, we witness a financial restitution gap across demographics, whereby complaints from low-socioeconomic-status filers and Black or Hispanic filers are around 4.5% less likely to receive monetary restitution. Regarding the potential mechanisms on the filer side, both self-advocacy and attaching supporting documentation matter for financial restitution and vary across demographics. Regarding potential mechanisms on the company side, companies do not allocate resources differently across demographics, but they do seem to weigh the importance they give to self-advocacy and attachments differently across demographics in a way that exacerbates the existing financial restitution gap.

5 Regulatory Scrutiny and Financial Restitution

We proceed to leverage confidential data on the Bureau's internal monitoring reviews of the complaint process. Since 2020, the CFPB has monitored and reviewed companies' processing of complaints. Specifically, the CFPB assesses whether companies manage complaint volume effectively and whether they properly responding to complaints. In conducting these reviews, the CFPB chooses a random selection of a company's complaints over the previous few years. Between 2020 and 2024, nearly 550 companies were monitored through reviews, amounting to a total of over 194,000 screened complaints. These numbers represent around 10% of both the number of all companies that have ever received a CFPB complaint and the number of total complaints, highlighting the broad scope of this investigative effort.

Once the Bureau has screened a random complaint as part of the monitoring review, it assigns metrics that capture how well the company processed the complaint. In particular, we focus on the two internal metrics that value the company's response to the filer. $I(company\ not\ address\ compl.)_{i,f,c,r,q,tr}$ is a dummy variable equal to 1 if the Bureau deems that the company did not properly address the complaint i following its review. $I(response\ not\ substantive)_{i,f,c,r,q,tr}$ is a dummy variable equal to 1 if the Bureau deemed that the company did not provide a substantive response to the filer of complaint i following its review. Overall, companies did not properly address around 5.25% of the reviewed complaints and did not provide a substantive response to 3.4% of them. If the CFPB finds that the company is processing complaints poorly, it then issues the company a confidential monitoring report highlighting the deficiencies. The CFPB sent 85 such reports between 2020-2024 and the complaints were delivered staggered over time.

In what follows, we first employ these confidential company monitoring report data to explore the ideal benchmark against which companies should be held accountable and then to assess whether regulatory pressure affects company behavior.

5.1 CFPB Company Monitoring Reviews

By looking at the reviewed complaints that the CFPB flags (or not) as properly processed, we can gather information on the optimal benchmark for complaint processing. Further, having found differences in restitution across demographics, we can use this information to test whether such differences are driven by companies not correctly processing complaints across demographics.

We find that complaints from low-socioeconomic-status and minority filers are more likely to be poorly addressed or receive an unsatisfactory response, especially at companies that receive a monitoring report from the Bureau. Figure 8 plots $I(company\ not\ address\ compl.)_{i,f,c,r,q,tr}$ (graphs on the left) and $I(response\ not\ substantive)_{i,f,c,r,q,tr}$ (graphs on the right) by quintiles of the reviewed complaints' census tract household median income (Panel A), education (Panel B), and share of minority population (non-White, Panel C). Within each Panel, the top graphs pool together all reviewed complaints, while the bottom graphs distinguish between reviewed complaints that did result in a confidential monitoring report being sent to the company (highlighting the deficiencies) and reviewed complaints that did not. The graphs depict a clear monotonic trend that is opposite the patterns of financial restitution: low-income, low-education, and minority filers are more likely to have their complaints improperly handled. This pattern is especially marked at companies that receive monitoring reports.

However, the disparities in complaint processing are much smaller than the socioeconomic differences for filers receiving financial restitution. Comparing Figure 8 with Figure

3, complaints in the bottom quintile of filer tract income/education are ∼20% more likely to be flagged as poorly handled in investigations than complaints in the top quintile, while they were ∼70% less likely to receive financial restitution. Complaints in the top quintile of filer minority likelihood are ∼10% more likely to be flagged as poorly handled in investigations, while ∼50% less likely to receive financial restitution.

Table 11 uses regression analysis to test for differences in complaint handling across demographic groups. These regressions allow us to control for time, company, and quarter fixed effects. We find that the inclusion of company or quarter fixed effects reduces the statistical significance of the coefficients of interest across specifications such that the differences in complaint handling are no longer statistically different from zero. These findings suggest that companies are not treating different demographic groups differently, but rather, companies with more complaints from certain demographic groups are more likely to have deficiencies in their handling of complaints.

Overall, while there is some evidence that demographic differences in financial resitution is driven by companies failing to process low-socioeconomic-status and Black or Hispanic complaints properly, the primary driver of the gap remains how consumers themselves engage with the complaint process (self-advocating, attaching supporting documentation, etc.).

5.2 CFPB Company Monitoring Reports

Next, having noticed that failing to process low-socioeconomic-status and minority complaints properly is a dynamic that is particularly marked at companies that end up receiving a monitoring report from the CFPB (8), we analyze how such companies respond to receiving the report itself and the added regulatory scrutiny that comes with it.

Figure 7 provides information on the companies that received a monitoring report from the CFPB between 2020 and 2024. Panel A highlights how 85 companies out of the over 550 reviewed between 2020 and 2024 received a monitoring report. Panel B shows how these companies usually account for around 0.5% of all complaints.

We use the staggered distribution of these monitoring reports to conduct a difference-in-differences analysis of the effects of increased regulatory scrutiny on companies' financial restitution. We use companies that receive monitoring reports as our treated sample. We restrict our control sample to the companies that were reviewed but never received a report. We also restrict the control sample to companies that received at least 100 yearly complaints in 2018 (prior to the review processes). This restriction on the control sample accounts for the fact that companies that receive monitoring reports tend to be larger. Table 12, Panel A presents the balance t-tests for the treated and the control groups prior to the start of monitoring reviews in 2020. Even imposing a size threshold, treated companies tend to receive, on average, significantly more complaints. Treated companies also tend to attract more deposit-related complaints than control companies, suggesting they are more likely to be banks than specialized institutions or fintech companies. Treated companies then also register more attachments to their complaints than control companies. Importantly, there is no difference across treated and controls on how many complaints they get from low-socioeconomic-status and minority filers on average. Panel B presents balance t-tests for the early-treated companies (receiving monitoring reports in 2020-2021-2022) and the late-treated companies (receiving monitoring reports in 2023-2024). The CFPB first targeted larger banks, then expanded to smaller banks and other financial institutions, which happen to get a lower percentage of complaints from low-socioeconomic-status and minority filers, on average.

We apply a difference-in-differences methodology to the complaint-level data of these companies:

$$solved\ w/MR_{i,c,r,q,tr} = \gamma_t + \gamma_g + \gamma_c + \beta_1 \times I(post\text{-}report)_{i,c,q} + \beta_2 \times X_{f,t} + \beta_3 \times I(post\text{-}report)_{i,c,q} \times X_{f,t} + \epsilon$$

In this specification, $solved\ w/MR_{i,f,c,r,q,tr}$ is a dummy equal to 1 if complaint i from filer f in tract tr against company c in quarter q has been solved with monetary relief by company employee r. $I(post\text{-}report)_{i,c,q}$ is a dummy equal to 1 if complaint i is filed against company c in quarter q, the quarter of or after which company c received a monitoring report from the CFPB (negative feedback from the CFPB).[13] $X_{f,t}$ is either a high-income, high-education, or race dummy.

In Table 13, Panel A presents results of regressing $solved\ w/MR_{i,f,c,r,q,tr}$ on the interaction of $I(post\text{-}report)_{i,c,q}$ with filer income, Panel B presents interaction with filer education, and Panel C with minority dummies.

We find that after receiving a monitoring report, companies increase the share of complaints resolved with monetary relief by several percentage points. However, they do so mostly for complaints filed by high-socioeconomic-status filers and Asian filers (positive but not significant coefficients on $I(post\text{-}report)_{i,c,q}$, positive and significant coefficients on the interaction between $I(post\text{-}report)_{i,c,q}$ and dummies for high education/income, Asian filers). This result suggests that regulatory interventions disproportionately benefit wealthier and more educated individuals. Instead of reducing differences in restitution across demographics, heightened regulatory scrutiny further exacerbates differences in financial restitution.

[13] $I(post\text{-}report)_{i,c,q}$ is the equivalent of *Treated x Post* in the traditional difference-in-differences setup, with *Treated* and *Post* being here absorbed by company and quarter fixed effects.

Since our treatment effects are heterogeneous over time and likely across groups, we also employ the Callaway and Sant'Anna Estimator in place of the two-way fixed effects diff-in-diffs model. Figure 8 reports the estimator's coefficient plots. Panel A distinguishes between the share of complaints solved with monetary relief coming from below-median-income tracts (left graph) and the share of complaints solved with monetary relief coming from above-median-income tracts (right graph). There is a marked increase in the likelihood of financial restitution in the complaints from above-median-income tracts following increased regulatory scrutiny with the delivery of the monitoring report by the Bureau. Financial restitution likelihood presents a much smaller and delayed uptick instead in complaints from below-median-income tracts. Panel B repeats the exercise for above- and below-median-education tracts and displays similar patterns. Panel C distinguishes between the share of complaints solved with monetary relief coming from minority filers (as per the BISG algorithm) and the share of complaints solved with monetary relief coming from White filers. Again, White filer complaints see an immediate and marked increase in restitution likelihood after the company receives the CFPB monitoring report, while minority filers witness a much smaller and delayed uptick.

The Internet Appendix contains further robustness checks. In Table B.1, we replicate the difference-in-differences analysis but with $I(\textit{low-income complaint})_{q,tr}$ (columns 1 to 3), $I(\textit{low-education complaint})_{q,tr}$ (columns 4 to 6), and $I(\textit{minority complaint})_{i,f,c,r,q,tr}$ (columns 7 to 9) as dependent variables in the place of $\textit{solved w/MR}_{i,f,c,r,q,tr}$. Regressing these variables on $I(\textit{post-report})_{i,c,q}$, we test whether there is a change in the composition of submitted complaints across demographics at companies once they receive the CFPB monitoring report. This analysis is conducted to rule out the scenario in which the increase in financial restitution only for the high-socioeconomic-status and Asian segments of the population simply derives from companies getting more such complaints after receiving

the CFPB report. We do not find this to be the case, as we only see a slight increase in minority complaints.

In Table B.2 and B.1, we replicate the analysis in Table 13 and Figure B.1 on a matched sample. Instead of keeping as controls all investigated companies with at least 100 complaints in 2018 (prior to investigations), we restrict control companies to the three nearest neighbors of the treated ones based on overall number of complaints, share of complaints regarding loan-related products, and share of complaints with filer attachments—the three dimensions on which treated and controls differed the most (Table 12). Untabulated tests show that the matched sample is more balanced, while the estimation output in the table displays no virtual significant change with respect to previous results.

Lastly, we investigate the changes companies that receive a CFPB monitoring report apply to their complaint processing due to the highlighted deficiencies and the increased scrutiny. Table 14 reports regression estimates of several company complaint-handling measures on $I(post\text{-}report)_{i,c,q}$ under company and quarter fixed effects. Panel A reports evidence of an increase in the number of company employees devoted to complaints handling after the delivery of the monitoring report, albeit only significant at the $\sim$13% level. Panel B shows no increase in the frequency with which company employees access the complaint system under increased scrutiny—if anything, a slight decrease. Panel C shows no sign of allocating more experienced employees to complaint processing after receiving a monitoring report.[14] Panel D investigates whether companies take more into account filer self-advocacy when deciding to grant financial restitution after receiving a CFPB monitoring report. We find that self-advocacy increases the likelihood of receiving financial restitution by (0.0178/0.0761=) 23.39% in normal times but by ((0.0178+0.0203)/0.0761=) 50.07% after the company receives a CFPB monitoring report. Panel E investigates whether companies take more into account filer attachments when deciding whether to grant

[14]Experience being measured in terms of how many complaints the employee had already resolved.

financial restitution after receiving a CFPB monitoring report. We find that attaching supporting documentation increases the likelihood of receiving financial restitution by (0.0117/0.0761=) 15.38% in normal times but by ((0.0117+0.0162)/0.0761=) 36.66% after the company receives a CFPB monitoring report. Further, the post-report financial restitution likelihood with attachments gets even higher if the complaint is filed from an above-median-income/education tract and by an Asian or White filer.

Overall, under regulatory scrutiny, companies improve their responsiveness primarily to consumers who are already more likely to secure restitution. On the other hand, complaints from low-socioeconomic-status and minority consumers remain less likely to result in compensation. This finding further supports the role of financial aptitude and self-advocacy in determining restitution outcomes—consumers who can effectively navigate the dispute resolution process are best positioned to benefit from regulatory oversight.

6 Conclusion

Financial disputes are a pervasive yet understudied aspect of consumer financial markets. This paper provides the first systematic study of financial complaints and restitution using confidential regulatory data from the CFPB. We document a large and growing volume of complaints, with hundreds of millions of dollars in restitution paid out over the past decade. The rate of restitution has remained constant despite the growth in complaints, suggesting scope for additional compensation to consumers as consumers gain understanding of their financial products and the ability to bring forward disputes.

Our findings highlight the complementary nature of regulatory oversight and financial sophistication or self-advocacy. We find little evidence that firm identity systematically predicts restitution, suggesting that financial disputes are not driven primarily by a subset

of bad acting firms. Instead, product complexity plays a central role, with simpler products like bank accounts and credit cards generating higher restitution rates than mortgages and other structured financial products. Moreover, consumers who actively advocate for themselves—by explicitly requesting refunds, claiming fraud, or providing supporting documentation—are far more likely to receive restitution.

While regulatory scrutiny increases restitution rates, it is most effective when paired with consumer engagement, reinforcing the complementary relationship between regulation and financial sophistication. These findings suggest that ensuring broad access to financial redress requires more than firm oversight. Policies aimed at simplifying complaint resolution, enhancing financial literacy, and making consumer redress mechanisms more accessible could help ensure that financial protections benefit a wider set of consumers.

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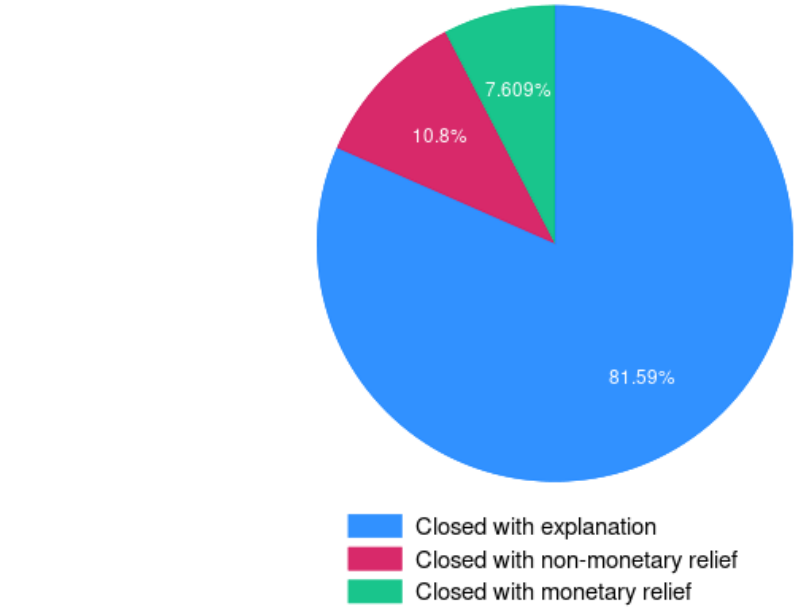
Figure 1: **Company Answers to Complaints**

This figure illustrates the ways in which companies answer consumer complaints. The vast majority of complaints is closed with an explanation (80%), followed by 10.5% closed with an action that does not entail monetary relief, then 7.4% of complaints are solved with monetary relief.

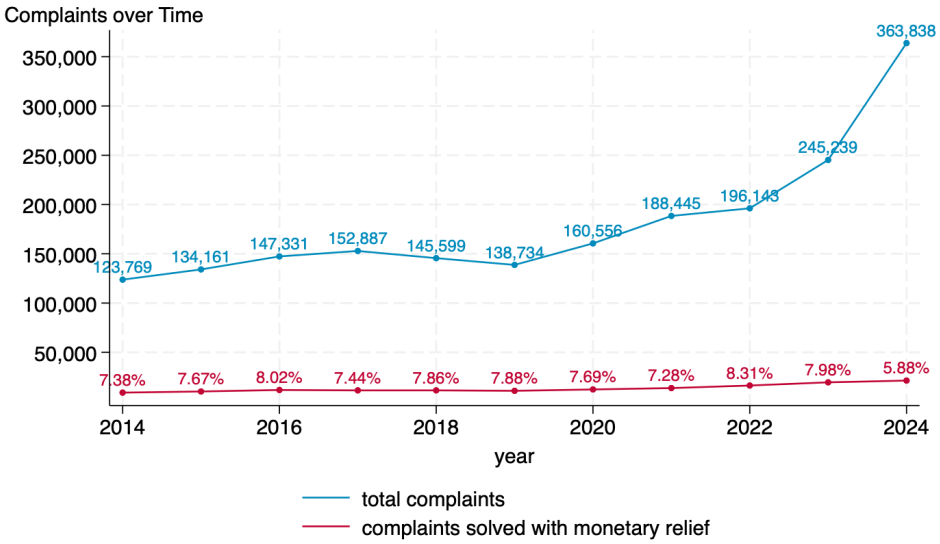


Source: CFPB data, 2014m1 - 2024m12.

Figure 2: **Complaints Dynamics**

This figure investigates trends in CFPB complaints over time. Panel A plots the overall number of complaints filed with the CFPB (blue line) and the overall number of complaints that received monetary relief (red line, with labels in % of overall complaints) over time. Panel B reports the overall number of complaints within each product over time, distinguishing across debt collection, cards (debit, credit, prepaid), accounts (checking or savings), mortgage, money transfer (money transfer, virtual currency, or money service), student loan, car loan, other loan (payday, title, personal loan), and other (a residual category).

Panel A: Complaints over time



Panel B: Product complaints over time

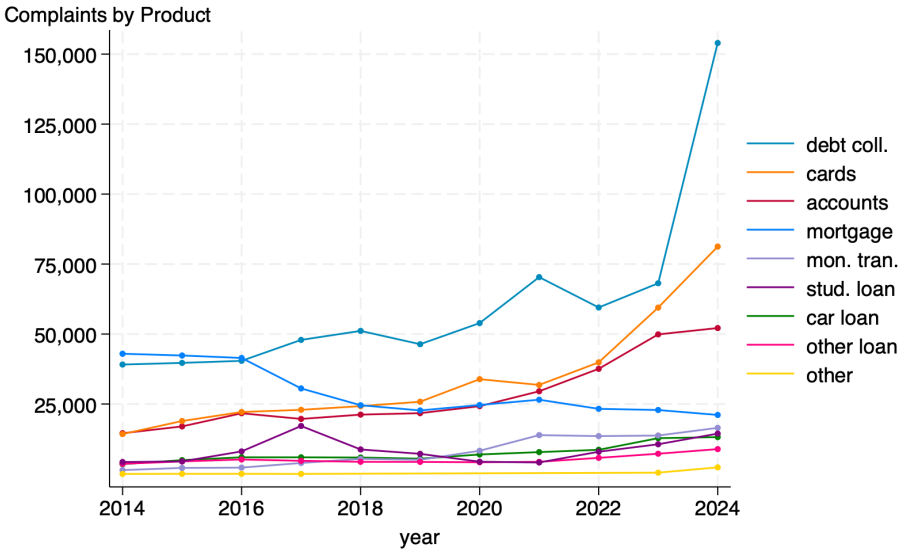
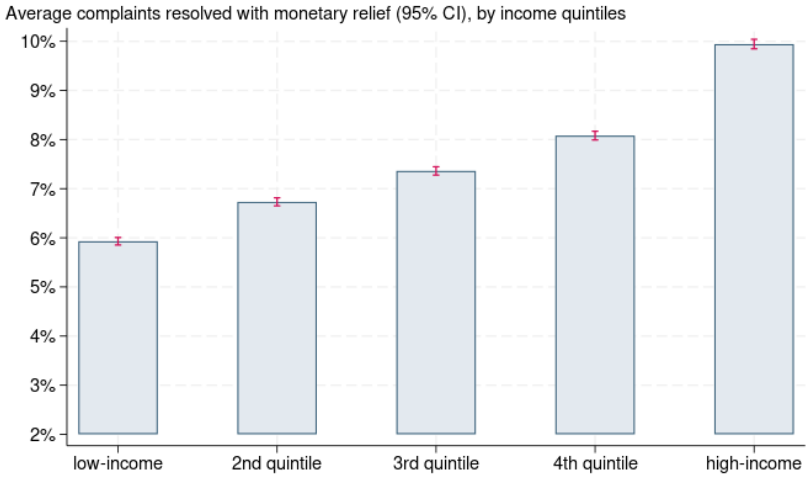


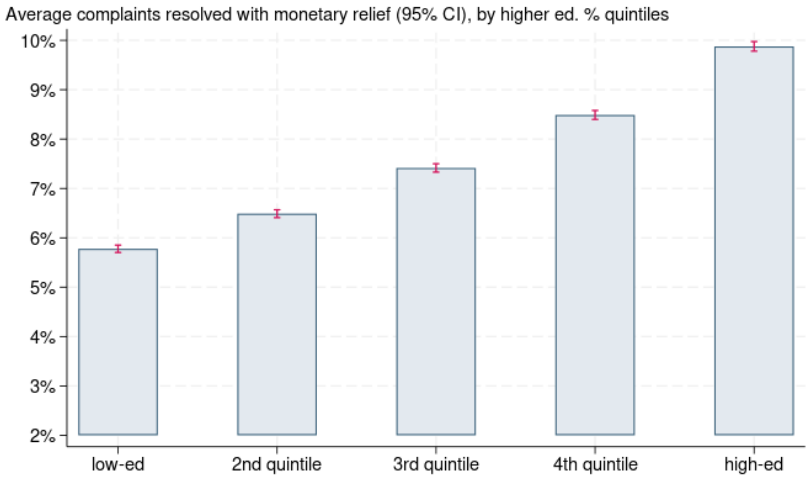
Figure 3: **The Financial Restitution Gap**

This figure reports the percentage of complaints solved with monetary relief by quintiles of the filer's census tract income (household median income, Panel A), education (% of population above 18yo with a bachelor degree, Panel B), and minority population (% of non-white population, Panel C). Panel B plots the product average across the share of complaints filed from the lowest quintile of tract household median income, the share of complaints filed from the lowest quintile of tract % population above 25 with a bachelor degree, and the share of complaints filed from the highest quintile of tract % population of non-white ethnicity.

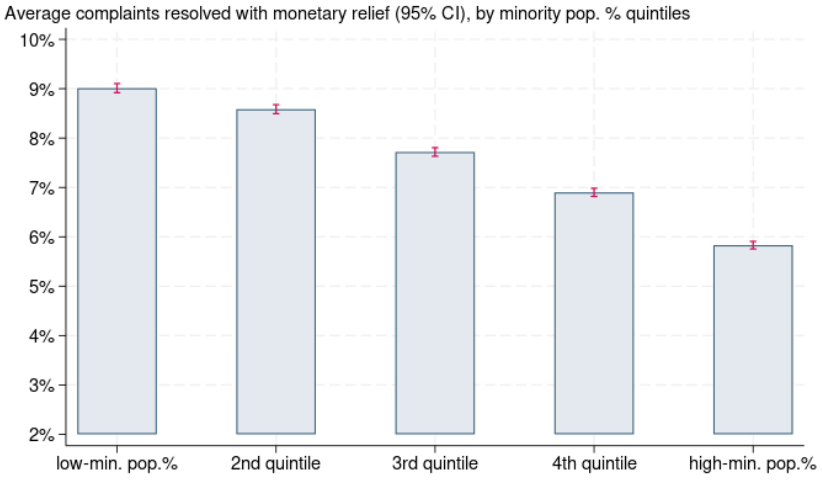
Panel A:Monetary relief likelihood on Census tract income quintiles



Panel B:Monetary relief likelihood on Census tract education quintiles



Panel C:Monetary relief likelihood on Census tract education quintiles



Panel D: Avg share of complaints filed from bottom quintile of socioeconomic status

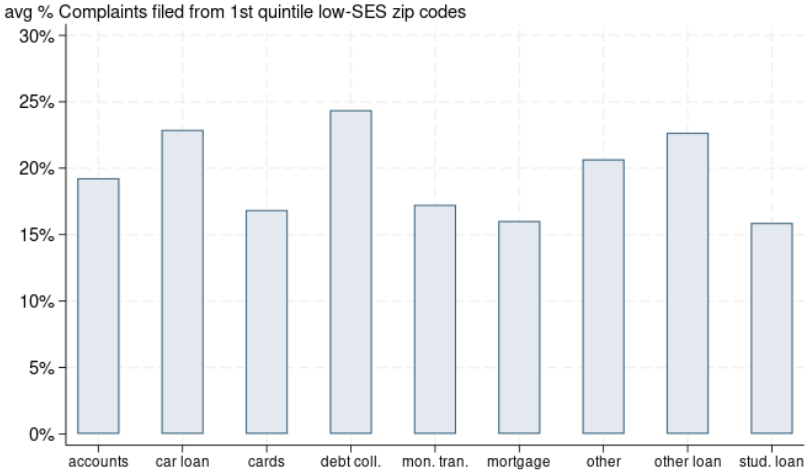
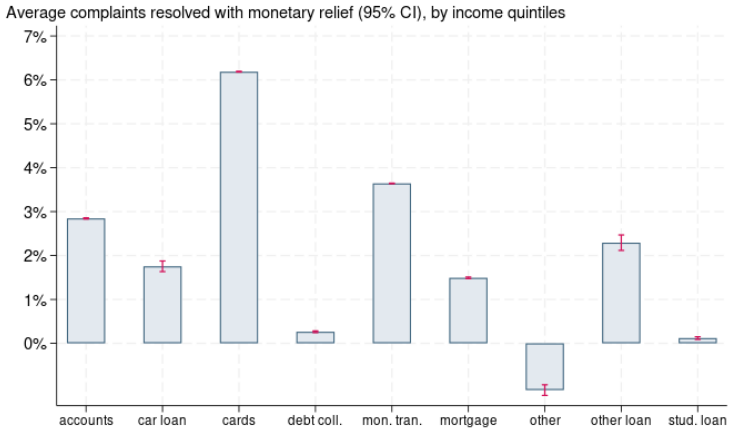


Figure 4: **Financial Restitution Gap by Product**

This figure reports dynamics by product. Panel C investigates the financial restitution gap across products. In Panel A, within each product we take the share of complaints solved with monetary relief in the highest quintile of filer's tract household median income and subtract the share of complaints solved with monetary relief in the lowest quintile of filer's tract household median income. In Panel B, within each product we take the share of complaints solved with monetary relief in the highest quintile of filer's tract % of population above 25 with a bachelor degree and subtract the share of complaints solved with monetary relief in the lowest quintile of filer's tract % of population above 25 with a bachelor degree. In Panel C, within each product we take the share of complaints solved with monetary relief in the highest quintile of filer's tract % of minority population and subtract the share of complaints solved with monetary relief in the lowest quintile of filer's tract % of minority population.

Panel A: Highest **income** quintile - lowest income quintile:

Panel B: Highest **education** quintile - lowest education quintile:



Panel C: Lowest **minority** quintile - highest minority quintile:

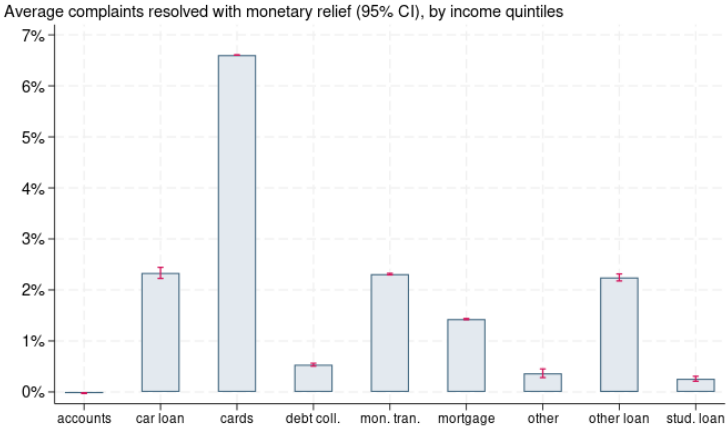
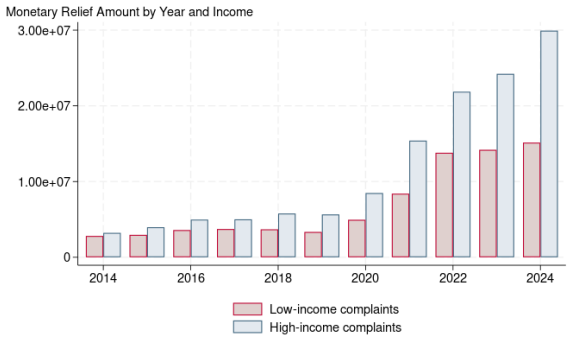


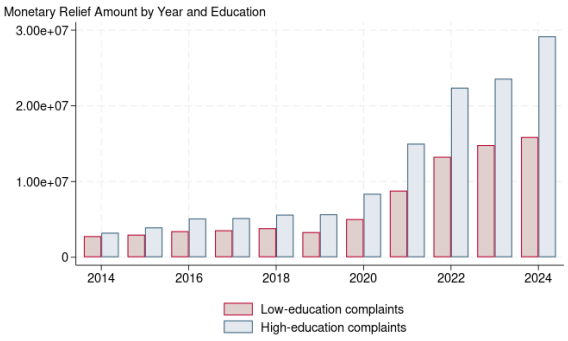
Figure 5: **Monetary Relief Dynamics**

This figure reports on the evolution of the total amount of monetary relief granted over time. Panel A separates complaints based on whether the complaint is or not filed from a tract that has below median income that year (left plot) or below median education (right plot). Panel B distinguishes total monetary relief amounts between complaints from Asian and White filers, Black and White filers, and Hispanic and White filers (from left to right, respectively).

Panel A: Monetary relief over time by income and education

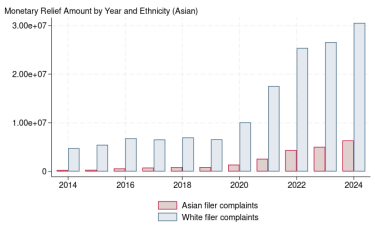


Income

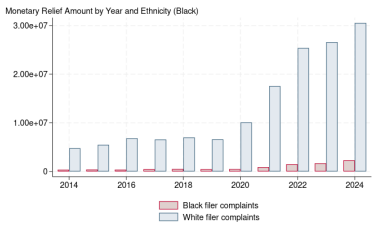


Education

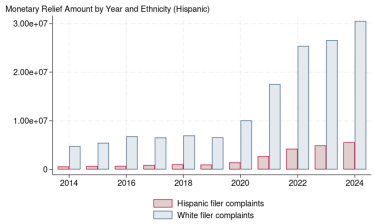
Panel B: Monetary relief over time by ethnicity



Asian and White



Black and White

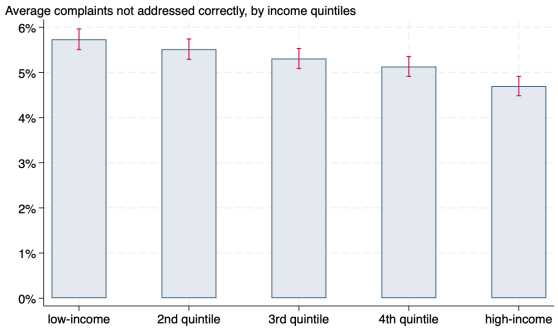


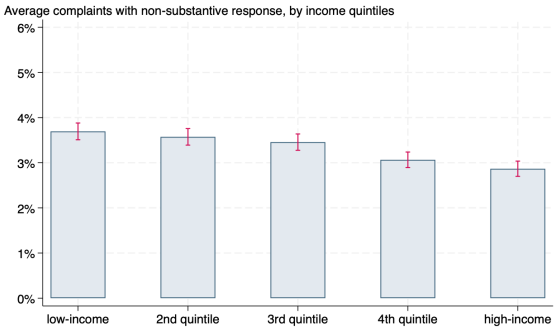
Hispanic and White

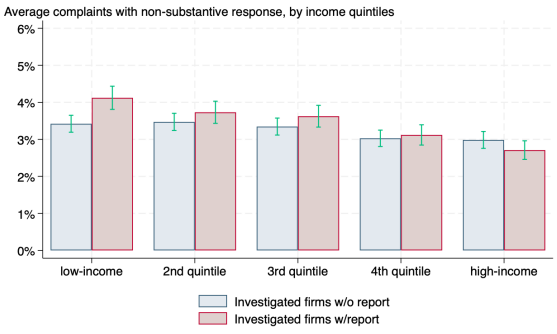
Figure 6: **CFPB Company Monotiring Reviews across Demographics**

This figure reports the percentage of complaints flagged as having a problematic response by quintiles of the filer's census tract income (household median income, Panel A), education (% of population above 18yo with a bachelor degree, Panel B), and minority population (% of non-white population, Panel C). Throughout all panels, plots on the left report about the share of reviewed complaints not addressed properly by the company, plots on the right report about the share of reviewed complaints with a not substantive response. Within each panel, the top two graphs report results for all reviewed complaints, the bottom two graphs distinguish between complaints at reviewed firms that never received a monitoring report (negative feedback from CFPB) and complaints at reviewed firms that received a monitoring report at least once.

Panel A: CFPB Company Reviews by Census tract income quintiles



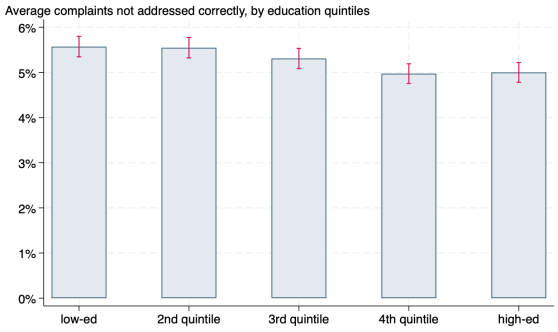


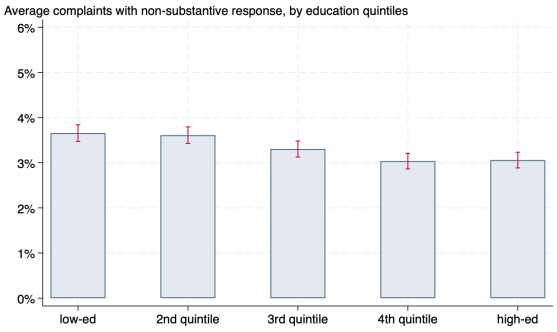


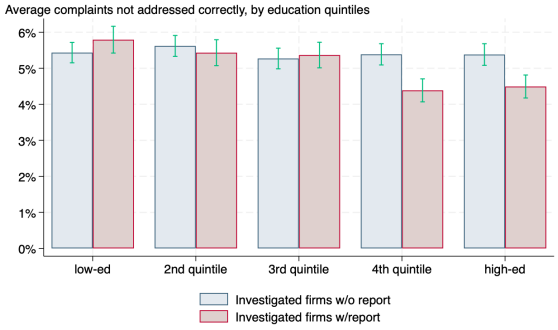
Company did not address complaint

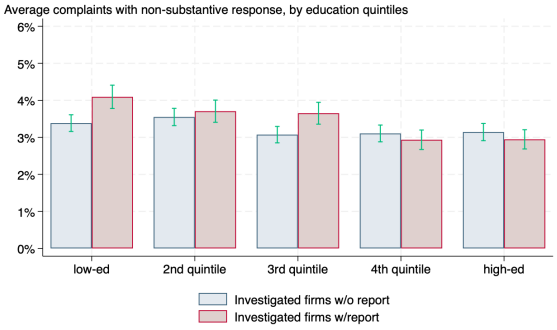
Company response not substantive

Panel B: CFPB Company Reviews by Census tract education quintiles





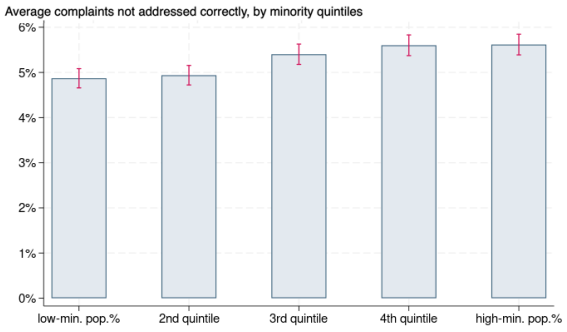


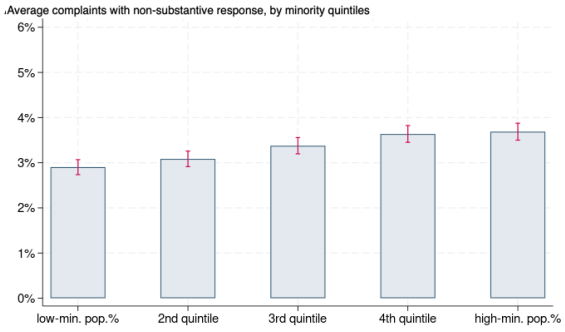


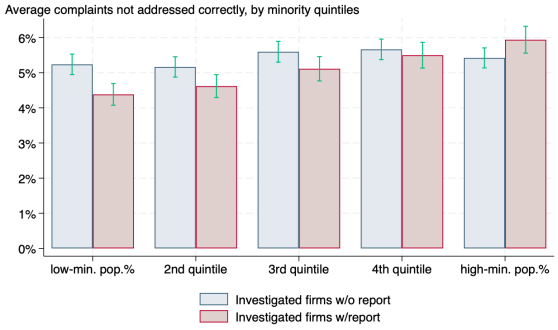
Company did not address complaint

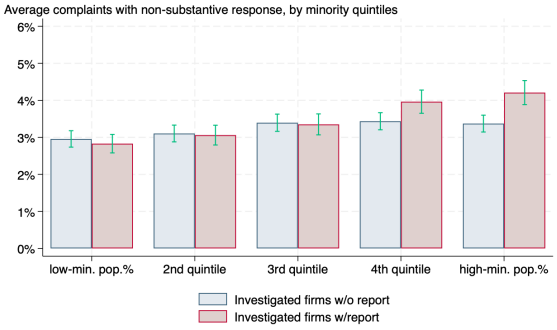
Company response not substantive

Panel C: CFPB Company Reviews by Census tract minority quintiles









Company did not address complaint

Company response not substantive

Figure 7: **Firms Receiving a CFPB Monitoring Report**

text This figure reports information on CFPB monitoring reports. Panel A illustrates how many firms the CFPB has sent monitoring reports to between 2021 and 2024 (sign of negative feedback from the agency). Panel B plots the evolution over time of the total number of complaints received by firms that the CFPB has sent a monitoring report to between 2014 and 2024. The labels in red represent the share that these complaints represent of overall complaints, in %.

Panel A: Monitoring reports per year

Year	Reported Firms
2021	14
2022	20
2023	31
2024	20

Panel B: Complaints of reported firms

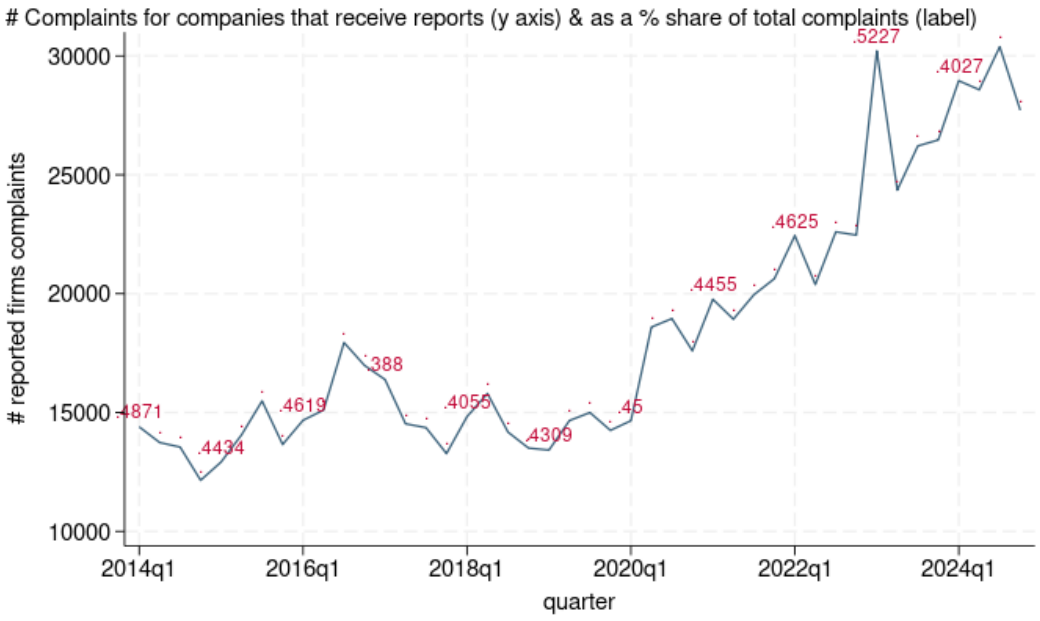
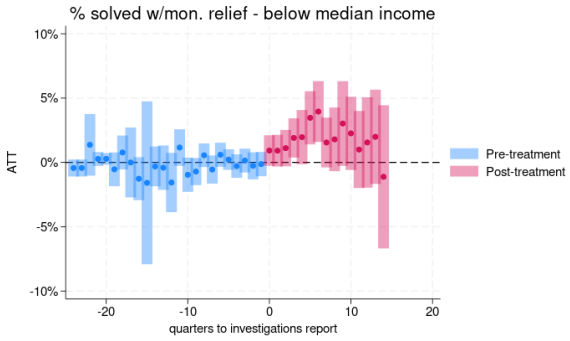


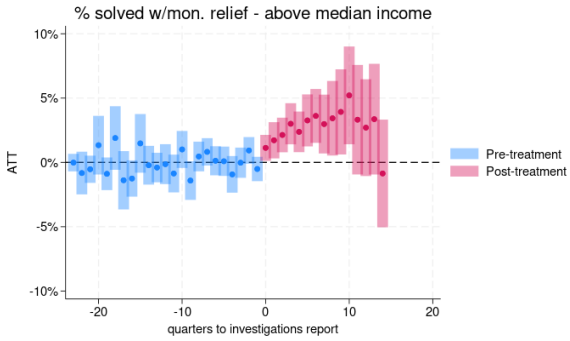
Figure 8: **CFPB Monitoring Reports - Dynamic Difference in Differences**

This figure reports the dynamic difference-in-differences Callaway and Sant'Anna estimators of the percentage of complaints solved with monetary relief each quarter by each company around receiving a monitoring report. The subsamples distinguish between high and low household median income (Panel A), high and low education (% of population above 18yo with a bachelor degree, Panel B), minority and white population (% of non-white population, Panel C). The sample is restricted to companies that were reviewed and received a monitoring report (negative feedback from CFPB, treatment) and reviewed companies that did not receive a report but had at least 100 yearly complaints prior the start of the company reviews period (controls).

Panel A: CFPB reports by low and high income

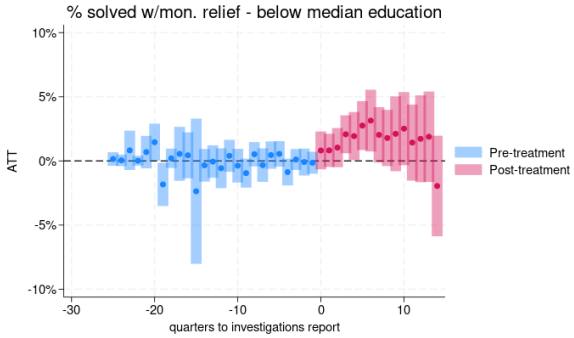


Low-income complaints

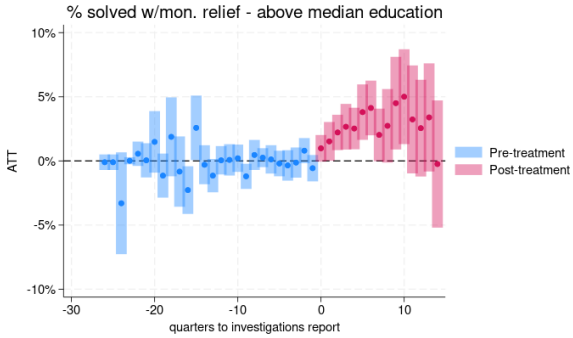


High-income complaints

Panel B: CFPB reports by low and high education

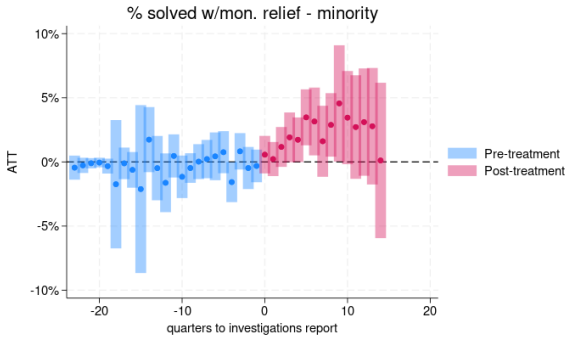


Low-education complaints

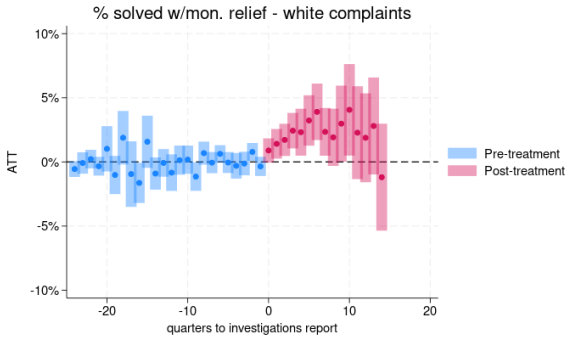


High-education complaints

Panel C: CFPB reports by minority and white filer



Minority complaints

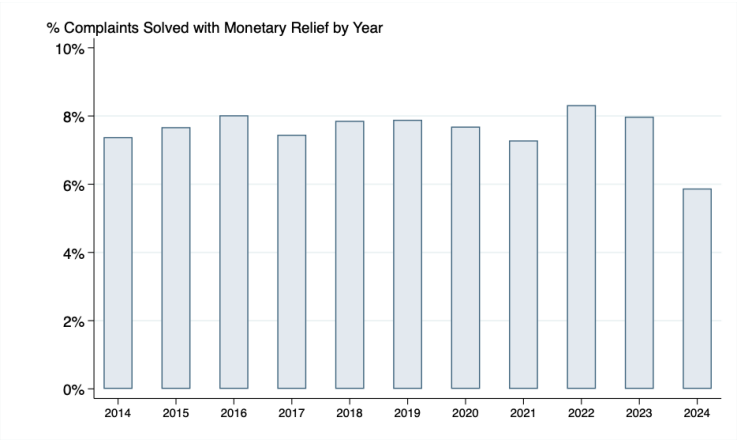


White complaints

Table 1: **Monetary Relief Dynamics**

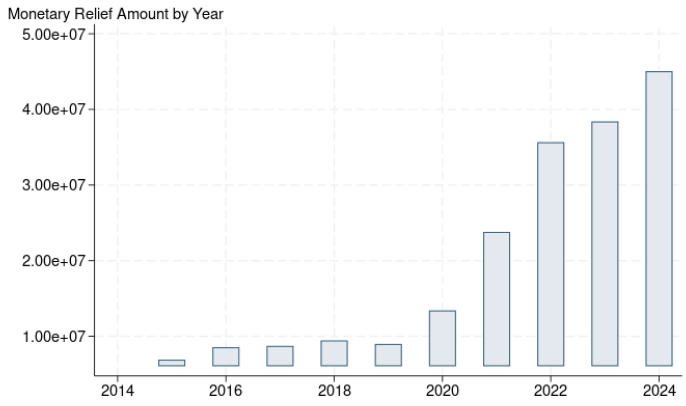
Description: This table shows financial restitution trends over time and across products. Panel A reports the evolution over time of the number of total complaints and the number of complaints solved with monetary relief. Panel B reports the evolution over time of the amount of monetary relief granted. Panel C reports the evolution of the number of total complaints and the number of complaints solved with monetary relief across products.

Panel A: Complaints solved with monetary relief over time



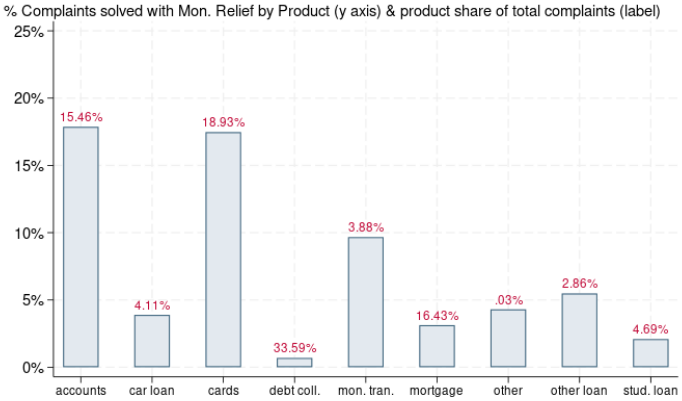
year	complaints	solved wMR	% solved wMR
2014	113,551	8,693	7.65%
2015	122,691	9,804	7.99%
2016	135,380	11,233	8.30%
2017	140,999	10,710	7.60%
2018	133,724	10,654	7.97%
2019	129,364	10,295	7.96%
2020	148,708	11,548	7.77%
2021	176,256	12,943	7.34%
2022	186,052	15,605	8.39%
2023	225,482	18,004	7.99%
2024	317,988	19,779	6.22%
total	1,830,195	139,268	7.61%

Panel B: Monetary relief amount over time



year	total relief	relief mean	relief st. dev.
2014	6,034,036	694.13	429.71
2015	6,924,295	706.27	494.88
2016	8,566,959	762.66	538.85
2017	8,734,339	815.53	546.06
2018	9,460,498	887.98	603.62
2019	8,994,702	873.70	581.50
2020	1.34e+07	1,160.37	775.06
2021	2.38e+07	1,838.83	1,286.96
2022	3.57e+07	2,287.73	1,634.78
2023	3.84e+07	2,132.86	1,458.12
2024	4.51e+07	2,280.20	1,418.00
total	2.05e+08	1,471.98	1102.94

Panel C: Complaints solved with monetary relief by product



product	complaints	solved wMR	% solved wMR
accounts	309,287	53,789	17.39%
car loan	81,222	3,081	3.79%
cards	374,629	64,154	17.13%
debt coll.	670,457	4,504	.67%
mon. tran.	86,290	7,860	9.11%
mortgage	323,034	9,873	3.06%
other	30,55	144	4.71%
other loan	57,192	3,052	5.34%
stud. loan	91,536	1,898	2.07%

Table 2: **Determinants of Restitution**

Description: This table reports statistics on the determinants of the likelihood of receiving financial restitution. Panel A reports variance decompositions of regressing *solved wMR*, a dummy variable equal to 1 if the complaint is resolved with monetary relief, on different combinations of quarter fixed effects, company fixed effects, product fixed effects, and county fixed effects. Percentages are based on Mean Squares, which account for the degrees of freedom of the explanatory variables. The first three columns run the regression on the entire sample; columns 3, 4, and 5 run the regression on the subsample that only contains companies that provide more than one financial product. Panel B reports financial restitution summary statistics across different splits of the complaint data based on filer demographics.

Panel A: Company and Product weight

	all companies			**companies > 1 product**		
dep. variable	**% model variation explained (MS)**			**% model variation explained (MS)**		
= **solved wMR**	(1)	(2)	(3)	(4)	(5)	(6)
quarter FE	33.33%	0.5%	0.5%	19.42%	0.50%	0.48%
company FE	66.67%	0.24%	0.24%	80.58%	0.52%	0.51%
product FE		99.26%	99.23%		98.98%	98.98%
county FE			0.03%			0.30%
model variation (R-squared)	10.29%	12.18%	12.56%	10.03%	11.94%	12.32%
obs	1,996,702	1,996,702	1,900,172	1,944,294	1,944,294	1,850,105

Panel B: Filer demographics

filer	**complaints**	**solved wMR**	**% solved wMR**	**tot. relief**	**avg. relief**
income, above median	915,161	51,884	5.67%	7.64e+07	1,472.50
income, below median	915,034	79,963	8.74%	12.86e+07	1,608.24
education, above median	915,123	58,204	6.36%	7.78e+07	1,336.09
education, below median	915,072	81,064	8.86%	12.74e+07	1,571.29
asian	99,638	12,749	12.80%	2.36e+07	1,848.06
black	162,472	7,095	4.37%	0.94e+07	1,318.62
hispanic	219,655	15,138	6.89%	2.39e+07	1,580.80
white	1,338,544	103,744	7.75%	14.73e+07	1,420.15

Table 3: **The Financial Restitution Gap - Baseline effects on Financial Restitution Likelihood**

Description: This table presents evidence of a Financial Restitution Gap in consumer finance, i.e. the lower likelihood of receiving financial restitution when filing a complaint from low socioeconomic statuses. Across panels, the outcome variable $solved\ w/MR_{i,f,c,r,q,tr}$ is a dummy equal to one if filer i's complaint c from Census tract tr against company c filed in quarter q has been solved with monetary relief, zero otherwise. Panel A regresses this complaint-level information on $I(above\ med.\ household\ med.\ income)_{q,tr}$, a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q, in columns 1 to 3, and on quintiles of the tract household median income in columns 4 to 6. Panel B regresses this complaint-level information on $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$, a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 25 with a bachelor's degree in quarter q, in columns 1 to 3, and on quintiles of the tract higher education in columns 4 to 6. Panel C regresses this complaint-level information on $I(minority\ filer)_{i,f,c,r,q,tr}$, a dummy equal to one if complaint c comes from filer i who is non-white according to Bayesian Improved Surname and Geocoding (BISG) in columns 1 to 3, and on dummies for Asian, Black, and Hispanic filer ethnicity in columns 4 to 6. Across panels, standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively; - denotes a coefficient absorbed by fixed effects.

Panel A: Income

	solved w/MR$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. household med. income)$_{q,tr}$	0.0101***	0.00951***	0.00868***			
	(0.0019)	(0.0016)	(0.0014)			
household med. income quintile$_{q,tr}$				-	-	-
household med. income quintile$_{q,tr}$=2				0.00474***	0.00531***	0.00482***
				(0.0010)	(0.0011)	(0.0010)
household med. income quintile$_{q,tr}$=3				0.00747***	0.00792***	0.00748***
				(0.0015)	(0.0014)	(0.0013)
household med. income quintile$_{q,tr}$=4				0.0104***	0.0109***	0.0106***
				(0.0021)	(0.0019)	(0.0018)
household med. income quintile$_{q,tr}$=5				0.0182***	0.0169***	0.0165***
				(0.0033)	(0.0028)	(0.0027)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,828,730	1,826,276	1,826,203	1,828,730	1,826,276	1,826,203
R-squared	0.104	0.137	0.139	0.104	0.137	0.139

Panel B: Education

	solved w/MR$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. % pop. w/higher ed.)$_{q,tr}$	0.0117***	0.00935***	0.00847***			
	(0.0021)	(0.0016)	(0.0014)			
% pop. w/higher ed. quintile$_{q,tr}$				-	-	-
% pop. w/higher ed. quintile$_{q,tr}$=2				0.00358***	0.00382***	0.00366***
				(0.00080)	(0.00076)	(0.00082)
% pop. w/higher ed. quintile$_{q,tr}$=3				0.00807***	0.00776***	0.00784***
				(0.0015)	(0.0014)	(0.0014)
% pop. w/higher ed. quintile$_{q,tr}$=4				0.0130***	0.0114***	0.0111***
				(0.0023)	(0.0019)	(0.0019)
% pop. w/higher ed. quintile$_{q,tr}$=5				0.0197***	0.0159***	0.0157***
				(0.0036)	(0.0028)	(0.0028)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,828,730	1,826,276	1,826,203	1,828,730	1,826,276	1,826,203
R-squared	0.104	0.137	0.139	0.104	0.137	0.139

Panel C: Ethnicity

	solved w/MR$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(minority filer)$_{i,f,c,r,q,tr}$	-0.00243**	-0.00269***	-0.00173**			
	(0.0011)	(0.00072)	(0.00068)			
I(Asian filer)$_{i,f,c,r,q,tr}$				0.0239***	0.0158***	0.0146***
				(0.0042)	(0.0031)	(0.0030)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.0149***	-0.0116***	-0.00953***
				(0.0032)	(0.0024)	(0.0020)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.00435***	-0.00386***	-0.00330***
				(0.0016)	(0.0011)	(0.00091)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,828,730	1,826,276	1,826,203	1,828,730	1,826,276	1,826,203
R-squared	0.104	0.137	0.139	0.104	0.137	0.139

Table 4: **The Financial Restitution Gap - Baseline effects on Financial Restitution Amounts**

Description: This table presents evidence on how the financial restitution amounts correlate with socioeconomic status. Across panels, the outcome variable $Monetary\ Relief\ amount_{i,f,c,r,q,tr}$ is the $ amount of relief awarded if the complaint c has been solved with monetary relief (winsorized at the 2.5% level in each tail) and zero otherwise. We use fixed-effects Poisson models to estimate this table due to the nature of the data. More in detail, Panel A regresses this complaint-level information on $I(above\ med.\ household\ med.\ income)_{q,tr}$, a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q, in columns 1 to 3, and on quintiles of the tract household median income in columns 4 to 6. Panel B regresses this complaint-level information on $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$, a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 25 with a bachelor's degree in quarter q, in columns 1 to 3, and on quintiles of the tract higher education in columns 4 to 6. Panel C regresses this complaint-level information on $I(minority\ filer)_{i,f,c,r,q,tr}$, a dummy equal to one if complaint c comes from filer i who is non-white according to Bayesian Improved Surname and Geocoding (BISG) in columns 1 to 3, and on dummies for Asian, Black, and Hispanic ethnicity in columns 4 to 6. Across panels, standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively; - denotes a coefficient absorbed by fixed effects.

Panel A: Income

	monetary relief amount$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. household med. income)$_{q,tr}$	0.299***	0.295***	0.271***			
	(0.028)	(0.027)	(0.031)			
household med. income quintile$_{q,tr}$				-	-	-
household med. income quintile$_{q,tr}$=2				0.141***	0.156***	0.140***
				(0.025)	(0.025)	(0.028)
household med. income quintile$_{q,tr}$=3				0.210***	0.228***	0.213***
				(0.032)	(0.031)	(0.040)
household med. income quintile$_{q,tr}$=4				0.323***	0.342***	0.336***
				(0.041)	(0.037)	(0.045)
household med. income quintile$_{q,tr}$=5				0.506***	0.500***	0.489***
				(0.042)	(0.040)	(0.050)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,517,592	1,439,004	1,433,561	1,517,592	1,439,004	1,433,561

Panel B: Education

	monetary relief amount$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. % pop. w/higher ed.)$_{q,tr}$	0.278***	0.256***	0.236***			
	(0.029)	(0.024)	(0.024)			
% pop. w/higher ed. quintile$_{q,tr}$				-	-	-
% pop. w/higher ed. quintile$_{q,tr}$=2				0.0968**	0.106**	0.107***
				(0.045)	(0.044)	(0.040)
% pop. w/higher ed. quintile$_{q,tr}$=3				0.239***	0.244***	0.244***
				(0.037)	(0.034)	(0.028)
% pop. w/higher ed. quintile$_{q,tr}$=4				0.349***	0.340***	0.340***
				(0.043)	(0.038)	(0.035)
% pop. w/higher ed. quintile$_{q,tr}$=5				0.442***	0.411***	0.415***
				(0.056)	(0.049)	(0.048)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,517,592	1,439,004	1,433,561	1,517,592	1,439,004	1,433,561

Panel C: Ethnicity

	monetary relief amount$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(minority filer)$_{i,f,c,r,q,tr}$	-0.000605	-0.0318*	-0.0831***			
	(0.023)	(0.017)	(0.025)			
I(Asian filer)$_{i,f,c,r,q,tr}$				0.316***	0.222***	0.147***
				(0.050)	(0.031)	(0.042)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.419***	-0.396***	-0.379***
				(0.033)	(0.031)	(0.036)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.0466	-0.0658**	-0.143***
				(0.033)	(0.031)	(0.027)
quarter FE	x	x	x	x	x	x
company FE	x			x		
company x product FE		x	x		x	x
county FE			x			x
observations	1,517,592	1,439,004	1,433,561	1,517,592	1,439,004	1,433,561

Table 5: **Financial Restitution Gap Mechanisms - Advocating for Relief**

Description: This table reports results on how the likelihood of attaching a supporting document changes across socioeconomic statuses. The outcome variable is $I(mention\ of\ refund/fraud\ \&\ similar\ words\ in;[])_{i,f,c,r,q,tr}$, a dummy equal to one if filer i of complaint c has mentioned either "refund" or similar words ("refunding", "refunded", "refunds", "repay", "reimburse", "reimbursement", "reimbursements", "reimbursing", "reimbursed", "repayment", "repayments", "repaying", "pay back", "paying back", "paid back", "make good", "making good", "made good", "compensate", "compensation", "compensations", "compensating", "compensated", "recoup", "recoups", "recouping", "recouped", "remunerate", "remuneration", "remunerations", "remunerating", "remunerated", "squaring accounts with", "squared accounts with", "square accounts with") or "fraud" and similar words ("deceit", "deception", "trickery", "rip-off", "fake", "con", "impostor", "fraudster", "deceive", "deceiving", "deceived", "defraud", "defrauded", "cheat", "cheating", "cheated", "trick", "tricked", "tricking", "mislead", "misled", "misleading", "misguide", "misguided", "misguiding") while filing the complaint in either the complaint description/narrative (columns 1, 3, 5) or in the desired resolution field (columns 2, 4, 6), zero otherwise. The independent variables of interest are: $I(above\ med.\ household\ med.\ income)_{q,tr}$ in columns 1 and 2 (a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q), $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{c,q,tr}$ in columns 3 and 4 (a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 18o with a bachelor degree in quarter q), and dummies for Asian, Black, and Hispanic filer ethnicity in columns 5 and 6. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	I(mention of refund/fraud & similar words in [ ] $_{i,f,c,r,q,tr}$)					
	[ ]=descr.	[ ]=desired res.	[ ]=descr.	[ ]=desired res.	[ ]=descr.	[ ]=desired res.
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. household med. income)$_{q,tr}$	0.0233***	0.0134***				
	(0.0015)	(0.0016)				
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.0265***	0.0194***		
			(0.0018)	(0.0017)		
I(Asian filer)$_{i,f,c,r,q,tr}$					-0.00590	0.00868*
					(0.0045)	(0.0051)
I(Black filer)$_{i,f,c,r,q,tr}$					-0.0171***	-0.0106***
					(0.0026)	(0.0031)
I(Hispanic filer)$_{i,f,c,r,q,tr}$					-0.0250***	-0.0141***
					(0.0030)	(0.0022)
quarter FE	x	x	x	x	x	x
company x product FE	x	x	x	x	x	x
county FE	x	x	x	x	x	x
observations	1,741,564	1,805,330	1,741,564	1,805,330	1,741,564	1,805,330
R-squared	0.0304	0.0242	0.0306	0.0244	0.0303	0.0242

Table 6: **Financial Restitution Gap Mechanisms - Attachments**

Description: This table reports results on how the likelihood of attaching a supporting document changes across socioeconomic statuses. The outcome variable is $I(filer\ attachment)_{i,f,c,r,q,tr}$, a dummy equal to one if filer i of complaint c has attached a supporting document while filing the complaint, zero otherwise. The independent variables of interest are: $I(above\ med.\ household\ med.\ income)_{q,tr}$ in column 1 (a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q), $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$ in column 2 (a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 25 with a bachelor degree in quarter q), and dummies for Asian, Black, and Hispanic filer ethnicity in column 3. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	I(filer attachment)$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)
I(above med. household med. income)$_{q,tr}$	0.00373***		
	(0.0010)		
I(above med. % pop. w/higher ed.)$_{q,tr}$		0.00569***	
		(0.0013)	
I(Asian filer)$_{i,f,c,r,q,tr}$			-0.00116
			(0.016)
I(Black filer)$_{i,f,c,r,q,tr}$			0.00586**
			(0.0024)
I(Hispanic filer)$_{i,f,c,r,q,tr}$			0.00840***
			(0.0019)
quarter FE	x	x	x
company x product FE	x	x	x
county FE	x	x	x
observations	1,826,203	1,826,203	1,826,203
R-squared	0.281	0.281	0.281

Table 7: **Financial Restitution Gap Mechanisms - Selection**

Description: This table presents results from Heckman Sample Selection Models to investigate the likelihood of low socioeconomic status consumers filing with companies that the CFPB deems do not address complaints properly during company monitoring reviews. In the first stage, the model predicts the likelihood of a firm not addressing complaints properly during company monitoring reviews. In the second stage, the percentage of company complaints coming from below median income tracts (column 1) or the percentage of company complaints coming from below median education tracts (column 2) or the percentage of company complaints coming from white filers (column 3) are regressed on the likelihood of a firm not addressing complaints properly during company monitoring reviews, correcting for the selection bias identified in the first stage. text

	% compl. from below median		**% compl. from**
	household median income	**% pop. w/higher ed.**	**white filers**
	(1)	(2)	(3)
% poorly addressed complaints$_c$	0.135	0.0630	0.00858
	(0.15)	(0.15)	(0.058)
select			
I(company poorly addressing complaints)$_c$	0.522***	0.505***	0.656***
	(0.18)	(0.18)	(0.18)
lambda	0.326	0.320	-0.0899
	(0.30)	(0.31)	(0.081)
observations	1,143	1,143	1,143

Table 8: **Financial Restitution Gap Mechanisms - Company Resources**

Description: This table analyses whether companies allocate efforts to respond to complaint filers differently across socioeconomic statuses. The dependent variables are $prev.\ experience_{i,f,c,r,q,tr}$ in columns 1, 3, and 5 and $\%\ days\ w/login_{i,f,c,r,q,tr}$ in columns 2, 4, 6. The dependent variable $prev.\ experience_{i,f,c,r,q,tr}$ is the natural logarithm of the count of how many complaints the company respondent of complaint c already solved before this one. The dependent variable $\%\ days\ w/login_{i,f,c,r,q,tr}$ is the percentage of days between complaint c submission and response that the company respondent logged into the CFPB complaint system. The independent variables of interest are: $I(above\ med.\ household\ med.\ income)_{q,tr}$ in columns 1 and 2 (a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q), $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$ in columns 3 and 4 (a dummy equal to one if complaint c comes from a Census tract tr that has above median % of the population above 25 with a bachelor degree in quarter q), and dummies for Asian, Black, and Hispanic filer ethnicity in columns 5 and 6. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	resources allocated by the company = [ ]$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
	[ ]=prev. exp.	[ ]=% days w/login	[ ]=prev. exp.	[ ]=% days w/login	[ ]=prev. exp.	% days w/login$_{i,c,q,tr}$
I(above med. household med. income)$_{q,tr}$	0.00151	-0.000208				
	(0.0030)	(0.00034)				
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00106	-0.0000837		
			(0.0030)	(0.00038)		
I(Asian filer)$_{i,f,c,r,q,tr}$					-0.00377	-0.00320*
					(0.012)	(0.0017)
I(Black filer)$_{i,f,c,r,q,tr}$					0.000193	0.00115*
					(0.0051)	(0.00065)
I(Hispanic filer)$_{i,f,c,r,q,tr}$					-0.00595	0.000179
					(0.0044)	(0.00058)
quarter FE	x	x	x	x	x	x
company x product FE	x	x	x	x	x	x
county FE	x	x	x	x	x	x
observations	1,826,203	1,730,115	1,826,203	1,730,115	1,826,203	1,730,115
R-squared	0.848	0.751	0.848	0.751	0.848	0.751

Table 9: **Financial Restitution Gap Mechanisms - Company Respondent**

Description: This table introduces respondent fixed effects (*Respondent FE*), controlling for time-invariant characteristics of the person within the company assigned to respond to the complaint. Columns 2, 4, and 6 replicate the baseline regressions of column 3 in Panels A, B, and C of Table **??**, adding respondent fixed effects. Since the information on respondent ID is not available for all complaints, columns 1, 3, and 5 replicate the same baseline regressions but over the subsample of complaints that have respondent ID information for comparison. The independent variables of interest are: $I(above\ med.\ household\ med.\ income)_{q,tr}$ in columns 1 and 2 (a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q), $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$ in columns 3 and 4 (a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 18o with a bachelor degree in quarter q), and dummies for Asian, Black, and Hispanic filer ethnicity in columns 5 and 6. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	solved w/MR$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(above med. household med. income)$_{q,tr}$	0.00925***	0.00926***				
	(0.0016)	(0.0017)				
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00899***	0.00893***		
			(0.0016)	(0.0016)		
I(Asian filer)$_{i,f,c,r,q,tr}$					0.0154***	0.0160***
					(0.0031)	(0.0027)
I(Black filer)$_{i,f,c,r,q,tr}$					-0.00972***	-0.00974***
					(0.0022)	(0.0022)
I(Hispanic filer)$_{i,f,c,r,q,tr}$					-0.00307***	-0.00311***
					(0.00097)	(0.00098)
quarter FE	x	x	x	x	x	x
company x product FE	x	x	x	x	x	x
county FE	x	x	x	x	x	x
respondent FE		x		x		x
observations	1,410,810	1,410,810	1,410,810	1,410,810	1,410,810	1,410,810
R-squared	0.141	0.166	0.141	0.166	0.141	0.166

Table 10: **Financial Restitution Gap Mechanisms - All**

Description: This table pools together all potential determinants on the company and filer side to analyze how much they explain overall monetary relief patterns. Columns 1, 3, and 5 replicate baseline results of Table 3 on the same subsample where respondent ID information is available, for direct comparison with the other columns. Columns 2, 4, and 6 add all the previously introduced potential determinants of the financial restitution gap: $I(filer\ attachment)_{i,f,c,r,q,tr}$, a dummy equal to one if filer i of complaint c has attached a supporting document while filing the complaint, zero otherwise; $I(des.\ res.\ adv.\ mon.\ rel.)_{i,f,c,r,q,tr}$, a dummy equal to one if filer f of complaint c mentions words like "relief" or "fraud" and similar ones in the desired resolution; respondent fixed effects, the ID of the person the company assigns to answer the complaint; $prev.\ experience_{i,f,c,r,q,tr}$, the natural logarithm of the count of how many complaints the company respondent r of complaint c already solved before this one; $\%\ days\ w/login_{i,f,c,r,q,tr}$, the percentage of days between complaint c submission and response that the company respondent logged into the CFPB complaint system. The independent variables of interest are: $I(above\ med.\ household\ med.\ income)_{q,tr}$ in columns 1 and 2 (a dummy equal to one if complaint c comes from a Census tract tr that has above median household median income in quarter q), $I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$ in columns 3 and 4 (a dummy equal to one if complaint c comes from a Census tract tr that has above median % of population above 25 with a bachelor's degree in quarter q), and dummies for Asian, Black, and Hispanic filer ethnicity in columns 5 and 6. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	solved w/MR$_{i,f,c,r,q,tr}$					
	(1)	(2)	(3)	(4)	(5)	(6)
I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$		0.0167***		0.0169***		0.0212***
		(0.0027)		(0.0027)		(0.0031)
I(filer attachment)$_{i,f,c,r,q,tr}$		0.00962***		0.00968***		0.0114***
		(0.0016)		(0.0016)		(0.0018)
I(above med. hh med. income)$_{q,tr}$	0.00925***	0.00368***				
	(0.0016)	(0.0010)				
I(above med. hh med. income)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$		0.00789***				
		(0.0016)				
I(above med. hh med. income)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$		0.00475***				
		(0.0013)				
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00902***	0.00348***		
			(0.0016)	(0.0011)		
I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				0.00734***		
				(0.0018)		
I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				0.00459***		
				(0.0014)		
I(Asian filer)$_{i,f,c,r,q,tr}$					0.0154***	0.00352
					(0.0031)	(0.0032)
I(Black filer)$_{i,f,c,r,q,tr}$					-0.00964***	-0.00435**
					(0.0021)	(0.0018)
I(Hispanic filer)$_{i,f,c,r,q,tr}$					-0.00314***	-0.00279**
					(0.00098)	(0.0013)
I(Asian filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$						0.0125***
						(0.0030)
I(Black filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$						-0.00947***
						(0.0019)
I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$						-0.00282*
						(0.0015)
I(Asian filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$						0.0142***
						(0.0030)
I(Black filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$						-0.00425**
						(0.0019)
I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$						0.00144
						(0.0019)
prev. experience$_{i,f,c,r,q,tr}$		0.000292		0.000290		0.000308
		(0.00094)		(0.00093)		(0.00094)
% days w/login$_{i,f,c,r,q,tr}$		-0.0113***		-0.0113***		-0.0113***
		(0.0030)		(0.0030)		(0.0029)
quarter FE	x	x	x	x	x	x
company x product FE	x	x	x	x	x	x
county FE	x	x	x	x	x	x
respondent FE		x		x		x
observations	1,391,348	1,297,695	1,391,348	1,297,695	1,391,348	1,297,695
R-squared	0.142	0.169	0.142	0.169	0.142	0.170

Table 11: **CFPB Company Monitoring Reviews across Demographics**

Description: This table presents estimations regarding the likelihood of the CFPB flagging a reviewed complaint as either not properly addressed by the company (columns 1 to 3 across panels), or not having received a substantive response from the company (columns 4 to 6 across panels). The tables regress these likelihoods on quintiles of the filer's census tract income (household median income, Panel A), education (% of population above 25 with a bachelor's degree, Panel B), and ethnicity of the filer according to BISG algorithms (dummies for Asian, Black, or Hispanic filer, Panel C). Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

Panel A: Income

	I(company not address compl.)$_{i,f,c,r,q,tr}$			I(response not substantive)$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)	(4)	(5)	(6)
household med. income quintile$_{q,tr}$=1	-	-	-	-	-	-
household med. income quintile$_{q,tr}$=2	-0.00216	0.00103	-0.000363	-0.00117	0.00144	0.000171
	(0.0017)	(0.0016)	(0.0011)	(0.0014)	(0.0012)	(0.00097)
household med. income quintile$_{q,tr}$=3	-0.00421**	0.00119	-0.00109	-0.00237*	0.00194^{+}	-0.0000329
	(0.0016)	(0.0015)	(0.0013)	(0.0013)	(0.0012)	(0.00095)
household med. income quintile$_{q,tr}$=4	-0.00571***	0.00178	-0.00153	-0.00606***	-0.0000156	-0.00299^{+}
	(0.0018)	(0.0015)	(0.0030)	(0.0016)	(0.0012)	(0.0018)
household med. income quintile$_{q,tr}$=5	-0.00946***	0.00113	-0.00314	-0.00759***	0.000674	-0.00318
	(0.0025)	(0.0017)	(0.0027)	(0.0021)	(0.0014)	(0.0023)
quarter FE	x			x		
company FE		x			x	
product FE			x			x
observations	194,338	193,914	194,338	194,338	193,914	194,338
R-squared	0.0139	0.0583	0.00586	0.0142	0.0653	0.00510

Panel B: Education

	I(company not address compl.)$_{i,f,c,r,q,tr}$			I(response not substantive)$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)	(4)	(5)	(6)
% pop. w/higher ed. quintile$_{q,tr}$	-	-	-	-	-	-
% pop. w/higher ed. quintile$_{q,tr}$=2	-0.000269	0.00193	0.00144	-0.000469	0.00123	0.000768
	(0.0013)	(0.0017)	(0.0014)	(0.0012)	(0.0013)	(0.0010)
% pop. w/higher ed. quintile$_{q,tr}$=3	-0.00227	0.00190	0.0000636	-0.00319**	-0.0000597	-0.00163
	(0.0016)	(0.0018)	(0.0024)	(0.0015)	(0.0014)	(0.0018)
% pop. w/higher ed. quintile$_{q,tr}$=4	-0.00561***	0.000393	-0.00218	-0.00590***	-0.00128	-0.00364^{+}
	(0.0020)	(0.0017)	(0.0032)	(0.0016)	(0.0014)	(0.0022)
% pop. w/higher ed. quintile$_{q,tr}$=5	-0.00516**	0.00225	-0.00111	-0.00554***	0.0000343	-0.00306
	(0.0022)	(0.0019)	(0.0040)	(0.0016)	(0.0015)	(0.0029)
quarter FE	x			x		
company FE		x			x	
product FE			x			x
observations	194,338	193,914	194,338	194,338	193,914	194,338
R-squared	0.0138	0.0583	0.00587	0.0142	0.0653	0.00511

Panel C: Ethnicity

	I(company not address compl.)$_{i,f,c,r,q,tr}$			I(response not substantive)$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)	(4)	(5)	(6)
I(Asian filer)$_{i,f,c,r,q,tr}$	-0.00245	0.00417*	0.00194	0.000921	0.00491**	0.00309
	(0.0027)	(0.0023)	(0.0037)	(0.0020)	(0.0019)	(0.0035)
I(Black filer)$_{i,f,c,r,q,tr}$	0.00626***	0.00188	0.00335	0.00476**	0.00182	0.00282*
	(0.0021)	(0.0021)	(0.0021)	(0.0019)	(0.0015)	(0.0015)
I(Hispanic filer)$_{i,f,c,r,q,tr}$	0.00122	0.00162	0.000496	0.00226	0.00276**	0.00197
	(0.0018)	(0.0015)	(0.0021)	(0.0017)	(0.0013)	(0.0019)
quarter FE	x			x		
company FE		x			x	
product FE			x			x
observations	194,338	193,914	194,338	194,338	193,914	194,338
R-squared	0.0137	0.0583	0.00586	0.0140	0.0653	0.00506

Table 12: **The Financial Restitution Gap - Diff-in-Diffs, Balance Tests**

Description: This table compares treated vs. controls (panel A) and treated early vs. treated late (panel B) before 2020, which the start of the company monitoring review period that originates the treatment of receiving a monitoring report (negative feedback from CFPB). In panel A, column 1 reports the pre-2020 quarterly average of the variables outlined across companies that will end up receiving a monitoring report (negative feedback from CFPB). Column 2 does the same for control companies, i.e., companies that will be reviewed but will not receive a monitoring report and also had at least 100 complaints in 2018. In panel B, column 1 reports the pre-2020 quarterly average of the variables outlined across companies that will end up receiving a monitoring report (negative feedback from CFPB) late in the company monitoring reviews time period. Column 2 does the same for companies that will end up receiving a monitoring report (negative feedback from CFPB) early in the reviews time period. Across panels, column 3 reports the difference across the previous two columns with its statistical significance. ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

Panel A: Treated vs Controls

	Reported	**Control**	**Difference**
	(1)	(2)	(3)
ln(# complaints)	4.60	3.16	1.44***
% deposit-related complaints	39.21%	9.47%	29.74%***
% loan-related complaints	60.78%	90.54%	-29.75%***
% complaints w/filer attachment	13.71%	8.91%	4.80%***
% complaints from bottom income quartile	27.81%	27.83%	-0.02%
% complaints from bottom education quartile	27.30%	27.34%	-0.04%
% complaints from minorities	22.84%	23.71%	0.87%

Panel B: Treated Late vs Treated Early

	Late Report	**Early Report**	**Difference**
	(1)	(2)	(3)
ln(# complaints)	3.42	5.59	-2.18***
% deposit-related complaints	12.11%	61.75%	-49.64%***
% loan-related complaints	87.89%	38.25%	49.64%***
% complaints w/filer attachment	11.77%	15.32%	-3.55%***
% complaints from bottom income quartile	31.82%	24.47%	7.35%***
% complaints from bottom education quartile	31.19%	24.06%	7.12%***
% complaints from minorities	25.17%	20.91%	4.26%***

Table 13: **CFPB Monitoring Reports - Difference in Differences**

Description: These table presents difference-in-differences estimates around the first time a company receives a monitoring report (negative feedback from the CFPB). The sample comprehends all treated companies and as controls those companies that were also reviewed but did not receive a report and have at least 100 complaints in 2018 (pre-review). Across panels, the outcome variable is $solved\ w/MR_{i,f,c,r,q,tr}$, a dummy equal to one if filer i's complaint c from Census tract tr against company c filed in quarter q has been solved with monetary relief, zero otherwise. $I(post\text{-}report)_{i,c,q}$ is a dummy variable equal to one if complaint i was filed against company c in quarter q, which is after company c has received a monitoring report (negative feedback from the CFPB). The tables regress $solved\ w/MR_{i,f,c,r,q,tr}$ on the interaction of $I(post\text{-}report)_{i,c,q}$ with the filer's census tract income being above median ($I(above\ med.\ household\ med.\ income)_{q,tr}$, Panel A), or the filer's census tract education being above median ($I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$, Panel B), or the filer's ethnicity according to BISG algorithms (dummies for non-white, Asian, Black, or Hispanic filer, Panel C).Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

Panel A: Income

	solved w/MR$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)
I(post-report)$_{i,c,q}$	-0.00586	-0.00847	-0.00817
	(0.011)	(0.011)	(0.011)
I(above med. household med. income)$_{q,tr}$	0.00727***	0.00690***	0.00570***
	(0.0020)	(0.0017)	(0.0014)
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$	0.0203***	0.0178***	0.0174***
	(0.0040)	(0.0035)	(0.0035)
quarter FE	x	x	x
company FE	x		
company x product FE		x	x
county FE			x
observations	1,003,708	1,003,541	1,003,388
R-squared	0.106	0.132	0.135

Panel B: Education

	solved w/MR$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)
I(post-report)$_{i,c,q}$	-0.00659	-0.00883	-0.00857
	(0.011)	(0.011)	(0.011)
I(above med. % pop. w/higher ed.)$_{q,tr}$	0.00723***	0.00591***	0.00475***
	(0.0018)	(0.0015)	(0.0013)
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$	0.0216***	0.0185***	0.0181***
	(0.0045)	(0.0038)	(0.0038)
quarter FE	x	x	x
company FE	x		
company x product FE		x	x
county FE			x
observations	1,003,708	1,003,541	1,003,388
R-squared	0.106	0.131	0.135

Panel C: Ethnicity

	solved w/MR$_{i,f,c,r,q,tr}$			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	0.00643	0.00223	0.00235	0.00266
	(0.013)	(0.012)	(0.012)	(0.012)
I(minority filer)$_{i,f,c,r,q,tr}$	-0.00223	-0.00183^{+}	-0.000444	
	(0.0016)	(0.0012)	(0.0011)	
I(post-report)$_{i,c,q}$ × I(minority filer)$_{i,f,c,r,q,tr}$	-0.00484^{+}	-0.00398^{+}	-0.00432*	
	(0.0029)	(0.0026)	(0.0026)	
I(Asian filer)$_{i,f,c,r,q,tr}$				0.00751**
				(0.0031)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.0225***
				(0.0051)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.00400**
				(0.0019)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				-0.0278***
				(0.0059)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.00106
				(0.0016)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.00778**
				(0.0038)
quarter FE	x	x	x	x
company FE	x			
company x product FE		x	x	x
county FE			x	x
observations	1,003,708	1,003,541	1,003,388	1,003,388
R-squared	0.105	0.131	0.134	0.135

Table 14: **CFPB Monitoring Reports - Difference in Differences, Mechanisms**

Description: These table presents investigates the potential mechanisms behind the rise in the number of complaints solved with monetary relief after having received a monitoring report (negative feedback from the CFPB). The setting is still a difference-in-differences one around the first time a company receives the monitoring report. The sample comprehends all treated companies and, as controls, those companies that were also reviewed but did not receive a report and had at least 100 complaints in 2018 (pre-reviews). Panel A, B, and C investigate whether treated companies have been employing more resources after receiving the report. In Panel A, the dependent variable is $\#\ of\ company\ respondents_{c,q}$, the number of company c employees actively answering complaints in quarter q. In panel B, the dependent variable is $\%\ days\ w/login_{i,f,c,r,q,tr}$, the percentage of days between complaint i submission and resolution that company c actively logged into the CFPB complaint system. In Panel C, the dependent variable is $ln(\#\ previous\ complaints_{i,f,c,r,q,tr})$, the natural logarithm of the number of complaints that company respondent r has resolved before handling the current complaint i, a proxy for experience. Across these three panels, the independent variable of interest is then $I(post\text{-}report)_{i,c,q}$, a dummy variable equal to one if complaint i was filed against company c in quarter q after company has received a monitoring report, and its interactions with income ($I(above\ med.\ household\ med.\ income)_{q,tr}$) education ($I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$), and ethnicity (dummies for Asian, Black, or Hispanic filer). Panel D and C investigate whether treated companies pay more attention to filers advocating for monetary relief or attaching documents to the complaints after having received a monitoring report. Across these two panels, the dependent variable is $solved\ w/MR_{i,f,c,r,q,tr}$, a dummy equal to one if complaint i has been solved with monetary relief, and it is regressed on $I(post\text{-}report)_{i,c,q}$ in interactions with income, education, and ethnicity. Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

Panel A: Employees

	# of company respondents$_{c,q}$
	(1)
I(post-report)$_{i,c,q}$	2.509^{+}
	(1.64)
quarter FE	x
company FE	x
observations	4,466
R-squared	0.893

Panel B: Company Logins

	% days w/login$_{i,f,c,r,q,tr}$			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	-0.0231*	-0.0224*	-0.0223*	-0.0233*
	(0.012)	(0.012)	(0.012)	(0.012)
I(above med. household med. income)$_{q,tr}$		0.000504		
		(0.00071)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$		-0.00121		
		(0.0021)		
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.000320	
			(0.00079)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$			-0.00139	
			(0.0023)	
I(Asian filer)$_{i,f,c,r,q,tr}$				-0.00435^{+}
				(0.0027)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.000255
				(0.0035)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.000730
				(0.00098)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				0.00368
				(0.0028)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				0.000487
				(0.00082)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.000138
				(0.0019)
quarter FE	x	x	x	x
company x product FE	x	x	x	x
county FE	x	x	x	x
observations	993,924	993,924	993,924	993,924
R-squared	0.389	0.389	0.389	0.389

Panel C: Company Respondent Experience

	ln(# previous complaints$_{i,f,c,r,q,tr}$)			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	-0.148	-0.139	-0.141	-0.151
	(0.13)	(0.13)	(0.13)	(0.13)
I(above med. household med. income)$_{q,tr}$		0.00579		
		(0.0057)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$		-0.0164		
		(0.015)		
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00848	
			(0.0059)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$			-0.0117	
			(0.014)	
I(Asian filer)$_{i,f,c,r,q,tr}$				-0.0219
				(0.023)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.0120
				(0.039)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.0149*
				(0.0079)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				0.0525**
				(0.024)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				0.00209
				(0.0071)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.0129
				(0.015)
quarter FE	x	x	x	x
company x product FE	x	x	x	x
county FE	x	x	x	x
observations	1,003,388	1,003,388	1,003,388	1,003,388
R-squared	0.391	0.391	0.391	0.392

Panel D: Filer Advocating for Monetary Relief

	solved w/MR$_{i,f,c,r,q,tr}$			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	-0.00651	-0.0138	-0.0146	-0.00522
	(0.011)	(0.011)	(0.010)	(0.012)
I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$	0.0178***	0.0154***	0.0151***	0.0178***
	(0.0040)	(0.0036)	(0.0036)	(0.0039)
I(post-report)$_{i,c,q}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$	0.0203***	0.0168***	0.0175***	0.0208***
	(0.0051)	(0.0052)	(0.0053)	(0.0053)
I(above med. household med. income)$_{q,tr}$		0.00381***		
		(0.0013)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$		0.0144***		
		(0.0035)		
I(above med. household med. income)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$		0.00497***		
		(0.0016)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$		0.00456		
		(0.0032)		
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00255**	
			(0.0013)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$			0.0158***	
			(0.0041)	
I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$			0.00561***	
			(0.0018)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$			0.00325	
			(0.0032)	
I(Asian filer)$_{i,f,c,r,q,tr}$				0.00314
				(0.0037)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.0213***
				(0.0056)
I(Asian filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				0.0118**
				(0.0045)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				-0.000227
				(0.0063)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.00241
				(0.0019)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				-0.0225***
				(0.0055)
I(Black filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				-0.00441**
				(0.0020)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				-0.0117**
				(0.0051)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.000804
				(0.0016)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,q,tr}$				-0.00479*
				(0.0028)
I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				-0.000794
				(0.0023)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(des. res. adv. mon. rel.)$_{i,f,c,r,q,tr}$				-0.00519
				(0.0067)
quarter FE	x	x	x	x
company x product FE	x	x	x	x
county FE	x	x	x	x
observations	991,205	991,205	991,205	991,205
R-squared	0.137	0.137	0.137	0.137

Panel E: Filer Attachment

	solved w/MR$_{i,f,c,r,q,tr}$			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	-0.00626	-0.0128	-0.0129	-0.00347
	(0.011)	(0.011)	(0.010)	(0.012)
I(filer attachment)$_{i,f,c,r,q,tr}$	0.0117***	0.0107***	0.0109***	0.0116***
	(0.0026)	(0.0025)	(0.0025)	(0.0025)
I(post-report)$_{i,c,q}$ × I(filer attachment)$_{i,f,c,r,q,tr}$	0.0162***	0.0111***	0.0106**	0.0144***
	(0.0046)	(0.0040)	(0.0042)	(0.0045)
I(above med. household med. income)$_{q,tr}$		0.00464***		
		(0.0015)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$		0.0128***		
		(0.0033)		
I(above med. household med. income)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$		0.00195		
		(0.0016)		
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$		0.00866***		
		(0.0032)		
I(above med. % pop. w/higher ed.)$_{q,tr}$			0.00388***	
			(0.0014)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$			0.0130***	
			(0.0041)	
I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$			0.00157	
			(0.0015)	
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$			0.00944***	
			(0.0020)	
I(Asian filer)$_{i,f,c,r,q,tr}$				0.00498
				(0.0036)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.00933
				(0.0066)
I(Asian filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				0.00591**
				(0.0025)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				0.0200***
				(0.0057)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.00266
				(0.0019)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				-0.0210***
				(0.0066)
I(Black filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				-0.00238
				(0.0018)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				-0.0138***
				(0.0047)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.00139
				(0.0016)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.0113**
				(0.0045)
I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				0.000456
				(0.0017)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$ × I(filer attachment)$_{i,f,c,r,q,tr}$				0.00589
				(0.0052)
quarter FE	x	x	x	x
company x product FE	x	x	x	x
county FE	x	x	x	x
observations	1,003,388	1,003,388	1,003,388	1,003,388
R-squared	0.135	0.136	0.136	0.136

Appendix to:

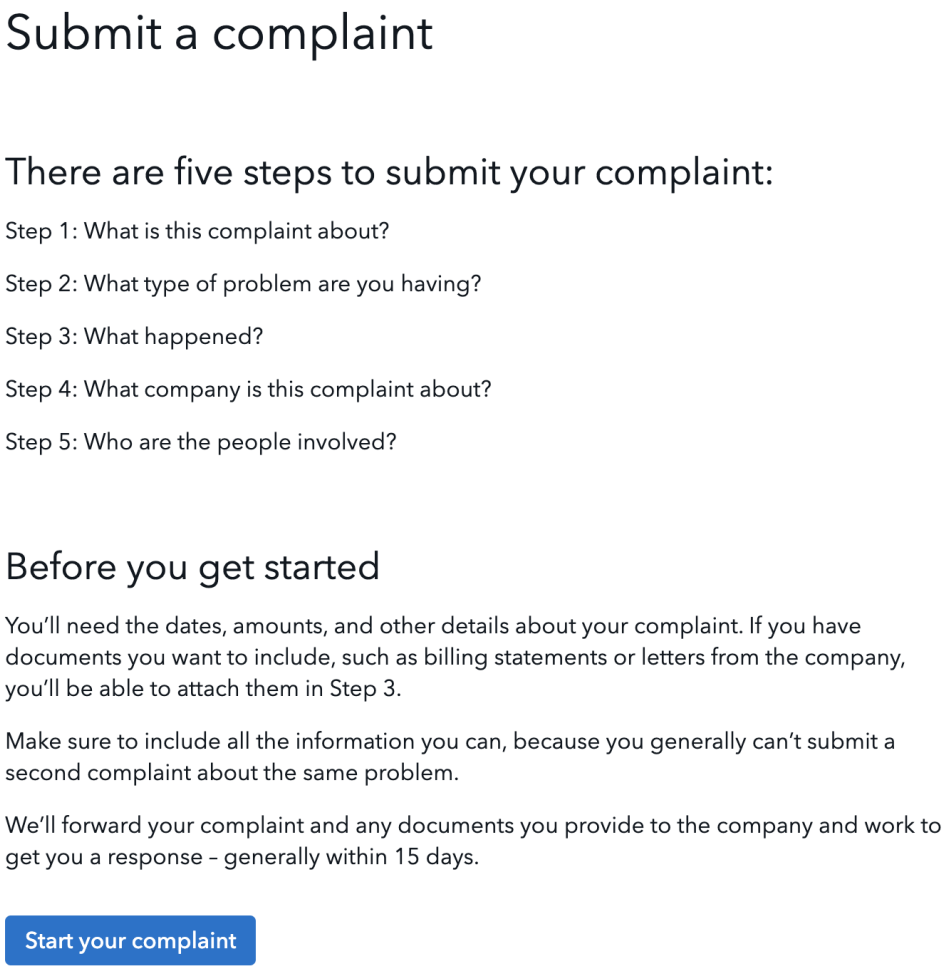
The Hidden Costs of Financial Services: Consumer Disputes and Financial Restitution

(intended for online publication)

A.I Submitting a Complaint on the CFPB Website

Figure A.I.1: **Filing a complaint on the CFPB website**

The Figure shows the different steps for filing a complaint regarding a checking account.



Submit a complaint

What is this complaint about?

Choose the product or service that best matches your complaint.

- ○ Debt collection
- ○ Credit reporting, credit repair services, or other personal consumer reports
- ○ Mortgage
- ○ Credit card or prepaid card
- ○ Checking or savings account
- ○ Vehicle loan or lease
- ○ Student loan
- ○ Payday loan, title loan, or personal loan (installment loan or personal line of credit)
- ○ Money transfer, virtual currency, or money service (check cashing service, currency exchange, cashier's/traveler's check, debt settlement)

‹ | Previous Step 1 of 5 Next | ›

What type of problem are you having?

Most of the **checking account** complaints we get are about one of the following topics. Select the one that best describes your complaint. You will have the chance to explain your complaint in detail in the next step.

- ○ Opening an account
- ○ Managing an account (deposits, withdrawals, using ATM card, making or receiving payments, cashing a check, fees)
- ○ Closing an account
- ○ Problem caused by your funds being low
- ○ Problem with a lender or other company charging your account
- ○ Problem with credit report or credit score

‹ Previous | Step 2 of 5 | Next ›

What happened?

Describe what happened, and we'll send your comments to the companies involved.

- Include dates, amounts, and actions that were taken by you or the company.
- Do not include personal information, such as your name, account number, address, Social Security number, etc. We may ask for some of this information later, to help the company identify you and your account.

☐ I want the CFPB to publish this description on consumerfinance.gov so that others can learn from my experience. The CFPB will take steps to remove my personal information from this description but someone may still be able to identify me. Learn how it works. I consent to publishing this description after the CFPB has taken these steps.

Publishing this description will not affect how the CFPB handles your complaint.

What would be a fair resolution to this issue?

We'll forward this to the companies involved. Be specific so they know what resolution you are looking for. The company may or may not offer to resolve your complaint.

Attach documents (optional)

Include copies or photos of documents related to your issue, such as contracts, letters, and receipts, and we will forward all materials to the company for review.

Select a file to attach

We accept all file formats, except .dll, .dmg, .exe and .msi, up to 10 MB per file. All uploaded files will be scanned for viruses and will be immediately deleted if one is detected.

Select a file to upload

What company is this complaint about?

We'll forward your entire complaint to the company and request they respond within 15 days of receiving it.

Bank or credit union

Company name

Company name

We will forward your complaint to this company and ask for a response.

We need this information to help the company find you in their system and respond to your complaint. (optional)

- [ ] Account number
  This number is on your billing statement
- [ ] Billing address

Previous | Step 4 of 5 | Next

Who are the people involved?

Identify who is involved in this complaint. This could include:

- "Just you" if you are the account holder or borrower
- "You and someone else" if you are submitting for yourself and want to include another account holder or co-borrower
- "Someone else" if you are submitting for someone else as an authorized third party, such as a lawyer, advocate, or power of attorney

◯ Just you	◯ You and someone else
◯ Someone else	

Previous | Step 5 of 5 | Review

Table A.1: **Example of Complaint**

Description: The table presents a complaint from the CFPB database, available at the CFPB database webpage. For an explanation of the information attached to each complaint, refer to the CFPB database fields webpage

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Date received	1/17/19
Product	Mortgage
Subproduct	Conventional home mortgage
Issue	Trouble during payment process
Subissue	[blank]
Company	Ditech Financial LLC
State	TX
Zip code	781XX
Company response	Closed with explanation
Complaint narrative	I have been trying to get my Private Mortgage Insurance Removed from my mortgage since XX/XX/XXXX when my mortgage dropped below 80 % loan to value. Last year my mortgage was sold from XXXX XXXX (Under mortgage XXXX) to Ditech Mortgage (account XXXX). I reached out to Ditech via a email (after being told to do so via phone representative) request to remove my PMI on mortgage on XX/XX/XXXX and received no response at all from them, I even checked my junk box and nothing was there. My mortgage papers that I signed state an "Automatic Termination of PMI" that states once my loan is below 78 % loan to value PMI will automatically terminate (I have attached this document). I reached out again today on XX/XX/XXXX to make this request via phone and was told initially to send the request that I already sent it too. I asked to speak with a supervisor and after being put on hold for about 30 minutes, I finally spoke to one. They told me that my loan to value must be under 70 % loan to value and that was their policy. After reading this document to the supervisor, I was told that "they don't have that document on file". She sent me a link to send her the form I have. I did so and just told me that I'll be hearing from them in 7-10 business days. Given their past history, I highly doubt that I will hear from them. I did mention to the supervisor and ask her why they weren't staying compliant to the homeowners protection act and she said nothing. From my understand this act requires mortgage companies to drop off PMI once loans are below 78 % LTV and the loan is current. I qualify for both of those items and don't understand why this is such a difficult task.

B.I CFPB Investigation Difference-in-Differences, Robustness

Table B.1: **CFPB Investigations - Difference in Differences, Testing Complaints Composition**

Description: These table presents difference-in-differences estimates around the first time a company receives an investigation report (negative feedback from the CFPB). The sample comprehends all treated companies and as controls those companies that were also investigated but did not receive a report and have at least 100 complaints in 2018 (pre-investigations). In columns 1 to 3, the outcome variable is $I(low\text{-}income\ complaint)_{q,tr}$, a dummy equal to one if complaint i against company c filed has been filed in quarter q by filer f from a tract tr that is in the bottom quartile of tracts by household median income, zero otherwise. In columns 4 to 6, the outcome variable is $I(low\text{-}education\ complaint)_{q,tr}$, a dummy equal to one if complaint i against company c has been filed in quarter q by filer f from a tract tr that is in the bottom quartile of tracts by % of population above 25 with a bachelor's degree, zero otherwise. In columns 7 to 9, the outcome variable is $I(minority\ complaint)_{i,f,c,r,q,tr}$, a dummy variable equal to one if complaint i was filed against company c in quarter q by filer f who is either Asian, Black or Hispanic according to BISG algorithms. Across columns, $I(post\text{-}report)_{i,c,q}$ is a dummy variable equal to one if complaint i was filed against company c in quarter q, which is after company c has received an investigation report (negative feedback from the CFPB). Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

	I(low-income complaint)$_{q,tr}$			I(low-ed. complaint)$_{q,tr}$			I(minority complaint)$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I(post-report)$_{i,c,q}$	0.00523	0.00244	0.00591*	0.00427	0.00314	0.00537**	0.0307***	0.0249***	0.0181***
	(0.0040)	(0.0040)	(0.0031)	(0.0035)	(0.0034)	(0.0022)	(0.0090)	(0.0086)	(0.0064)
quarter FE	x	x	x	x	x	x	x	x	x
company FE	x			x			x		
company x product FE		x	x		x	x		x	x
county FE			x			x			x
observations	1,003,708	1,003,541	1,003,388	1,003,708	1,003,541	1,003,388	1,003,708	1,003,541	1,003,388
R-squared	0.0228	0.0274	0.208	0.0199	0.0243	0.206	0.0178	0.0218	0.188

Table B.2: **CFPB Investigations - Difference in Differences, Matched Sample**

Description: These table presents difference-in-differences estimates around the first time a company receives an investigation report (negative feedback from the CFPB). The sample comprehends all treated companies and, as controls for each treated company, the three closest companies in terms of overall number of complaints, share of complaints from loan-related products, and share of complaints with filer attachments in 2018 (pre-investigations). Across panels, the outcome variable is $solved\ w/MR_{i,f,c,r,q,tr}$, a dummy equal to one if filer i's complaint c from Census tract tr against company c filed in quarter q has been solved with monetary relief, zero otherwise. $I(post\text{-}report)_{i,c,q}$ is a dummy variable equal to one if complaint i was filed against company c in quarter q, which is after company c has received an investigation report (negative feedback from the CFPB). The tables regress $solved\ w/MR_{i,f,c,r,q,tr}$ on the interaction of $I(post\text{-}report)_{i,c,q}$ with the filer's census tract income being above median ($I(above\ med.\ household\ med.\ income)_{q,tr}$, Panel A), or the filer's census tract education being above median ($I(above\ med.\ \%\ pop.\ w/higher\ ed.)_{q,tr}$, Panel B), or the filer's ethnicity according to BISG algorithms (dummies for non-white, Asian, Black, or Hispanic filer, Panel C). Standard errors are clustered at the company level; ***, **, and * denote 1%, 5%, and 10% statistical significance, respectively.

Panel A: Income

	solved w/MR$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)
I(post-report)$_{i,c,q}$	0.00514	0.00713	0.00737
	(0.0068)	(0.0064)	(0.0064)
I(above med. household med. income)$_{q,tr}$	0.0116***	0.0123***	0.0105***
	(0.0026)	(0.0028)	(0.0025)
I(post-report)$_{i,c,q}$ × I(above med. household med. income)$_{q,tr}$	0.0166***	0.0130***	0.0128***
	(0.0040)	(0.0043)	(0.0044)
quarter FE	x	x	x
company FE	x		
company x product FE		x	x
county FE			x
observations	561,018	560,953	560,741
R-squared	0.0593	0.0860	0.0916

Panel B: Education

	solved w/MR$_{i,f,c,r,q,tr}$		
	(1)	(2)	(3)
I(post-report)$_{i,c,q}$	0.00535	0.00684	0.00695
	(0.0071)	(0.0066)	(0.0065)
I(above med. % pop. w/higher ed.)$_{q,tr}$	0.0133***	0.0114***	0.00948***
	(0.0028)	(0.0028)	(0.0026)
I(post-report)$_{i,c,q}$ × I(above med. % pop. w/higher ed.)$_{q,tr}$	0.0162***	0.0136***	0.0135***
	(0.0050)	(0.0047)	(0.0048)
quarter FE	x	x	x
company FE	x		
company x product FE		x	x
county FE			x
observations	561,018	560,953	560,741
R-squared	0.0595	0.0859	0.0916

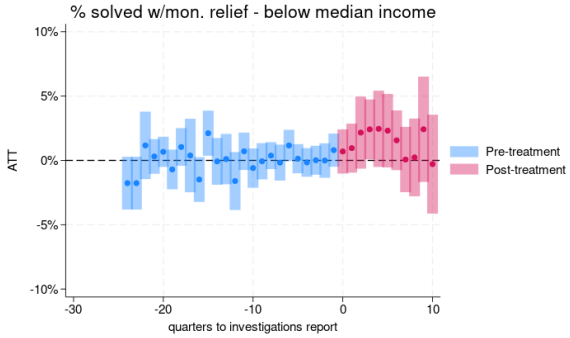
Panel C: Ethnicity

	solved w/MR$_{i,f,c,r,q,tr}$			
	(1)	(2)	(3)	(4)
I(post-report)$_{i,c,q}$	0.0154**	0.0153**	0.0156**	0.0163**
	(0.0072)	(0.0069)	(0.0069)	(0.0068)
I(minority filer)$_{i,f,c,r,q,tr}$	-0.000568	-0.000476	0.00105	
	(0.0026)	(0.0023)	(0.0021)	
I(post-report)$_{i,c,q}$ × I(minority filer)$_{i,f,c,r,q,tr}$	-0.00687**	-0.00561*	-0.00603*	
	(0.0033)	(0.0034)	(0.0034)	
I(Asian filer)$_{i,f,c,r,q,tr}$				0.0146**
				(0.0058)
I(post-report)$_{i,c,q}$ × I(Asian filer)$_{i,f,c,r,q,tr}$				0.0148**
				(0.0067)
I(Black filer)$_{i,f,c,r,q,tr}$				-0.0104**
				(0.0041)
I(post-report)$_{i,c,q}$ × I(Black filer)$_{i,f,c,r,q,tr}$				-0.0217***
				(0.0074)
I(Hispanic filer)$_{i,f,c,r,q,tr}$				0.00100
				(0.0035)
I(post-report)$_{i,c,q}$ × I(Hispanic filer)$_{i,f,c,r,q,tr}$				-0.0105**
				(0.0050)
quarter FE	x	x	x	x
company FE	x			
company x product FE		x	x	x
county FE			x	x
observations	561,018	560,953	560,741	560,741
R-squared	0.0583	0.0851	0.0910	0.0918

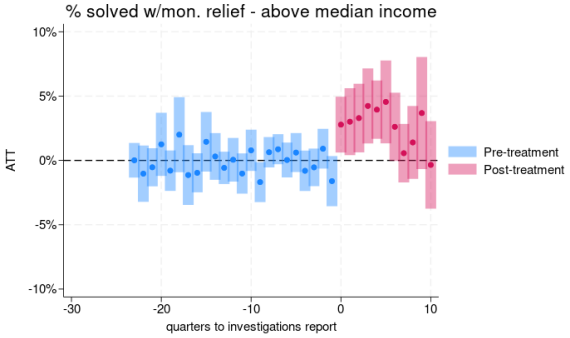
Figure B.1: **CFPB Investigations - Dynamic Difference in Differences, Matched Sample**

This figure reports the dynamic difference-in-differences Callaway and Sant'Anna estimators of the percentage of complaints solved with monetary relief each quarter by each company around receiving an investigation report. The subsamples distinguish between high and low household median income (Panel A), high and low education (% of population above 18yo with a bachelor degree, Panel B), minority and white population (% of non-white population, Panel C). The sample is restricted to companies that were investigated and received and investigation report (negative feedback from CFPB, treatment) and investigated companies that did not receive a report but were similar to treated firms in terms of overall number of complaints, share of loan-related complaints, and share of complaints with filer attachments prior the start of the investigations period (controls).

Panel A: CFPB reports by low and high income

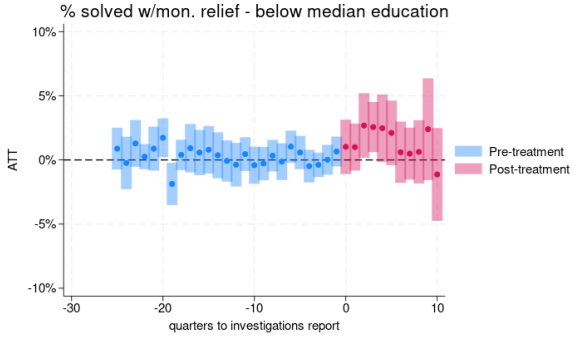


Low-income complaints

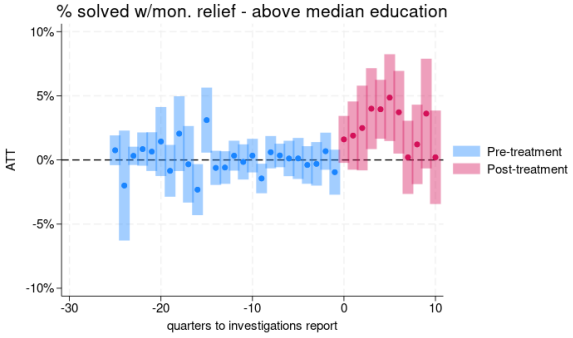


High-income complaints

Panel B: CFPB reports by low and high education

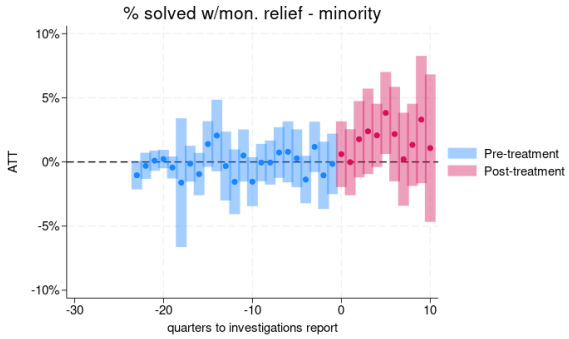


Low-education complaints

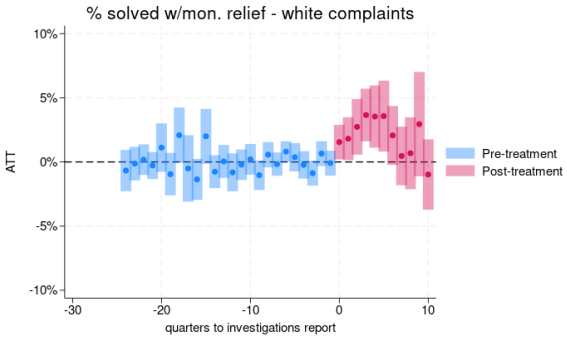


High-education complaints

Panel C: CFPB reports by minority and white filer



Minority complaints



White complaints