EXHIBIT 16

REDACTED

THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION

IN RE CALIFORNIA BAIL BOND ANTITRUST LITIGATION	CASE No. 4:19-cv-00717-JST **Expert Report of Hal J. Singer, Ph.D.** **December 11, 2024**

TABLE OF CONTENTS

INTRODUCTION AND ASSIGNMENT

1. Plaintiffs in this case are purchasers of commercial bail bond services ("Bail Bonds") in California.[1] Defendants are 19 bail surety companies ("Sureties") that guarantee the payment of bail bonds to a court in the state of California.[2] Plaintiffs allege that Defendants, in conjunction with their California bail agency business partners ("Agents" or "Agencies") who select for and process ("underwrite")[3] bail bonds, engaged in a price-fixing conspiracy (the "Conspiracy") to (1) maintain a standard filed rate of ten percent, and (2) discourage and suppress the practice of advertising and issuing rebates to customers.[4] Plaintiffs seek to recover damages resulting from the alleged overpayments due to the alleged Conspiracy.[5]

2. Plaintiffs seek to certify a class of persons ("Class") comprised of:

> All persons who, between February 24, 2004 and the present (the "Class Period"), paid for part or all of a commercial bail bond premium in connection with a California state court criminal proceeding. Specifically excluded from this Class are Defendants; the officers, directors or employees of any Defendant; any entity in which any Defendant has a controlling interest; any affiliate, legal representative, heir or assign of any Defendant and any person acting on their behalf; any person who acted as a bail agent during the Class Period; any judicial officer presiding over this action and the members of his/her immediate family and judicial staff; and any juror assigned to this action.[6]

I have been instructed by Counsel to set the end of the Class Period for the purpose of my analyses as the end of the available data, August 14, 2024. Ten of the Surety Defendants produced data with customer identities. Based on this data, I calculate that there are at least 1.62 million unique members of the Class, as defined as unique purchasers of Bail Bonds.[7] Extrapolating to the Defendants that did not produce identifying customer information, I estimate that there are approximately 2.15 million Class Members.[8]

---

1. *In Re California Bail Bond Antitrust Litigation*, Corrected Third Consolidated Amended Class Action Complaint, filed May 9, 2022 [hereafter Complaint] at ¶¶36-37. The named Plaintiffs are Shonetta Crain and Kira Monterrey.
2. Complaint at ¶¶15-35. *See also* GEORGE E. REJDA, PRINCIPLES OF RISK MANAGEMENT AND INSURANCE, 723 (Pearson 10th ed. 2008) [hereafter REJDA (2008)] ("Surety: Party who agrees to answer for the debt, default, or obligation of another in the purchase of a bond. Surety bond: Bond that provides monetary compensation if the bonded party fails to perform certain acts.").
3. REJDA (2008) at 724 ("Underwriting: The selection and classification of applicants for insurance through a clearly stated company policy consistent with company objectives.").
4. Complaint at ¶¶6-8.
5. Complaint at ¶¶10-11.
6. Complaint at ¶38.
7. I calculate there are 1,623,390 Class Members in the Class Period by counting the number of unique customer names within each Defendant Surety's bond transaction dataset. Repeat customers within a surety dataset are only counted once (23.51 percent of Class Members are repeat customers).
8. The average Gross Premium charged to all known Class Members is $3,599 per Class Member (accounting for Class Members who made multiple Bond purchases). Dividing the total Gross Premiums charged in all transactions for the Defendants without Customer information by this average, I estimate there are approximately 526,388 additional Class Members, or 2,149,778 total.

3. Counsel for Plaintiffs and the proposed Class have asked me to assess the following issues:

(a) **Collective Market Power**: Whether the Defendants and their agents collectively possess market power in a relevant antitrust market that would enable the creation and maintenance of a price-fixing conspiracy;

(b) **Quantitative Evidence of a Price-Fixing Conspiracy:** Whether quantitative evidence, such as analysis of Defendants' transaction data, shows artificially inflated prices;

(c) **Common Impact:** Whether there are methodologies and evidence common to the Class that can be used to show that inflated bail bond premiums have resulted in widespread injury across the Class ("Common Impact");

(d) **Aggregate Damages:** Whether there are methodologies common to the Class that can be used to calculate aggregate damages to the Class caused by the alleged Conspiracy over the Class Period; and

(e) **Common Evidence:** Whether evidence, data, and analyses common to the Class are capable of proving (a) through (d) above.

SUMMARY OF CONCLUSIONS

4. I have reached the following opinions based on my review and analysis of the available evidence:

(a) **Collective Market Power**: Defendants and Agencies have market power in a relevant antitrust market. Commercial Bail Bonds are a relevant product market, and the geographic scope of the market is the state of California. Collective market power can be shown with both direct and indirect proof. The direct proof involves demonstrating that Defendants successfully inflated bail bond prices above competitive levels. The indirect proof involves demonstrating that Defendants and their agents collectively have high market shares in a relevant antitrust market, and these shares are protected by high barriers to entry. Defendants represent the vast majority of the commercial Bail Bond market in California and entry is restricted by licensure requirements.

(b) **Quantitative Evidence of a Price-Fixing Conspiracy:** The record evidence is consistent with a Conspiracy to fix the prices of Bail Bonds in California. The Conspiracy consists of two mutually reinforcing elements of Challenged Conduct: (i) an agreement to fix the "Standard Rate" of 10 percent that was submitted to the California Department of Insurance ("CDI") for approval and the "Qualified Rates" that based on the Standard Rate (collectively, the "Filed Rates"), and (ii) and agreement to discourage and suppress the practice of agents issuing additional "Rebates" below approved the CDI approved Filed Rates. Both of these elements serve to increase the "Effective Rate," or the percentage of the bond value charged to the Customer as the "Purchase Price." I use economic analysis in conjunction with bond-level transaction data and Agent rebate data to evaluate the effect of the Challenged Conduct on bond Effective Rates during the Class Period. Testing the effect of the Challenged Conduct on bond Effective Rates can be done via two independent, but reinforcing, analytical methods.

Under the first method, I assess the competitive Effective Rate directly ("Direct Analyses"). I offer two Direct Analyses: (1) a theoretical Effective Rate model, and (2) a Effective Rate model based on marginal costs. The Direct Analyses are agnostic as to whether the Conduct inflated Filed Rates or suppressed Rebating. I find that the Challenged Conduct inflated the Effective Rates by 2.45 to 3.26 percentage points (as a percent of the bond amount). Under the second method, I estimate the effect of the Challenged Conduct on Filed Rates and Rebates separately (the "Benchmarking Analyses"). I again offer two methods: (1) a benchmarking regression of Filed Rates, and (2) a benchmarking analysis of Rebates after the filing of the complaint. I find that the Challenged Conduct inflated the Filed Rates by 0.83 percentage points during the Class Period, and that the Challenged Conduct suppressed Rebates by 1.69 percentage points during the Class Period. The combination of inflated Filed Rates and suppressed Rebates artificially inflated the Effective Rates by 2.52 percentage points.

(c) **Common Impact:** Using standard economic methods and quantitative and qualitative evidence common to the Class, I find that all or virtually all Class Members were individually injured by having been charged artificial higher Purchase Prices due to the alleged Conspiracy. I use a standard two-part method to demonstrate that the price inflation of Filed Rates would have been transmitted to all or virtually all Class Members by virtue of the existence of a rigid price structure. In part one, my empirical methods described above (Direct Analyses and Component Analyses) show that the Challenged Conduct, among other things, inflated the Filed Rate generally. In part two, I show that because all rates charged by Sureties, including Qualified Rates, are tethered to the standard Filed Rates, it follows that any shock (in this case, the Challenged Conduct) that caused the standard Filed Rates to increase would necessarily inflate the prices charged to all Class members. A similar proof is applied to rebates—because all rebates are tethered to the standard Filed Rate, a shock that inflates the standard Filed Rate would necessarily inflate the prices charged to all Class members. Another standard method of proving Common Impact—namely, in-sample prediction—shows that over 98 percent of Class members suffered antitrust injury.

(d) **Aggregate Damages:** I compute aggregate damages to the Class as a whole using classwide methods and data. Using the but-for prices from my various impact models, I calculate that the alleged Conspiracy resulted in overcharges between $2.11 billion and $2.73 billion during the Class Period. I also demonstrate that is possible to separately estimate damages for each of the two prongs of the Conspiracy.

(e) **Common Evidence:** The evidence, data, and analyses I used to reach each of the above-mentioned conclusions are common to the Class as a whole.

5. My report is organized as follows: In Part I, I review the relevant background and economic features of the commercial Bail industry in California. In Part II, I demonstrate that the commercial Bail industry is a relevant antitrust market in the state of California, and that Defendants and their Agents possesses collective monopoly power in that market. In Part III, I discuss the economic features of the Challenged Conduct. In Part IV, I assess the quantitative evidence of the alleged Conspiracy through a benchmarking analysis and theoretical model of competition. In Part V, I demonstrate Common Impact to the Class using common evidence and methods. In Part VI, I calculate aggregate damages.

6. The opinions in this report reflect my review of evidence, data, and other relevant materials reviewed or analyzed to date. My analysis relies upon two sources of Bail Bond data: (1) bond-level transaction data from the Surety Defendants ranging from January 1, 2003 to August 14, 2023, ("Surety Data"); and (2) sampled aggregate and bond-level transaction data from individual Bail Agencies ("Agency Data").[9] The Surety Data contains transaction information including the bond face value (or bond amount), and premium charged by each Agent and Surety. The Agency Data contains transaction information including the bond amount, premiums charged and collected, and rebates offered by the agency. Together, these two sources provide quantitative evidence of a price-fixing conspiracy among Defendant Sureties during the Class Period. The materials upon which I relied in forming my opinions are listed in Appendix 2.[10]

QUALIFICATIONS

7. I am a Managing Director at Econ One Research, Inc. ("Econ One") and a career-line professor at the University of Utah College of Social & Behavioral Science, where I teach economics and the law and antitrust economics. I also serve as executive director of the Utah Project, an interdisciplinary center dedicated to the study of antitrust and consumer protection issues.[11] My testifying experience has focused on antitrust and consumer protection matters, with a special emphasis in assessing common impact in class action litigation.

8. I am an applied microeconomist with an emphasis on industrial organization and regulation. In an academic capacity, I have published several books and book chapters, spanning a range of industries and topics, and my articles have appeared in dozens of legal and economic journals. My competition-related articles have appeared in multiple American Bar Association (ABA) Antitrust Section journals, and I have been a panelist at several ABA Antitrust events. In a consulting capacity, I have been nominated for antitrust practitioner of the year among economists by the American Antitrust Institute (AAI) for my work in *Tennis Channel v. Comcast*. AAI named me as Co-Honoree in the same category in 2018 for my work *In Re Lidoderm Antitrust Litigation*. AAI also named me as Honoree in the same category in 2023 for my work in *Cung Le v. Zuffa, LLC* (d/b/a as UFC).

9. I have testified as an economic expert in state and federal courts, as well as before regulatory agencies. I also have testified before the House Judiciary Subcommittee on Antitrust and the Senate Judiciary Subcommittee on Competition Policy, Antitrust, and Consumer Rights on the interplay between antitrust and sector-specific regulation. I have served as an expert for both plaintiffs seeking class certification and defendants opposing class certification. Federal courts have relied on my work in certifying ten classes in antitrust matters,[12] and five classes in

---

9. *See* Part IV.A.1 for a summary of the Surety Data and Part IV.A.2 for a summary of the Agency Data.

10. I reserve the right to supplement or amend my opinions should new materials or information become available to me.

11. *See Utah Project on Antitrust and Consumer Protection*, THE UNIVERSITY OF UTAH, https://utahproject.utah.edu/ (last visited Dec. 11, 2024).

12. *See Meijer, Inc. v. Abbott Laboratories*, No. C 07-5985 CW, 2008 WL 4065839 (N.D. Cal. Aug. 27, 2008) (granting Plaintiffs' Motion for Class Certification); *Natchitoches Parish Hosp. Serv. Dist. v. Tyco Int'l, Ltd.*, 262 F.R.D. 58 (D. Mass. 2008) (granting Motion to Certify Class); *Southeast Missouri Hospital and St. Francis Medical Center v. C.R. Bard*, No. 1:07cv0031 TCM, 2008 WL 4372741 (E.D. Mo. Sept. 22, 2008) (granting in Part Motion for Class Certification); *Johnson v. Arizona Hosp. and Healthcare Assoc.*, No. CV 07-1292-PHX-SRB, 2009 WL

consumer protection matters.[13] I also have testified before Congress on competition policy.[14] Finally, in antitrust litigation, I have served as an expert to the Federal Trade Commission, the Competition Bureau of Canada, and to several state Attorneys General.

10. My full curriculum vitae appears as Appendix 1 to this report and reflects a full list of the cases in which I have served as a testifying expert since 2013 and a list of publications I have authored in the last ten years.

11. I have no financial stake in the outcome of this case. Econ One is being compensated for my work in this matter at my standard rate of $1,000 per hour; my staff is being billed at rates from $320 to $600. Our compensation is not dependent on the outcome of the litigation.

I. BACKGROUND

12. In this section, I explain the key background facts necessary for forming my opinions in the rest of this report. I first review the key economic actors and terms used in the bail bond industry. I then explain how a Bail Bond transaction works, explain the economics behind the transaction, and briefly review the relevant history of Bail Bonds in California as it relates to the Challenged Conduct. I then describe the Surety Defendants and review how they have priced Bail Bonds over the Class Period. Finally, I describe the bail agencies.

A. Defined Terms

13. The Bail industry has a specific set of terminology and jargon that is necessary to understand the mechanics of a Bail Bond transaction. While many of the terms are commonly used and understood by the different economic actors in the marketplace, in my review of the evidence

---

5031334 (D. Ariz. Jul. 14, 2009) (granting in Part Motion for Class Certification); *In re Delta/AirTran Baggage Fee Antitrust Litig.*, 317 F.R.D. 675 (N.D. Ga. 2016) (granting Motion to Certify Class); *In re Lidoderm Antitrust Litig.*, No. 12-md-02521, 2017 WL 679367 (N.D. Cal. Feb. 21, 2017) (granting Motions for Class Certifications and Denying *Daubert* Motions); *Cung Le, et al. v. Zuffa, LLC d/b/a Ultimate Fighting Championship*, No. 2:15-cv-01045-RFB-BNW, ECF No. 839 (D. Nev. Aug. 9, 2023) (granting in part Plaintiffs' Motion for Class Certification); *In Re: Pork Antitrust Litig.*, No. 0:18-cv-01776, ECF No. 1887 (D. Minn. Mar. 29, 2023) (granting Motion to Certify Class); *Simon and Simon, PC d/b/a City Smiles and VIP Dental Spas v. Align Technology, Inc.*, No. 20-cv-03754-VC (N.D. Cal. Nov. 29, 2023) (granting in Part and Denying in Part the Motions for Class Certification; Denying Motions to Exclude Dr. Singer and Dr. Vogt); *In re: Broiler Chicken Grower Antitrust Litig. (No. II)*, No. 6:17-cv-00033-RJS-CMR (E.D. Ok. May 8, 2024) (granting Motion to Certify Class and denying *Daubert* motion as to Dr. Singer).

13. *See In re MacBook Keyboard Litig.*, No. 5:18-cv-02813-EJD, 2021 WL 1250378 (N.D. Cal. Mar. 8, 2021); *In re JUUL Labs, Inc., Marketing, Sales Practices, and Products Liability Litig.*, No. 19-md-02913-WHO, ECF No. 3327 (N.D. Cal. Jun. 28, 2022); *In Re: Pepperdine University Tuition and Fees Covid-19 Refund Litigation*, Master File No. 2:20-cv-04928-DMG, ECF No. 115 (C.D. Cal. Sept. 26, 2023); *In Re: University of Southern California Tuition and Fees COVID-19 Refund Litigation*, No. 2:20-cv-4066-DMG, ECF No. 213 (C.D. Cal. Sept. 29, 2023); *Michael Miazza, et al. v. Board of Supervisors of Louisiana State University and Agricultural and Mechanical College*, No. C-696918 (Parish of East Baton Rouge Jul. 13, 2021) (granting Motion to Certify Class).

14. *Reviving Competition, Part 1: Proposals to Address Gatekeeper Power and Lower Barriers to Entry Online*, held by the House Subcommittee on Antitrust (Feb. 23, 2021); *Breaking the News – Journalism, Competition, and the Effects of Market Power on a Free Press*, held by the Senate Subcommittee on Competition Policy, Antitrust, and Consumer Rights (Feb. 2, 2022); *(Im)Balance of Power: How Market Concentration Affects Worker Compensation and Consumer Prices*, Testimony to the House Committee on Economic Disparity and Fairness in Growth (Apr. 6, 2022).

I find there are often multiple terms that refer to the same concept, and in some cases certain terms may mean different things to different actors. Below, I explain the defined terms as I will use them in the report, and report all of the variations of those terms I have encountered in my review of the evidence.

1. Economic Actors

14. The key economic actors in the market are summarized below:

- **Court:** The Court refers both to the California legal system, as well as the individual judges who adjudicate the legal process in which Bail Bonds are used. The Court sets the Bail Bond amount of the Accused and assigns a court date for the Accused to appear.[15] Should the Accused fail to appear for their court date, the Court may foreclose on (collect) the posted Bail Bond amount.
- **Accused (aka Principal, or Defendant):** The individual charged with a crime. To avoid jail time in advance of their court date, the Accused must either deposit the set bail amount to the Court in cash or must secure a Bail Bond for the same amount. The Accused are sometimes called "defendants" within the industry, or "principals" in the language of the surety bonds.[16] To avoid confusion, I will reserve the term "Defendants" to refer to the Surety Defendants in this matter, and used the term "Accused."
- **Customer (aka Indemnitor)**: The actual purchasers of the Bail Bonds who compose the Class Members in this matter. The Bail Bond customers might be the Accused themselves, but typically is a friend, relative, or acquaintance purchasing a Bail Bond on behalf of the Accused.[17] [redacted]

15. Deposition of Michael Ziemer (May 30, 2024) [hereafter Ziemer Dep.] at 31:9-32:9 [redacted]). *See also Bail Schedules*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailSchedules (last visited Dec. 11, 2024).

16. Deposition of Sean O'Brien (May 14, 2024) [hereafter O'Brien Dep.] at 69:21-70:12 [redacted]); Deposition of Robert Hayes (Jul. 18, 2024) [hereafter Hayes Dep.] at 214:1-5 ("[redacted]").

17. Ziemer Dep. at 41:14-21 [redacted]). *See also* Deposition of Jonathan Schneider (Aug. 22, 2024) [hereafter Schneider Dep.] at 25:7-17 [redacted]"). *See also* Christa Brown, *Do the Math: Money Bail Doesn't Add Up for San Francisco*, OFFICE OF THE TREASURER & TAX COLLECTOR CITY & COUNTY OF SAN FRANCISCO (Jun. 2017) at 2 ("Typically, the bail bond is cosigned and copaid by the friends and family of the defendant"); *id*. at 9 ("Many people who pay bail are the friends and families of the defendant; often, the wives, mothers, sisters and grandmothers[.]"). *See also Selling Off Our Freedom*, ACLU CAMPAIGN FOR SMART JUSTICE (May 2017), https://www.aclu.org/wp-

[redacted].[18]

- **Bail Agency**: These are the firms that underwrite and sell Bail Bonds. Bail Agencies consist of one or more individual Bail Agents that engage in the daily operations of the writing, servicing, and collection of revenues from Bail Bonds. In this report, I will refer to individual single-Agent firms as Bail Agencies. Bail Agencies sign a contract with a Surety for the ability to issue Bail Bonds and must also register with the CDI. Bail Agencies typically contract with one to three different Sureties.[19] Sureties typically have a single contract with an Agency (or a primary Agent owner), who can then subcontract to additional Agents.[20] Agencies agree to indemnify Sureties for any losses.[21]
- **Bail Agent (aka Bondsmen, Representative, or Producers)**: These are individuals that process and sell Bail Bonds to Bail Bond Customers. In the case of single-agent firms, a Bail Agent and a Bail Agency are one and the same. Typically, individual Agents are managed by a Bail Agency firm.
- **Surety**: Sureties are the financial guarantor of a Bail Bond. They contract with a Bail Agency to provide Powers, which are the currency that Agents use to write bail bonds they can deposit with the Court in lieu of cash. The Surety is the final guarantor of the Bond—in the event that the Accused fails to appear to their court date and the Court forecloses on the Bail Bond, the Surety theoretically would pay the Court the Face Value of the bail bond. Sureties are responsible for setting the filed rates with the CDI.
- **Managing General Agent ("MGA"):** This is an intermediary between the Bail Agency and the Surety; the MGA runs the Surety's Bail business on the Surety's behalf.[22] A general

---

content/uploads/publications/059_bail_report_2_1.pdf [hereafter ACLU Report] at 14 ("Family members or friends must often cosign contracts with the bail bond industry"); *id*. at 31 ("Bail companies generally have family members on the hook and liens on homes or other assets that keep strong pressure to pay"). *See also State Licensing Handbook, Chapter 19: Bail Bond Agents*, NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS, https://content.naic.org/sites/default/files/inline-files/Chapter%2019.pdf (last visited Dec. 10, 2024) [hereafter State Licensing Handbook] at 1 ("The defendant, the defendant's family and friends, or a professional bail bond agent executes a document that promises to forfeit the sum of money determined by the court to be commensurate with the gravity of the alleged offense if the defendant fails to return for the trial date.").

18. Hayes Dep. at 214:6-14.

19. Bail agencies contracting with between 1 and 3 sureties made up 99 percent of the agencies in the Surety Data. *See* Singer Workpapers for details.

20. [redacted]. Deposition of Mark Francis (May 7, 2024) [hereafter Francis Dep.] at 73:3-74:10; Deposition of William Shields (Jul. 24, 2024) [hereafter Shields Dep.] at 63:18-64:3 [redacted].

21. Hayes Dep. at 214:15-23 [redacted]"); Deposition of Lisa Thompson (June 12, 2024) [hereafter Thompson Dep.]. at 36:3-7 [redacted]").

22. O'Brien Dep. at 46:20-47:17 [redacted]

agent is deemed a Managing General Agent when "they are given an underwriting authority, based upon prescribed, defined, and agreed terms, to actually bind coverage on behalf of their client in the company."[23] About half of all Sureties use an MGA to manage their surety bail business, with some MGAs servicing multiple Sureties. MGAs typically agree to indemnify the Surety for any losses.[24]

- **California Department of Insurance ("CDI"):** The regulatory body in California that regulates the Bail industry. Their responsibilities include approving Bail Bond rate premiums submitted by Sureties.

2. Bail Terms

15. The key bail terms used in this report are summarized below:

- **Bail:** The temporary release of the Accused, conditional on a sum of money being offered as collateral to provide a financial incentive for the Accused to show up to their court dates.[25]
- **Bail Bond:** A financial asset purchased on behalf of the Accused to satisfy the full amount of Bail.[26]
- **Penal Amount (aka Liability)**: The Bail amount set by the Court—what must be deposited or pledged for the Accused to leave jail, and what may be forfeited if they fail to appear.[27]

[redacted]

23. Shields Dep. at 195:11-14.

24. *See, e.g.*, Francis Dep. at 96:14-97:16.

25. *SF Bail Fact Sheet*, SUPERIOR COURT OF CALIFORNIA, COUNTY OF SAN FRANCISCO, https://sf.courts.ca.gov/system/files/general/bail-fact-sheet-2024.pdf (last visited Dec. 11, 2024) ("Bail is money or property that a defendant puts up to guarantee their promise to return for future court dates. If the defendant fails to return to court, the money or property is forfeited."). *See also How Courts Work*, ABA (Sept. 9, 2019), https://www.americanbar.org/groups/public_education/resources/law_related_education_network/how_courts_work/bail/ ("Bail is the amount of money defendants must post to be released from custody until their trial. Bail is not a fine. It is not supposed to be used as punishment. The purpose of bail is simply to ensure that defendants will appear for trial and all pretrial hearings for which they must be present. Bail is returned to defendants when their trial is over, in some states minus a processing fee.").

26. *Bail Bonds*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 11, 2024) ("A bail bond is a surety bond, which is posted by a bail bond company to the court as a guarantee for an arrestee's appearance at all court dates. The court will release an arrestee from detention upon posting of the bail bond."). *See also The Devil in the Details: Bail Bond Contracts in California*, UCLA SCHOOL OF LAW CRIMINAL JUSTICE REFORM CLINIC (May 2017), https://static.prisonpolicy.org/scans/UCLA_Devil%20_in_the_Details.pdf [hereafter Devil in the Details] at 4 ("Bond: A secured bond is a promise to pay the full bail amount if the accused does not comply with the release conditions of the court. The accused contracts with a bail agency who guarantees to the court that the accused will appear at scheduled court hearings as a condition of release from jail.").

27. Ziemer Dep. at 31:9-32:9 [redacted]; Hayes Dep. 214:25-215:5 [redacted]

Bail schedules, which set the penal amounts for each type of crime, are regulated by individual counties.[28]

- **Bond Amount (aka Face Value of the Bond)**: The pledged money a Bond represents. Equal to the Penal Amount set by the Court.[29]
- **Filed Rate (aka Gross Premium Rate)**: The percentage of the Bond Amount that an Agency can legally charge a Customer for the purchase of a Bail Bond.[30] Filed Rates are determined by the Surety, which must have these rates approved by CDI.[31] The Filed Rate charged to a Customer is reported by the Agency to the Surety. A Surety typically has one to five Filed Rates on record with the CDI, and the Agent is legally responsible for determining what Filed Rate applies to a Customer on the basis of the Customer's objective characteristics.[32] The Filed Rate types are:
    - **Standard Rate**: This is the default rate that applies unless objective criteria for a Preferred Rate apply. In this market, the Standard Rate is universally ten percent with the exception of AIA, which lowered its standard rate to nine percent in 2018 as a result of a CDI excessive rate inquiry.[33]

[redacted]"); Deposition of Mike Wood (Jul. 31, 2024) [hereafter Wood Dep.] at 26:14-22 [redacted]").

28. *Bail Schedules*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailSchedules (last visited Dec. 11, 2024) ("Bail schedules are regulated by individual counties. The judges in each county adopt a countywide bail schedule that sets bail based on the requirements that apply to that jurisdiction.").

29. O'Brien Dep. at 106:9-18 [redacted]); Ziemer Dep. at 32:10-33:21 [redacted]); Wood Dep. at 26:14-24 [redacted].").

30. Ziemer Dep. at 33:23-34:12 [redacted]); Wood Dep. at 26:23-27:2 [redacted]

31. Ziemer Dep. at 34:24-35:3 [redacted]

32. *See* CAL. CODE REGS. tit. 10, § 2081 ("No bail licensee shall . . . charge or collect money or other valuable consideration . . . except for . . . (a) To pay the premium at the rates established by the insurer . . ."). *See also* Deposition of Brian Nairin (Sept. 5, 2024) [hereafter Nairin Dep.] Ex. 172 (AIA_000043629) at -630 [redacted].

33. *See* Exhibit 11. *See also* O'Brien Dep. at 104:15-24 [redacted] *See also* Hayes Dep. at 216:2-25. *See also* Deposition of Jeffrey Stanley (Sept. 16, 2024) [hereafter Jeffrey Stanley Dep.] at 42:24-25 [redacted]."). *See also* Thompson Dep. Ex. 78 (BANKERS_000004362) at -381 [redacted] For evidence of

- **Qualified Rate (aka Preferred Rate)**: A lower rate that applies if the Customer fits some objective qualification. For example, a Qualified Rate applies if the Customer has private counsel (in some cases, they could qualify with a public defender), or is a union member, government employee, or has real property collateral.[34] Typically the Qualified Rate is either seven or eight percent.[35]
- **High Risk Rates**: A higher rate some (but not all) Sureties have for higher risk charges, such as federal or immigration cases.[36]

- **Rebate**: A price reduction from the Filed Rate given by the Agent to a Customer in order to lower the effective amount the Customer pays. [redacted]). Rebates come out of the Agent's commission and are *not* reported to the Surety.[38] Rebates are typically expressed as a percentage of the Bond Amount.
- **"Discount"**: Market actors in the Bail industry use this term to mean *any* reduction a

---

AIA's lower Standard Rate, *see, generally*, Nairin Dep. at 201:15-22 [redacted]).

34. O'Brien Dep. at 104:15-24 [redacted].); Ziemer Dep. at 137:23-138:6 [redacted]); Hayes Dep. at 216:2-217:6; Deposition of George Stahlman, Jr. (Sept. 25, 2024) [hereafter Stahlman Dep.] at 33:21-24 [redacted] *See also* Jeffrey Stanley Dep. at 40:1-4 [redacted]); *id*. at 41:19-22 [redacted]. *See also* Jeffrey Stanley Dep. at 43:16-23 ([redacted]); Deposition of Craig Stanley (Aug. 23, 2024) at 19:1-4 ("Q. Okay. How does Golden State Bail Bonds determine whether someone qualifies for an 8 percent rate? A. I'll ask them a series of questions to qualify them."). There are also instances in which a customer could qualify for a seven or eight percent rate with a public defender: *see* Jeffrey Stanley Dep. at 44:19-22 [redacted].").

35. *See* Exhibit 11; Deposition of Sharon Jallad (Jun. 27, 2024) [hereafter Jallad Dep.] at 153:6-19 [redacted]

36. *See* Exhibit 11.

37. Jeffrey Stanley Dep. at 46:13-15. [redacted] *See* Jeffrey Stanley Dep. at 45:13-16. *See also* Nairin Dep. at 44:3-7 [redacted]).

38. Deposition of Fred Anschultz (May 29, 2024) [hereafter Anschultz Dep.] at 36:14-23 [redacted]

Customer receives from the Standard Rate, *either* in the form of a Qualified Rate *or* in the form of a Rebate.[39] Due to the interchangeable use of this term to refer to two separate forms of a price reduction to the Customer, I omit using this term in my report.[40]

- **Effective Rate:** The percentage of the Bond Amount a Customer is actually charged for a Bail Bond, after accounting for the Filed Rate used by the agent and subtracting any Rebates ($Effective\ Rate = Filed\ Rate - Rebate\ Rate$). A ten percent Standard Rate with no Rebates would have an Effective Rate of ten percent. A Qualified Rate of eight percent with a one percent Rebate would have an Effective Rate of seven percent.
- **Purchase Price:** This is the amount of money the Customer is charged in dollars (equal to ($Purchase\ Price = Effective\ Rate * Bond\ Amount$). This is usually paid in cash at the time of the purchase, however some agents will offer financing.[41]
- **Contract Rate (aka Net Premium)**: The contractual commission the Surety collects from the Agent for each Bail transaction, sometimes expressed as a percentage of the Bond Amount, and sometimes expressed as a percentage of the Filed Rate. [42] Typically, 0.5 to

---

39. Thompson Dep. at 52:18-23; Francis Dep. 41:17-42:1.; Ziemer Dep. at 36:12-19 (. Stahlman Dep. at 29:1-4).

40. Shields Dep. at 117:6-23 *See also* Shields Dep. at 118:2-7 *See also* Jeffrey Stanley Dep. at 75:9-17 Nairin Dep. at 43:23-44:15); Deposition of Yousuf Nabi (Sept. 18, 2024) [hereafter Nabi Dep.] at 30:15-20 ").

41. Ziemer Dep. 43:6-25. *See, e.g.*, Hayes Dep. Ex. 121 (TWOJINN-00017486) at -502

42. *See* Francis Dep. at 49:6-10; Ziemer Dep. at 35:22-36:9; Ziemer Dep. at 70:12-73:2 *See also* O'Brien Dep. at 52:1-5

1.0 percent of the Bond Value or ten percent of the Filed Rate, depending on the contract.[43]

- The money the Surety collects from each Bail transaction in dollars is also termed the "Net Premium."[45] (This is not to be confused with the Purchase Price to the Consumer, "net" of any Rebates.)
- Note that if basis of the Contract Rate is the Bond Amount, the Surety receives the same Net Premium regardless of Filed Rate used.[46] If the basis of the Contract Rate is the Filed Rate, the Surety will receive a lower Net Premium if the Customer qualifies for a lower Filed Rate.[47]

- **Powers**: Short for "power of attorney," these are physical pieces of stamped or inked paper from a Surety that allow an Agent to write a bond for up to the amount on the Power.[48]

43. Shields Dep. at 153:12-18 Shields Dep. at 64:17-65:7 .

44. *See* Singer Workpapers for details.

45. ACCRED000130608 Ziemer Dep. at 35:13-21); Shields Dep. at 144:13-24); Shields Dep. at 145:7-9

46. Ziemer Dep. at 139:24-140:5).

47. Ziemer Dep. at 37:1-11. *Id*. at 73:3-74:2 Thompson Dep. at 55:17-23

48. For example, an agent would use a $100,000 power for a bond with a Face Value of $90,000. Ziemer Dep. at 30:24-31:8 .); *see also* Ziemer Dep. Ex. 38 (CF0056620) at -636-37 .); Deposition of Donald Blackwell (June 13, 2024) [hereafter Blackwell Dep.] at 36:20-37:3

Powers are expended on use, and typically contain written forms to be completed for the crime, amount of Bail, name of person, address, Court, location. Powers typically have an expiration date, and power "inventory" is monitored and controlled by the issuing Surety.[49] Agents and Sureties will sometimes negotiate over large bonds that a typical power will not cover.[50] It is the responsibility of the Bail Agent to determine the risk of nonappearance of the Accused when issuing a power of attorney.[51]

- **Indemnity:** The obligation of one party to make another whole in the event of Forfeiture. Customers agree to indemnify Agents against any losses in the Bail Bond contract.[52] Agents agree to indemnify Sureties (or MGAs) against losses in their own contracts. MGAs indemnify Sureties against losses.
- **Collateral:** Real property or cash collected by the Agent for the duration of the Bail Bond, to help indemnify the Agent against losses. The decision to collect Collateral is entirely up to the Agent and their evaluation of the Customer.[53] Bail Agents are responsible for assessing the risk that the Accused would not appear by reviewing the personal circumstances that would inform whether "the person would still be around to appear in court."[54]

[redacted]; Shields Dep. at 72:24-73:4; Thompson Dep. at 63:21-64:8.

49. [redacted] Francis Dep. at 91:14-15 [redacted]

50. Ziemer Dep. at 84:9-24. *See also* Anschultz Dep. at 30:2-16 [redacted].

51. Blackwell Dep. at 58:5-18 [redacted]

52. Ziemer Dep. at 41:24-42:14 [redacted]).

53. Ziemer Dep. at 44:1-6 [redacted]. Hayes Dep. at 227:18-228:10 [redacted]

54. Blackwell Dep. at 58:5-12 [redacted]).

- **Build-Up-Fund ("BUF"):** A contractually mandated savings account in the Agency-Surety contract that functions as an additional layer of financial protection used to indemnify the Surety.[55] In the event of a forfeiture that ends in summary judgment, payment to the Court would first be made by the Agent, and then out of the BUF before the Surety pays directly.[56] The BUF moneys are legally owned by the Agency and return to the Agency upon termination of the business,[57] but are fully controlled by the Surety.[58] The BUF is put into a money market, checking, or CD account with the Surety as a trustee.[59] The BUF "builds" up over time via mandatory contributions by the Agency in each Bail Bond transaction.[60] BUF contributions are based on Bond Amount, regardless of the Gross Premium Rate charged.[61]
- **Exoneration:** The closing of an active bond for whatever reason, either when the Accused has completed their Court process (whatever outcome) or if the Accused fails to appear,

55. Blackwell Dep. at 31:18-32:1 [redacted]

56. Blackwell Dep. at 32:25-33:8 [redacted]; Jallad Dep. at 125:9-20 [redacted].

57. Ziemer Dep. at 116:15-117:7 [redacted]

58. Blackwell Dep. at 32:4-9 [redacted]

59. Ziemer Dep. at 38:1-39:22; Blackwell Dep. at 32:10-15; Shields Dep. at 66:4-15; Anschultz Dep. at 67:3-9 [redacted]

60. Anschultz Dep. at 66:20-67:2 [redacted].

61. Ziemer Dep. at 142:3-5 [redacted]

the bond is forfeited, and the Court may order the Surety to pay the Bond Amount via summary judgment.[62]

- **Forfeiture:** The process of forfeiting the Bail money to the Court.[63] The Forfeiture process begins when the Accused fails to appear to their court dates.[64] If the Accused is located, the Forfeiture process may be suspended.[65] In California, Agents have six months to surrender the Accused, although they can request a six-month extension in some instances.[66] Agents may sometimes hire "recovery agents" (bounty hunters) during the statutorily allotted time to assist with the apprehension and surrender of the Accused; this is an additional source of fees.[67] If a Forfeiture moves to summary judgment and the bond must be paid, sometimes the agents pay it outright, not even informing the surety, sometimes they ask for it out of the BUF.[68] The Surety serves as the guarantor of the full

62. Ziemer Dep. Ex. 38 (CF0056620) at -636-37 [redacted].

63. Shields Dep. at 53:7-11 [redacted]; Thompson Dep. at 39:9-13 [redacted]); Ziemer Dep. at 130:4-7 [redacted].

64. Ziemer Dep. at 52:4-53:19. *See also* Ziemer Dep. Ex. 38 (CF0056620) at -636-37 [redacted] Anschultz Dep. at 62:25-63:9 [redacted].

65. Thompson Dep. at 39:16-22 [redacted].

66. Thompson Dep. at 39:23-40:3 [redacted].

67. Thompson Dep. at 44:17-23 [redacted].

68. Ziemer Dep. at 130:9-22 [redacted].

value of the bond and holds sufficient reserves to cover obligations.[69] Forfeiture is infrequent and rarely results in a loss to the Surety.[70]

- **Summary Judgment:** A civil action filed against the Surety, after a specific time has passed from the bond Forfeiture date, for the non-appearance of the Accused. The judgment amount is equal to the Bond Amount plus accrued interest.[71] This exonerates the bond.
- **Loss (aka Write Off):** Any expense incurred by the Agency or Surety in dealing with a Forfeiture that is not ultimately recovered from a downstream indemnitor or Collateral. [72]

B. Defendant Sureties

16. Defendants Sureties are 19 Bail Surety companies that operate in California.[73] I understand that these 19 Sureties represent the majority of Sureties that issue Powers for Bail Bonds in California.[74] Some Sureties use an MGA as a third party to run their Bail Bond business, as noted below. MGAs are middlemen firms that purchase bonds power from the Surety and then resell them to Bail Agents.[75]

1. **Accredited Surety and Casualty Company ("Accredited"):**[76] Accredited used the MGA "Accredited Bond Agencies"[77] and ceased California Bail operations in 2020.

---

69. Shields Dep. at 53:24-54:7 [redacted] .").

70. *See* Part I.D.5, *infra*.

71. Ziemer Dep. Ex. 38 (CF0056620) at 636-37 [redacted]

72. *Id*. ("BAIL BOND FUNDAMENTALS AND DEFINITIONS", defining Loss as "defined as any expense incurred in the enforcement of termination of an Agent's liability.").

73. Complaint at ¶¶15-35. I use the term "Defendant Sureties" as I understand that in addition to the Surety Defendants, Plaintiffs have also named William B. Carmichael, the President and CEO of ASC and the former President and Executive Director of the American Bail Coalition, as a named Defendant.

74. *See* Part II.B.3 *infra*.

75. Anschultz Dep. at 30:24-31:11 [redacted] . *Id*. at 31:16-20 [redacted] *See also* Wood Dep. at 41:13-17 [redacted]

76. Complaint at ¶15.

77. Jallad Dep. at 39:11-22 [redacted]

2. **American Contractors Indemnity Company ("ACIC"):**[78] [redacted]"[79] and ceased California Bail operations in 2019.
3. **Allegheny Casualty Company ("Allegheny"):**[80] Allegheny uses AIA as an MGA.[81] AIA is separately listed as a Defendant.[82]
4. **American Surety Company ("ASC"):** [83] ASC uses the MGA "USI". USI was owned by the ASC, which was also the MGA for ILM.[84]
5. **Bankers Insurance Company ("Bankers"):** Bankers is based out of Florida.[85]
6. **Continental Heritage Insurance Company ("CHIC" or "Continental"):**[86] [redacted]."[88]
7. **Danielson National Insurance Company ("Danielson"):**[89] Danielson ceased operations in California in 2013. I understand that Danielson has settled with the Plaintiffs.
8. **Financial Casualty & Surety, Inc. ("FCS"):**[90] [redacted].[91] FCS is affiliated (merged) with FC&S Insurance Agency and Financial Casualty, which offers services and personnel to FCS at a cost.[92] In about 2002, FC&S Insurance Agency acquired FCS for the purpose of entering the Bail Bond business.[93] FC&S Insurance Agency operates its Bail business through FCS.[94] Almost all of FCS's business is bonds; FCS also has some

78. Complaint at ¶17.
79. Anschultz Dep. at 99:24-100:8 [redacted]
80. Complaint at ¶16.
81. Complaint at ¶16.
82. Complaint at ¶18.
83. Complaint at ¶19.
84. Blackwell Dep. at 40:7-14 [redacted].").
85. Complaint at ¶20.
86. Complaint at ¶21.
87. O'Brien Dep. at 57:5-15, 93:17-25.
88. O'Brien Dep. at 57:5-15, 93:17-25.
89. Complaint at ¶22.
90. Complaint at ¶23.
91. Ziemer Dep. at 118:1-5.
92. Shields Dep. at 19:23-20:5 [redacted]). *See also* Shields Dep. at 20:10-16 [redacted]
93. Shields Dep. at 20:17-25 [redacted].
94. Shields Dep. at 21:14-21 [redacted]

small, continuing obligations to workers compensation plans that it offered before its acquisition.[95]

9. **International Fidelity Insurance Company ("IFIC"):**[96] [redacted] "[redacted]"[97]
10. **Indiana Lumbermens Mutual Insurance Company ("ILM Group" or "ILM"):**[98] ILM used the MGA "Underwriters Surety, Inc." (USI).[99] ILM began its Bail Bond business with USI at the end of 2003.[100] ILM had previously worked with USI in the Bail Bond industry in the 1980s and 1990s,[101] however this relationship ended several years prior to 2003.[102] USI was owned by the American Surety Company [ASC], which was also the MGA for ILM.[103] It worked with ILM because ASC was licensed to operate as a Surety in a limited number of states, whereas ILM enjoyed greater market access.[104] ILM reentered the California Bail Bond market in 2005.[105] ILM had no other MGAs other than USI in the Bail

---

[redacted]

95. Shields Dep. at 48:5-11 [redacted]
96. Complaint at ¶25.
97. Jallad Dep. at 39:6-22.
98. Complaint at ¶24.
99. Blackwell Dep. at 16:24-17:4 [redacted] *See also* Blackwell Dep. at 50:8-11 [redacted].").
100. Blackwell Dep. at 26:14-21 [redacted]
101. Blackwell Dep. at 107:9-13 [redacted]
102. Blackwell Dep. at 45:23-46:1 [redacted]
103. Blackwell Dep. at 40:7-14 [redacted]
104. Blackwell Dep. at 40:15-24 [redacted]
105. *See* Blackwell Dep. Ex. 98 (ASC 033749) [redacted]. *See also* Blackwell Dep. at 115:20-116:8 [redacted]

market.[106] After the ILM/PLM (Pennsylvania Lumbermans Mutual Insurance Company) affiliation, the new entity ended their active participation in the Bail industry in 2015.[107] The significantly larger company, PLM, perceived ILM's Bail business as inconsistent with the core of its business.[108] The last issued power of attorney occurred in 2016, and there were still open bonds in 2017.[109] Despite its exit, the Bail Bond business had been profitable for ILM.[110]

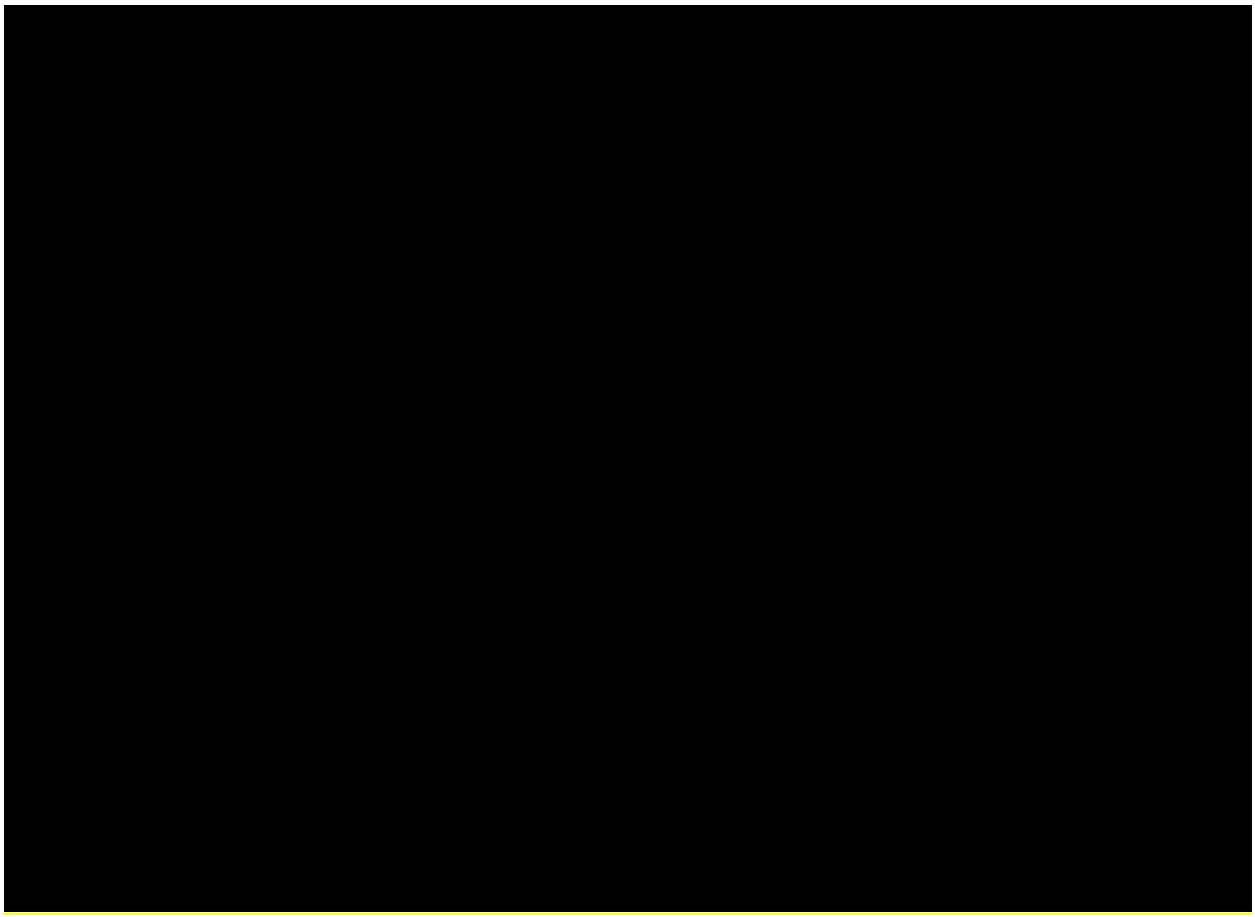
11. **Lexington National Insurance Corporation ("Lexington"):**[111] Lexington is based out of Maryland and uses a designated agent in California.[112]
12. **Lexon Insurance Company ("Lexon"):**[113] Lexon ceased operations in California in 2014. I understand that Lexon has settled with the Plaintiffs.
13. **North River Insurance Company ("North River"):**[114] North River is a member of the Crum & Forster (C&F) group.[115]
14. **Seaview Insurance Company ("Seaview").** Seaview is based out of California. Seaview's owners also own Two Jinn, Inc.'s Bail Bonds ("Aladdin Bail Bonds").[116]
15. **Seneca Insurance Company ("Seneca"):**[117] [redacted].[118] Seneca is a member of the Crum & Forster group.[119]
16. **Sun Surety Insurance Company ("Sun Surety"):** Sun Surety is based in South Dakota.[120]

106. Blackwell Dep. at 50:8-11 [redacted]
107. Blackwell Dep. at 13:17-14:1 [redacted].").
108. Blackwell Dep. at 14:2-15 [redacted]
109. Blackwell Dep. at 27:24-28:15 [redacted]
110. Blackwell Dep. at 16:21-23 [redacted]
111. Complaint at ¶26.
112. Complaint at ¶26.
113. Complaint at ¶27.
114. Complaint at ¶28.
115. Complaint at ¶28, n. 2.
116. Complaint at ¶29.
117. Complaint at ¶30.
118. Ziemer Dep. at 101:23-102:3.
119. Complaint at ¶28, n. 2.
120. Complaint at ¶31.

17. **United States Fire Insurance Company ("US Fire"):**[121] US Fire is a member of the Crum & Forster group.[122]
18. **Universal Fire & Casualty Company ("Universal").** Universal is based out of Indiana and uses a designated agent in California.[123]
19. **Williamsburg National Insurance Company ("Williamsburg"):**[124] Williamsburg ceased operations in California in 2017.

17. EXHIBIT 1 below shows the number of bonds issued by each Surety over the Class Period. Although there are 19 Defendant Sureties, because the Crum & Forster (C&F) entities often bundle their data together, certain exhibits may have fewer than 19 Sureties.

EXHIBIT 1: BONDS BY DEFENDANT SURETY BY YEAR DURING THE CLASS PERIOD



Note: North River, Seneca, and US Fire grouped under C&F.
Source: Surety Data.

121. Complaint at ¶32.
122. Complaint at ¶28, n. 2.
123. Complaint at ¶33.
124. Complaint at ¶34.

C. California Bail Agencies

18. The CDI reports that there are approximately 2,300 Bail Agents registered in the state of California.[125] [redacted].[126]

19. The top ten Bail Bond Agencies control the majority of the California Bail Bond market, as measured by the cumulative share of bonds issued. [redacted]

EXHIBIT 2: TOP TEN BAIL AGENCIES IN CLASS PERIOD

Rank	Agency Name	Share of Bonds	Share of Gross Premium	Cumulative Share of Bonds	Cumulative Share of Gross Premium
[redacted]					

Source: Surety Data.

20. Exhibit 3 and Exhibit 4 below show the relationship between the top Bail Agencies and the Sureties. While some Agencies use a single Surety, other Agencies have multiple Surety relationships. [redacted]

125. *See Bail Agents*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailAgents (last visited Dec. 11, 2024) ("Currently, there are approximately 2,300 bail agents and organizations in California licensed by CDI.").

126. *See* Singer Workpapers for details. Note I did not standardize Agent names between Defendants.

EXHIBIT 3: AGENCY SHARE OF SURETY'S BUSINESS BY PERCENTAGE OF GROSS PREMIUM

Agency Name	Rank	Defendant Surety	Share of Total Gross Premium Collected
[redacted]			

Source: Surety Data.

EXHIBIT 4: SURETY SHARE OF AGENCY'S BUSINESS BY PERCENTAGE OF GROSS PREMIUM

Defendant Surety	Rank	Agency Name	Share of Total Gross Premium Collected
			%

Note: North River, Seneca, and US Fire grouped under C&F.
Source: Surety Data.

D. Commercial Bail Bonds Transactions

21. The Bail system is a legal and financial process used in the American court system that solves the following problem: The Courts need to ensure that an individual accused of a prison-worthy crime does not flee, but it is socially undesirable and impractical to imprison everyone

accused of a crime until the end of their legal proceedings.[127] The Bail system attempts to solve this problem by giving the Accused party a significant financial incentive to appear in Court throughout their legal proceedings. For certain crimes, a Court will release the Accused party on the condition that they deposit a set dollar amount with the Court.[128] This Penal Amount, or Bail, is refunded after all Court appearances are fulfilled.

22. Because the Bail system creates a strong demand for instant cash, the Bail Bond industry has arisen as a liquidity service to provide it. Bail is typically set in the thousands of dollars, depending on the circumstances of the crime and the policies of the specific Court. If the Accused has the cash funds readily available to post Bail, they may deposit cash directly with the Court.[129] However, many Accused individuals do not have access to the large cash amounts that are required to post Bail. Rather than sit in jail, the Accused (or someone on their behalf) may purchase a short-term loan specifically tailored for posting Bail, called a Bail Bond.

1. Narrative of a Transaction

23. In a typical Bail Bond transaction, the Customer (who either is the Accused, or someone on behalf of the Accused) pays a nonrefundable upfront fee (the Purchase Price) to a third-party Bail Agency and Bail Agent licensed to issue Bail Bonds. The Purchase Price for a Bail Bond is determined by the value of the Penal Amount, the Filed Rate for which the Customer qualifies, and any Rebates offered by the Bail Agent. Over the Class Period, the typical Purchase Price was the Standard Rate of ten percent with no Rebates. For example, if the Court sets the Penal Amount at $10,000, the Purchase Price for a ten percent Standard Rate bond would be $1,000. The Agent may also require additional "Collateral" or real-property assurances as a condition of issuing the bond.[130] Once the bond is issued, the Agent then "posts Bail" with the

---

127. Devil in the Details at 1 ("Under the current money bail system, many people accused of crimes lack sufficient financial resources to post bail and must enter into bail bond contracts to avoid unnecessary pretrial detention."). *See also id*. at 1-3.

128. Typically each county has a Bail schedule to guide judges' discretion. Here, for instance, is Sacramento's: *County of Sacramento Felony and Misdemeanor Bail Schedules for Persons in Pretrial Custody*, SUPERIOR COURT OF CALIFORNIA, https://www.saccourt.ca.gov/criminal/docs/bail-schedule.pdf (last visited Dec. 11, 2024). Bail amounts tend to rise with the severity of the crime and with the extent of the criminal record.

129. I understand that Courts also accept cashier's checks or money orders into the registry of the Court. *See, e.g.*, *Payment Methods*, SUPERIOR COURT OF CALIFORNIA COUNTY OF SANTA CLARA, https://santaclara.courts.ca.gov/forms-filing/payment-methods#:~:text=Payment%20is%20accepted%20by%20cash,3.5%25%20convenience%20fee%20per%20transaction (last visited Dec. 7, 2024) ("Payment is accepted by cash, check (payable to 'Clerk/Superior Court'), or credit card."); *Payment Options and Information*, SUPERIOR COURT OF CALIFORNIA COUNTY OF ORANGE, https://www.occourts.org/divisions/collections/payment-options (last visited Dec. 7, 2024) ("Check or Money Order should be made payable to: Clerk of the Court[.]"); *Payment Options and Information*, SUPERIOR COURT OF CALIFORNIA COUNTY OF SAN BERNANDINO, https://dev.sb-court.org/divisions/traffic/payment-options-and-information (last visited Dec. 7, 2024) ("You may pay in person with cash, credit card, debit card, check or money order[.]").

130. Devil in the Details at 19 ("Sureties may exercise total control over indemnitors' life savings, homes, and vehicles offered as collateral to secure a bail bond. Indemnitors agreements are written to give sureties broad discretion and control over collateral while severely limiting the indemnitor's ability to make decisions about his or her own property. These agreements include provisions that allow the surety to demand immediate payment at any point after a default[.]").

Court on the Accused's behalf. The Agent does not literally deposit any funds with the Court, but rather the Agent deposits a certificate called a Power that allows the Court to ultimately hold the Surety financially accountable for the full Penal Amount should the Accused fail to appear in court.[131]

24. Each Bail Bond is a transaction underwritten by the Agent, who assesses the "fiscal and flight risk" of the Accused and the Customer purchasing the bond on their behalf.[132] If the Agent decides to underwrite a bond, the Agent applies the appropriate Filed Rate, and then decides whether or not to offer the Customer a Rebate (discussed further in Part I.D.3).[133] Once the Bail Bond is purchased, the Agent will submit a Power to the Court.

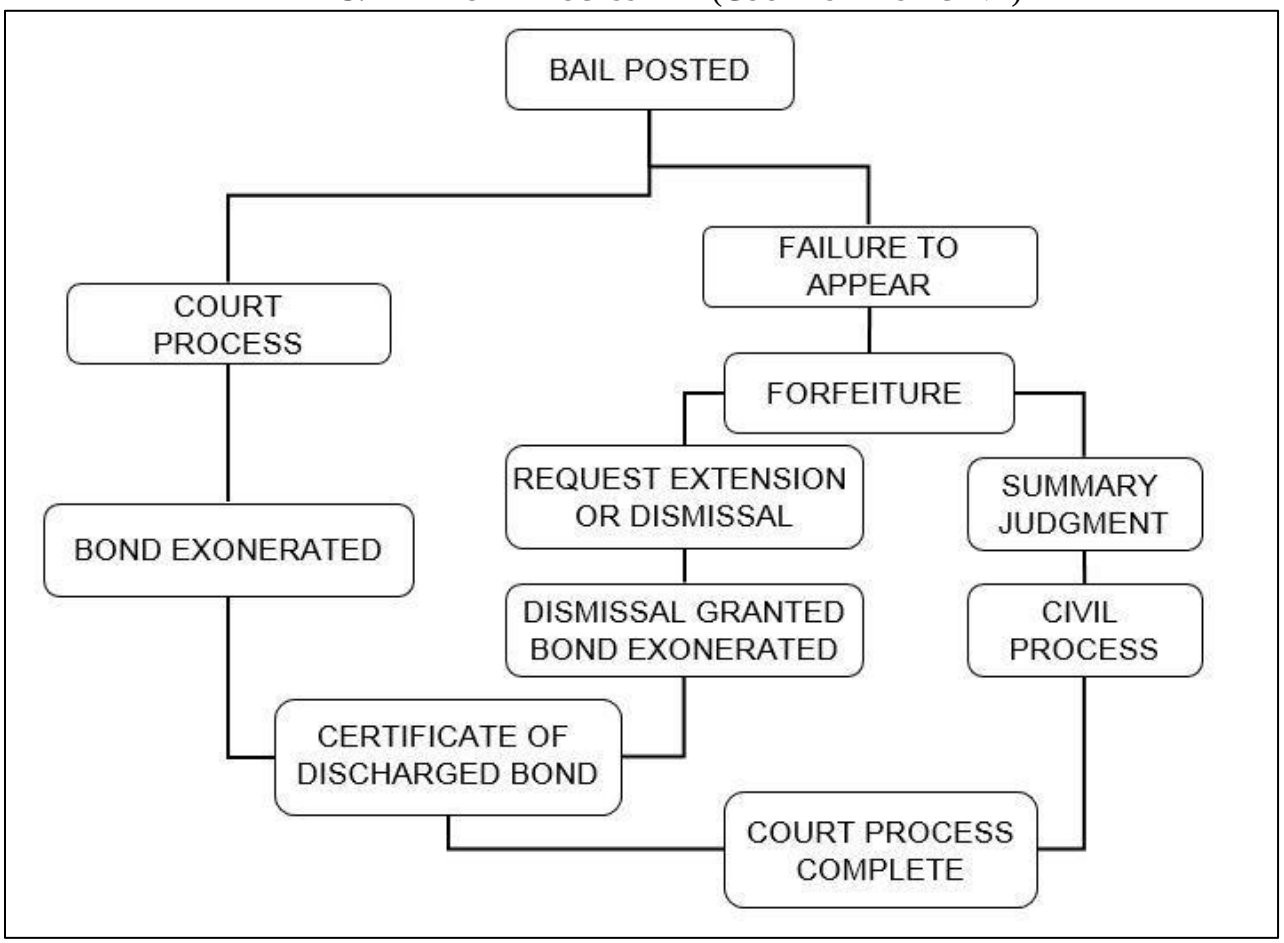
25. The transaction completes in one of two ways as shown visually from the perspective of the Court in Exhibit 5 below. If the Accused appears as promised through the process (left side of Exhibit 5), the bond is exonerated, meaning the Power is discharged, the Agency and the Surety are exonerated of liability, and the transaction is complete. (The Purchase Price amount is not returned to the Customer). If the Accused fails to appear, the Court begins the process of Forfeiture, or collection of the Bond Amount.

131. *See* CAL. PENAL CODE § 1269(b) (distinguishing "bail in cash" from a "surety bond executed by a certified, admitted surety insurer"); CAL. PENAL CODE § 1299.01 (distinguishing deposits of "money" from "bonds").

132. Hayes Dep. at 38:3-19 [redacted].

133. Hayes Dep. at 39:13-41:19 [redacted] *See also* Jeffrey Stanley Dep. at 45:7-11 [redacted]

EXHIBIT 5: BAIL BOND PROCESS MAP (COURT'S PERSPECTIVE)



Source: *Bail Bonds*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 11, 2024).

26. The Forfeiture processes can be appealed or requested to be dismissed by the Agent or Surety (left branch of the right side of Exhibit 5). The Forfeiture process itself is complex, and is mapped in the Appendix (Exhibit 40). Normally, the Agent has some amount of time to cure the nonappearance of the Accused, usually negotiated between the Court and the Agent, and that time window is typically extended as long as the Agent stays on top of her case management.[134] After sufficient time, if the Court has not heard from the Accused or the Agent, the Court will initiate a

134. According to the CDI, if the Accused appears in court or is otherwise detained within 185 days of the Court noticing the Surety and Agent of Forfeiture, then the Forfeiture is vacated, and the bond is exonerated. *See* Exhibit 40, *infra*. *See also* CAL. PENAL CODE §1305 (The statute in California describing the process of Forfeiture of a Bail Bond. "If the defendant appears either voluntarily or in custody after surrender or arrest in court within 180 days of the date of forfeiture or within 180 days of the date of mailing of the notice if the notice is required under subdivision (b), the court shall, on its own motion at the time the defendant first appears in court on the case in which the forfeiture was entered, direct the order of forfeiture to be vacated and the bond exonerated."); *id*. ("In cases arising under subdivision (g), if the bail agent and the prosecuting agency agree that additional time is needed to return the defendant to the jurisdiction of the court, and the prosecuting agency agrees to the tolling of the 180-day period, the court may, on the basis of the agreement, toll the 180-day period within which to vacate the forfeiture. The court may order tolling for up to the length of time agreed upon by the parties.").

civil proceeding to forfeit the bond, usually resulting in a Summary Judgment against the Agent (right branch of the right side of Exhibit 5).[135] The Summary Judgment can be and typically is appealed to a higher court. But once judgment is issued and affirmed, it is enforceable against the Agent and is typically executed against the Agent's BUF. Exhibit 6 shows a simplified version of the process, from the perspective of a Surety.

EXHIBIT 6: BAIL BOND PROCESS MAP (SURETY'S PERSPECTIVE)

Source: Ziemer Dep. Ex. 38 (CF0056620) at -635.

2. Example Bail Bond Transactions

27. As defined in Part I.A.2, the prices and commission of a Bail Bond transaction are a function of the Penal Amount, the Filed Rate applied, Rebates from the Agent (if any), and the Contract Rate between the Surety and the Agent. I illustrate four examples of Bail Bond transactions in Exhibit 7 below:

- Bond A is an example of a Standard Rate with no Rebate,
- Bond B is an example of Qualified Rate with no Rebate,
- Bond C is an example of a Standard Rate with a Rebate, and
- Bond D is an example of a Qualified Rate with a Rebate.

In each example, the Penal Amount is $10,000 and the Contract Rate between the Agent and the Surety's Contract Rate is set at one percent of the Penal Amount.

135. *See, e.g.*, *Bail Bonds*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 11, 2024). *See also* Jeffrey Stanley Dep. at 60:1-11 [redacted]; *id*. at 58:10-59:59:5 [redacted]

EXHIBIT 7: FOUR EXAMPLE BAIL BONDS

Line	Value	Bond A	Bond B	Bond C	Bond D
[1]	Filed Rate	10%	8%	10%	8%
[2]	Rebate (%)	0%	0%	1%	1%
[3]=[1]-[2]	Customer's Effective Rate (%)	10%	8%	9%	7%
[4]	Surety's Contract Rate (%)	1%	1%	1%	1%
[5]=[3]-[4]	Agent's Commission (%)	9%	7%	8%	6%
[6]	Penal Amount / Bond Amount	$10,000	$10,000	$10,000	$10,000
[7]=[1]*[6]	Gross Premium	$1,000	$800	$1,000	$800
[8]=[2]*[6]	Rebate	$0	$0	$100	$100
[9]=[3]*[6]	Customer's Purchase Price	$1,000	$800	$900	$700
[10]=[4]*[6]	Surety's Net Premium	$100	$100	$100	$100
[11]=[5]*[6]	Agent's Commission	$900	$700	$800	$600

Note: All percentages are of the Penal Amount (Bond Amount).

28. The calculations of the relevant percentages based off of the Penal Amount are performed in lines one through five as follows:

1. The Agent determines the applicable Filed Rate for the Customer. In Bonds A and C, the Customer receives the Standard Rate of ten percent. For Bonds B and C, the Customer receives a Qualified Rate of eight percent (for, say, being a union member or having private counsel).
    a. The Filed Rate (ten or eight percent) is reported to the Surety by the Agency.
2. The Agent decides whether or not to offer a Rebate out of their own commission. In Bonds C and D, the Agent offers a Rebate of one percent off of the Filed Rate.
    a. Rebates are not reported to the Surety by the Agency.
3. The Customer's Effective Rate is calculated as the Filed Rate minus any Rebate.
    a. This rate is not reported to the Surety by the Agency.
4. In each scenario, the Surety collects one percent of the Penal Amount.
5. The Agent's Commission is the residual of the Effective Rate minus the Contract Rate.

Lines 6 though 11 convert these percentages into dollar amounts based on the $10,000 Penal Amount of the bond. Note that some portion of the Agent's commission (not modeled above) is typically set aside in the BUF owned by the Agency (but controlled by the Surety), to be used as a rainy-day fund for potential future Forfeitures.[136]

136. Francis Dep. 45:10-48:21 [redacted]; Wood Dep. Ex. 151 (Annual Statement for year 2014; "The only uncertainty in regards to liquidity is the risk that a contractually liable producer may fail to pay a bail bond forfeiture, thus necessitating payment by the Company. However, the Company generally has contract collateral and indemnity funds (also known as 'Build-Up Funds') for each producer to pay forfeiture payments in the event of a default by a liable producer.").

29. As demonstrated above, the proceeds of the transaction are split between the Agent (for underwriting the bond) and the Surety (for guaranteeing the bond.)[137] However, Bonds C and D demonstrate that the Agent can Rebate part of their commission back to the Customer to lower the ultimate Purchase Price. Therefore, the Agent has an economic incentive to charge the highest Filed Rate possible and offer no Rebates, while the Surety collects the same commission no matter what. (If the Contract Rate is defined as a percentage of the Filed Rate, a lower Filed Rate would mean a lower Net Commission for the Surety.) Whether or not an Agent Rebates has no *direct* effect on the Surety's Net Premium for the transaction. However, as explained later in Part III, in a broader view Sureties *do* care about the Effective Rates because it influences the Contract Rate the Sureties can charge Agents.[138] Nevertheless, on the individual Bond transaction level, the decision to give a Rebate is at the Agent's sole discretion,[139] [redacted].[140] Likely because of these incentives, Agents only report the Filed Rate to the Surety for each bond, and do not report any Rebating.[141]

3. Filed Rates and Rebating

30. Exhibit 7 above reveals that a Customer can achieve a lower Purchase Price in one of two ways: Either a lower Filed Rate is applied to them (Bonds B and D), or they receive a Rebate on the Filed Rate (Bonds C and D), or both (Bond D). From the Customer's and Agent's point of view, any reduction in the Effective Rate is money out of the Agent's pocket and back into the Customer's pocket.

31. I understand that as a matter of law, the Filed Rate that a Customer receives ought to be objectively determined and should not vary based on the particular Agency involved in the

---

137. Ziemer Dep. Ex. 38 (CF0056620) at -636-37 [redacted]; Wood Dep. at 28:2-15 [redacted]

138. Francis Dep. at 42:10-22 [redacted] Hayes Dep. at 219:25-220:14 [redacted]

139. Shields Dep. at 127:5-7 [redacted] Thompson Dep. at 54:8-10 [redacted]

140. Shields Dep. at 127:17-19 ([redacted]).

141. *See* Part IV.A.1, *infra*.

transaction.[142] I also understand that an Agent is required by law to inform Customers of the various Qualified Rates, and must determine if the Customer qualifies for any of those rates.[143] However, as explained in Part IV, there is evidence that this is not always the case, and that Agents in fact exercised discretion on what Filed Rate they could apply to the Customer, only informing a Customer that they qualified for a lower Qualified Rate in more competitive circumstances.

32. In contrast, Rebating is at the sole discretion of the Agent. Agents generally only offered Rebates when they believed it was necessary to secure the bond.[144] In theory, Rebating allows the Agents to compete with one another for Customers on price. This competition can only occur, however, if the Customer understands that Rebating is possible. If the Customer does not know that they can receive a further Rebate on the Filed Rate, then it is unlikely that they will receive one. Therefore, any suppression of consumer knowledge that Rebating is a legal practice would, all else equal, result in fewer Rebates being offered, as an unknowing Customer would mistakenly believe that the Effective Rate that they are paying is solely a function of the prescribed Filed Rate.

33. Rebates only appear to be offered when the Customer knows that they are possible. Record evidence from this case shows that there are no other specific factors or criteria considered in determining a Rebate.[145] [redacted]

142. *Bail Bonds*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 11, 2024) ("Each surety company must file rates with CDI and bail agents representing a surety must charge the same filed rates.").

143. Hayes Dep. at 224:6-25 [redacted]. *See* n. 32, *supra.*

144. Hayes Dep. at 205:16-206:2 [redacted] Deposition of William Carmichael (Sept. 27, 2024) [hereafter Carmichael Dep.] at 244:15-245:2 [redacted]).

145. Shields Dep. at 127:8-11 ("[redacted]

[redacted][146] It is not in an Agent's interest, however, to offer a Rebate unless the Customer knows Rebating is possible, and can play one Agent off another. [147]

34. Importantly, the record evidence indicates that Rebates are determined independently from the Filed Rate, meaning that they are applied on top of whatever Filed Rate is determined.[148] [redacted].[149]

4. Economics of Bail Bonds

35. A Bail Bond is a kind of "surety bond" in the insurance and bonding literature.[150] Surety bonds are financially similar to insurance policies, as they provide monetary compensation

146. Jeffrey Stanley Dep. at 44:24-45:11 [redacted] Stahlman Dep. at 86:1-86:23 [redacted]). Nabi Dep. at 52:25-53:16 [redacted].

147. Deposition of Steven Mehr (Sept. 24, 2024) [hereafter Mehr Dep.] at 28:5-11 [redacted]; Nabi Dep. at 31:24-32:11 [redacted]

148. Nairin Dep. at 25:18-26:7 [redacted] Jeffrey Stanley Dep. at 99:20-21 ("[redacted]

149. [redacted]. *See* n. 357, *infra*.

150. REJDA (2008) at 626, 628. A "Court bond" is a type of surety bond, and a Bail Bond is a type of court bond.

from one party to another on the condition of an event occurring.[151] Unlike insurance, however, the event in question here is the failure of the Accused to appear before the Court.[152] Because this is an intentional act (as opposed to an outcome out of the control of all parties in the relationship), it is economically distinct from a traditional two-party insurance policy.[153] Another key difference is that insurance is a two-party contract, while surety bonds involve three parties: In a typical surety bond, (1) the Principal is the party who agrees to perform certain acts (in the case of Bail Bonds, the Accused), (2) the "obligee" is the party who receives the proceeds of the bond if the Principal fails to perform (here, the Court), and (3) the Surety (or "obligor") is the party which agrees to answer for the debt or default on behalf of the Principal.[154] Therefore, although surety bonds are typically regulated as an insurance product and are sold by insurance companies, they are economically distinct products.[155]

36. Sureties consider Bail Bond transactions as closer to a "reinsurance" program.[156] In such a relationship, the reinsurer receives a small, fixed percentage of the premium and only has

151. REJDA (2008) at 626 ("A surety bond is a bond that usually provides monetary compensation if the bonded party fails to perform certain promised acts. For example, a contractor may be financially overextended and unable to complete a building project. A public official may embezzle public funds, or the executor of an estate may illegal convert part of the estate assets to his or her own use. Surety bonds can be used to meet these loss exposures."); O'Brien Dep. at 67:22-69:7 [redacted]).

152. Ziemer Dep. at 41:24-42:14 [redacted]

153. Ziemer Dep. at 41:24-42:14 [redacted]

154. REJDA (2008) at 626-627.

155. Blackwell Dep. at 75:10-76:1[redacted]). *See also* Blackwell Dep. at 82:5-9 [redacted]

156. ACCRED000130608 at -612, a[redacted]

to pay out if the primary insurer exceeds a certain amount of loss.[157] The main difference between Sureties and traditional excess of loss reinsurance is that a Surety has a lower risk of payout but a higher exposure if payout occurs.[158] There are additional facts that differentiate Bail Bonds from a typical investment product:

37. *First*, although in theory the Surety is ultimately responsible for paying the Bail Bond should the Court issue Summary Judgment, in practice this rarely occurs because of (1) the Bail Customer agrees to indemnify the Bail Agency; (2) the Bail Agency in turn agrees to indemnify the Surety (or MGA); and (3) if the Surety uses an MGA, the MGA *also* agrees to indemnify the Surety. As a condition of obtaining the bond, the Customer agrees to indemnify, or make whole, the Bail Agency in the event of a Forfeiture. Agents may specifically ask Customers to put up Collateral (typically, real property) that can be sold to cover losses for this reason.[159]

[redacted]

157. *Id*. *See also* Blackwell Dep. at 76:19-77:19 [redacted]

158. Blackwell Dep. at 78:13-79:16 [redacted]

159. Francis Dep. at 43:6-18 [redacted]

Similarly, Agency-Surety contracts stipulate that the Agency will indemnify 100 percent of the Surety's losses. Because of this feature, Agencies have been known to pay the Court themselves, rather than informing the Surety.[160] This means that, in the event of a Forfeiture that ends in Summary Judgment, losses must flow down through multiple indemnification steps before they can result in a Loss to the Surety.[161] In the event of a Forfeiture where the Accused cannot be located, the Surety is protected in myriad ways as explained above.

38. As shown in Part I.F below, the result of indemnification at each stage of the Bail contract is that actual Losses to Sureties are very low, and often zero, across the Class Period. As one Surety email succinctly summarized: [redacted][163] [redacted][164] [redacted][165]

160. Ziemer Dep. at 130:9-22 [redacted]

161. Shields Dep. at 74:1-5 [redacted] *See also id.* at 74:13-19 [redacted]; *id.* at 75:12-15 [redacted]. *See also* Shields Dep. Ex. 137 (FCS000069813) at -814 [redacted]

162. Ziemer Dep. Ex. 45 (CF0066216).

163. Shields Dep. at 58:4-59:5 [redacted]

164. *Id.*

165. *See* n. 156, *supra.*

39. *Second*, a Bail Bond does *not* result in an actual cash transaction between the Court and the Agent, or the Court and the Surety.[166] Rather, the Court holds the Agent (and Surety) liable in the event the Accused fails to appear, and only collects the Bail funds after a lengthy extension and appeal process.[167] Rather than depositing cash with the Court, a Bail Agent will deposit a Surety's Power with the Court. A Surety only needs to physically give up its cash holdings in the event of a forfeiture that is not paid by the Agents. Although the Bail Agencies incur a number of costs to operate (discussed in Part IV.B.1), Sureties have few (if any) costs associated with issuing Powers.[168]

40. As a financial instrument from the Surety's point a view, a Bail Bond is like an insurance policy for an event that never occurs. The Surety "makes available" its funds in the case of Forfeiture, collects a share of the gross premiums for providing that theoretical access, but rarely (if ever) needs to actually write a check. When Forfeitures do happen, the collections are almost always absorbed by the Agents or the BUFs provided by the Agents. In the event a particular Agent writes too many bonds that end in Forfeiture, the Surety can cease to do business with that Agent if their BUF gets too low and puts the Surety's funds at risk. [redacted].[169]

41. Finally, the evidence shows that Bail Bonds themselves are fungible, commodity products from the Customer's point of view.[170] That is, a Bail Customer only cares about getting a Bail Bond for the lowest price possible.[171] There is no technological innovation between Sureties and Agent's Bond offerings, and there are no brand-specific factors that make a Bond from Agency A any different from a Bond from Agency B. To the extent that Bail Bonds are homogenous commodity services, standard economic principles would predict that in competition, the equilibrium price would fall towards the marginal cost of providing a Bail Bond, and no Surety

---

166. ACLU Report at 14 ("When the bail bond agent has been paid, the agent will file a bond with the court to obtain the person's release. The bond is a legal promise to pay the bail in full if the court declares the bond forfeited, which may be triggered for failure to appear.").

167. *See, e.g.*, *Flow Chart of Bail Collection Process After Forfeiture*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/Flow-Chart-of-Bail-Collection-Process-After-Forfeiture.pdf (last visited Dec. 11, 2024).

168. Blackwell Dep. at 125:5-9 [redacted].

169. Thompson Dep. at 66:6-18 [redacted]

170. Deposition of Michael Bench (Nov. 20, 2024) [hereafter Bench Dep.] Ex. 247 (ARBB 0000196) at -197 (GSBAA material characterizing the bail industry as "just like all other commodities, services and other lines of insurance"); Ziemer Dep. Ex. 43 (CF0067516) [redacted].

171. Bench Dep. at 126:15-18; Stahlman Dep. at 69:13-18; Deposition of Sean Cook (Nov. 15, 2024) [hereafter Cook Dep.] at 20:4-12, 69:10-14 [redacted] Jeffrey Stanley Dep. at 161:18-23 ([redacted]).

and Agents would be able to change a price above competitive levels for the services of underwriting a bond.[172]

5. Bond Forfeiture

42. Bond Forfeiture is a rare event. According to a 2017 study written by members of the Judicial Branch of California, approximately $1.73 billion in Bond Value was posted with the Superior Court of Los Angeles from May 2016 to May 2017, and a total of $3.8 million in Bail was actually forfeited (a Forfeiture rate of approximately 0.22 percent of Bond Amount).[173] The study also found that very little of these Forfeitures were ultimately paid by the Sureties, finding, "[a] review of financial statements from 32 sureties in 2012 found they paid less than one percent in bail losses suggesting that contract terms may be substantively unconscionable […] By comparison, auto and property insurance companies lose 40 to 60 percent of their revenue to claims."[174] This is not surprising given the layers of indemnification between a Surety and a forfeited bond. As visualized below, a Loss to the Surety can only occur if the Forfeiture process leads to an actual Forfeiture, and the Agent exhausts their BUFs and other Collateral, (and the MGA exhausts their resources, if a Surety employs one), before a Surety is required to send money to a Court. [redacted][175] In short, Sureties have very limited exposure given the unlikelihood of a Forfeiture event, as summarized by the pathway below.

$$Forfeiture\ Process \rightarrow Bond\ Forfeited \rightarrow Agent\ Pays \rightarrow (MGA\ Pays) \rightarrow Loss\ to\ the\ Surety$$

43. To analyze the amount of Losses from Forfeitures Sureties incur, Counsel for the Plaintiffs asked Defendants to produce a list of the dates and amounts Sureties made to a Court in California with respect to a Forfeiture event.[176] [redacted]. Importantly, the latter is far less likely to occur than the former, as the bond can be vacated or exonerated in many instances where the Accused fails to appear.[177]

---

172. N. GREGORY MANKIW, PRINCIPLES OF MICROECONOMICS, 293-303 (Cengage 8th ed. 2018) [hereafter MANKIW]. at 268-284.

173. *Pretrial Detention Reform: Recommendations to the Chief Justice*, JUDICIAL BRANCH OF CALIFORNIA, Pretrial Detention Reform Workgroup (Oct. 2017), https://www.courts.ca.gov/documents/PDRReport-20171023.pdf at 38.

174. *Id*. at 7.

175. *See* Singer Workpapers for details.

176. *See, e.g.*, ACIC Responses and Objections to Plaintiffs Fourth Set of Interrogatories (Jul. 7, 2024); ACIC_000212493.

177. *Flow Chart of Bail Collection Process After Forfeiture*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/Flow-Chart-of-Bail-Collection-Process-After-Forfeiture.pdf (last visited Dec. 11, 2024). *See, e.g.*, Blackwell Dep. at 80:20-25 (discussing whether ILM ever had to directly cover a Forfeiture Loss itself: "Q. Did you ever suffer any kind of loss as the -- out of the bail industry? A. No. Q. So you never had to pay out on any forfeiture; is that fair? A. That's correct.").

44. I first assess the prevalence of Bond Forfeiture regardless of what entity ultimately pays the Court, which reflects the inherent degree of risk of writing a Bail Bond. [redacted]. I first compute Forfeiture rates using instructions provided to me by Defendant Sureties. Each Defendant provided slightly different approaches to computing its total number of Forfeitures. [redacted]

EXHIBIT 8: FORFEITURES AS A PERCENTAGE OF COUNT, BOND AMOUNT, AND GROSS PREMIUMS

Surety	Forfeiture Rate by Count	Forfeiture Rate by Bond Amount	Forfeiture Rate as Percent of Gross Premium
[redacted]	[redacted]	[redacted]	[redacted]

Notes: (1) The calculations are computed using Surety Data and the productions generated by Defendants in response to Counsel for Plaintiff's Fourth Set of ROGs.[178] "Forfeiture Rate by Count" is the number of Forfeiture events reported by the Surety as a percent of the total number of bonds issued. "Forfeiture Rate by Bond Amount" is the total dollar value of all forfeited bonds as a percent of the total dollar value of all bonds issued. "Forfeiture Rate as Percent of Gross Premium" is the total dollar value of all bonds experiencing Forfeiture as a percent of the total gross premium for all bonds in dollars; (2) I relied upon the correspondences with sureties to produce a count and dollar amount associated with Forfeitures for each, using their responses to Interrogatory No. 6 specifically to interpret their data. In some instances, the sureties generated new productions to report this data or deferred to previous productions. (3) If a correspondence detailed a Forfeiture event in a new production that occurred outside the timeframe of the Surety Data, I excluded it to consistently and conservatively estimate incidence rates. [redacted].[179] (5) Outliers were removed.

Source: For correspondences, *see* ACIC Responses and Objections to Plaintiffs Fourth Set of Interrogatories (Jul. 10, 2024); ACIC_000212493; Accredited's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories to Surety Defendants (Jul. 24, 2024); ACCRED000349255_HIGHLY CONFIDENTIAL; Bankers Response to Pls 4th Set of Rogs (Jul. 31, 2024); C&F Defendants Responses to Fourth Set of Interrogatories (Jul. 17, 2024); "Forfeiture PDF Conversions" (list of C&F Forfeiture events); FCS-Obections & Responses to Plaintiffs' Fourth Set of Rogs (Jul. 22, 2024); Sun Surety's Response to Fourth Set of ROGS (Jul. 12, 2024); Universal Fire's Response to Fourth Set of ROGS (Jul. 12, 2024); Williamsburg R&O Pls Rogs (Set 4) (Jul. 10, 2024). *See also* Singer Workpapers for additional details.

178. For more details on my methodology, *see* Singer Workpapers.

179. *Flow Chart of Bail Collection Process After Forfeiture*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/Flow-Chart-of-Bail-Collection-Process-After-Forfeiture.pdf (last visited Dec. 11, 2024). *See also* ILM's response to Plaintiffs Interrogatory No. 6 Set Four (Jul. 10, 2024).

45. I next assess the Forfeiture incidence by Filed Rate Type for a more limited subset of Defendants using an alternative method. [redacted] In Exhibit 9 below, I calculate Forfeiture with respect to three Filed Rate Types: Standard (10%); Qualified-1 (8%); and Qualified-2 (7%). I measure Forfeiture both in terms of a percent of bonds where the Accused fails to make a court appearance at some point (*i.e.*, beginning the "Forfeiture Process") and the percentage of bonds where the Bond's Forfeiture is finalized. [redacted]

EXHIBIT 9: FORFEITURE PROCESS AND FINALIZATION INCIDENCE BY FILED RATE TYPE

Filed Rate Type	Forfeiture Process Incidence	Forfeiture Finalized Incidence
[redacted]	[redacted]	[redacted]

Notes: (1) The Filed Rate Type classifications are based on CDI filings. Only bonds issued between 2016 and 2022 are included in the analysis because of the overlap between sampled sureties with respect to Filed Rates. *See* Exhibit 9, Exhibit 11: Filed Rates by Defendant, *infra*. (2) The Probability of Forfeiture is computed by calculating the count of all Forfeiture events for each "Filed Rate Type" as a percent of all bonds issued of the same types, regardless of whether it was forfeited or not. [redacted] For details, *see* ¶94. ([redacted] (6) *See* Exhibit 41, *infra*, to see breakdown by Surety.
Source: Surety Data; Singer Workpapers.

46. I next assess the degree that Forfeiture Losses are paid by the Defendant Sureties. Exhibit 10 calculates the amount of Loss to the Defendant Sureties. These values are taken from statements and data produced by the Defendants, reported in Appendix 4. [redacted]

180. *See* n. 168, *supra.*

EXHIBIT 10: FORFEITURE LOSSES TO SURETIES

Surety	Forfeiture Losses as Percent of Bond Amount	Forfeiture Losses as Percent of Gross Premiums	Forfeiture Losses as Percent of Net Premiums
[redacted]	[redacted]	[redacted]	[redacted]

Notes: (1) The calculations are computed using Surety Data and the productions generated by Defendants in response to Counsel for Plaintiff's Fourth Set of ROGs.[181] The amount of Forfeiture Losses for each Surety are computed using the instructions provided in correspondence. (2) All values are computed as a percent of all Bond Amounts, Gross Premiums collected, and Net Premiums collected for each Surety in the Surety Data. [redacted] *See, generally*, notes for Exhibit 8, *supra*. [redacted].[183] (7) Outliers were removed.

Sources: For correspondences, *see* ACIC Responses and Objections to Plaintiffs Fourth Set of Interrogatories (Jul. 10, 2024); ACIC_000212493; AIA R&O Pls Rogs (Set 4) (Jul. 10, 2024); American Surety Responses to Plaintiffs Interrogatory No. 6 Set Four (Jul. 10, 2024); ASC - CA Forfeiture Data - HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY(700096472.1); Bankers Response to Pls 4th Set of Rogs (Jul. 31, 2024); C&F Defendants Responses to Fourth Set of Interrogatories (Jul. 17, 2024); "Forfeiture PDF Conversions" (list of C&F Forfeiture events); CHIC R&Os to Pls Rogs (Set 4) (Jun. 11, 2024); FCS-Obections & Responses to Plaintiffs' Fourth Set of Rogs (Jul. 22, 2024); Seaview's Responses and Objections to Plaintiffs' Fourth Set of Interrogatories (Jun. 10, 2024); Sun Surety's Response to Fourth Set of ROGS (Jul. 12, 2024); Universal Fire's Response to Fourth Set of ROGS (Jul. 12, 2024); Williamsburg R&O Pls Rogs (Set 4) (Jul. 10, 2024). *See also* Singer Workpapers for additional details.

181. For more details on my methodology, *see* Singer Workpapers.

182. *See* ACIC Responses and Objections to Plaintiffs Fourth Set of Interrogatories (Jul. 10, 2024); ACIC_000212493.

183. *See* Accredited's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories to Surety Defendants (Jul. 22, 2024); ACCRED000349255_HIGHLY CONFIDENTIAL.

6. Filed Rates During the Class Period

47. The CDI is responsible for the regulation of the Bail industry.[184] Among other duties, it licenses Bail Agents and Sureties to do business in California and investigates the activity of Bail Agents.[185] The CDI is also responsible for approving the Filed Rates submitted by a Surety. The CDI determines whether Filed Rates charged to Bail Customers in California are fair. Each Surety company must file rates with CDI and Bail Agents representing a Surety must charge the same Filed Rates.[186] There is no obligation to re-file rates with the CDI on an annual basis—a new filing is only required if a Surety wishes to change them.[187]

48. The record evidence indicates that there is no actuarial basis for the Filed Rates used over the Class Period. [redacted] and there continues to be no actuarial basis today.[189] [redacted][190] [redacted]

184. *Bail Bonds*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 11, 2024).

185. *Id*.

186. *Id*.

187. Ziemer Dep. at 135:2-20 [redacted]

188. Shields Dep. at 91:22-92:2 [redacted] *See* Shields Dep. Ex. 138 at 17 (a 2004 CDI Insurance rate filling document filed by FCS to enter the Bail Bond business in California).

189. Shields Dep. at 94:15-20 [redacted] *See* Shields Dep. at 91:14-18 [redacted]); Shields Dep. at 91:22-92:2 [redacted] Shields Dep. at 92:3-11 [redacted] *See also* Shields Dep. at 92:18-93:4 [redacted]

190. Shields Dep. at 93:8-13.

it [redacted]. [191] [redacted], [192] FCS's Standard Rate has remained unchanged at ten percent during the Class Period.

49. The CDI allows Sureties to submit rates for approval with no additional statistical support, provided these rates are based on "the approved sequential analysis and rating factors of another insurer."[193] These filings are termed "Me Too" filings and explicitly allow a Surety to file for a rate *without* statistical support, provided the rate does not depart from a previously approved rate.[194] Accordingly, when they submitted rates to CDI, Defendants typically do not provide a

191. Shields Dep. at 93:24-94:8 [redacted]").

192. Shields Dep. at 96:10-25 [redacted]

193. Me Too filings are allowed under CAL. CODE REGS. tit. 10 §2632.9(b) and refer to an insurer adopting the rules and/or rates from another insurer's previously approved filling. *See Private Passenger Auto Class Plan Filing Instructions*, STATE OF CALIFORNIA DEPARTMENT OF INSURANCE (Apr. 15, 2011), https://www.insurance.ca.gov/0250-insurers/0800-rate-filings/upload/ClassPlanInstructions.pdf at 7.

194. *Id*. ("Me Too Filings Insurers may adopt the approved sequential analysis and rating factors of another insurer or from an Advisory Organization (AO) in accordance with CAL. CODE REGS. tit. 10 §2632.9(b). This type of filing is referred to as 'Me-Too' class plans. Only filings approved by the CDI may be adopted. Deviations to Me-Too filings are permitted only with statistical support. Application page CP-6 requires the deviations to be identified. A deviation in Me-Too filings means: any departure from the Me-Too company's rating plan with respect to the selection of rating factors, the definition of each rating factor and any changes made to the corresponding relativities associated with each rating factor. If a Me-Too is being adopted with deviation, the factor weights for each affected coverage must be recalculated.").

justification for the Filed Rates they set,[195] or their justification is based on a "Me Too" logic.[196] Thus, once California Bail Bond Sureties and the SAA worked together to establish the Standard 10% Rate in 1953, it was easy for other Bail Bond Sureties to adopt that same Standard Rate. According to Shields, "There is no actuarial justification for bail bond rates filed by any insurance company writing bail bond surety."[197]

50. In contrast, Defendants typically use actuarial means to justify their non-Bail rates to the CDI for other products. For example, Accredited has provided several justifications for its non-b surety lines of insurance. When Accredited was approved to offer child custody and visitation bonds, its rate filling noted that despite the lack of data it possessed, it still based its rates on an analysis of its projections for the program and its expected expenses.[198] For certain insurance types, Accredited determines its rates using a "loss cost multiplier" or LCM. A LCM is a standard

195. *See, e.g.*, Financial Casualty & Surety – CDI Rate Filling no. 04-8381 (Sept. 2024) at 17 ("There is no actuarial justification for bail bond rates filed by any insurance company writing bail bond surety. Bail bond surety is a very small niche surety market and there is no significant body of statistical information relating to this niche line of business. The common rate used in every state across the United States is 10% with a per bond minimum."); *id*. ("All insurance companies writing bail bond surety in California have approved rates that are either 10% of liability or a slight variation of this rate. Ranger Insurance Company has a filed rate of 10% with a $50 minimum premium. American Contractors Insurance Company has a tiered rate of 8%, 10% and 15% depending on risk as defined in their rate filing. Harco Insurance Company has a tiered rate of 8% and 10%. Continental Heritage Insurance Company has a tiered rate of 8% and 10%. Lincoln National Insurance Company has a tiered rate of 8% and 10% American Surety Insurance Company has a 10% rate. Bankers Insurance Company of Florida has a 10% rate. International Fidelity Insurance Company and Allegany Insurance Company have a 10% rate with a per bond minimum. To my knowledge, all other insurance companies writing bail bond surety in California have a 10% rate with a defined per bond minimum. All of the above rates are approved by the California Department of Insurance and currently in use. To our knowledge, none of the above Filed Rates are actuarially justified. These rates have been in use for many years and the 10% rate has been approved and in use for decades. New insurance company rate filings for bail bond surety such as the rates being filed by FCS are essentially 'ME TO' [sic] filings."); Blackwell Dep. Ex. 97 (ILM043057) at -062 (Email with attached Indiana Lumbermens Mutual Insurance 1989 CDI rate filing; "Since there is no actuarial data with regards to bail, and commercial bail is essentially a loan to the defendant of the credit worthiness of the surety company involved, and the present rate of 10% is fair, and not in the least usuary, considering the risk of the undertaking.").

196. *See e.g.*, Accredited – CDI Rate Filling no. 10-5444 (Jul. 31, 2010) at 2 ("Additionally, these factors are currently being used in the marketplace by both American Contractors Indemnity Company (filing 08-2395) and Bankers Insurance Company (filing 09-4748)."). *See also id*. (ACIC's explanation of its rate change was merely "The rational for adding these factors is that we believe defendants with private counsel or who are members of Unions or AARP (or have close ties to Unions or AARP) are less of a flight risk. As a result, we believe we will have less forfeitures with these types of defendants."); *see also* American Contractors Indemnity Company – CDI Rate Filling no. 08-2395 (Apr. 30, 2008) at 5. Bankers used nearly identical language. *See also* Bankers Insurance Company – CDI Rate Filing no. 09-4748 (Jun. 10, 2009) at 2 ("The rational for adding this factor is that we believe defendants who are members of Unions or AARP, or defendants that have close ties to Unions or AARP are a lower flight risk. As a result, the Company believes it will experience a lower forfeiture rate with these types of defendants."). Me Too filings are allowed under CAL. CODE REGS. tit. 10 §2632.9(b) and refer to an insurer adopting the rules and/or rates from another insurer's previously approved filling. *See Private Passenger Auto Class Plan Filing Instructions*, STATE OF CALIFORNIA DEPARTMENT OF INSURANCE (Apr. 15, 2011), https://www.insurance.ca.gov/0250-insurers/0800-rate-filings/upload/ClassPlanInstructions.pdf at 7.

197. Shields Dep. Ex. 138 at 17.

198. Accredited – CDI Rate Filling no. 00-12469 (Sept. 1, 2000) at 3 ("Accredited Surety & Casualty Company does not have the benefit of its own prior loss, expense or investment income experience with which to support its proposed rates; however, an analysis of the projections for the Child Custody/Visitation Bond program as well as expected expenses are contained on the attached worksheet along with an actuarial memorandum.").

insurance tool that helps an insurer determine the premium it should charge for coverage based on the cost of payouts and administering payouts ("loss cost"), its business expenses, and its desired profit.[199] In a 1999 surety filing, Accredited calculated a loss cost multiplier by using industry loss cost data provided by the Surety Association of America.[200] Accredited also has used its own expense information to update the LCM it uses for certain types of surety bonds.[201] While "Me Too" justifications have been used for non-Bail surety lines, typically Accredited provides extra actuarial justification on top of the "Me Too" claim to justify their rates for non-Bail submissions.[202]

51. Exhibit 11 below shows how the CDI Filed Rates for each Defendant Surety have changed (if at all) over time. Exhibit 11shows that all Sureties, with the exception of AIA,[203] charged a 10 percent Standard Rate throughout the Class Period. Exhibit 11 also reveals that while some Sureties maintained lower Qualified Rates since 2004, most of the modern-day Qualified rates were instituted in 2018—approximately one year after the CDI Inquiry began.

199. *Ratemaking Glossary*, NATIONAL COUNCIL ON COMPENSATION INSURANCE, https://www.ncci.com/Articles/Documents/II_Ratemaking-Curriculum-Glossary.pdf?cacheversion=469857095 (last visited Dec. 11, 2024) at 2 ("Loss Cost—The portion of workers compensation rates that is allocated for the payment of losses, and not for coverage of carrier expenses. … Carriers can use these loss costs as the basis for their rates, typically adjusting them for expenses with a loss cost multiplier. Loss Cost Multiplier—An adjustment to the loss cost that takes into consideration business expenses and profit. The loss cost multiplied by the loss cost multiplier equals the desirable premium to charge for coverage."). *See also* Julia Kagan, *Loss Cost: What it Means, How to Calculate*, INVESTOPEDIA (Aug. 7, 2023), https://www.investopedia.com/terms/l/loss-cost.asp ("The loss cost represents payments to cover claims made on the underwritten policies of insurance companies. Loss cost also includes administrative expenses associated with investigating and adjusting claims made by policyholders. It is, therefore, the actual total cost required to cover a claim. […] Additionally, because the loss cost only includes claims and administrative expenses related to investigating and adjusting claims, it must be modified to take into account profit and other business expenses, such as salaries and overhead. These company-specific adjustments are called the loss cost multiplier (LCM). The loss cost multiplied by the loss cost multiplier equals the desirable premium to charge for coverage.").

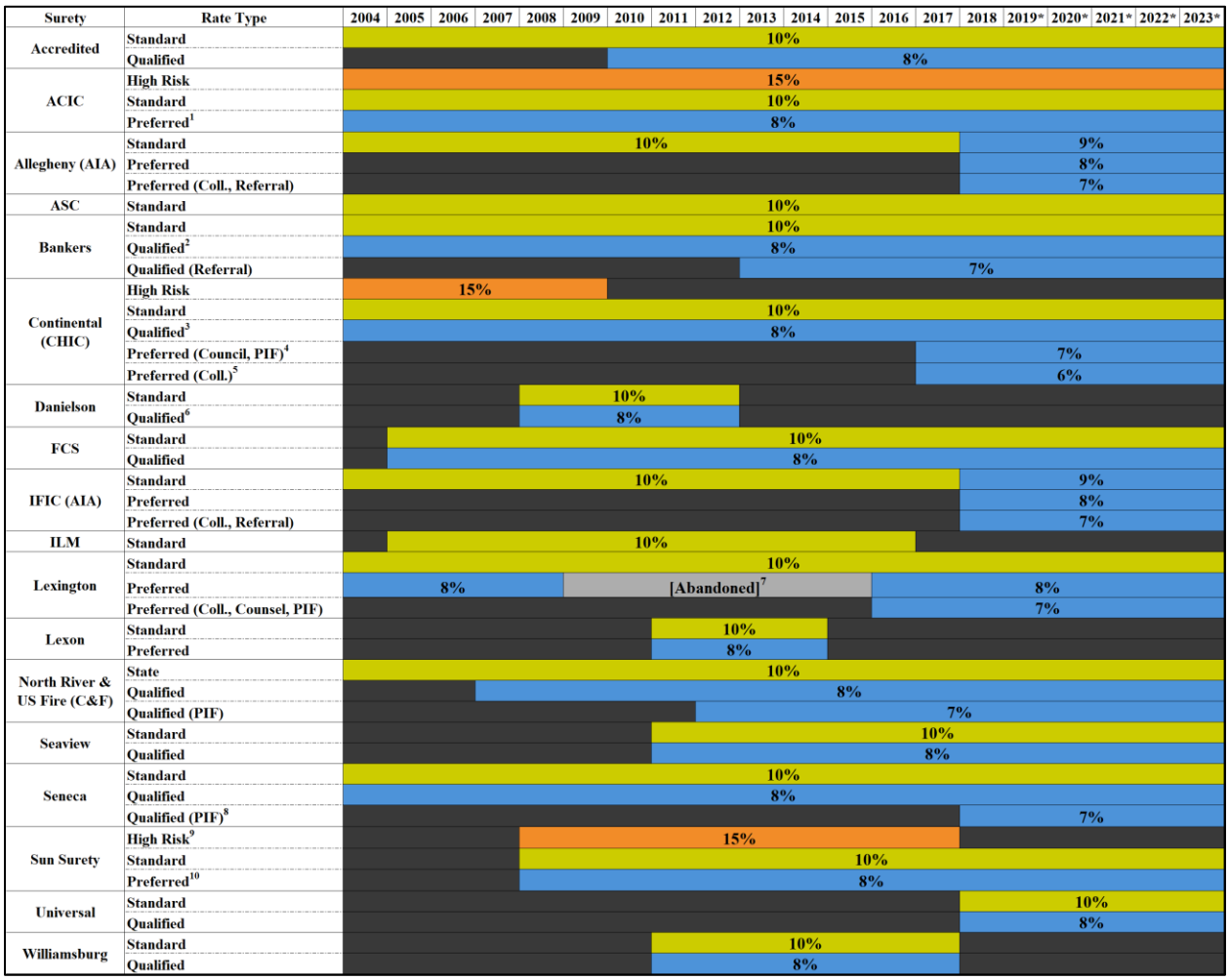
200. *See* Accredited – CDI rate filing no. 99-2958 (Mar. 10, 1999) at 3, 20.

201. *See e.g.*, Accredited – CDI rate filing no. 06-7980 (Oct. 18, 2006) at 7 ("The proposed loss cost multiplier is 4.44. This loss cost multiplier was selected to reflect current and actual expenses based on countrywide market experience as well as Accredited experience in order to keep rates competitive and assume uniform rates countrywide.").

202. *See e.g.*, Accredited – CDI Rate Filling no. 17-2088 (Mar. 14, 2017) at 61.

203. AIA moved to a 9 percent Standard Rate in 2018 after being forced to do so by the CDI.

EXHIBIT 11: FILED RATES BY DEFENDANT



Source: *CDI Rate Filing Database Public portal*, CALIFORNIA DEPARTMENT OF INSURANCE, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=186:1:299756363645::NO:RP,1:: (last visited Dec. 8, 2024).

Note: Black field with no rate indicates no rate filed. Paid in full is abbreviated as "PIF." (*) There have been no new rate fillings since 2018; (1) Qualification conditions updated in 2008; (2) Qualification conditions updated in 2007; (3) Rate renamed from Preferred to Qualified in 2009; (4) Rate was originally proposed in a rejected 2016 CDI rate filing; (5) Rate was originally proposed in a rejected 2016 CDI rate filing; (6) Qualification conditions updated in 2011; (7) Rate suspended from 2009-2016. CDI was notified of this change, but no public rate filing was made to note this suspension until rate was reintroduced in 2016; (8) 6% rate proposed but withdrawn in 2013; a 7% rate was proposed but withdrawn in 2014; (9) Rate was never used according to Sun Surety in a 2017 CDI rate filing; and (10) Qualification conditions updated in 2011.

II. DEFENDANTS' COLLECTIVE MARKET POWER

52. In this section, I use standard methods to show that the Surety Defendants and their Agents collectively possess monopoly power in the relevant antitrust market of "Commercial Bail Bonds" in California. Because Defendants and their Agents collectively possess market power, *if* Defendants engaged in the Conspiracy to artificially inflate Bail Bond prices (Gross Premiums), then such artificially inflated prices could not be defeated by consumer substitution to a competing

service.

53. I define the Commercial Bail Bond market based around consumer demand for the purchase of Bail funds. As explained in Part I.A.2, only Agents and Sureties licensed by CDI are legally allowed to commercially provide Bail funds to Bail Customers. Defendants represent nearly all Bail Bond Sureties in California.[204] I am not aware of any legal method of economically substituting away from a Bail Bond (for example, taking out a personal loan for the purposes of posting Bail).[205] Thus, the Conspiracy, if it exists, spans the entire Commercial Bail Bond market in California, encompassing all sellers of Bail Bonds.

54. It could be argued that the Commercial Bail Bond market is technically two separate markets that are vertically arranged in a supply chain: A retail market for Bail Bonds (where Agents are the sellers and Consumers are the buyers) and a wholesale market for Bail Bond Powers (where Sureties are the sellers of Powers and Agents are the Buyers). Yet this is a distinction without practical difference here, as (1) Agencies and Sureties are incapable of selling Bail Bonds without one another, and (2) there is no substitution for a Bail Bond Power at any link of the supply chain. Thus, for the purposes of this section, I treat Agents and Sureties as vertically integrated entities when assessing market power in the retail portion of the market.

55. A firm or a group of firms possess monopoly power (or "market power") if it possesses "the power to control prices or exclude competition."[206] The exercise of monopoly power may impose economic costs on society by restricting output, raising price, reducing quality or consumer choice, or inhibiting innovation relative to the levels that would have prevailed with competition.[207] In economics, monopoly power may also refer to a firm's ability to "profitably set its price above its marginal cost without making a loss."[208] Demonstrating that a firm possesses monopoly power can be accomplished using either direct or indirect proof. I demonstrate both proofs, although as a matter of economics, either suffices.

56. *Direct Proof:* Evidence of pricing or exclusionary power can directly establish monopoly power.[209] My Direct and Component Analyses in Part IV demonstrate that Defendants

---

204. *See* Part II.B.3.

205. *See* n. 215, *infra.*

206. *United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377, 391 (1956).

207. *See* DENNIS W. CARLTON AND JEFFREY M. PERLOFF, MODERN INDUSTRIAL ORGANIZATION, 88-98 (Pearson Addison Wesley 4th ed. 2005) [hereafter MODERN IO]; *see also* Thomas Krattenmaker, Robert Lande & Steven Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 GEORGETOWN LAW JOURNAL 241-269 (1987); Timothy Brennan, *Bundled Rebates as Exclusion Rather Than Predation*, 4(2) JOURNAL OF COMPETITION LAW AND ECONOMICS 335-374 (2008). As is common practice in economics, I use the terms "market power" and "monopoly power" interchangeably.

208. MODERN IO at 93; William M. Landes and Richard A. Posner, *Market Power in Antitrust Cases*, 94 HARVARD LAW REV. 937, 937 (1981) ("The term 'market power' refers to the ability of a firm (or a group of firms, acting jointly) to raise price above the competitive level without losing so many sales so rapidly that the price increase is unprofitable and must be rescinded.").

209. *See, e.g.*, *Merger Guidelines*, U.S. DEPARTMENT OF JUSTICE AND THE FEDERAL TRADE COMMISSION (Dec. 18, 2023) [hereafter Merger Guidelines (2023)] §4.3 ("Direct evidence of the exercise of market power can demonstrate the existence of a relevant market in which that power exists. This evidence can be valuable when assessing the risk that a dominant position may be entrenched, maintained, or extended, since the same evidence

inflated the prices (Purchase Price) of Bail Bonds above what would have prevailed absent the alleged Conspiracy. Defendants would not have been able to inflate prices if they lacked monopoly power. Thus, evidence that they can and did inflate prices is evidence they possess monopoly power. Antitrust authorities recognize that "if power can be shown directly, there is no need for market definition: the value of market definition is in cases where power cannot be shown directly and must be inferred from sufficiently high market share in a relevant market."[210]

57. *Indirect Proof*: Monopoly power can also be established by defining a relevant antitrust product market within a relevant geographic market, and then demonstrating that a firm (or group of firms collectively) controls high shares of that proposed market.[211] The Department of Justice (DOJ) and Federal Trade Commission (FTC) (the "Antitrust Agencies") consider a group of products or services to be a relevant antitrust market if it can be shown that the consumers purchasing those products do not have sufficient economic substitutes to turn to should a "hypothetical monopolist" become the only seller of the product or service.[212] The Antitrust Agencies can also establish a relevant antitrust market using certain observable market characteristics called "practical indicia" or the "Brown Shoe" factors.[213] As an alternative to the

---

identifies market power and can be sufficient to identify the line of commerce and section of the country affected by a merger, even if the metes and bounds of the market are only broadly characterized."); Carl Shapiro, *Antitrust: What Went Wrong and How to Fix It*, 35(3) ANTITRUST 33-45, 40 (2021) ("IO economists know that the actual economic effects of a practice do not turn on where one draws market boundaries. I have been involved in many antitrust cases where a great deal of time was spent debating arcane details of market definition, distracting from the real economic issues in the case. I shudder to think about how much brain damage among antitrust lawyers and economists has been caused by arguing over market definition."). Dr. Shapiro has twice held the position of Deputy Assistant Attorney General for Economics at the Antitrust Division of the U.S. Department of Justice; Jonathan Baker and Timothy Bresnahan, *Economic Evidence in Antitrust: Defining Markets and Measuring Market Power in* PAOLO BUCCIROSSI, ED., HANDBOOK OF ANTITRUST ECONOMICS 1- 42, 15 (MIT Press 2008) ("Historically, in the antitrust world, market power has most commonly been identified through inference from a high market share. But direct evidence has increasingly become important as an alternative, in part because academic economists have developed a number of econometric approaches for measuring market power."); Aaron S. Edlin and Daniel L. Rubinfeld, *Exclusive or Efficient Pricing? The Big Deal Bundling of Academic Journals*, 72 ANTITRUST L.J. 119-157, 141 (2004) ("Market definition is only a traditional means to the end of determining whether power over price exists. Power over price is what matters . . . if power can be shown directly, there is no need for market definition: the value of market definition is in cases where power cannot be shown directly and must be inferred from sufficiently high market share in a relevant market."); Daniel A. Crane, *Market Power Without Market Definition*, 90(1) NOTRE DAME L. REV. 31-79, 43 (2014) ("Although the market definition/market share paradigm predominates in antitrust analysis, formal doctrine holds that this is merely one of two available routes to proving market power; the other being a 'direct' evidence route."); ABA SECTION OF ANTITRUST LAW, ANTITRUST LAW DEVELOPMENTS, 229 (ABA 7th ed. 2012) (noting that Economists and antitrust practitioners have embraced the use of direct evidence of monopoly power in antitrust litigation).

210. Aaron S. Edlin and Daniel L. Rubinfeld, *Exclusive or Efficient Pricing? The Big Deal Bundling of Academic Journals*, 72 ANTITRUST L.J. 119-157, 141 (2004).

211. Merger Guidelines (2023) §4.3 ("The Agencies identify the 'area of effective competition' in which competition may be lessened 'with reference to a product market (the 'line of commerce') and a geographic market (the 'section of the country.'). The Agencies refer to the process of identifying market(s) protected by the Clayton Act as a 'market definition' exercise and the markets so defined as 'relevant antitrust markets' or simply 'relevant markets.'"). *See also* §4.3.A.

212. Merger Guidelines (2023) §4.3.A.

213. Merger Guidelines (2023) §4.3 ("A relevant market can be identified from evidence on observed market characteristics ('practical indicia'), such as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors. Various practical indicia may identify a relevant market in

Brown Shoe factors, a Hypothetical Monopolist Test ("HMT") can be used to assess whether there are sufficient economic substitutes to the proposed group of products or services, such that a price increase made by a hypothetical monopolist of the identified group would be rendered unprofitable by buyers switching to an outside good.[214] I do not perform a formal HMT here because the Brown Shoe factors are satisfied, and because there was little variation in the price of Commercial Bail Bonds in California due in part to the alleged Conspiracy. (Consumer responsiveness to price changes is a key input to perform a HMT.) Moreover, given the limited functional substitutes to Bail Bonds, it would be unnecessary for a hypothetical monopolist of Bail Bonds in California to control alternative financial products in order to raise prices of Bail Bonds over competitive levels. Put differently, to even qualify as an *economic* substitute that constrains Bail Bond prices, a product must be a *functional* substitute. That there are so few functional substitutes—only cash, cash equivalents, or sometimes real property titles may be used[215]—implies there are no close economic substitutes to Bail Bonds. Once a relevant antitrust market is established, monopoly power over that market can be demonstrated with evidence that (1) the firm(s) in question account for a significant share of the relevant market and (2) that high share is protected by entry barriers into the market, which would hamper a would-be rival from entering.[216]

58. Below, I demonstrate using both proofs that Commercial Bail Bonds is the relevant antitrust market, that the relevant geographic market is the state of California, and that Defendants and Co-Conspirators have collective monopoly power in this market. *First*, I show using direct proof that Defendants and Co-Conspirators exercised monopoly power over Commercial Bail Bonds during the Class Period, which directly demonstrates their monopoly power and the

---

different settings."). *Id*. citing *Brown Shoe Co. v. United States*, 370 U.S. 294 (1962), quoted in *United States v. U.S. Sugar Corp.*, 73 F.4th 197, 204-07 (3d Cir. 2023) (affirming district court's application of Brown Shoe practical indicia to evaluate relevant product market that included based on the unique facts of the industry.).

214. Merger Guidelines (2023) §4.3.A.

215. CAL. PENAL CODE § 1298 ("In lieu of a deposit of money, the defendant or any other person may deposit bonds of the United States or of the State of California of the face value of the cash deposit required . . . or the defendant or any other person may give as security any equity in real property which he or she owns . . ."). *See also Bond Postings*, UNITED STATES DISTRICT COURT CENTRAL DISTRICT OF CALIFORNIA, https://www.cacd.uscourts.gov/court-procedures/filing-procedures/bond-postings (last visited Dec. 10, 2024) ("If posting money to satisfy a condition of bail, only a cashier's check or money order will be accepted. Cash (over $5,000.00) and personal checks are NOT accepted."); *Inmate Bail Frequently Asked Questions*, SAN MATEO COUNTY SHERIFF'S OFFICE, https://www.smcsheriff.com/inmate-bail-frequently-asked-questions (last visited Dec. 11, 2024) ("If an inmate is eligible for bail, there are two ways to post bail. The first is to post a cash bond. Simply bring the amount of bail to the cashiers window located in the lobby of the jail, and the staff member will assist you. The second way to post bail for an inmate is to use a Bail Bonds Agency.").

216. Merger Guidelines (2023) §2.4.C ("When evaluating a potentially unlawful merger of current competitors, the Agencies will assess whether entry by other firms would be timely, likely, and sufficient to replace the lost competition using the standards discussed in Section 3.2. The existence of a perceived or actual potential entrant may not meet that standard when considering a merger between firms that already participate in the relevant market. The competitive impact of perceived and actual potential entrants is typically attenuated compared to competition between two current market participants. However, because concentrated markets often lack robust competition, the loss of even an attenuated source of competition such as a potential entrant may substantially lessen competition in such markets. Moreover, because the Agencies seek to prevent threats to competition in their incipiency, the likelihood of potential entry that could establish that a merger's effect 'may be' to substantially lessen competition will generally not equal the likelihood of entry that would rebut a demonstrated risk that competition may be substantially lessened."). *Id*. §3.2.

existence of a relevant antitrust market. *Second*, using indirect proof, I demonstrate (i) that Commercial Bail Bonds satisfies the Brown Shoe factors, (ii) that Defendants collectively control the vast majority of this relevant antitrust market, and (iii) that there are significant barriers to entry. This implies that *if* the Conspiracy existed, Defendants and Co-Conspirators would be able to successfully inflate prices on commercial Bail Bonds above competitive levels.

A. Direct Evidence of Defendants' Market Power

59. My quantitative analyses performed in Part IV demonstrate that Defendants can and do profitably inflate the Purchase Price of Bail Bonds beyond competitive levels in California. These analyses show that the Effective Rates charged to Customers were inflated over competitive levels, and thus an artificially higher Purchase Price.[217] The ability to raise prices above competitive levels is a hallmark of market power, as Defendants could not have inflated Purchase Prices if they did not possess (collective) market power.

B. Indirect Evidence of Defendants' Market Power

1. The Brown Shoe Factors Demonstrate That Commercial Bail Bonds Are the Relevant Product Market in California

60. The Brown Shoe factors, or practical indicia of the contours of the market, may be used to identify a relevant antitrust market. The Brown Shoe factors are (1) industry or public recognition of the market, (2) peculiar product characteristics and uses (3) unique production facilities, (4) distinct customers, (5) distinct prices, (6) sensitivity to price changes, and (7) specialized vendors.[218] There is no precise formula for applying these factors, nor is there a set number of factors that must be satisfied to identify a relevant antitrust market (the Supreme Court has used as few as three).[219] Nevertheless, I demonstrate below that that Commercial Bail Bonds satisfies all seven factors, which strongly implies that Commercial Bail Bonds are a relevant antitrust market.

- The first factor, industry or public recognition of the market, is satisfied. The state of California recognizes Commercial Bail Bonds as a market and regulates that

---

217. *See* Exhibit 13, *infra*.

218. Merger Guidelines (2023) §4.3 ("A relevant market can be identified from evidence on observed market characteristics ('practical indicia'), such as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors. Various practical indicia may identify a relevant market in different settings."). *See also Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962) (markets may "be determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors"). *Regeneron Pharms., Inc. v. Novartis Pharma AG*, 96 F.4th 327, 339 (2d Cir. Mar. 18, 2024) ("[I]ndustry or public recognition of the []market as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors.").

219. Merger Guidelines (2023) §2.5.A.2, n. 29 ("See *Brown Shoe*, 370 U.S. at 328-34; *Illumina*, slip op. at 20-22 ('There is no precise formula when it comes to applying these factors. Indeed, the Supreme Court has found a vertical merger unlawful by examining only three of the *Brown Shoe* factors.' (cleaned up)); *Fruehauf Corp. v. FTC*, 603 F.2d 345, 353 (2d Cir. 1979); *U.S. Steel Corp. v. FTC*, 426 F.2d 592, 599 (6th Cir. 1970).").

market through the CDI.[220] Academics, such as the UCLA School of Law Criminal Justice Reform Clinic, recognize "the commercial bail bond industry" in the United States generally, and in California specifically.[221] Industry participants, including Defendants and Co-Conspirators themselves, recognize themselves as operating within a Commercial Bail Bond industry in California.[222]

- The second factor, peculiar product characteristics and uses, is similarly satisfied. A surety Bail Bond has a single use case—to free the Accused from pretrial incarceration. A Bail Bond has no other uses.[223] There are limited functional substitutes for a Bail Bond. Absent a Bail Bond, the Accused must deposit cash with the Court (a "cash bond") or put up property or assets (a "property bond") to cover the Bail amount.[224]

---

220. *Bail Schedules*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#:~:text=Bail%20schedules%20are%20regulated%20by,bail%20information%20for%20that%20court (last visited Dec. 11, 2024).

221. Devil in the Details at 3 ("The Commercial Bail Bond Industry: Desperate to avoid the dire consequences of pretrial detention, people accused of crimes resort to the commercial bail bond industry for help. The commercial bail bond industry in the United States – which involves both bail agents and the sureties that finance the bail – writes about $14 billion in bonds each year (a conservative estimate) and takes profits of $2 billion annually.").

222. *See* Nairin Dep. at 120:4-14 [redacted]; Nairin Dep. Ex. 178 (ASC 061709) at -711 [redacted]; Wood Dep. at 53:24-54:5 [redacted] Francis Dep. 123:22-124:4 [redacted] Schneider Dep. at 139:16-25 [redacted]).

223. State Licensing Handbook at 1 ("The defendant, the defendant's family and friends, or a professional bail bond agent executes a document that promises to forfeit the sum of money determined by the court to be commensurate with the gravity of the alleged offense if the defendant fails to return for the trial date.").

224. CAL. PENAL CODE § 1298 ("In lieu of a deposit of money, the defendant or any other person may deposit bonds of the United States or of the State of California of the face value of the cash deposit required . . . or the defendant or any other person may give as security any equity in real property which he or she owns . . ."); *see also Bail Bonds and Cash Bails*, SAN DIEGO COUNTY SHERIFF'S DEPARTMENT (Mar. 2022), https://apps.sdsheriff.net/PublicDocs/SB978/Human%20Resource%20Services%20Bureau/Professional%20Staff%2

- The third factor, unique production facilities, is satisfied. In this case, Bail Bonds are "produced" through the unique interaction of the court system, the Sureties, and the Bail Agents.[225]

- The fourth factor, distinct customers, is satisfied. Bail Bond customers are the Accused (or their friends and family) seeking to release the Accused from pretrial detention. No other customer segment has an interest or use for Bail Bonds.[226]

- The fifth factor, distinct prices, is satisfied. Bail Bond prices are unique because they are a function of the Court-determined Bail amount and a CDI approved Filed Rate.[227]

- The sixth factor, sensitivity to price changes, is satisfied. On the one hand, there have been no meaningful price changes in the Bail Bond industry to which customers could respond. On the other hand, the Bail Bond industry has expressed a uniform *insensitivity* to price changes regardless of external circumstances. Put differently, that Bail Bonds have *not* changed premium rates for over two decades (while real interest rates in the market have fluctuated wildly) indicates that a Bail Bond is a separate and distinct financial product.

- The seventh factor, specialized vendors, is satisfied. Bail Agency offices and Bail Agents themselves have a single purpose, to sell Bail Bonds to Bail Bond Customers.[228]

0Development/Inmate%20Processing/DIA%20Training/DIA%20Training%20Manual/Section%205%20Bail%20Bonds%20and%20Cash%20Bails.pdf at 4 ("A bond is a LEGAL document.") (emphasis in original).

225. Ariel Nelson et al., *Commercialized (In)justice Litigation Guide*, NATIONAL CONSUMER LAW CENTER (Jun. 2020), https://www.nclc.org/wp-content/uploads/2022/09/WP_Litigation_Guide.pdf at 8 ("Commercial bail bonds are, at their core, a specialized form of insurance."). *See also* Dave Jones, *Recommendations for California's Bail System*, CALIFORNIA DEPARTMENT OF INSURANCE (Feb. 2018), https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/CDI-Bail-Report-Draft-2-8-18.pdf [hereafter Commissioner Recommendations] at 6 ("The process by which a person purchases a bail bond differs substantially from a person who is purchasing homeowners insurance, but the bail consumer population should [also] be afforded equal attentiveness, considering the vulnerable state one is in when they or their family and/or friends are purchasing bail.").

226. Joshua Page et al., *A Debt of Care: Commercial Bail and the Gendered Logic of Criminal Justice Predation*, 5(1) THE RUSSELL SAGE FOUNDATION JOURNAL OF THE SOCIAL SCIENCES 150-172, 157 (Feb. 2019) ("A cosigner is usually a family member, romantic partner, or close friend who formally accepts financial and legal liability for the defendant making court appearances."); Christa Brown, *Do the Math: Money Bail Doesn't Add Up for San Francisco*, OFFICE OF THE TREASURER & TAX COLLECTOR CITY & COUNTY OF SAN FRANCISCO (Jun. 2017) at 1, 3 ("Many people who pay bail are the friends and families of the defendant; often, the wives, mothers, sisters and grandmothers[.]").

227. *Bail Agent or Agency*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/0200-industry/0050-renew-license/0200-requirements/bail-agent.cfm (last visited Dec. 11, 2024) (explaining that Surety companies "file rates with CDI" and that "[t]he court determines the amount of the bond".).

228. *See* Cook Dep. Ex. 236 at 61 [redacted] *Fact Sheet: Profit over People*, CENTER FOR AMERICAN PROGRESS (Jul. 6 2022), https://www.americanprogress.org/article/fact-sheet-profit-over-people/ ("Clients (individuals arrested and charged

2. The Relevant Geographic Market Is California

61. For a Surety to do business in California, it must have its rates approved by the CDI. For an Agent to do business in California, it must register with the CDI.[229] And for a Customer to obtain a Bail Bond for a California Court, it must use an approved Agent and cannot use out of state Agents.[230] For these reasons, the relevant Geographic market is California.

3. Defendants Account for Over 90 Percent of the Commercial Bail Bond Market in California

62. The Antitrust Agencies calculate market shares for all firms that currently supply products and services in the relevant market.[231] Comparing the available Surety Data against publicly known estimates shows that Defendant Sureties account for nearly all Bail Bonds written in California.

63. By bonds written, according to a February 2018 CDI report, "[t]here are approximately 175,000 bail bonds written per year in California."[232] This report does not specify the methodology or exact period covered. [redacted].[233] [redacted] While a market share over 100 percent is not possible (the over 100 percent value is driven by the approximate nature of the CDI estimate and the unknown year range), the point is that Defendants account for a large share of the market.

64. By Agents represented, as of 2024 there the CDI reports that there are approximately 2,300 Bail Agents registered in the state of California.[234] [redacted]

---

with a crime) work directly with commercial bail agents, who are responsible for initiating the contractual relationship between the client and the bail company and enforcing bail contracts."); *What is a Bail Agent*, CBAA, https://cbaa.com/bail-agent-portal/ (last visited Dec. 11, 2024) ("A bail bonds person, bail bond agent or bond dealer is any person, agency or corporation that will act as a surety and pledge money or property as bail for the appearance of a defendant in court.").

229. *Bail Agent or Agency*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/0200-industry/0050-renew-license/0200-requirements/bail-agent.cfm (last visited Dec. 11, 2024) (an agent must "Complete a minimum of 20 hours of approved prelicensing classroom study in subjects pertinent to the duties and responsibilities of a bail licensee, including, but not limited to, all laws and regulations related thereto, rights of the accused, and ethics" and then "take and pass the required examination.").

230. *Bail Bonds and Cash Bails*, SAN DIEGO COUNTY SHERIFF'S DEPARTMENT (Mar. 2022), https://apps.sdsheriff.net/PublicDocs/SB978/Human%20Resource%20Services%20Bureau/Professional%20Staff%20Development/Inmate%20Processing/DIA%20Training/DIA%20Training%20Manual/Section%205%20Bail%20Bonds%20and%20Cash%20Bails.pdf at 1, 4 ("Bonds are accepted from any authorized bail agent from anywhere in the state of California. Bail agents must have in their possession an identification card confirming his/her status as a licensed bail agent with the California Department of Insurance.").

231. Merger Guidelines (2023) §4.4.

232. Commissioner Recommendations at 5.

233. *See* Exhibit 15. Including outliers, this figure is 194,119.

234. *See Bail Agents*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailAgents (last visited Dec. 11, 2024) ("Currently, there are approximately 2,300 bail agents and organizations in California licensed by CDI.").

[redacted][235] [redacted]
[redacted][236]

4. High Barriers to Entry Protect Defendants' Market Power

65. The Antitrust Agencies typically consider whether an outside firm could enter a market to defeat the exercise of monopoly power.[237] High entry barriers are any characteristics of the market that prevent the "timely, likely, and sufficient" entry of a would-be rival.[238] In this case, the principal barrier to entry is Surety licensure with the CDI. According to AIA's Mark Francis [redacted]."[239]

III. THE CHALLENGED CONDUCT

66. In this section, I review the alleged Conspiracy and the two elements of Challenged Conduct: An alleged agreement to fix the Filed Rates and an alleged agreement to suppress Rebating. I first review the history and qualitative evidence of the Alleged Conspiracy, which helps explain the economic motivations and mechanics of the Challenged Conduct. I then explain the economics of the how each of the two elements of the Challenged Conduct would affect Consumer Purchase Prices in this industry.

67. While I review qualitative evidence to place the alleged Conspiracy in context, at this time, I do not offer an opinion as to the qualitative evidence is consistent with an agreement to fix prices. Economists may use qualitative evidence to study economically significant aspects of cartel behavior, and economists frequently bring their expertise to bear in analyzing documentary evidence of communications among alleged cartel members and other qualitative aspects of cartel organization and behavior.[240] These qualitative analyses can be assessed with common evidence and methods. For the purposes of this report, however, my opinions regarding the evidence consistent with the existence of an agreement to fix prices are limited to the quantitative evidence I analyze in Part IV.

---

235. *See* Singer Workpapers for details.
236. Equal to 2,152 / 2,300.
237. Merger Guidelines (2023) §2.4.C; §3.2.
238. Merger Guidelines (2023) §3.2.
239. Francis Dep. at 89:12-15.
240. *See, e.g.*, Margaret C. Levenstein and Valerie Y. Suslow, *What Determines Cartel Success?*, 44(1) JOURNAL OF ECONOMIC LITERATURE 43-95 (2006) [hereafter Levenstein & Suslow (2006)]. Professors Margaret Levenstein and Valerie Suslow review the empirical economic literature studying the determinants of cartel success. They explain that economists recognize that cartels often achieve collusion through the "development of sophisticated and flexible organizations," which they establish "over time as a result of organizational learning." *Id*. at 69. Economists also recognize the "difficulties in observing and quantifying such information [on organizational learning] for a large number of industries." *Id*. For this reason, economic case studies, which focus on a single cartel within a single industry, relying less on large data sets and more on qualitative evidence, "are much more amenable to studying organizational issues[.]" *Id*.

A. The Alleged Conspiracy

68. The CDI was charged with regulating the Bail Bond industry with the passage of the Bail Bond Regulatory Act in 1937.[241] [redacted][242] [redacted][243] This description comports with Exhibit 11, which shows that 10 percent has remained the Standard Rate, and with my own analysis of the Net Premium paid to Sureties. Therefore, by Defendants' own admission, the 10 percent Standard Rate has remained fixed since 1953. There does not appear to be any actuarial justification for this ten percent rate.[244]

69. The second element of the Conspiracy, the suppression of Rebating, began short after the passage of The Insurance Rate Reduction and Reform Act ("Proposition 103") in 1988. Proposition 103 eliminated California's anti-rebating statute on insurance premiums, which included Bail Bonds.[245] The act was expressly intended to encourage competition in the insurance marketplace, and removed the authority of the CDI to regulate the *competitiveness* of Filed Rates.[246] In theory, this would have rendered the Filed Rates as a maximum, and the Effective Rates actually charged to Customers would have been competed down to competitive levels through Agent-level rebating.

70. Competition did briefly materialize. The record evidence shows that Aladdin Bail Bonds, the largest Agency at the time and today,[247] began advertising Rebated Bonds. [redacted]

241. *Id*.
242. Pltf. Ex. 201 (ASC 555573) at -573, -582.
243. Pltf. Ex. 201 (ASC 555573) at -573, -582.
244. Carmicheal Dep. at 58:24-59:12 [redacted]").
245. Pltf. Ex. 201 (ASC 555573) at -573, -582.
246. *Prop 103 Consumer Intervenor Process*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/150-other-prog/01-intervenor/index.cfm (last visited Dec. 11, 2024). In 1990, the California Attorney General reiterated that "Proposition 103 . . . divest[s] the commissioner of earlier authority over the competitiveness of rates.". *See also In re Cal. Bail Bonds Antitrust Litig.*, ECF No. 67-7 at 33.
247. Hayes Dep. Ex. 118 ("PBC is the largest retail bond agency in the state of California."). *See also* Exhibit 2, *supra*. Aladdin was previously owned by Pacific Bonding Corporation, and later by Two Jinn Inc.

[redacted]."[248] Shortly after the 2004 case *Pacific Bonding Corporation v. Garamendi*, that affirmed the right for agents to offer Rebates, Robert Spencer Douglas, the owner and operator of Aladdin who brought forward the *Pacific Bonding* case, was required to sell Aladdin in a plea deal related to an unrelated matter.[249] [redacted].[250] [redacted].[251] Despite the 2004 ruling that Rebating was now legal, Rebates did not become a standard industry practice for over a decade.[252]

71. In and around October 2016, the CDI sent letters expressing its concerns about excessive Filed Rates to nearly every Defendant (the "CDI Inquiry").[253] A group of sureties including ASC, Bankers, and Lexington led the response to the CDI Inquiry and supported the ten percent rate, insisting that premium rebating was common and that a ten percent Filed Rate was a state and national standard.[254] [redacted]

72. [redacted][257] [redacted]

248. Hayes Dep. Ex. 119.

249. Lance Pugmire, *Bail Bond Chief Takes Plea Deal*, LOS ANGELES TIMES (Jun. 26, 2004), https://www.latimes.com/archives/la-xpm-2004-jun-26-me-bailplea26-story.html ("The president of a major California bail bond agency agreed Friday to forfeit his license and sell his corporation as part of a plea agreement with prosecutors who charged that he paid inmates to illegally solicit business from others behind bars.").

250. *See* Lauricella Dep. Ex. 65 (SEAVIEW-00026865) at -871-72.

251. Hayes Dep. at 27:14-19 ("[redacted]").

252. *See* Part IV.C.2, *infra*.

253. Carmichael Dep. Ex. 228 (ASC 465500); Carmichael Dep. at 197:18-24 [redacted] Jallad Dep. at 131:12-18 [redacted].

254. Carmichael Dep. Ex. 229 (ASC 554987) at -988 [redacted].

255. Carmichael Dep. Ex. 228 (ASC 465500) at -500 [redacted]).

256. Carmichael Dep. Ex. 228 (ASC 465500) at -500.

257. Carmichael Dep. Ex. 227 (ASC 538171) at -171.

[redacted]."[258]

[redacted]."[259]

73. Accordingly, the Plaintiffs allege that Defendants have conspired to fix the Standard Rates (most notably the 10 percent Standard Rate) and to have conspired to suppress the practice of Rebating below the official Filed Rates. These two activities form the two elements of the Challenged Conduct.

B. The Two Elements of the Challenged Conduct

74. Collusion occurs when a group of sellers coordinate their economic behavior to collectively approximate (or even replicate) the same pricing and associated profits of a monopolist.[260] Economists have long recognized that monopolists enjoy greater profits than firms in competitive industries.[261] A monopolist sets prices above what would be charged in a competitive market, increasing its own profits at the expense of consumer welfare. Such a position is obviously desirable for a firm, but difficult to obtain because antitrust law impedes a firm from acquiring all of its rivals to make itself a monopolist.[262] If a group of firms in an industry reach an agreement to not compete with one another, however, they can achieve monopoly-like prices and profits ("supra-competitive" outcomes") by collectively behaving like a monopolist.[263] This is commonly achieved by an agreement to inflate prices, reduce quantity, reduce quality, or decrease some other consumer benefit relative to what would occur in a competitive environment.[264] Such an agreement is termed "collusion," and the group of firms with such an agreement is called a "cartel."[265]

75. The alleged price-fixing Conspiracy in this case contains two mutually reinforcing elements of Challenged Conduct that served to inflate the Effective Rates and Purchase Prices charged to Customers: (1) an agreement to fix and maintain an artificially inflated Standard Rate, and (2) an agreement to discourage and suppress the practice of advertising and issuing Rebates.[266] Absent the Conspiracy, the Plaintiffs allege that Customer's Effective Rates and Purchase Prices would have been lower, both because (1) all Filed Rates (both the Standard Rate and the Qualified Rates) would be lower, and because (2) more Customers would have obtained the same or higher Rebates than they actually did. The Plaintiffs do not allege that the Challenged Conduct is a strict agreement to *always* price Bail Bonds at a particular Filed Rate, but rather to establish ten percent as the Standard Rate, set artificially high Qualified Rates, and to impair the ability of Class

---

258. Hayes Dep. Ex. 122 at 3.
259. Hayes Dep. Ex. 122 at 3.
260. MODERN IO at 122-154.
261. *See* MANKIW Chapter 15.
262. ROBERT C. MARSHALL AND LESLIE M. MARX, THE ECONOMICS OF COLLUSION, CARTELS AND BIDDING RINGS, 8 (The MIT Press 2012).
263. *Id*. at 7. Colluding firms do not need to achieve the optimal monopoly price to enjoy enhanced profits. Any supra-competitive price (that is, prices above what would exist in competition) benefits the firms at the expense of customers.
264. *Id*. at 85.
265. MANKIW at 339.
266. Complaint at ¶¶6-8.

Members to negotiate down from that the Filed Rates via the suppression of Rebating.

76. Taken together, the two elements of the Challenged Conduct mutually reinforce each other to inflate the Effective Rate charged to the Customer. The Sureties allegedly agreed to fix the formal Filed Rates, and then allegedly agreed to suppress and frustrate the ability of customers to obtain prices less than the Filed Rates. Notably, while all Agents would directly benefit from the Customer paying higher Effective Rates, it is also in the interest of the Sureties—even those Sureties that set their Contract Rates as a percentage of the Penal Value rather than the Filed Rate. By maintaining high Effective Rates, Sureties are able to charge Agents higher Contract Rates than would prevail under competition. As explained by Michael Whitlock in a 2015 email to William Carmichael:[267]

[redacted]

[redacted].[268] This incentive helps explain why a Surety would be keen to keep Filed Rates high and Rebating low.

77. The Challenged Conduct is alleged to have started at least in the beginning of the Class Period and continues to this day. As explained in Part III.A, in October 2016, the CDI began inquiring about excessive Filed Rates to nearly all Defendant Sureties, which quickly circulated to all members of the American Bail Coalition.[269] The quantitative evidence tested in Part IV supports the thesis that the Conspiracy began to lose some cohesion after the October 2016 CDI Inquiry. Therefore, for the purposes of the economic analyses that follow, I treat October 2016 through the present as an "attenuated" period during which the Challenged Conduct appears to have been less effective.

267. Carmichael Dep. Ex 227 (ASC 538171) at -171 (emphasis added).

268. Thompson Dep. at 50:17-51:20 [redacted]

269. See n. 253, *supra*.

1. Agreement to Fix Filed Rates

78. The first element of the Challenged Conduct, the agreement to fix the Filed Rates, is what economists and antitrust practitioners consider a traditional "naked" price-fixing agreement.[270] This is the most straightforward type of collusion, whereby, "rival sellers in some manner arrive at an understanding as to what price [to charge]," similar to how a monopolist would set its own prices.[271] Fixing the Filed Rates at an artificially high level has straightforward economic effects—a price fix of the Filed Rates would directly affect the Purchase Prices charged to Consumers, as all Discounts, whether Qualified Rates or Rebates, are tethered to the Standard Rate. And consumers that purchased at the Standard Filed Rate with no Rebate would also be injured. Inflated Filed Rates would allow Agents to collect inflated premiums and enable Sureties to charge Agents larger Contract Rates than what would persist in a more competitive market.

2. Agreement to Suppress Rebating

79. The second element—namely, the agreement to suppress the practice of advertising and issuing Rebates—is essentially an agreement not to compete over prices. This practice gives Customers the false impression that anything less than the Filed Rate is illegal or fraudulent.[272] The suppression of information and active propagation of *misinformation* creates an information asymmetry between the Customer and the Sureties and Agents, which helps ensure that most Customers pay the Filed Rate and nothing less.

80. Economists study information asymmetry between buyers, sellers, principles, and agents, because knowledge asymmetries between parties often has profound effects on market prices.[273] In the famous paper "The Market For Lemons,"[274] economist George Akerlof showed how information asymmetries of used car quality between buyers and sellers—where sellers know whether the car being sold is a reliable automobile or a "lemon"—affected the *market prices* of both types of cars.[275] He then demonstrated how asymmetric information could affect pricing in other sectors such as insurance, employment, and credit markets.[276] Asymmetric information affects prices negotiated between buyers and sellers generally; or in this case, between Bail Agents

---

270. *Price Fixing*, FEDERAL TRADE COMMISSION, https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/dealings-competitors/price-fixing (last visited Dec. 11, 2024) ("A naked agreement among competitors to fix prices is almost always illegal, whether prices are specified at a minimum, maximum, or within some range. Illegal price fixing occurs whenever two or more competitors agree to take actions to raise, lower, maintain, or stabilize the price of any product or service.").

271. Levenstein & Suslow (2006).

272. Complaint at ¶¶8-9.

273. *See, e.g.*, MANKIW at 452-457 ("22-1 Asymmetric Information."). S*ee also* PHILLIP AREEDA AND HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION, 469 (Wolter Kluwer 4th ed.) [hereafter AREEDA & HOVENKAMP] at 469 ("[T]he research I describe here focuses on *asymmetries* of information, th[e] fact that different people know different things.").

274. George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84(3) THE QUARTERLY JOURNAL OF ECONOMICS 488-500 (1970).

275. *Id*. at 489 ("An asymmetry in available information has developed: for the sellers now have more knowledge about the quality of a car than the buyers. But good cars and bad cars must still sell at the same price since it is impossible for a buyer to tell the difference between a good car and a bad car.").

276. *Id*. at 492-499.

and Class Members.

81. Economists recognize that one of the primary ways a cartel reduces competition is "by taking actions to increase information asymmetry."[277] Nobel Laureate economist Joseph E. Stiglitz observed that "even a small amount of information imperfection could have a profound effect on the nature of [market] equilibrium," and as such, market actors "have an incentive to increase asymmetries of information in order to enhance market power."[278] Phillip Areeda and Herbert Hovenkamp describe these same causal mechanisms: "[U]ncertainty stands in the way of oligopolists' achieving cartel-like results through recognized interdependence. This uncertainty can be reduced by the adoption of one or more practices—for example by exchanges of information . . . about the desired direction of future price movements in a market. . . Our concern is that such practices can make possible cartel-like prices or other anticompetitive results that would not otherwise occur at all or so frequently or so completely."[279] Here, the Challenged Conduct involved suppressing advertisements about Discounts and Rebates, which created information asymmetry in favor of the Bail Agents.

82. Information asymmetries can be used to manipulate prices because they affect negotiations between buyers and sellers. In classic negotiation theory, a negotiator's "strength" relative to her counterparty is determined by her "Best Alternative To a Negotiated Agreement," or "BATNA."[280] That is, a party's BATNA is her outside option if neither party can come to an agreement. As the value of a negotiator's BATNA increases, she can press for more favorable terms from her counterparty. A "strong" negotiator has many attractive outside options should the present negotiation fail, while a "weak" negotiator has poor or no alternatives to the present negotiation. For example, a job candidate with five other offers is a stronger negotiator compared to a candidate with none. Empirical studies on the strength of one's BATNA confirm that having strong alternatives significantly increases the share of value that a negotiator can claim.[281] For

---

277. AREEDA & HOVENKAMP at 470 (explaining that market actors can "reduce competition" by "taking actions to increase information asymmetry.").

278. Joseph E. Stiglitz, *Information and the Change in the Paradigm in Economics*, 92(3) THE AMERICAN ECONOMIC REVIEW 460-501, 461, 487 (2002). This harm is not theoretical and has manifested in recent cases. S*ee, e.g.*, *Todd v. Exxon Corp.*, 275 F.3d 191, 197, 211-13 (2nd Cir. 2001) (frequent exchange of partially aggregated current and future information could "reduce[] the incentive for defendants to bid up salaries"); *In re Pharm. Indus. Average Wholesale Price Litig.*, 491 F. Supp. 2d 20, 36-37 (D. Mass. 2007) (crediting theory that "asymmetric information … pose[d] problems for price competition," removing "competitive pressure on doctors to lower [] prices"), *aff'd*, 582 F.3d 156 (1st Cir. 2009); *Nitsch v. Dreamworks Animation SKG Inc.*, 315 F.R.D. 270, 297-98 (N.D. Cal. 2016) (showing anticompetitive effects through "economic models of asymmetric information.").

279. AREEDA & HOVENKAMP ¶1435a.

280. ROGER FISHER, WILLIAM L. URY, AND BRUCE PATTON, GETTING TO YES: NEGOTIATING AGREEMENT WITHOUT GIVING IN, 102-104 (Penguin 2nd ed. 2011) ("What is your BATNA—your Best Alternative To a Negotiated Agreement? *That* is the standard against which any proposed agreement should be measured. That is the only standard that can protect you both from accepting terms that are too unfavorable and from rejecting terms it would be in your interest to accept . . . *The better your BATNA, the greater your power.* People think of negotiating power as being determined by resources determined by resources like wealth, political connections, physical strength, friends, and military might. In fact, the relative negotiating power of two parties depends primarily upon how attractive to each is the option of not reaching agreement.") (emphasis in original).

281. Robin L. Pinkley, Margaret A. Neale, and Rebecca J. Bennett, *The Impact of Alternatives to Settlement in Dyadic Negotiation*, 57(1) ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES 97-116 (1994) [hereafter Pinkley (1994)].

example, in one experimental study of job negotiations, negotiators with a strong BATNA claimed 56 percent of the value up for negotiation relative to their low or no BATNA counterparties (as opposed to a 50-50 split).[282] Importantly, the "strength" of a negotiator is not just determined by their individual ability to bargain (charisma), but by the fundamentals of their BATNA.

83. Critically, asymmetric knowledge of a counterparty's BATNA confers an advantage to the negotiator who knows more.[283] In many negotiations, participants are unaware of their counterparty's alternatives. Absent any knowledge, negotiators *tend* to assume a similar level of relative BATNA power to their counterpart.[284] Research shows that having knowledge of a counterparty's BATNA confers negotiating power to the stronger negotiator and allows them to claim more economic value on average.[285]

84. In this case, the asymmetric information created by the Challenged Conduct cuts two ways. *First*, absent the Challenged Conduct, Class Members would be generally aware that Agents are able to offer Rebates, and a Class Member could hold out in a negotiation by threatening to go to another Agent to receive a better Rebate. *Second*, Agents would know this as well and would be incentivized to cut a deal closer to their marginal costs, with the knowledge that they could be undercut by their rivals. Thus, under competitive circumstances, Class Members would be able to negotiate down the Purchase Price for a Bail Bond by playing sellers off each other.

85. If the Challenged Conduct *removes* this information from Class Members, the dynamics change. Now, a Class Member would not know that Rebating was even possible, and may accept a ten percent Effective Rate under the (false) belief that it was a government fiat or unchangeable industry standard. Moreover, Agents could hold out for their preferred ten percent rate, confident in the knowledge that they will not be undercut by other Agents in the Conspiracy. These dynamics would impair or completely erase a Class Member's abilities to negotiate.

86. While the Challenged Conduct would generally result in higher gross premiums because the average Customer would be unaware of their ability to negotiate for a better rate, a small subset of particularly well-informed Customers in an environment of many sellers would have this knowledge regardless. These well-informed Customers would be *less* affected (although they would still be harmed) by the Challenged Conduct, and the reduction in information

---

282. *Id*. at 110 ("When an individual with a BATNA negotiated with someone with no BATNA or a BATNA of lower value, they received a greater proportion of the outcome (56% on average). In contrast, when both members of the dyad had the same BATNA, the outcome was split almost evenly between the two negotiators.").

283. *See, e.g.*, LEIGH THOMPSON, THE TRUTH ABOUT NEGOTIATIONS (FT Press 1st ed. 2008), Truths 10 and 13.

284. Pinkley (1994) at 103 ("Since individual tend to base their perceptions of others on their own situations and experiences, negotiators will initially estimate the other party's BATNA by using their own BATNA as an anchor/ Prior to the negotiation interaction, they are likely to project their own situation on to their opponent; if they have an attractive BATNA, they will assume that their opponent also has a BATNA or inflate the value of the opponent's BATNA."). *See also* Ricky Siu Wong, *Knowledge of Opponents' Power in Power-Asymmetric Negotiations: Whose Knowledge Shapes the Structure of Outcomes?*, 11(2) CONTEMPORARY MANAGEMENT RESEARCH, 133 (2015) [hereafter Wong (2015)] ("I examined the impact of strong and weak negotiators' BATNAs on their perceptions about others' BATNAs, prior to negotiations. The findings show that the quality of negotiators' BATNAs influenced how their expectations about others' BATNAs were formed. Most strong negotiators (94%) and weak negotiators (90%) reported that they believed their opponents also had a BATNA. Moreover, their estimates were similar to their own BATNAs.").

285. Wong (2015) at 117-142.

asymmetry would put downward pressure on the gross premium.[286] Importantly, even a perfectly informed Customer in an area with many Bail Bond sellers would still be worse off under the Challenged Conduct, because their bargaining position would be weakened (relative to a competitive world) from Bail Agencies downplaying the availability of price discounts.[287]

IV. QUANTITATIVE EVIDENCE OF A PRICE-FIXING CONSPIRACY

87. In this section, I empirically assess the available quantitative evidence of the alleged Conspiracy using standard econometric and economic theory methods. I empirically test the hypothesis that the Class Members were charged artificially higher Purchase Prices during the Class Period. These analyses provide strong evidence consistent with the presence of a Conspiracy and also form the basis for my later estimation of Common Impact and Aggregate Damages. In particular, this exercise constitutes the first part of a two-part proof of proving Common Impact—namely, showing that the Challenged Conduct generally raised the Filed Rates (or suppressed Rebates).

88. Economists routinely use the framework of a "but-for" world to model counterfactual outcomes, such as what prices and outputs would be "but-for" actions that resulted in market power. This technique allows economists to model "overcharge," or the difference between inflated, actual world prices and those prices that would have prevailed in a more competitive environment, an environment "but-for" the alleged exclusionary conduct.[288] Here, the ultimate question is whether the Challenged Conduct inflated the Purchase Prices charge to consumers.

89. As explained in Part I.A.2, the Purchase Price of a Bond is the product of the Bond Amount and the Effective Rate:

$$Purchase\ Price = Bond\ Amount * Effective\ Rate$$

where the Effective Rate is the Filed Rate less any Rebates (both expressed as percentage of the Bond Amount):

$$Effective\ Rate = Filed\ Rate - Rebate\ Rate$$

Accordingly, the Effective Rate could be artificially inflated either by increasing the Filed Rate, decreasing the Rebate amounts, or both.

90. In this case, the actual Purchase Price charged to Consumers is not observable for every Class Member in the Surety Data. While the Filed Rates during the Conduct Period are known for each and every Class Member's transaction, the prevalence and degree of Rebating during the Conduct Period is not reported to Sureties, and thus not contained in the Surety Data.[289]

---

286. *See* Part III.B.2, *supra*.

287. *Id*.

288. Dijk & Verboven (2008) at 2334 ("The challenge primarily lies in estimating the price overcharge, which is the difference between the actual price charged during the collusive period and the hypothetical price that would have occurred but for the collusion.").

289. *See* Part IV.A.1, *infra*.

Therefore, while it is possible to assess the Gross Premium nominally charged to a Customer, it is not possible to know if they actually paid this amount based on the Surety Data alone, as a Customer may have been charged an Effective Rate below the reported Filed Rate due to Rebating by the Agent. To address this data limitation, I separately obtained a random sample of data from the Agencies themselves (Agency Data) to assess the prevalence and degree of Rebating.[290] Given the known Filed Rates and this Estimate of Rebate Rates, I am able to accurately calculate the average Effective Rates charged to Class members over the Class Period, and thus the Purchase Prices. The results of this analysis (described in Part IV.A) is summarized in Exhibit 12 below.

EXHIBIT 12: AVERAGE ACTUAL EFFECTIVE RATE

	Average
Actual Filed Rate	[redacted]%
Actual Rebate Rate	[redacted]
Actual Effective Rate	[redacted]

Source: Surety Data; Agency Data.

91. Using these same two datasets, next I measure the effect of the Challenged Conduct on Purchase Prices via two independent, but reinforcing analytical methods, each of which ends up with a but-for Purchase Price:

Direct Analysis of the But-For Effective Rate: Under this method, I directly model the but-for competitive Effective Rate, agnostic to the Filed Rates and Rebating in the but-for world. I use both a theorical risk-pricing model as well as estimates of marginal cost to produce a Bond to assess the "bottom-line" competitive Effective Rate that would be charged to Customers absent the Challenged Conduct. I then compare this competitive Effective Rate to what was actually charged to Customers.

Benchmarking Analysis of the But-For Filed Rates and Rebating: Under this method, I model the but-for Filed Rates and but-for Rebating separately using benchmarking analyses. When combined, these two but-for values produce a but-for Effective Rate. While the inflation of Filed Rates and suppression of Rebating both raise the Effective Rate (and thus Purchase Price) charged to the Customer, those outcomes would have been achieved though distinct mechanisms and thus would inflate the Effective Rate in different magnitudes.

92. The results of both of these methods (described in Part IV.B and IV.C, respectively) is summarized in Exhibit 13 below, which shows that but-for the Challenged Conduct, the Effective Rate for a Bail Bond would be between 5 and 6 percent. Given that the actual-world Effective Rates are approximately 8.5 percent, this finding means that the available quantitative evidence shows that Effective Rates were inflated by between 2.5 and 3.5 percentage points. As only a firm with market power (or a collection of firms acting as a monopolist) is capable of raising prices above competitive levels for a commodity product like Bail Bonds, this evidence of price inflation is consistent with a Conspiracy.

290. *See* Part I.B., *infra*.

EXHIBIT 13: EFFECT OF THE CHALLENGED CONDUCT ON EFFECTIVE RATES

	Methods		
	Direct Method: Theoretical Model	Direct Method: 6% Marginal Cost Model	Benchmark Method: Regression + Rebate Model
Actual Effective Rate	[redacted]	[redacted]	[redacted]
But-For Filed Rate	-	-	[redacted]
But-For Rebate Rate	-	-	[redacted]
But-For Effective Rate	[redacted]	[redacted]	[redacted]
Overcharge	[redacted]	[redacted]	[redacted]

93. All of these methods demonstrate that the Challenged Conduct inflated Purchase Prices charged to Class Members. In the following sections, I explain the data I use to perform these analyses, and then take each method in turn. It bears repeating that these findings represent generalized price effects. To show Common Impact, in Part V I use these results as part one of a two-part proof of Common Impact, which explains how a generalized shock can be transmitted given a rigid pricing structure.

A. Calculation of Actual Rates

1. Surety Data: Filed Rates

94. My primary data source, spanning all Class Members during the Class Period, is the bond-level transaction data produced by the Surety Defendants. This standardized dataset contains observations at the individual bond level, from which I could ascertain the following information to use: Bond Amount, Gross Premium, Net Premium, execution date, Forfeiture date, Surety name, and Bail Agency.[291] I also relied upon bond status data reported by several sureties, reporting whether a bond was forfeited, exonerated, open, or set aside; these Sureties include ACIC, Lexington, Sun, and Universal. I calculated the Filed Rates as the Gross Premium divided by the Bond Amount. The bond-transaction productions provided by each Surety Defendant independently were cleaned and processed into a single standardized dataset. During data cleaning, I dropped a small number of outlier bonds that either had: (i) a *negative* Filed Rate (after accounting for potential refunds), (ii) Filed Rate greater than 15 percentage points, which is higher than the maximum allowed Filed Rate during the period, or Bonds without a date of execution.[292] Notably, Bonds that do not follow an actual Filed Rate type (i.e., "Non-Standard") were not excluded from the dataset. As explained in Part IV.B.2 below, a number of Agencies used Filed Rate blow the official CDI approved maximum.

95. [redacted]

291. *See* Singer Workpapers; Surety Bond Transaction Dataset.

292. [redacted] *see* Singer Workpapers.

[redacted].[293] Exhibit 14 below shows summary statistics for the Surety Data. [redacted].[294] [redacted].[295] [redacted].[296]

EXHIBIT 14: SUMMARY OF SURETY DATA

Defendants	Year Data Begins	Year Data Ends	Bonds Written	Total Bond Value	Total Gross Premiums	Total Net Premium
[redacted]						

Source: Surety Data.
Note: (1) Data above limited from 2004 onward (Class Period begins February 24, 2004); C&F Includes North River, Seneca, US Fire. (2) Outliers were removed. For details, *see* ¶94.

96. [redacted]

293. *Id*.
294. *See* Exhibit 1, *supra*.
295. *Id*.
296. *See* Singer Workpapers; Surety Bond Transaction Dataset.

EXHIBIT 15: UNIQUE BONDS BY YEAR (GRAPH)

Source: Surety Data.
Notes: (1) All Defendant Sureties are included in the Exhibit, with North River, Seneca, and US Fire grouped under C&F; (2) Outliers were removed. For details, *see* ¶94.

97. The Surety Data provides the best source of Filed Rate data available. Exhibit 16 shows the Filed Rates each Class Member was charged by year.

EXHIBIT 16: FILED RATE CHARGED BY YEAR FOR ALL SURETIES

Year	Above 10% Bonds	10% Bonds	9% Bonds	8% Bonds	7% Bonds	6% Bonds	5% Bonds	Below 5% Bonds
[redacted]								

Source: Surety Data.
Note: (1) The average annual gross premium is calculated by dividing total annual gross premiums by total annual bond value. (2) Outliers were removed.

98. Exhibit 17 shows the weighted average Filed Rate by Defendant and for all Sureties in the data. [redacted]

297. *See* n. 33, *supra*.

EXHIBIT 17: WEIGHTED AVERAGE FILED RATE CHARGED BY YEAR

Year	ACIC	AIA	ASC	Accredited	Bankers	C&F	Continental	Danielson	FCS	ILM	Lexington	Lexon	Seaview	Sun Surety	Universal	Williamsburg	Total Weighted
[redacted]																	

Notes: (1) The average annual Gross Premium is calculated by dividing total annual Gross Premiums by total annual bond value; (2) All Defendant Sureties are included in the Exhibit, with North River, Seneca, and US Fire grouped under C&F; (3) Outliers have been removed.
Source: Surety Data.

EXHIBIT 18: WEIGHTED AVERAGE FILED RATES BY YEAR (GRAPH)

Source: Surety Data.
Notes: (1) The average annual Gross Premium is calculated by dividing total annual Gross Premiums by total annual bond value; (2) North River, Seneca, and US Fire grouped under C&F; (3) Outliers have been removed.

2. Agency Data: Estimated Rebates

99. Because the Surety Data does not contain any information on Rebates issued to the Customer by the Bail Agent, it is not possible to use the Surety Data to determine if the Gross Premiums ($Filed\ Rate * Bond\ Amount$) charged to Customers in the Surety Data are the actual Purchase Prices they would have paid. To evaluate the Purchase Prices actually charged to Class Members, it was necessary to estimate how many transactions may have received a Rebate from the Agents, and the value of those Rebates.

100. Given the thousands of independent Agents in California, it was not practical to request rebating data from every Agent. I therefore designed a two-pronged census and subpopulation sample approach to quantify Rebating. At my direction, counsel for the Plaintiff requested Rebating information from a number of selected Agencies.[298]

101. I first conducted a "census" of the largest Bail Agents in California. As shown

298. The primary sampling unit is the Bail Agency, as reported variously in the Surety Data.

previously in Exhibit 2, the top ten Bail Agencies collectively represent over half of all Bail Bonds issued in California. Therefore, subpoenaing this relatively small number of Agencies would grant complete information on Rebating and thus Effective Rates for approximately half of the Class. These top ten Agencies, by chance, did business with all but one Defendant Surety. To ensure all Defendants were represented in the census, I also included an eleventh Agency, the largest for the remaining Defendant not represented by the top ten.[299] [redacted]). Of these eleven, seven ultimately responded with usable data.

102. [redacted].[301] Of these 44 Agencies subpoenaed, 16 ultimately responded with usable data.

103. For each of the subpoenaed Agents (census and sample), the core question regarding rebating is: "What percentage of the bond value did you give back to customers as a rebate?" The respondents produced a range of machine-readable data, electronic images of paper receipts, signed declarations, and deposition testimonies. In my analysis below, I keep those agencies that responded with usable Rebate data, or clear declarations or deposition testimonies about their rebating practices. I removed one agent (Sean Cook of Premier Bail Bonds) because although his data shows he did not Rebate, Bond receipts reviewed at his deposition clearly indicates he did issue Rebates.[302] (In the Appendix, I also perform this analysis only on the Agency Data I am able to independently verify.)[303] I assign zero Rebates for agencies that sent declarations stating they have never rebated (for example, Fausto's Bail Bonds in Exhibit 16 below). This limited the usable respondents to seven Agencies in the Census and 14 Agencies in the sample.[304] From these data, I calculate the share of Bond Amounts that was Rebated to the Customer in

299. The census Agencies, as reported by their Surety Data names, are TWO JINN INC., DMCG, INC, ALL PRO BAIL BONDS, INC., GEORGE STAHLMAN III AGENCY, BAD BOYS BAIL BONDS, ABSOLUTE BONDING CORP, POWER BAIL BONDS, INC., LUIS LOPEZ AGENCY - CALL CENTER, FAUSTO'S BAIL BONDS, INC., SALVADOR RIVAS BAIL BONDS. The 11th agency UNGER_HAROLD was included to represent Sun Surety.

300. Note that I did not clean all the agency names in the Surety data, only those in the census and the random sample respondents.

301. For example, a Bail Agency with $500 in Gross Premiums will be 5x as likely to be drawn as an Agency with $100 in Gross Premiums. *See, e.g.*, William G. Cochran, SAMPLING TECHNIQUES, 3rd ed., John Wiley & Sons (1977) at 250.

302. *See* Cook Dep. at 158:5-160:4.

303. In Exhibit 42, Exhibit 43, and Exhibit 44 in the APPENDIX 3: APPENDIX EXHIBITS. .

304. In addition to those agencies that did not respond with data or declarations (such as Your Way Out/Salvador Rivas Bail Bonds), I excluded Steven Mehr from my rebate analysis as they did not produce clear, machine-readable rebate data.

Exhibit 19 and Exhibit 20 below.[305]

104. Exhibit 16 shows the Rebate percent of Bond Amount for the seven Agencies in the census. Approximately one percent of the total Bond Amount was issued as Rebates over time. Three agencies have a zero percent Rebate overall per declarations stating they never rebated (Acme/Power Bail Bonds, Fausto's Bail Bonds, and King Stahlman Bail Bonds) while All-Pro, Bad Boys Bail Bonds, DMCG, and Two Jinn all provided Rebating data. [redacted]

EXHIBIT 19: SUMMARY OF SAMPLED AGENCY DATA (CENSUS)

[1]	[2]	[3]	[4] = [3] / [2]
Agent	**Sample Bond Amount**	**Sample Rebate**	**Rebate Percent of Bond Amount**
[redacted]	[redacted]	[redacted]	[redacted]

Source: Agency and Surety Data.
Note: The BBBB Rebate percentage and Rebate amount was calculated by applying additional assumptions on the data they supplied. *See* Singer Workpapers.

105. Exhibit 20 shows the Rebate percent of Bond Amount for 14 Agencies in the sample population. Ten agencies have a zero percent Rebate overall (owing to declarations stating they never rebated), with four producing data showing positive Rebate Values. [redacted]

305. BBBB Bonding Corp, aka "Bad Boys Bail Bonds," is a unique case. BBBB's data contains information, on a bond-by-bond basis, on what the final premium paid by the Customer was (that is, after accounting for Rebates) and if that bond was subject to a Rebate or a Qualified Rate. However, any bond that received a Rebate contains no information as to whether it was rebated off of a ten percent Standard Rate, or one of the lower Qualified Rates. Accordingly, I have estimated BBBB's Rebate rates by assuming that all Rebates were issued on the next lowest Qualified Rate.

EXHIBIT 20: SUMMARY OF SAMPLED AGENCY DATA (RANDOM SAMPLE)

[1]	[2]	[3]	[4] = [3] / [2]
Agent	**Sample Bond Amount**	**Sample Rebate**	**Rebate Percent of Bond Amount**
[redacted]			

Source: Agency and Surety Data.

106. Because the sample was randomly drawn, I calculate the confidence intervals for the sample.[306] [redacted]

107. Finally, I apply the census and sample values to the Surety Data. [redacted]

306. *See, e.g.*, Avijit Hazara, *Using the Confidence Interval Confidently*, 9(10) JOURNAL OF THORACIC DISEASE, 4126 (2017) ("If we are calculating the 95% CI of the mean, the z value to be used would be 1.96"; "CI = Sample mean ± z value × Standard error of mean (SEM)").

307. I used a log transformation method to account for the skewness of the sample data and to remove the possibly of negative confidence intervals. Specifically, I log transformed each sample Agency Rebate percentage, adding 0.01 to all of the values. I took the weighted sample mean and weighted variance based on the Bond Amount each Agency represents in the Surety Data. *See* Martin Bland and Douglas Altman, *Statistics Notes: Transformations, Means, and Confidence Intervals*, 312 BMJ 1 (Apr. 27, 1996) ("A logarithmic transformation is often useful for data which have positive skewness […] We carry out all calculations on the transformed scale and transform back once we have calculated the confidence interval.").

[redacted]

EXHIBIT 21: ESTIMATED POPULATION-WIDE REBATE RATE

[1]	[2]	[3]	[4]
Population Type	**Rebate Percent of Bond Amount**	**Percent of Surety Data Represented**	**Respondents' Percent of Represented**
[redacted]			

Source: Agency and Surety Data.

B. Direct Analysis of the But-For Effective Rate

108. My first method of assessing the effects of the alleged Conspiracy is to analyze the competitive Effective Rate and compare it to the actual-world Effective Rate. The logic of this method is as follows: For a commodity product like a Bail Bond, a principle of microeconomics is that businesses in a competitive marketplace will set their prices at a point equal to or exceeding their marginal cost.[308] Therefore, if there is evidence that Bail Bonds Bail Bonds *can* be sold at much lower Effective Rates than they actually are, such as result would reveals that transactions that occurred at Effective Rates higher than the competitive level were subject to some degree of market power that allowed the Agent to charge more. Because Bail Bonds are commodity products, that market power must be due to the Conspiracy, as opposed to some brand-specific attribute or quality enhancement.

109. I calculate the competitive Effective Rate in two ways: (1) by calculating the theoretically competitive Effective Rate given the known inputs about risks and costs in the industry; and (2) by examining the available evidence to determine the minimum viable Effective Rate that Bail Agencies can offer. Either method demonstrates that Bail Bonds can be sold at lower Purchase Prices than what is standard, which is evidence that the firms selling them above those rates commanded a supracompetitive premium, most likely owing to the Challenged Conduct.

110. Because the Purchase Price of a Bond is equal to the Effective Rate multiplied by the Bond Amount, this method of analyzing the bottom-line Effective Rate assesses the effect of the Challenged Conduct as a whole. It is agnostic as to whether Filed Rates were inflated, or Rebating was suppressed, or both.

1. Theoretical Effective Rate Model

111. I first model the competitive Effective Rate based on economic theory. This approach uses a theoretical economic model to estimate the overall impact of the Challenged

308. *See* Part I.D.4. *See also* MANKIW at 272, Figure 1 (showing price = marginal revenue = marginal cost for a competitive firm); *id*. at 268-284.

Conduct by assessing what the bottom-line competitive Effective Rate would be in this industry.[309] I develop this model based off formulas from the surety bond and insurance literature. I adapt a standard expected value model for determining the competitive Effective Rate of a Bail Bond given a set of three inputs: (1) the probability of Loss, (2) the risk-free rate of investing, and (3) the administrative cost associated with underwriting and issuing a bond.

112. I am not aware of any Bail-Bond specific formula in the economic literature for the competitive pricing of bonds. The record evidence reviewed in Part I.D.6 shows that the Defendant Sureties did not use any specific Bail Bond formula or actuarial modeling to justify their Filed Rates, and that the Standard Rate of ten percent was consistent with the outcome of the Challenged Conduct. [redacted][310] Therefore, to build a theoretical model to calculate Bail Bond formulas, I adapt a more generalized probability model from the insurance literature to the specific facts of the Bail Bond market.

113. Insurance actuaries apply probability and statistical analyses to determine how to price an insurance policy like a Bail Bond.[311] One of the core concepts at the heart of pricing is "expected value," or the average result of a probabilistic event.[312] The expected value for a series of events *i* is given by:

$$EV = \sum X_i P_i$$

where P is the probability of Loss for event *i* and *X* is the amount of Loss. For example, if five events *i* have a probability of Loss of 10% and an amount of Loss of $100, the expected Loss value is $50.[313] At the core of any insurance program, the Surety must set its prices such that premium collections are above the expected Loss values, or else the Surety would end up losing more money

309. *See, e.g.*, AMERICAN BAR ASSOCIATION, PROVING ANTITRUST DAMAGES, LEGAL AND ECONOMIC ISSUES, 97-98 (ABA 3rd ed. 2017) [hereafter ABA PROVING ANTITRUST DAMAGES] ("[T]he plaintiff may instead build its but-for world based on other relevant data and economic theory."); Dijk & Verboven (2008) at 2337 ("Simulation analysis. Another approach to quantifying damages when benchmark price data are not available is to specify an economic model that incorporates information on demand and cost conditions and the nature of oligopolistic behavior in the market under consideration. Such an economic model can be calibrated using information on observed prices and margins, price elasticities of demand, cost structures, and market shares. When the model is completely specified in this way, it is possible to carry out counterfactual simulations, i.e., ask how the equilibrium prices would change once the collusion no longer exists. This simulation approach could also be used to provide information about margins in the but-for world that could then be applied to specific cost data."); Dijk & Verboven (2008) at 2339 ("When there is no information available to serve as a reasonable competitive benchmark, one may assess the overcharge using more theoretically based approaches, but such approaches will inevitably require additional assumptions.").

310. Francis Dep. at 88:17-89:8 ("[redacted]

311. REJDA (2008) at 37-40.

312. REJDA (2008) at 37.

313. Equal to 5 * (0.1 * $100).

than it gained. Thus, the first step to determining price is to determine the expected value of the Loss. In the context of a Bail Bond, *X* is the Face Value or total Liability of the bond, and *P* is the probability that a bond completes the Forfeiture processes.

114. In a perfectly competitive and frictionless market with risk-neutral profit-maximizing Sureties, the price of a surety bond is given by the requirement that the Surety company is indifferent between issuing the bond or investing into a risk-free asset.[314] This can be expressed as:

$$r_1 * B * (1 - P) = r_0 * B$$

where r_0 is a risk-free rate (typically, a U.S. Treasury is used), r_1 is the premium rate, B is the bond value bond, and *P* is the probability of Forfeiture of the whole value of B. The intuition of this model is that an investor (here, the Surety) can invest their capital at the risk-free rate r_0 and be guaranteed a return. To be made whole for taking on riskier investments, the investor must demand a premium over the risk-free rate. Assuming an investor is risk-neutral, they are indifferent between an investment that has the same expected outcome. For example, if the investor is investing $100, they are indifferent between an investment with a guaranteed return of $110 (a 10 percent risk-free rate with *P* of zero), or an investment return with a 50 percent chance of returning $220 and a 50 percent chance of $0 (a premium rate 20 percent when *P* is 0.50).[315]

115. Insurance textbooks note that surety bonds differ from general insurance in three important ways:

- There are three parties to a surety bond (principal, oblige, surety) as opposed to two.
- The surety has a legal right to recover Losses from the principal.
- The surety theoretically expects no Losses to occur, because of their right to recover Losses. Thus, the premium is viewed as a service fee, by which the surety's credit is substituted for the principals.[316]

The key insight is that part of the gross premium charged is to cover the administrative service costs of writing and processing a surety bond—something that would not be captured in the "perfectly competitive" market equation above. Thus, a modification of the original equation is required to account for the real-world friction of administrating a bond, where *A* is the administrative service cost expressed as a percent of the Bond Amount. This yields the equation:

$$r_1 * B * (1 - P) - B * A = r_0 * B$$

This formula can be rearranged to solve for the competitive premium rate (the but-for Effective

314. *See* Aleix Calveras, Juan-Jose Ganuza, and Esther Hauk, *Wild Bids. Gambling for Resurrection in Procurement Contracts*, 26(1) JOURNAL OF REGULATORY ECONOMICS 41-68 (2004); Achim Wambach and Andreas R. Engel, *Surety Bonds with Fair and Unfair Pricing*, 36 THE GENEVA RISK AND INSURANCE REVIEW 36-50 (2011).

315. This can be written out using the expected value equation as 0.5*0 + 0.5*x = 110, and then solving for x.

316. REJDA (2008) at 627.

Rate), r_1. Because all terms are expressed as a percentage of the Bond Amount *B*, the term *B* drops out of the equation, leaving:

$$r_1 = \frac{r_0 + A}{1 - P}$$

Intuitively, the equation states that the competitive premium rate (the but-for Effective Rate) is a function of the risk-free rate and administrative cost of servicing the bond, divided by the probability of Forfeiture. As the risk-free rate or the cost of service the bond increases, the Effective Rate increases. As the probability of Forfeiture goes to 0, the Effective Rate will be a function of the risk-free rate plus any administrative costs.

116. I apply the equation above to analyze what the Effective Rate would be in a competitive market absent both elements of the Challenged Conduct. When applied for this market, I treat Agents and Sureties as a single economic entity that supplies Bonds at rate r_1. This means that the cost *A* is the total cost of servicing the Bond, and probability of Forfeiture *P* is agnostic as to what entity pays for the Loss in the event of a Forfeiture. (The model is agnostic as to how the Agent and Surety split the commission from the Effective Rate r_1.) I base my calculation on the following inputs from the record evidence and public data:

- For the risk-free rate, r_0, I test a range of 0.48, 0.64, and 0.80 percent. These rates are based off of the average market yield for U.S. Treasury securities with a one-year constant maturity, equal to 1.8 percent, which reflects the risk-free rate for a bond with a one-year duration during the period 2004–2024.[317] (This method conservatively ignores that the fact that a Surety does not actually need to relinquish the money pledged in a Power.) Importantly, while the interest rates on a U.S. Treasury Security are denominated as an annual interest value, a bond may return its investment in a much shorter period, allowing for the Surety to re-invest the money in a shorter amount of time. For example, if the average bond were half of a year, an investor could obtain the r_1 value *twice* in the time it took the risk free rate r_0, to mature. Based on the Surety Data, I find that Bonds have an average duration from issuance to Exoneration of just 118 days (when weighted by Bond Face Value), or just 32 percent of a year. To account for this time differential, I take a spread of annual risk-free rates (1.5, 2.0, and 2.5 percent) and downwardly adjust these risk free rates by a factor of 0.32 to compare the shorter average investment duration.

- For the probability of Forfeiture, *P*, I use the Forfeiture rates from the Surety Data. This is the probability that a Bond actually results in a Forfeiture (as opposed to entering the Forfeiture process, but not resulting in a Forfeiture Loss.)[318] For those Defendants that reported the status of the Bond, I calculate the share of all Standard Rate and Qualified Rate bonds that actually result in a Forfeiture. I calculate Forfeitures for Bonds at the Standard Rate of 10 percent (1.46 percent chance of Forfeiture) and two tiers of Qualified

317. *Market Yield on U.S. Treasury Securities at 1-Year Constant Maturity, Quoted on an Investment Basis*, FEDERAL RESERVE BANK OF ST. LOUIS, https://fred.stlouisfed.org/series/DGS1 (last visited Dec. 9, 2024).

318. See Part I.D.5.

Rates at 8 percent and 7 percent (1.10 and 0.60 percent respectively).[319] This allows me to capture the risk profiles of the most typical bonds in the Surety Data.

- For administrative service costs, *A*, I use a range of values based on the available Profit & Loss records of two of the largest Bail Agencies, All Pro Bail Bonds and Two Jinn (Aladdin).[320] I [redacted]). Accordingly, in my model below I test a range of *A* values slightly more expansive than these observed values, testing 3, 4, 5, and 6 percent.[321] As the Sureties themselves have essentially no variable costs for doing business, I do not include any additional Surety specific costs.[322] Notably, these values of *A* are blended between all types of Bonds, whether they are Standard or Qualified Bonds.

117. I present results showing the estimated competitive Effective Rates for Bail Bonds under these varying scenarios in Exhibit 22 below. For example, in the first row, I compute the Effective Rate for a Bond with a probability of Forfeiture of 1.46 percent (the real-world probability of Forfeiture for a Standard Rate bond), an administrative cost of 3.0 percent of the Bond Amount (i.e., ~$300 on a $10,000 bond), and a risk-free rate of 0.48 percent. [redacted]

319. *See* Exhibit 9, Exhibit 11: Filed Rates by Defendant, *supra*. The two Qualified Rate bonds are distinct, officially Filed Rates for customers with certain qualifying conditions.

320. To denominate A as percentage of total Bond Amount, in instances where only the gross premium was reported in the P&L, I used the average Filed Rate for all bonds for that Agency to estimate Bond Face Value.

321. *See* SEAVIEW-00165193 (Seaview 2016 Budget); 2024-11-26 (VOL002).pdf (All Pro 2009 and 2023); TWOJINN-00020670 (Two Jinn 2018); SEAVIEW-00117911.pdf.

322. Blackwell Dep. at 125:5-9 [redacted]").

EXHIBIT 22: THEORETICAL MODEL OF EFFECTIVE RATES

[1]	[2]	[3]	[4]	[5] = ([3]+[4]) / (1-[2])
BRT	*P*	r_0	*A*	r_1
Bond Risk Type	**Probability of Forfeiture**	**Risk-Free Rate**	**Administrative Cost**	**Competitive Effective Rate**
[redacted]				

Notes: (1) The Filed Rate Type classifications are based on CDI filings. Only bonds issued between 2016 and 2022 are included in the analysis because of the overlap between sampled sureties with respect to Filed Rates. *See* Exhibit 9, Exhibit 11: Filed Rates by Defendant, *supra*. (2) The Probability of Forfeiture is computed by calculating the count of all Forfeiture events for each "Filed Rate Type" as a percent of all bonds issued of the same types, regardless of whether it was forfeited or not. The four sureties that provided this data are: ACIC, Lexington, Sun, and Universal. Outliers were removed. For details, *see* ¶94. (3) Only Lexington produces data on "Qualified-2" Filed Rate Type. (4) Some Filed Rate Types were excluded due to insufficient sample size; the three types listed represent over 95% of all bonds issued by the four sureties.
Source: *See* Singer Workpapers.

118. There are three key insights offered by this analysis. *First*, Exhibit 22 highlights that, as a practical matter, the actual risk of Forfeiture is so low that it has virtually no effect on the Effective Rate charged. *Second*, the Effective Rate is primarily driven by the administrative cost of issuing the Bond. This comports with the literature and the record evidence which describes the premium charged primarily as a "service fee."[323] *Third*, the competitive Effective Rate is calculated by the model is substantially lower than the actual-world Effective Rates. [redacted] This implies that the actual-world Effective Rate is inflated due to the Challenged Conduct.

119. One question opened by this analysis is whether the Qualified Rates, which in the real-world are a flat one to three percentage point reductions off of the Standard Rate, have any justification for being lower or higher than the Standard Rate. I note is that the administrative costs *A* used above are averages for all of an Agencies Bonds. While the actual risk of Forfeiture between a Standard Rate and a Qualified Rate Bond is not economically material, it is possible that the administrative costs do vary materially between the different type of Filed Rates. That is, although Bonds infrequently forfeit, it could be the case that Qualified Rate Bonds require less administrative burden and less follow-up than Standard Rate Bonds, meaning they would have a lower administrative cost *A*. As shown in Exhibit 9, the Accused is more likely to fail to make a court appearance for Standard Rate Bonds than for Qualified-1 Rate Bonds (13.16 percent compared to 9.51 percent). Assuming this is the case, Qualified Rate bonds would still persist in the but-for world, with the difference in Filed Rates between Standard and Qualified Rates being the difference in their cost of administration.

2. Evidence on Marginal Cost of Providing Bail Bonds

120. As explained above, one principle of microeconomics is that businesses in a competitive marketplace of commodity products set their prices at a point equal to or exceeding their marginal cost. Therefore, quantitative or record evidence showing a bond *can* be sold at a lower Effective Rate is evidence that the marginal cost of selling a Bail Bond is lower than the average Effective Rate. I perform this analysis using three independent data sources.

121. *First*, within the Surety Data, there are multiple examples of Agencies doing business across several years while offering a significant number of bonds below a 7 percent Filed Rate, which is the lowest "official" Filed Rate as shown in Exhibit 11 above.[324] In Exhibit 20

323. REJDA (2008) at 627. *See also* Holtschneider Dep. Ex. 204 (a 2016 Bail Coalition Working Group White Paper sent to the CDI as a part of the CDI Rate inquiry: "Although the bail bond fee is called a premium, the premium is as much a service charge as a conventional premium. The premium is largely based on the cost of investigating the applicant and handling the transaction.").

324. There is an open question as to why there exist Filed Rates are below 7 percent in the Surety Data at all. Recall that the "filed rate" variable in the Surety Data is calculated as the Gross Premium divided by the Bond Value. One explanation is that there is simply no check on how Agents report Gross Premiums, and that an agent can simply record any value for Gross Premium that they wish. Given Agents general lack of distinction between "Rebates" and "Discounts," it is possible that the "Gross Premiums" in the Surety data are actually after-Rebate Purchase Prices. For those Sureties that collect their Net Premium commission as a function of the Bond Amount rather than as a function on the Gross Premium, they would have little reason to reprimand this practice. This would make my subsequent

below, I show the top five agencies measured by the proportion of bonds they offered below a 7 percent Filed Rate.[325] That these agencies operated for years implies that their bonds were issued at rates above or equal to their marginal cost.

EXHIBIT 23: TOP BAIL AGENCIES OFFERING BONDS BELOW A 7% FILED RATE

Agency Name	Total Bonds	Below 7% Bonds	Proportion	Max Year	Min Year
[redacted]					

Note: Only Bail Agencies with more than 200 bonds within the Surety Data are considered. The "Max Year" is the latest year that the agency offered Bail Bonds within the Surety Data. The "Min Year" is the earliest year that the agency offered Bail Bonds within the Surety Data.

122. To take one such example of an agency that offered low Effective Rates, consider the example of Abba Bail Bonds. [redacted] s.[329]

123. *Second*, deposition testimony shows that Agents have price floors between three percent and five percent of the Bond Amount, which implies that the marginal cost of producing a Bond is between three and five percent. [redacted]

analyses of damages conservative, in that they may apply estimated Rebates on top of some "Filed Rates" are actually post-Rebate in the data.

325. *See* Exhibit 20. *See also* Singer Workpapers for details.

326. [redacted]; Deposition of Jane Un (Oct. 14, 2024) [hereafter Un Dep.] at 53:16-54:2 ("[redacted]

327. *Id.*

328. Un Dep. at 50:7-21 [redacted]

329. Un Dep. at 62:20-63:5 [redacted]

[redacted][332]
This record evidence suggests that 5 percent is a conservative lower bound for the marginal cost of a Bail Bond.[333]

124. *Third*, other evidence suggests that Bail Agencies were able to offer bonds at rates as low as five or six percent. One Bail Agent, Chad Conley, was prolific in his offering of bonds initially at a six percent and later at a five percent Effective Rate.[334] Not only were these bonds issued, but Chad Conley was publicly advertising these rates.[335] The explicit offering of these discounted bonds implies that Chad Conley was at least breaking even on each bond.

125. All of this evidence suggests that marginal cost of issuing a Bond ranges between three and six percent. This would imply that in a competitive market, the but-for Effective Rate would set to marginal cost, and therefore between three to six percent. Because the actual Effective Rate is higher than this range of potential but-for Filed Rates, that implies that the actual-world Effective Rate is inflated due to the Challenged Conduct.

C. Benchmarking Analysis of the But-For Filed Rates and Rebating

126. Under this method, I arrive at a but-for Effective Rate by analyzing its two principal inputs: Filed Rates and Rebates. Here, I independently assess whether the Challenged Conduct inflated Filed Rates or suppressed Rebating, and if so, to what degree using two benchmarking analyses. When these effects are summed, they reveal what the Effective Rate would be but for the Challenged Conduct.

1. Filed Rates: Regression Using Most Competitive Agencies

127. Economists typically exploit "natural experiments" using econometric techniques, or regression analysis, to test whether the alleged conduct resulted in an overcharge.[336] Regression

330. Nabi Dep. at 32:24-33:3 [redacted]
331. Mehr Dep. at 26:23-27:6 [redacted].
332. Stahlman Dep. at 40:24-41:2 [redacted]
333. Nabi Dep. at 35:6-35:12 [redacted].
334. ACCRED000131301; ACCRED000284988.
335. ACCRED000131301; ACCRED000284988.
336. Econometric methods are standard statistical techniques for "estimating economic relationships, testing economic theories, and evaluating and implementing government and business policy." *See* JEFFREY WOOLDRIDGE, INTRODUCTORY ECONOMETRICS: A MODERN APPROACH, 1 (Thompson 4th ed. 2009) [hereafter WOOLDRIDGE]. As such, econometric methods are widely used by economists and other analysts in academia, government, and private businesses; R. CARTER HILL, WILLIAM E. GRIFFITHS, AND GUAY C. LIM, PRINCIPLES OF ECONOMETRICS, 1 (John Wiley & Sons 5th ed. 2018) ("The importance of econometrics extends far beyond the discipline of economics.

analysis benefits from the ability to hold constant other key factors that could influence price, which aids an economist in causally identifying a relationship between the dependent variable and the key independent variable.[337] The use of regression analysis allows an economist to test the "null hypothesis" that the Challenged Conduct did not impact the Filed Rates beyond what can be explained by competitive factors.[338]

128. Regression analysis requires variation in both the dependent variable (here, the Filed Rate or Rebate amount) and the key independent variable (here, the Challenged Conduct) to identify a potentially causal relationship. It is standard practice in economics to employ an econometric model that compares prices during a time period or geography in which the alleged conspiracy or restraint is alleged to have occurred with prices in a benchmark period or geography in which the alleged conspiracy or restraint was absent or attenuated, holding constant other factors that may affect prices.[339] The degree to which benchmarking is reliable depends upon how similar the benchmarking candidate is to the target market (aside from the Challenged Conduct.)[340]

129. While a seemingly natural benchmarking candidate for the California Commercial Bail Bond market would be the Commercial Bail Bond market in other U.S. states, the problem

---

Econometrics is a set of research tools also employed in the business disciplines of accounting, finance, marketing, and management. It is also used by social scientists, specifically researchers in history, political science, and sociology. Econometrics plays an important role in such diverse fields as forestry, and in agricultural economics . . . Thus research methods employed by economists, which comprise the field of econometrics, are useful to a broad spectrum of individuals."); *see also id*. at 1 ("Econometrics is a set of research tools also employed in the business disciplines of accounting, finance, marketing and management. It is used by social scientists, specifically researchers in history, political science, and sociology.").

337. *See, e.g.*, WOOLDRIDGE at 68 ("Multiple regression analysis is more amenable to ceteris paribus analysis because it allows us to *explicitly control* for many other factors that simultaneously affect the dependent variable.") (emphasis in original).

338. *Id*. at 121-123.

339. *See, e.g.*, Jonathan Baker and Daniel Rubinfeld, *Empirical Methods in Antitrust Litigation: Review and Critique*, 1 AMERICAN LAW AND ECONOMICS REVIEW 386-435, 392 (1999) [hereafter Baker & Rubinfeld (1999)] ("Reduced form equations are perhaps the most commonly employed in price-fixing cases. In this litigation setting, the goal is typically to determine whether and how much prices rose as a result of the alleged cartel…The price effect of the alleged conspiracy is measured by the coefficient on a dummy variable that takes on the value of one during the period (or in the markets) in which the conspiracy is in operation."). The American Bar Association's treatise offers similar guidance. *See also* ABA PROVING ANTITRUST DAMAGES at 180 ("The dummy variable model uses data from both the alleged conspiracy period and the non-conspiracy period to estimate the relationship between price, economic factors, and a dummy variable for the alleged conspiracy period, with the dummy variable measuring how much higher prices were in the alleged conspiracy period relative to the non-conspiracy period, after controlling for the other economic factors."). *See also* AMERICAN BAR ASSOCIATION, PROOF OF CONSPIRACY UNDER FEDERAL ANTITRUST LAWS, 224-230 (ABA 1st ed. 2010) at n. 39 ("One way to estimate such a model would be to use the price of the product in question as the dependent variable, while using measurements of relevant demand and supply factors as explanatory variables, including a dummy variable that takes a value of one during the class period and zero otherwise. This dummy variable would capture the price inflation if any, during the class period after controlling for the effect of all the other demand and supply factors.").

340. Dijk & Verboven (2008) at 2336 ("The yardstick method is similar in spirit to the before-and-after method. It compares the cartel price to prices in similar markets where there are no allegations of collusion. These yardsticks can be other product markets in the same state or country that are similar in terms of demand, cost, and market structure conditions, or they can be the same product markets in other states or countries. As in the before-and-after approach, it is necessary to control for as many differences across the markets, states, or countries as possible (e.g., differences in income, input costs, capacity usage, etc.).").

with such an analysis is that California is the *only state* that authorizes rebating in this way, setting California apart from the rest of the country.[341] Thus, it is not possible to use other states as a proxy for what a competitive commercial Bail Bond market in California would have looked like.

130. Because an external benchmark is not available, I instead construct an internal benchmark of the *most competitive* Bail Bond transactions within California to assess if these transactions resulted in lower Filed Rates charged. The economic logic is that while the Challenged Conduct may still be present to some degree, Agents in particularly competitive circumstances may have applied lower Filed Rates so as to win over a potential Customer's business. As discussed in Part I.D.6, Filed Rates are supposed to be objectively applied to each Customer based on certain criteria, such as being a union member or being represented by private counsel. Yet the evidence I have reviewed demonstrates that Agents typically make little or no distinction between charging a lower Filed Rate and issuing a Rebate, often bundling the two terms as a "discount," as both practices have the same effect (to the Agent) of reducing the Effective Rate and thus the Agents commission.[342] It is also not beyond the realm of plausibility that an Agent may apply a Qualified Rate to a Customer who only tenuously fits the category if it is in both the Agent's and Customer's best interest. Therefore, I test the hypothesis that Agents might apply Qualified Rates more aggressively to Customers in the most competitive areas than Agents in other areas.

131. Based on a review of the Surety data, it appears that a specific geography in Los Angeles has Bail Agencies that more aggressively offer Qualified Rates than the rest of California. North Vignes Street in central Los Angeles sits across from the county jail, and this street contains at least a dozen individual Bail Agencies in a single block.[343] Customers physically shopping for Bail Bonds in this area would likely have knowledge of many sellers given the close physical proximity of multiple Agencies and would be very likely to secure a Qualified Rate if they even marginally fit the criteria. Within the Surety Data, I find nine Bail Agencies present in North Vignes Street and issuing bonds within the County of Los Angeles.[344] I select these nine agencies as the "Benchmark Bail Agencies." Among bonds for which there is location data, I find that bonds from the nine Benchmark Bail Agencies on North Vignes Street charged an average Filed Rate of 8.51 percent throughout the Class Period, compared to an average Filed Rate of 9.68 percent charged for all other agencies.[345] Exhibit 24 shows that a significant number of bond transactions are made with the Benchmark Bail Agencies on North Vignes Street.

---

341. Holtschneider Dep. at 194:5-9 [redacted].

342. *See* Part I.A.2, *supra*.

343. At present, there are over 12 different Bail Agencies on the North Vignes Street block in front of the LA County Jail. *See Coordinates 34.0578844, -118.2327878*, GOOGLE MAPS, https://www.google.com/maps/search/Bail/@34.0578844,-118.2327878,18.25z?entry=ttu&g_ep=EgoyMDI0MTIwNC4wIKXMDSoASAFQAw%3D%3D (last visited Dec. 11, 2024). Within the Surety Data, I was able to identify 9 of these current and former Bail Agencies which had offered Bail Bonds within Los Angeles County.

344. I define bonds issued within Los Angeles County from the Surety Data as: (i) bonds issued from a city within LA County; (ii) bonds issued from LA County; and (iii) bonds issued within the LA Court Jurisdiction.

345. *See* Singer Workpapers for details.

EXHIBIT 24: SUMMARY TABLE FOR BENCHMARK BOND TRANSACTIONS

Group	Face Value	Gross Premium	Average Filed Rate	Unique Bonds
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Note: The Benchmark Group represents the nine Bail Agencies with an office on North Vignes Street issuing bonds in LA County. The Average Filed Rate is an unweighted average Filed Rate of each group's bond transactions.
Source: Surety Data.

132. I next use a regression analysis to empirically test whether the Benchmark Group issued lower Filed Rates than other Agencies, controlling for other factors. The regression equation can be written as follows:

$$Filed\ Rate_{ijt} = \beta_0 + \beta_1 Benchmark_{ij} + \sum_k \lambda_k X_{ijt}^k + \varepsilon_{ijt}$$

The regression equation can be divided into three main components: (1) the *dependent* variable ($Filed\ Rate_{ijt}$), which measures the Filed Rate of an individual Bail Bond; (2) the key *independent* variable ($Benchmark_{tN}$), which is a dummy variable indicating bonds which are in the Benchmark Group subject to market competition; (3) the *control* variables (X_{ijt}^k), which collectively control for other factors (aside from the Conduct) that may influence Bail Bond premiums; and (4) an error term (ε_{ijt}). I describe each component below.

133. *First*, $Filed\ Rate_{ijt}$ is the dependent variable of the regression model; it is the Filed Rate each individual *i* was charged by a Bail Agent *j* at time *t*. The Filed Rate is formatted as an integer, so it can be interpreted as a percentage point of the Bond Amount.

134. *Second*, the key variables of interest, $Benchmark_{ij}$. The Benchmark variable is "1" if the Bond was issued from an Agent on North Vignes Street and "0" if not. That is, the Benchmark variable captures the effect of a weakening in the Challenged Conduct. In the equation above, the percentage point change in Filed Rates associated with a Benchmark transaction is given by the coefficient β_1. (Note that β_0 is the intercept of the regression equation.) If the coefficient β_1 is negative, this implies the Benchmark is associated with lower Filed Rates, holding other factors constant. If the coefficient is statistically significant, then we can reject the null hypothesis that being within the Benchmark Group had no effect on Filed Rates.

135. *Third*, the symbol X_{hijt}^k denotes the various *control* variables *k* in the model, which account for other demand-side and supply-side factors that could affect bond premiums across time. By holding other factors fixed, the regression can isolate the impact of a weakening of the Challenged Conduct on Filed Rates (and a conservative estimate of the effect of the Challenged Conduct).[346] Note that economists recognize that it is not possible to literally hold all else equal,

346. *See, e.g.*, WOOLDRIDGE at 12 ("The notion of ceteris paribus—which means 'other (relevant) factors being equal'— plays an important role in causal analysis… If other factors are not held fixed, then we cannot know the causal effect of a [independent variable] on [a dependent variable].").

nor is it desirable for a model to perfectly explain changes in the dependent variable for fear of "overfitting" a model.[347] Rather, the objective is to control for sufficient factors so that we can clearly estimate the relationship between the key independent variable (Benchmark Agencies) and the dependent variable (Filed Rates charged).[348] This is why multiple economists studying the same problem may come up with multiple empirically valid regression models: The objective is not to perfectly explain all movements in bond premiums, but rather to isolate the effect on price of a single variable of interest (Benchmark Agencies). Put differently, all regression models omit some variables. But only omitted variables that are correlated with both the dependent variable (Filed Rates charged) and at least one independent variable will engender bias in the regression coefficients.[349] I have included both supply and demand controls in my regression analysis.

136. For this regression analysis, I use six different control variables in addition to the relief variables to attempt to explain the Filed Rates charged to Bail Customers. To account for the cost of credit, which could indirectly affect the Filed Rates that Sureties charge for borrowed funds, I include the effective federal funds rate[350] and the 30-year treasury bill rate. [351] I next account for the total number of arrests in California[352] and the proportion of violent offenses in California.[353] These variables could directly affect the Face Value of Bonds that Bail Agents issue (violent crimes generally require higher Bail amounts than non-violent crimes) and thus could indirectly affect Filed Rates. Finally, I include a control for California's median household income[354] and the number of Bail Bonds issued per 1k people.[355] Both of these controls are included to capture long-run trends in Californians' demand for bonds. I summarize these control variables in Exhibit 25 and show the summary statistics for these control variables in Exhibit 26. I convert some of these control variables to natural logarithms (ln), which is a standard practice for continuous variables in econometrics.[356] This also allows the regression coefficients to be interpreted in percentage terms.

---

347. *Id*. at 13 ("[E]xcept in very special cases, it will not be possible to literally hold all else equal. The key question in most empirical studies is: Have enough other factors been held fixed to make a case for causality?").

348. In econometric terms, we add in controls until we are satisfied that the key independent variable Conduct is exogenous, or uncorrelated with the error term (the unexplained variation in price). *See* WOOLDRIDGE at 87-88.

349. *See* Kevin Caves and Hal Singer, *Applied Econometrics: When Can an Omitted Variable Invalidate a Regression?*, ANTITRUST SOURCE (2017).

350. *Federal Funds Effective Rate*, FRED, https://fred.stlouisfed.org/series/FEDFUNDS (last visited Dec. 11, 2024).

351. *Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis*, FRED, https://fred.stlouisfed.org/series/GS30 (last visited Dec. 11, 2024).

352. *Crime Statistics*, CALIFORNIA DEPARTMENT OF JUSTICE, https://openjustice.doj.ca.gov/exploration/crime-statistics (last visited Dec. 11, 2024).

353. *Id*.

354. *Median Household Income of California*, FRED, https://fred.stlouisfed.org/series/MEHOINUSCAA646N (last visited Dec. 11, 2024).

355. The total number of bonds is derived from the Surety Data. *See* Singer Workpapers. California population data is derived from FRED. *See Resident Population in California*, FRED, https://fred.stlouisfed.org/series/CAPOP (last visited Dec. 11, 2024).

356. *See, e.g.*, WOOLDRIDGE Chapter 6.2.

EXHIBIT 25: REGRESSION CONTROL VARIABLE DESCRIPTIONS

Control Variable	Description
Effective Federal Funds Rate	This monthly variable controls for the cost of short-term borrowing in a given month, which may indirectly affect Filed Rates.
Thirty Year Treasury Rate	This monthly variable controls for the risk-free rate of return, which may indirectly affect Filed Rates.
Total Arrests in California	This monthly variable controls for the number of arrests in California in a given year, which may indirectly affect Filed Rates. This variable is in 1,000 units.
Violent Offense % of Total Arrests	This monthly variable controls for the proportion of arrests that are for violent offenses, which would directly affect bond Face Values and indirectly affect Filed Rates
California Median Income	This monthly variable controls for the median household income in California, which may affect the demand for bonds. This variable is in $1,000 units.
Bonds per 1,000 People	This monthly variable controls for the number of bonds in our structured data per 1,000 Californians.

Note: The "California Median Income", "Violent Offense % of Total Arrests", "Total Arrests in California", and "Bonds Per 1,000 People" variables were originally annual and have been interpolated to estimate their value by month.

EXHIBIT 26: CONTROL VARIABLE SUMMARY STATISTICS

Variable	Mean	Standard Deviation	Minimum	Maximum	Observations
[redacted]					

137. I perform the regression analysis Exhibit 27 below. To demonstrate the marginal impact of each control variable, I run the regression four times, adding in new control variables in

each run of the mode. By the fourth column, I include all of the control variables.

EXHIBIT 27: VIGNES STREET BENCHMARK REGRESSION

	Dependent Variable: *Filed Rate*			
	(1)	(2)	(3)	(4)
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Note: Coefficients with "*" are statistically significant at the p = 0.05 level; This analysis only includes Bail transactions with county, city, or Court jurisdiction data to differentiate benchmark and non-benchmark bonds. The variables "Total Arrests" and "California Median Income" are in 1,000s.

138. The regression model shows that even after accounting for other factors that could plausibly explain Filed Rates, I find that there is a statistically and economically significant difference in Filed Rates charged between the Benchmark group on North Vignes Street and all other Bail Agents during the Class Period. [redacted]. These results are both statistically and economically significant.

139. This model allows me to conclude that the Agents on Vignes Street, who are subject to a greater geographic density of competition than other Agents, charged lower Filed Rates beyond what can be explained by other factors. This example of a breakout of competition that attenuates the Challenged Conduct during the Class Period—again, these Agents are still operating subject to the Challenged Conduct—is a small natural experiment that allows me to conclude that, were the Challenge Conduct Fully removed, Agents would charge lower Filed Rates to Customers and do so by *at least* 0.8 percentage points. Economists recognize that in the presence of umbrella effects, where defecting suppliers price below the cartel's preferred price, the benchmark rate itself is inflated by the Challenged Conduct. Extrapolating these results, in the absence of the Challenged Conduct—and eliminating any potential for umbrella effects—the price effects would be even greater than those estimated here.

2. Rebates: Analysis of Rebating During the Conduct Period

140. To study whether the Challenged Conduct had an effect on Rebating, I analyzed the Agency Data available to me that contained aggregate or bond-level details on Rebating across the Class Period. The following five agencies produced reasonably complete Rebate data for this analysis: All-Pro Bail Bonds, Bad Boys Bail Bonds, DMCG, Gotham Bail Bonds, and Two Jinn. I measured two metrics: the number of bonds on which Rebates are issued, and the amount of rebating (calculated as a percentage of the Bond Amount). [redacted]

141. All-Pro Bail Bonds is the third largest Agency in the Surety Data. All-Pro produced Rebate data on an individual, bond-by-bond basis covering the years 2006-2023.

[redacted]

EXHIBIT 28: ALL-PRO REBATING DATA

[1]	[2]	[3]	[4]	[5]	[6]
Year	**Number of Bonds**	**Number of Bonds with Rebates**	**% of Bonds with Rebates**	**Rebate % of Total Bond Amount**	**Rebate % of Bond Amount of Rebated Bonds**
[redacted]					

Source: All-Pro Rebate Data.

142. DMCG produced Rebate data that was aggregated on a monthly basis covering the years 2015-2023. Because the data were not produced on an individual, bond-by-bond basis, I was unable to calculate columns [2]-[4] and [6] above in Exhibit 27. [redacted]

EXHIBIT 29: DMCG REBATING DATA

[1]	[2]
Year	**Rebate % of Total Bond Amount**
[redacted]	[redacted]

Source: DMCG Rebate Data.

143. Two Jinn produced Rebate data on an individual, bond-by-bond basis covering the years 2004-2023. [redacted]

EXHIBIT 30: TWO JINN REBATING DATA

[1]	[2]	[3]	[4]	[5]	[6]
Year	**Number of Bonds**	**Number of Bonds with Rebates**	**% of Bonds with Rebates**	**Rebate % of Total Bond Amount**	**Rebate % of Bond Amount of Rebated Bonds**
[redacted]					

Source: Two Jinn Rebate Data.

144. Gotham Bail Bonds produced Rebate data on an individual, bond-by-bond basis covering the years 2016-2024. [redacted]

EXHIBIT 31: GOTHAM REBATING DATA

[1]	[2]	[3]	[4]	[5]	[6]
Year	**Number of Bonds**	**Number of Bonds with Rebates**	**% of Bonds with Rebates**	**Rebate % of Total Bond Amount**	**Rebate % of Bond Amount of Rebated Bonds**
[redacted]					

Source: Gotham Bail Bonds Rebate Data

145. Bad Boys Bail Bonds produced Rebate data that was aggregated on an annual basis covering the years 2018-2024. [redacted]

EXHIBIT 32: BAD BOYS REBATING DATA

[1]	[2]	[3]	[4]
Year	**% of Bonds with Rebates**	**Rebate % of Total Bond Amount**	**Rebate % of Bond Amount of Rebated Bonds**
[redacted]			

Source: Bad Boys Rebate Data.

146. [redacted]. Given that Rebating has been expressly legal since the 2004 *Pacific Bonding* decision, the

most plausible explanation is that the lack of rebating during the early years of the Class Period are due to the presence of a Conspiracy to suppress it. I am aware of no other fundamental changes in the Bail Industry that would explain the staggered advent of Rebating as shown in

Exhibit 28-Exhibit 32 above. The most plausible explanation is that any agreement to suppress Rebating ultimately broke down as more and more Agents began to offer Rebates at the margin to win business, and without an enforcement mechanism to punish the Agents that did offer Rebates, the element of the Challenged Conduct broke down over time.

147. [redacted]. Therefore, the end of the Class Period represents the most competitive time for Rebating during. Exhibit 33 below asses rebating for each Agency at the final years of each of the datasets. (Where the final year is not the most complete, I average the last two years.) These values below represent the most competitive Rebating that has existed during the Class Period, and I therefore use these values as a benchmark of what rebating *could have been* earlier in the Class Period. I compute two averages, one without Two Jinn (Aladdin) and one without. Given that the Plaintiffs alleged that Aladdin is still suppressing Rebating to this day (which is consistent with their data produced), I exclude them from the average.

EXHIBIT 33: SUMMARY OF AGENCY REBATING PRACTICES AT THE END OF THE CLASS PERIOD

[1]	[2]	[3]	[4]	[5]
Year	**Agency**	**% of Bonds with Rebates**	**Rebate % of Total Bond Amount**	**Rebate % of Bond Amount of Rebated Bonds**
[redacted]				

Source: Agency Rebate Data.

148. The takeaway is that Rebating by Agents did not begin in earnest until later in the Class Period, particularly after the filing of this case. [redacted] It is reasonable to conclude that the frequency and intensity of Rebating would have occurred earlier in the Class Period absent the Challenged Conduct.

V. COMMON IMPACT

149. The analyses in Part IV reveal that the Challenged Conduct artificially inflated the Effective Rate, and thus the actual Purchase Prices charged to Class Members *generally* across the Class Period. I next examine whether all or virtually all Class Members were *specifically*

injured.[357] To do this, I extend the economic logic of the "but-for world" damages model to demonstrate that all or virtually all Class Members would have been charged lower Purchase Prices absent the Challenged Conduct, and were thus injured by its real-world presence. I use two independent, mutually reinforcing proofs to demonstrate this impact. Both of these analyses of Common Impact are entirely classwide and use common methods and evidence. I then consider Common Impact assuming only one of the elements of Challenged Conduct removed.

150. Because but-for world only considers the unwinding of the Challenged Conduct—and no other changes—any Class-Member specific factors that could potentially influence the purchase or Purchase Price of a Bail Bond are already factored into the data. That is, for any given Bond in the but-for world absent the Challenged Conduct, the Penal Amount would not change (it is set by the Court reflects the nature of the crime and flight). Nor would the objective criteria that qualify a Customer for a Qualified Rate (*e.g.*, private counsel, union membership, veteran status). Class Members who negotiated for a Rebate in the actual world likely would continue to receive a Rebate in the but-for world, and potentially of even greater magnitude. Those individuals who never received a bond because they were a flight risk would continue to not receive a bond in the but-for world.[358]

151. Similarly, it is worth noting that how a Class Member actually paid for the Bond's Purchase Price is not relevant to this analysis, which is based on what they were charged. Customers who paid for their Bond via credit or a payment plan would continue to do so. These individuals are still harmed in that the amount they were charged as a part of a credit plan (even if at zero percent interest) is still higher than what they would have been charged in the but-for world, as the down-payment and amount of money owed would be less.

A. In-Sample Prediction of Effective Rates Shows Nearly All Class Members Were Impacted

152. The first standard method of demonstrating Common Impact is to use an "in-sample prediction" that compares the price that each Customer actually were charged to the price they would have been charged in the absence of the Challenged Conduct. Under this method, a Consumer suffers antitrust injury whenever the price they were charged on at least one transaction

---

357. *See, e.g.*, Vivek Mani and Darwin V. Neher, *Antitrust Impact in Class/Collective Actions*, CORNERSTONE, GLOBAL LEGAL GROUP (Nov. 13, 2020), https://www.cornerstone.com/wp-content/uploads/2022/01/Antitrust-Impact-in-Class-or-Collective-Actions.pdf ("In the U.S., a central question in class certification is whether all, or virtually all, punitive class members were impacted by the conduct at issue. This interpretation of the common impact question asks whether common evidence, or a common methodology, can be utilised to establish antitrust harm flowing from the alleged conduct, for (virtually) each and every putative class member.").

358. Many agents testified that they wouldn't write a bond if it is deemed too high risk. *See, e.g.*, Jeffrey Stanley Dep. at 156:25-157:8 [redacted] Bench Dep. at 105:9-14 ("Q. Sorry. Flight risk. If the Defendant is a flight risk? A. Oh, yeah. We don't write it. If we see they're a flight risk, it doesn't matter how much they pay us. They'd have to come up with cash collateral."). *See also* Deposition of Topo Padilla (Nov. 25, 2024) at 149:2-20, 185:6-14; Cook Dep. at 108:10-109:12; Stahlman Dep. at 40:3-23 ([redacted]).

during the Class Period is above the price they would have been charged in the absence of the Conduct. Because it is not possible to fully track Consumers in the Surety data, I perform this analysis on a transaction-by-transition basis.[359] I use the standard tool of in-sample prediction to compute the proportion of transactions that sustained antitrust injury on one or more occasions. Courts have certified several antitrust class action cases where Plaintiff's economists' have used this method to demonstrate Common Impact.[360]

153. A Class Member could be potentially immunized if he or she received an ultra-low, non-standard Filed Rate or they received an extraordinarily large Rebate. Indeed, my analysis of marginal costs in Part IV.B.2 revealed that some Agents in the Surety Data charged non-standard Filed Rates below the seven percent official minimum, and other record evidence shows that some individual Customers received unusually large Rebates. These Customers, for whatever reason, may have obtained a more competitive Effective Rate than the but-for Effective Rate and may have escaped injury.

154. To assess the number of transactions that potentially escaped injury, I test the but-for Effective Rates calculated in Exhibit 13 against the Surety Data. Accordingly, this analysis is agnostic as to whether one or both forms of the Challenged Conduct are removed. Because Filed Rates are known for each Bond, but Rebate amounts are an estimated average, I test each bond against a range of potential Rebates it could have received.

155. In Exhibit 34 below, I first select a but-for Effective Rate to test. I then do a Bond-by-Bond assessment: I take the actual Filed Rate for that Bond in the Surety Data, and I assign it an assumed Rebate based on the ranges of Rebates observed in the Agency Data. Using that assumed Rebate, I calculate that Bond's *estimated* real-world Effective Rate, *assuming* it received a Rebate. I then compare this estimated actual-world Effective Rate against the But-For Effective Rates calculated in Part V. I count the Bond transaction as injured if the actual-world is above the but-for world Effective Rate. For the range of assumed Rebates, I test the weighted average Rebates found in Exhibit 21, and each of the Rebate amounts found in the most competitive year of Rebating found in Exhibit 33.

359. This would potentially understate harm, in that a Consumer with two transactions could be harmed on one but not the other.

360. *See, e.g.*, *In re Air Cargo Shipping Servs. Antitrust Litig*., No. 06-MD-1775 JG VVP, 2014 WL 7882100 (E.D.N.Y. Oct. 15, 2014); *See also In re Capacitors Antitrust Litigation* (No. III), case No. 17-md-02801-JD, 2018 WL 5980139 (N.D. Cal. Nov. 14, 2018); *In re Packaged Seafood Prods. Antitrust Litig.* 332 F.R.D. 308 (S.D. Cal. 2019).

EXHIBIT 34: DIRECT CALCULATION OF IMPACT

		But-For Effective Rate		
Assumed Rebate		**5.19%**	**5.93%**	**6.0%**
Weighted Average	0.8%	98.4%	98.2%	98.1%
[redacted]				

Notes: N = 309,0690.
Source: Surety Data.

156. [redacted] To the extent that the factfinder believes that these transactions were not impacted, they can be identified and removed from the Class.

B. Evidence of a Pricing Structure that Would Transmit Harms to All Class Members

157. The second standard economic method of assessing Common Impact is a two-pronged, classwide approach that has been accepted in multiple past antitrust cases in certifying classes, including in *UFC*,[361] *Broilers*,[362] *Olean Wholesale Grocery Cooperative, Inc. v. Bumble*

361. *Cung Le, et al. v. Zuffa, LLC d/b/a Ultimate Fighting Championship*, 2:15-cv-01045-RFB-BNW, ECF No. 839 (D. Nev. Aug. 9, 2023) (order granting class certification). I personally performed this analysis.

362. *In re: Broiler Chicken Grower Antitrust Litig.* (No. II), 6:17-cv-00033-RJS-CMR, 2024 WL 2117359 (E.D. Ok. May 8, 2024); *In re High-Tech Employees Antitrust Litigation*, 985 F. Supp. 2d 1167, 1206 (N.D. Cal. Jan. 1, 2013).

Bee,[363] *Polyurethane Foam*,[364] *High-Tech Employee*,[365] and *Arizona Travel Nurses*.[366] The first prong involves using classwide evidence to demonstrate that the Challenged Conduct inflated the prices charged to by Class Members generally. The second prong involves determining whether there is classwide evidence of a pricing structure that would transmit the artificially inflated prices (found by the first prong) broadly across the Class. These analyses and evidence are common to the Class as a whole.

158. The first prong of generalized harm can be established by either of the two analytical methods performed in Part V, which demonstrates that but-for the Challenged Conduct, the Effective Rate would be lower than in the actual world. The second prong is to assess whether this generalized harm would have been transmitted to all Customers by virtue of a pricing structure, which would mechanically transmit the harms of the Challenged Conduct to all or nearly all Class Member.

159. In this case, the evidence shows there is an anchor Standard Rate off of which all Qualified Rates and Rebates are based. Given that the Challenged Conduct is alleged to have inflated the Standard Rate, this would have impacted all other rates which are dependent on it.

1. The Existence of a Rigid Pricing Structure Ensures That a Generalized Shock to the Filed Rates Would Be Transmitted to All Class Members

160. The Filed Rates and any Rebates a Customer receives are anchored to the prevailing Standard Rate charged by the Surety. This ensures that if the Standard Rate were lower in the but-

---

363. *Olean Wholesale Grocery Cooperative, Inc. v. Bumble Bee Foods*, No. 19-56514, 31 F.4th 651, 671-673 (9th Cir. 2022) ("In simple terms, Dr. Mangum first aggregated (or 'pooled') the actual tuna sale transaction data for the Tuna Suppliers' sales to the DPPs during both the alleged conspiracy period and during benchmark periods before and after the conspiracy. Dr. Mangum then identified a number of variables (referred to as independent or explanatory variables) that could affect the price of tuna, including product characteristics, input costs, customer type, and variables related to consumer preference and demand, such as disposable income, seasonal effects, and geography. The model then isolated (or 'controlled for') the effect of these explanatory variables on the prices paid by DPPs, which allowed the model to isolate the effect that the conspiracy by itself had on the prices paid by DPPs… Dr. Mangum used the output of the pooled regression model to predict the but-for prices (i.e., what the price of tuna during the conspiracy period would have been without the overcharge caused by the conspiracy), and compared these predicted but-for prices to the actual prices paid by the DPP class."); *id*. at 671 ("Dr. Mangum first performed a pricing correlation test, which demonstrated that the prices of the Tuna Suppliers' products moved up or down together regardless of product or customer type, and thus supported the proposition that the Tuna Suppliers' collusion had a common, supra-competitive impact on their prices. Based on this evidence, Dr. Mangum concluded that the Tuna Suppliers' collusion would result in higher prices that would affect direct purchasers on a class-wide basis, which was consistent with his original theory.").

364. *In re Polyurethane Foam Antitrust Litig.*, 314 F.R.D. 226, 286 (N.D. Ohio 2014).

365. *In re High-Tech Employees Antitrust Litig.*, 985 F. Supp. 2d 1167, 1206 (N.D. Cal. Jan. 1, 2013) (granting Plaintiffs' Supplemental Motion for Class Certification: "Plaintiffs noted that Dr. Leamer's approach followed a roadmap widely accepted in antitrust class actions that uses evidence of general price effects plus evidence of a price structure to conclude that common evidence is capable of showing widespread harm to the class.").

366. *Johnson v. Arizona Hosp. and Healthcare Assoc.*, No. CV 07-1292-PHX-SRB, 2009 WL 5031334, at *8, 11 (D. Ariz. Jul. 14, 2009) (finding predominance where conduct was alleged to suppress bill rates for nurses generally and evidence was presented that bill rates were correlated with nurse pay rates).

for world, the Effective Rate would be lower by the same amount. There is no evidence that a lower Standard Rate would be absorbed by smaller Qualified Rates or Rebates.

161. As explained in Part I.D.6 and demonstrated in Exhibit 11, each Surety must submit to the CDI a single Standard Filed Rate and (potentially) multiple Qualified Rates that apply to all Class Members who fit the qualification standards. A goal of this government-mandated standardization of rates is to ensure that every Class Member who purchases a Bail Bond from any Agency associated with a particular Surety will receive the same Filed Rate based on their objective individual circumstances.

162. Beginning with the Standard Rate: Any shock (here, caused by the Challenged Conduct) that would artificially inflate the Standard Rate submitted to the CDI would impact every single Class Member who purchased a Bail Bond from that Surety a the Standard Rate. For example, Defendant ASC had only a single, 10 percent Standard Rate for the entire Class Period. It follows that 100 percent of ASC's Customers, and indeed any Customer who purchased a Standard Rate bond from any of the Defendants, were charged an inflated Filed Rate.

163. Next, because the Qualified Rates are anchored to the Standard Rates, a conspiracy that artificially inflated the Standard Rate would also inflate the Qualified Rates. As shown in Exhibit 11, for every Defendant Surety, the Qualified Rates were set as a Discount off the Standard Rate by rounded percentage point steps of one, two, or three, depending on the nature of the qualification. Like the Standard Rates, Qualified Rates were not independently actuarially determined based on risk profiles.[367] Instead, the record evidence demonstrates that Sureties based their Qualified Rates off of the Standard Rate.[368] For example, in Lexington's 2015 application to the CDI to add 8 percent and 7 percent Qualified Rates, the company explained at length the justification of Qualified Rates below 10 percent for "lower risk customers to pay lower premium."[369] Bail agency advertisements also framed the Qualified Rates as percentage reductions from the 10% Standard Rate.[370] Therefore, if the Challenged Conduct artificially inflated the Standard Rates filed with the CDI, all of the Qualified Rates would be anchored off of this artificially inflated Standard Rate and thus would themselves be inflated. As explained in Part IV.B.1, there is little actual Forfeiture risk difference between a Standard Rate and a Qualified Rate. The difference between these rates is, if anything, attributable to the reduced cost of servicing a Qualified Rate Customer. This would not change in the but-for world.

164. Finally, common documentary evidence shows that Rebating was anchored to the Standard Rates. For example, Exhibit 34 below shows that Aladdin, by far the largest Agency in

---

367. *See* Part I.D.6, *supra*.

368. Lauricella Dep. Ex. 69 (SEAVIEW 00006051) at -052 [redacted]). *See also* Stanley Dep. Ex. 210 [redacted] This equates to an 8 or 7 percent Qualified Rate, a 20 to 30% discount off of the Standard Rate of 10 percent.

369. Lexington - CDI rate filing No. 15-10267 (Dec. 1, 2015) at 39-40. Lexington filed with its application the Qualified Rate tiers of numerous other competitor Surety Defendants. See *id*. at 43-52.

370. Jeffrey Stanley Dep. Ex. 210; Bench Dep. Ex. 244. Bench Dep. at 118:4-13 ("[W]e discount off – off of the filed rate. No doubt about it.").

California, trained its agents to Rebate only as a tool of last resort to win over "incremental" Customers *after* starting with a 10 percent Standard Rate as an anchor point, and to then offer a lower 8 percent Qualified Rate. This means that if the Filed Rate were lower in the but-for world, Rebating negotiations would begin at those lower Filed Rates as a starting point. Other Surety executives and Bail Agents were clear that a Rebate is made "off of" the Surety's applicable Filed Rate.[371]

EXHIBIT 35: REBATES ARE BASED OFF OF FILED RATES

Source: Lauricella Dep. Ex. 74 (TWOJINN-00006630) at -632.

165. There is no reason to expect that Rebating would shrink or change in the but-for world. Indeed, in the absence of the Challenged Conduct, one would expect Rebating to increase. As explained in Part III.B.2, the Rebating negotiation turns on the strength of each negotiators BATNA. All of the Customers who received a Rebate in the actual world had a strong enough hand to "walk away" from an Agent if the price was too high. The Customer's BATNA would be unchanged by a reduction in the Filed Rates, as every Agent's Filed Rates would be lower. And the Challenged Conduct impaired Class Members' outside options.

371. Shields Dep. at 118:8-16); Cook Dep. at 254:2-10, 254:21-24 This was also reflected in bail agents' advertising. Jeffrey Stanley Dep. Ex. 211

166. I would only expect a finding of no-harm in the case of those Customers who received abnormally low Filed Rates or extraordinarily large Rebates, as indicated by the previous direct calculation of impact. For all other Customers, the pricing structure the industry would tend to transmit any generalized harm to every individual Consumer.

2. A Price Structure Regression Confirms Filed Rate Changes Impact all Class Members

167. Using standard econometric methods, I perform several regressions to test the relationship between Filed Rates across Class Members. If Filed Rates move together, it follows that a shock to the system that raised rates on average would be transmitted broadly to the Class. Specifically, similar to analyses performed by Plaintiffs' expert economist Professor Edward Leamer in *High-Tech Employee*, these regressions measure the extent to which a change in the average Filed Rate charged by Class Members *generally* is statistically associated with a change to the Filed Rate charged to an *individual* Class Member. In other words, in the regression models below I compare an individual Class Member's Filed Rate charged against the average Filed Rate of all other Class Members, delineated by various levels of relevant grouping.

168. Notably, the "shock" being tested in this case is not the removal of the Challenged Conduct, but the shift of Customers from the Standard Rate of 10 percent to the lower Qualified Rates that became available over time. This analysis allows me to test if Customers are received lower Filed Rates for individual idiosyncratic or macroeconomic reasons, or if they are receiving lower rates because of an inherent price structure in the industry

169. I run this test at four levels of aggregation. I start with (i) prices charged by all other Class Members across California. I then test prices charged by other Class Members utilizing (ii) the same Agency, (iii) the same Surety, and (iv) the same rate type. *First*, I test whether changes in average Filed Rates charged to all other Class Members in California are associated with changes in the Filed Rate charged to any given Class Member. *Second*, I test whether changes in average Filed Rates charged to Class Members using a particular Agency are associated with changes in the Filed Rate charged to any individual Class Member using that Agency. *Third*, I test whether changes in average Filed Rates charged to all other Class Members utilizing the same Surety are associated with changes in the Filed Rates charged to any Class Member using that Surety. *Fourth*, I test whether changes in average Filed Rates charged to all other Class Members with the same rate type are associated with changes in the Filed Rate charged to any Class Member with that rate type. The results of these regressions are shown in Exhibit 36.

EXHIBIT 36: PRICING STRUCTURE REGRESSION RESULTS

	Dependent Variable = Class Member *i* price			
Explanatory Variable	**All California**	**By Agency**	**By Surety**	**By Type**
[redacted]				

Notes: Reflects within-year comparisons. Robust P-values in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

170. Even across different Agencies, Sureties, and rate types, the most highly aggregated model, which tests changes in California rates broadly, demonstrates an economically and statistically significant relationship between an individual Class Member's Filed Rate and the Filed Rates of all other Class Members. The models aggregated by Agency, Surety, and Type show this even more definitively. [redacted]. What this means is that the Filed Rates charged to Class Members tend to move together across Agencies, Sureties, rate types, and the industry at large. This result is strong evidence of a pricing structure. This, in turn, means that an outside force affecting Filed Rates, like the alleged Challenged Conduct, would be expected to affect the Filed Rates charge to all Class Members. If, alternatively, changes in Class Member prices *do not* flow through to other Class Members, the coefficients would be near zero and/or statistically insignificant. This evidence is consistent with the thesis that the Challenged Conduct commonly impacted all Class Members during the Class Period.

C. Common Impact Assuming Only One Element of the Challenged Conduct Is Removed

171. The Common Impact analyses above assume that both elements of the Challenged Conduct are removed. I next consider if only one element is removed, leaving two alternative but-for worlds: (i) a world where Sureties compete on Filed Rates, but Sureties and Agents continue to suppress knowledge of Rebating, and (ii) a world where the Filed Rates are unchanged, but suppression of Rebating is removed. It is my opinion that *both* elements of the Challenged Conduct were required, in reality, to effectively inflate Purchase Prices, and the removal of just *one* of the elements is sufficient to reach a competitive outcome.

172. *First*, if Sureties compete on Filed Rates, then the logical end-state in a competitive Filed Rate market is that each Surety would set their Standard and Qualified rates at or near the but-for Effective Rates calculated from the Direct Analyses of the Effective Rate, as shown in Exhibit 13. In this scenario, whether or not a Customer receives a Rebate is largely immaterial, as the Filed Rates be set to the competitive level which is equal to marginal cost.

173. *Second*, if Sureties fix the Filed Rates to their present-day values, but the knowledge of rebating is not suppressed, then the Effective Rates charge to the Customers would still fall to the Effective Rates calculated in Exhibit 13. In this scenario, the formal Filed Rates set by the Sureties are immaterial, as the asymmetric information environment caused by the Challenged Conduct would be removed. All Customers and Agents would have greater, if not perfect knowledge of the market price for a commodity service like a Bail Bond, and would negotiate down the Effective Rate they would be charged to the competitive level. [redacted]

174. In either scenario, the but-for Effective Rates calculated in Part IV would be achieved. Whether they are achieved through competition on Filed Rates, or via competition via Rebating, would not affect the ultimate Purchase Prices charged to Customers. In either case, Common Impact to Class Members would be essentially identical, and all or nearly all Class Members would have been charged lower prices.

VI. AGGREGATE DAMAGES

175. In this section, I demonstrate how a standard, classwide, "but-for world" damages model can be used to calculate Aggregate Damages to the Class.[373] A "but-for world" damages model assesses what economic outcome would have occurred in a world absent the Challenged Conduct, and ascribes the difference between the actual and but-for world as the measurement of

372. Hayes Dep. Ex. 122 at 3.

373. Dijk and Verboven (2008) at 2332 ("The concept underlying most economic damages assessments is that of the 'but-for' world. In the case of a price-fixing agreement, the but-for world represents the economic outcome that would have occurred without the agreement. The difference between this counterfactual world and the actual world provides the measurement of damages.").

damages. In this case, damages are the difference between what Class Members were actually charged as a Purchase Price versus what they would have been charged in a world but-for the alleged Conspiracy.

176. In Part IV, I calculated the but-for Effective Rates using two independent methods. Using the resulting Effective Rates generated by those analyses, I can calculate damages to the Class as the difference between what Customers would have been charged under each of the calculated but-for Effective Rates and the actual amount they were charged under the actual-world Effective Rates.

177. To calculate damages, I start with the total Face Value of all bonds issued to Class Members during the Class Period from the Surety Data.[374] I then multiply this value by my estimate of the actual Effective Rate charged to Class Members, obtained by combing the known Filed Rate from the Surety data and the estimated Rebate Rate from Part IV.A.2. This yields the dollar value that Class Members were charged in the actual world. I then repeat this calculation using the but-for Effective Rates obtained from my analyses, as summarized in Exhibit 13. This yields the dollar value that Class Members would have been charged in the but-for world absent the Challenged Conduct. The difference between the actual and but-for charges are the total overcharges to Class Members. Exhibit 37 performs these calculations.

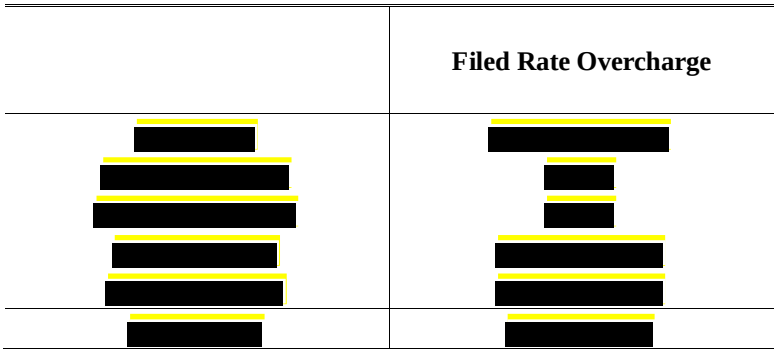
EXHIBIT 37: AGGREGATE DAMAGES

	Scenarios		
	Theoretical Model	6% Marginal Cost Model	Benchmark Regression + Rebate Model
[redacted]	[redacted]	[redacted]	[redacted]

178. Although it is my opinion that aggregate damages would be the same even if only one element of the Challenged Conduct were removed, I also demonstrate that is possible to calculate damages owing to each element of the Challenged Conduct below. To calculate the incremental damages of the Filed Rate inflation, I begin with the actual reported Bond Amounts issued to Class Members over the Class Period. I then divide the total charges to Class Members across the Class Period by the total Face Value to obtain the actual Filed Rate. Next, I then subtract my estimate of the Filed Rate percent overcharge calculated from the analyses conduct in Part V.C.1. from the actual Filed Rate to find the but-for Filed Rate. I then calculate what Class Members would have been charged at the lower but-for Filed Rate. I then subtract the actual charges from the but-for gross premiums. The difference between the actual and the but-for values is the overcharge to the Class from inflated Filed Rates.

374. I removed the "Benchmark" Bail Agencies issuing Bail Bonds on North Vignes Street, Los Angeles from this analysis.

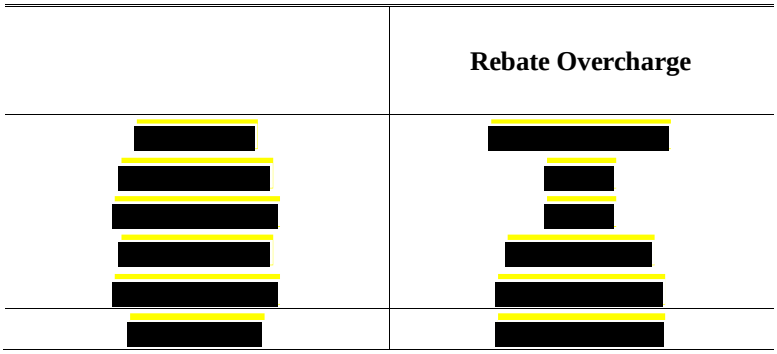
EXHIBIT 38: FILED RATE OVERCHARGES



Source: Surety Data.
Note: For the Benchmark Regression, only the Face Value and Gross Premiums of bonds outside of the benchmark are considered.

179. I use a similar method to calculate the incremental damages from Rebating. I start with the total Face Value of all bonds issued throughout the Class Period. I multiply that sum by the estimate of actual rebating during the Class Period obtained in Exhibit 12 above. The result of that calculation is the total amount of "actual" Rebates. I then take my estimate of the but-for level of rebating estimated in IV.C.2 and multiply that estimate by the total bond Face Value to calculate the but-for total Rebates. The difference between the but-for level of rebating and the "actual" level of rebating is the Rebate Overcharge.

EXHIBIT 39: REBATE OVERCHARGES

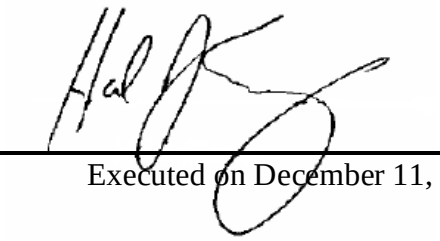


CONCLUSIONS

180. Defendants and Co-Conspirators have monopoly power in the market for California Bail Bonds. The quantitative evidence is consistent with Plaintiffs allegations that Defendants and Co-Conspirators conspired to raise prices Class Members were charged. Using standard economic methods and evidence common to the Class, I calculate that Effective Rates (and thus Purchase Prices charged) for Class Members would have been lower during the Class Period but-for the Challenged Conduct. I find that aggregate damages can readily be calculated using standard methods, and that all or virtually all Class Members were overcharged. Each prong of my analyses involves methods, data, and evidence common to all Class Members.

* * *

Hal J. Singer, Ph.D.:



Executed on December 11, 2024

APPENDIX 1: CURRICULUM VITAE OF HAL J. SINGER

Hal J. Singer

Econ One Research
Suite 04-125 1701 Rhode Island Ave, N.W.
Washington, D.C. 20036
Phone: 202.312.3065
hsinger@econone.com

Education

Ph.D., The John Hopkins University, 1999; M.A. 1996, Economics

B.S., Tulane University, *magna cum laude*, 1994, Economics. Dean's Honor Scholar (full academic scholarship). Senior Scholar Prize in Economics.

Current Positions

ECON ONE, Washington, D.C.: Managing Director 2018-present.

UNIVERSITY OF UTAH, ECONOMICS DEPARTMENT, Salt Lake City, UT: Career Line Professor 2022 - present.

THE UTAH PROJECT, Salt Lake City, UT: Director 2022-present.

Employment History

GEORGETOWN UNIVERSITY, MCDONOUGH SCHOOL OF BUSINESS, Washington, D.C.: Adjunct Professor 2010, 2014, 2016, 2018, 2019, 2020, 2021, 2022

ECONOMISTS INCORPORATED, Washington, D.C.: Principal 2014-2018.

NAVIGANT ECONOMICS, Washington, D.C.: Managing Director, 2010-2013.

EMPIRIS, L.L.C., Washington, D.C.: Managing Partner and President, 2008-2010.

CRITERION ECONOMICS, L.L.C., Washington, D.C.: President, 2004-2008. Senior Vice President, 1999-2004.

LECG, INC., Washington, D.C.: Senior Economist, 1998-1999.

U.S. SECURITIES AND EXCHANGE COMMISSION, OFFICE OF ECONOMIC ANALYSIS, Washington, D.C.: Staff Economist, 1997-1998.

THE JOHNS HOPKINS UNIVERSITY, ECONOMICS DEPARTMENT, Baltimore: Teaching Assistant, 1996-1998.

Honors

Honoree, Outstanding Antitrust Litigation Achievement in Economics, American Antitrust Institute, *In re Lidoderm Antitrust Litigation*, Oct. 9, 2018.

Finalist, Outstanding Antitrust Litigation Achievement in Economics, American Antitrust Institute, *Tennis Channel v. Comcast*, Dec. 4, 2013.

Authored Books and Book Chapters

Do Municipal Broadband Networks Stimulate or Crowd Out Private Investment? An Empirical Analysis of Employment Effects, in THE IMPACT OF THE INTERNET ON JOBS (Lorenzo Pupillo, ed. Palgrave 2017).

THE NEED FOR SPEED: A NEW FRAMEWORK FOR TELECOMMUNICATIONS POLICY FOR THE 21ST CENTURY, co-authored with Robert Litan (Brookings Press 2013).

Net Neutrality Is Bad Broadband Regulation, co-authored with Robert Litan, in THE ECONOMISTS' VOICE 2.0: THE FINANCIAL CRISIS, HEALTH CARE REFORM AND MORE (Aaron Edlin and Joseph Stiglitz, eds., Columbia University Press 2012).

Valuing Life Settlements as a Real Option, co-authored with Joseph R. Mason, in LONGEVITY TRADING AND LIFE SETTLEMENTS (Vishaal Bhuyan ed., John Wiley & Sons 2009).

An Antitrust Analysis of the World Trade Organization's Decision in the U.S.-Mexico Arbitration on Telecommunications Services, co- authored with J. Gregory Sidak, in HANDBOOK OF TRANS-ATLANTIC ANTITRUST (Philip Marsden, ed. Edward Elgar 2006).

BROADBAND IN EUROPE: HOW BRUSSELS CAN WIRE THE INFORMATION SOCIETY, co-authored with Dan Maldoom, Richard Marsden and J. Gregory Sidak (Kluwer/Springer Press 2005).

Are Vertically Integrated DSL Providers Squeezing Unaffiliated ISPs (and Should We Care)?, co-authored with Robert W. Crandall, in ACCESS PRICING: THEORY, PRACTICE AND EMPIRICAL EVIDENCE (Justus Haucap and Ralf Dewenter eds., Elsevier Press 2005).

Journal Articles

Competitive Effects of Fixed Wireless Access on Wireline Broadband Technologies Review of Network Economics, vol. 22, no. 4, (2023), pp. 241-283, co-authored with Augustus Urschel.

Addressing the Power Imbalance: A Legislative Proposal for Effectuating Competitive Payments from Platforms to Newspaper, Columbia Journal of Law and the Arts (2023)

The Abuse of Offsets as Procompetitive Justifications: Restoring the Proper Role of Efficiencies After Ohio v. American Express and NCAA v. Alston, GEORGIA STATE LAW REVIEW (2022), co-authored with Ted Tatos.

Antitrust Anachronism: The Interracial Wealth Transfer in Collegiate Athletics Under the Consumer Welfare Standard, ANTITRUST BULLETIN (2021), co-authored with Ted Tatos.

Competing Approaches to Antitrust: An Application in the Payment Card Industry, 27(3) GEORGE MASON LAW REVIEW (2020), co-authored with Kevin Caves.

Understanding the Economics in the Dispute Between the Writers' Guild of America and the Big Four Talent Agencies, COMPETITION POLICY INTERNATIONAL ANTITRUST CHRONICLE (2020), co-authored with Ted Tatos.

Antitrust Out of Focus: The FTC's Myopic Pursuit of 1-800 Contacts' Trademark Settlements, ANTITRUST SOURCE (2019), co-authored with Geoff Manne and Josh Wright.

Countervailing Coordination Rights in the News Sector Are Good for the Public (A Response to Professor Yun), COMPETITION POLICY INTERNATIONAL ANTITRUST CHRONICLE (2019), co-authored with Sanjukta Paul.

When the Econometrician Shrugged: Identifying and Plugging Gaps in the Consumer Welfare Standard, 26 GEORGE MASON LAW REVIEW (2019), co-authored with Kevin Caves.

Applied Econometrics: When Can an Omitted Variable Invalidate a Regression?, ANTITRUST SOURCE (2017), co-authored with Kevin Caves.

Paid Prioritization and Zero Rating: Why Antitrust Cannot Reach the Part of Net Neutrality Everyone Is Concerned About, ANTITRUST SOURCE (2017).

The Curious Absence of Economic Analysis at the Federal Communications Commission: An Agency in Search of a Mission, INTERNATIONAL JOURNAL OF COMMUNICATIONS (2017), co-authored with Gerald Faulhaber and Augustus Urschel.

On the Utility of Surrogates for Rule of Reason Cases, COMPETITION POLICY INTERNATIONAL ANTITRUST CHRONICLE (2015), co-authored with Kevin Caves.

Analyzing High-Tech Employee: The Dos and Don'ts of Proving (and Disproving) Classwide Antitrust Impact in Wage Suppression Cases, Antitrust Source (2015), co-authored with Kevin Caves.

Econometric Tests for Analyzing Common Impact, 26 Research in Law and Economics (2014), co-authored with Kevin Caves.

Life After Comcast: The Economist's Obligation to Decompose Damages Across Theories of Harm, ANTITRUST (Spring 2014), co-authored with Kevin Caves.

Is the U.S. Government's Internet Policy Broken?, 5 POLICY AND INTERNET (2013), co-authored with Robert Hahn.

Avoiding Rent-Seeking in Secondary Market Spectrum Transactions, 65 FEDERAL COMMUNICATIONS LAW JOURNAL (2013), co-authored with Jeffrey Eisenach.

Vertical Integration in Multichannel Television Markets: A Study of Regional Sports Networks, 12(1) REVIEW OF NETWORK ECONOMICS (2013), co-authored with Kevin Caves and Chris Holt.

Assessing Bundled and Share-Based Loyalty Rebates: Application to the Pharmaceutical Industry, 8(4) JOURNAL OF COMPETITION LAW AND ECONOMICS (2012), co-authored with Kevin Caves.

Lessons from Kahneman's Thinking Fast and Slow: Does Behavioral Economics Have a Role in Antitrust Analysis?, ANTITRUST SOURCE (2012), co-authored with Andrew Card.

Assessing Competition in U.S. Wireless Markets: Review of the FCC's Competition Reports, 64 FEDERAL COMMUNICATIONS LAW JOURNAL (2012), co-authored with Gerald Faulhaber and Robert Hahn.

An Empirical Analysis of Aftermarket Transactions by Hospitals, 28 JOURNAL OF CONTEMPORARY HEALTH LAW AND POLICY (2011), co-authored with Robert Litan and Anna Birkenbach.

Economic Evidence of Common Impact for Class Certification in Antitrust Cases: A Two-Step Analysis, ANTITRUST (Summer 2011).

Addressing the Next Wave of Internet Regulation: Toward a Workable Principle for Nondiscrimination, 4 REGULATION & GOVERNANCE (2010), co-authored with Robert Hahn and Robert Litan.

Class Certification in Antitrust Cases: An Economic Framework, 17 GEORGE MASON LAW REVIEW (2010), co-authored with Robert Kulick.

The Economic Impact of Eliminating Preemption of State Consumer Protection Laws, 12 UNIVERSITY OF PENNSYLVANIA JOURNAL OF BUSINESS LAW 781 (2010), co-authored with Joseph R. Mason and Robert B. Kulick.

Net Neutrality Is Bad Broadband Regulation, THE ECONOMISTS' VOICE, Sept. 2010, co-authored with Robert Litan.

Why the iPhone Won't Last Forever and What the Government Should Do to Promote its Successor, 8 JOURNAL ON TELECOMMUNICATIONS AND HIGH TECHNOLOGY LAW 313 (2010), co-authored with Robert W. Hahn.

What Does an Economist Have to Say About the Calculation of Reasonable Royalties?, 14 INTELLECTUAL PROPERTY LAW BULLETIN 7 (2010), co-authored with Kyle Smith.

Is Greater Price Transparency Needed in the Medical Device Industry?, HEALTH AFFAIRS (2008), co-authored with Robert W. Hahn and Keith Klovers.

Evaluating Market Power with Two-Sided Demand and Preemptive Offers to Dissipate Monopoly Rent, 4 JOURNAL OF COMPETITION LAW & ECONOMICS (2008), co-authored with J. Gregory Sidak.

Assessing Bias in Patent Infringement Cases: A Review of International Trade Commission Decisions, 21 HARVARD JOURNAL OF LAW AND TECHNOLOGY (2008), co-authored with Robert W. Hahn.

The Effect of Incumbent Bidding in Set-Aside Auctions: An Analysis of Prices in the Closed and Open Segments of FCC Auction 35, 32 TELECOMMUNICATIONS POLICY JOURNAL (2008), co-authored with Peter Cramton and Allan Ingraham.

A Real-Option Approach to Valuing Life Settlement Transactions, 23 JOURNAL OF FINANCIAL TRANSFORMATION (2008), co-authored with Joseph R. Mason.

The Economics of Wireless Net Neutrality, 3 JOURNAL OF COMPETITION LAW AND ECONOMICS 399 (2007), co-authored with Robert W. Hahn and Robert E Litan.

Vertical Foreclosure in Video Programming Markets: Implication for Cable Operators, 3 REVIEW OF NETWORK ECONOMICS 348 (2007), co-authored with J. Gregory Sidak.

The Unintended Consequences of Net Neutrality, 5 JOURNAL ON TELECOMMUNICATIONS AND HIGH TECH LAW 533 (2007), co-authored with Robert E. Litan.

Does Video Delivered Over a Telephone Network Require a Cable Franchise?, 59 FEDERAL COMMUNICATIONS LAW JOURNAL 251 (2007), co-authored with Robert W. Crandall and J. Gregory Sidak.

The Competitive Effects of a Cable Television Operator's Refusal to Carry DSL Advertising, 2 JOURNAL OF COMPETITION LAW AND ECONOMICS 301 (2006).

Uberregulation without Economics: The World Trade Organization's Decision in the U.S.-Mexico Arbitration on Telecommunications Services, 57 FEDERAL COMMUNICATIONS LAW JOURNAL 1 (2004), co-authored with J. Gregory Sidak.

The Secondary Market for Life Insurance Policies: Uncovering Life Insurance's "Hidden" Value, 6 MARQUETTE ELDER'S ADVISOR 95 (2004), co-authored with Neil A. Doherty and Brian A. O'Dea.

Do Unbundling Policies Discourage CLEC Facilities-Based Investment?, 4 TOPICS IN ECONOMIC ANALYSIS AND POLICY (2004), co-authored with Robert W. Crandall and Allan T. Ingraham.

Foreign Investment Restrictions as Industrial Policy, 3 CANADIAN JOURNAL OF LAW AND TECHNOLOGY 19 (2004), co- authored with Robert W. Crandall.

Regulating the Secondary Market for Life Insurance Policies, 21 JOURNAL OF INSURANCE REGULATION 63 (2003), co- authored with Neil A. Doherty.

Interim Pricing of Local Loop Unbundling in Ireland: Epilogue, 4 JOURNAL OF NETWORK INDUSTRIES 119 (2003), co-authored with J. Gregory Sidak.

The Benefits of a Secondary Market for Life Insurance, 38 REAL PROPERTY, PROBATE AND TRUST JOURNAL 449 (2003), co- authored with Neil A. Doherty.

The Empirical Case Against Asymmetric Regulation of Broadband Internet Access, 17 BERKELEY TECHNOLOGY LAW JOURNAL 954 (2002), co-authored with Robert W. Crandall and J. Gregory Sidak.

How Can Regulators Set Nonarbitrary Interim Rates? The Case of Local Loop Unbundling in Ireland, 3 JOURNAL OF NETWORK INDUSTRIES 273 (2002), co-authored with J. Gregory Sidak.

Vertical Foreclosure in Broadband Access, 49 JOURNAL OF INDUSTRIAL ECONOMICS (2001) 299, co-authored with Daniel L. Rubinfeld.

Open Access to Broadband Networks: A Case Study of the AOL/Time Warner Merger, 16 BERKELEY TECHNOLOGY LAW JOURNAL 640 (2001), co-authored with Daniel L. Rubinfeld.

Cable Modems and DSL: Broadband Internet Access for Residential Customers, 91 AMERICAN ECONOMICS ASSOCIATION PAPERS AND PROCEEDINGS 302 (2001), co-authored with Jerry A. Hausman and J. Gregory Sidak.

Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers, 18 YALE JOURNAL ON REGULATION 1 (2001), co-authored with Jerry A. Hausman and J. Gregory Sidak.

Determining the Source of Inter-License Synergies in Two-Way Paging Networks, 18 JOURNAL OF REGULATORY ECONOMICS 59 (2000).

A General Framework for Competitive Analysis in the Wireless Industry, 50 HASTINGS LAW REVIEW 1639 (2000), co- authored with J. Gregory Sidak and David Teece.

Capital Raising in Offshore Markets, 23 JOURNAL OF BUSINESS AND FINANCE 1181 (1999), co-authored with Ian Gray and Reena Aggarwal.

Expert Testimony Since 2013

Hernandez v. Illinois Institute of Technology, No. 1:20-cv-3010 (N.D. Ill. Jun 15, 2023)

Connecticut v. Sandoz, No. 2:20-CV-03539 (MDL 2724 Nov. 1, 2023)

Vakilzadeh v. The Trustees of the California State University, Los Angeles County Superior Court, Case No. 20STCV231344 (C.D. Cal Oct. 25, 2023)

In re Google Play Consumer Antitrust Litigation, 3:20-cv-05761-JD (N.D. Cal Aug. 28, 2023)

Simon & Simon, PC v. Align Tech., 3:20-CV-03754-VC (N.D. Cal. Jul. 25, 2023)

Borozny et al. v. RTX Corporation, Pratt & Whitney Division, et al, Case No. 3:21-cv-01657-SVN (D. Conn. May. 30, 2023)

Garavanian et al v. JetBlue Airways Corporation, et al, 1:23-cv-10678-WGY (D. Mass. Mar. 29, 2023)

In re EpiPen Direct Purchaser Litig., 20-CV-827 (ECT/JFD) (D. Minn. Mar. 29, 2023)

In the Matter of the Arbitration Between Washington Nationals Baseball Club v. TCR Sports Broadcasting Holdings, L.L.P. (Major League Baseball Revenue Sharing Definitions Committee) (2023)

Weidman v. Ford Motor Co., 18-cv-12719 (E.D. Mich. Dec. 16, 2022)

Fed. Trade Comm'n v. Meta Platforms Inc., 5:22-cv-04325-EJD (N.D. Cal. Nov. 2, 2022)

Estate of Berland v. Lavastone Capital LLC, 1:18-cv-02002-SB (D. Del. Sep. 28, 2022)

McKinney v. Cosair Gaming, Inc., 22-cv-00312-CRB (N.D. Cal. Jul. 19, 2022)

Henry et al v. Brown University et al, Case No. 1:22-cv-00125 (N.D. Ill. Jul. 7, 2022)

Estate of Phyllis Malkin v. Wells Fargo Bank, N.A., 17-cv-23136 (S.D. Fl. Jun. 23, 2022)

(Im)Balance of Power: How Market Concentration Affects Worker Compensation and Consumer Prices (U.S. House Committee on Economic Disparity and Fairness in Growth) (Apr. 6, 2022)

In re Pork Antitrust Litig., 18-1776 (JRT/HB) (D. Minn. Nov. 12, 2021)

Chelsea Jensen, et al. v. Samsung Electronics et al., T-809-18 (Federal Court in Canada Nov. 5, 2021)

In Re: Broiler Chicken Growing Antitrust Litigation (No. II), 6:20-MD-02977-RJS-CMR (E.D. Ok Aug. 19, 2021)

Deslandes et al v. McDonald's USA, LLC, 17-cv-04857 (N.D. IL Jul. 28, 2021)

Zydus Pharmaceuticals Inc. and Cadila Healthcare Limited v. Takeda Pharmaceutical Company Limited et al., 18-01994 (FLW)(TJB) (D. N.J. Jul. 26, 2021)

Miazza v. Bd. of Supervisors of La. State Univ. & Agric. & Mech. Coll., NO. 2021 CW 0750 (La. Ct. App. Jul. 13, 2021)

Dr. Rachael Kent v Apple Inc. and Apple Distribution International Ltd, 1403/7/7/21 (U.K. Competition Appeal Tribunal)

Elizabeth Helen Coll v Alphabet Inc. and Others, 1408/7/7/21 (U.K. Competition Appeal Tribunal)

In re Foreign Exchange Benchmark Rates Antitrust Litigation, 1:13-cv-07789-LGS (S.D.N.Y. Jun. 7, 2021)

Mark Shaffer et. Al v. The George Washington University and The Board of Trustees of George Washington University, 1:20-cv-01145-RJL (D. D.C. Apr. 28, 2021)

Fernandez v. CoreLogic Credco, LLC, Case No.: 3:20-cv-1262-JM-(AGS) (S.D. Cal. Apr. 8, 2021)

Reviving Competition, Part 1: Proposals to Address Gatekeeper Power and Lower Barriers to Entry Online (U.S. House of Representatives Subcommittee on Antitrust) (Feb. 23, 2021)

In re MacBook Keyboard Litig., Case No. 5:18-cv-02813-EJD (N.D. Cal. Oct. 13, 2020)

Manmohan Dhillon et al. v. Anheuser-Busch, LLC et al., 14CECG03039 MBS (Cal. Fresno Aug. 18, 2020)

Fusion Elite All Stars et al v. Varsity Brands, LLC et al, 2:20-CV-03390 (SHL-tmp) (W.D. Tenn. Jul. 10, 2020)

In Re: Pepperdine University Tuition and Fees Covid-19 Refund Litigation, No. 2:20-cv-04928-DMG (C.D. Cal. Jun. 3, 2020)

In Re: University of Southern California Tuition and Fees COVID-19 Refund Litigation, 2:20-cv-4066-DMG (C.D. Cal. May 4, 2020)

In Re: Boston University COVID-19 Refund Litigation, 1:20-cv-10827-RGS (D. Mass. Apr. 29, 2020)

Breaking the News – Journalism, Competition, and the Effects of Market Power on a Free Press (U.S. Senate Subcommittee on Competition Policy) (Feb. 2, 2020)

In Re: JUUL Labs, Inc. Marketing, Sales Practices, and Products Liability Litigation, 19-md-02913-WHO (N.D. Cal. Oct. 2, 2019)

In Re GSE Bonds Antitrust Litigation, No. 1:19-cv-01704-JSR (S.D. N.Y. Nov. 8, 2019)

beIN Sports, LLC v. Comcast Cable Communications, LLC, CSR-8972-P (FCC) (Jul. 1, 2019)
Donald Conrad et al. v. Jimmy John's Franchise LLC, et al., 3:18-cv-00133-NJR (S.D. Ill. May 21, 2019)

Imperial Premium Finance, LLC, v. Sun Life Assurance Company of Canada, 17-10189 (S.D. Fla. Sep. 18, 2018)

In Re: London Silver Fixing, Ltd. Antitrust Litigation, 1:14-md-02573-VEC (S.D. N.Y. Jul. 25, 2018)

Authenticom, Inc. v. CDK Glob., LLC, 17-cv-318-jdp (W.D. Wis. Jan. 12, 2018)

Sun Life Assurance Company of Canada v. U.S. Bank National Association, 2:14-cv-04703-SJF-GRB (E.D. N.Y. Jun. 12, 2017)

Cung Le v. Zuffa, LLC, Lead Case No. 2:15-cv-01045-RFB-PAL (D. Nev. Feb. 13, 2017)

In the Matter of 2014 Quadrennial Regulatory Review – Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, MB Docket No. 14-50 (Federal Communications Commission) (Dec. 1, 2016)

In re Lidoderm Antitrust Litig., Case No. 14-md-02521-WHO (N.D. Cal. Aug. 9, 2016)

Omni Healthcare et al. v. Health First Inc. et al., 6:13-CV-01509-RBD-DAB (M.D. Fla. Jul. 14, 2016)

In re Delta/AirTran Baggage Fee Antitrust Litig., 317 F.R.D. 634 (N.D. Ga. 2016)

Game Show Network, LLC v. Cablevision Systems Corp., File No. CSR-8529-P (Federal Communications Commission) (Oct. 21, 2015)

Mazda v. Carfax, Inc., 13-CV-2680 (AJN)(RLE) (S.D.N.Y. Jul. 24, 2015)

Lindsay Kamakahi and Justine Levy, et al v. American Society for Reproductive Medicine and Society for Assisted Reproductive Technology, 3:11-CV-1781 JCS (N.D. Cal. Jun. 3, 2015)

In re New York City Bus Tour Antitrust Litigation, 13-CV-07I1 (S.D. N.Y. Nov. 21, 2014)

STB Ex Parte No. 722 Railroad Revenue Adequacy (Surface Transportation Board) (Nov. 4, 2014)

Krouch v. Wal-Mart Stores, Inc., Case No. 12-cv-02217-YGR (N.D. Cal. Oct. 28, 2014)

In re Capacitors Antitrust Litigation, 14-cv-03264-JD (N.D. Cal. Oct. 2, 2014)

In the Matter of Petition for Rulemaking to Eliminate the Sports Blackout Rule, MB Docket No. 12-3 (Federal Communications Commission) (Sep. 30, 2014)

In re Myford Touch Consumer Litigation, 3-13-cv-3072-EMC (N.D. Cal. Aug. 7, 2014)

Altergy Systems v. Enersys Delaware Inc., 3:14-CV-02212 JD (N.D. Cal. Aug. 6, 2014)

Marchbanks Truck Service, et al. v. Comdata Network Inc., et al., cv- 07-1078-JKG (E.D. Pa. May. 5, 2014)

In re Photochromic Lens Antitrust Litig., MDL Docket No. 2173 (M.D. Fla. Apr. 3, 2014)

Philip R. Loy and Sharon Loy v. Womble Carlyle Sandridge & Rice, et al., 2014-cv-254012 (Ga. Super.)

In the Matter of Flat Wireless, LLC, for and on behalf of its Operating Subsidiaries, v. Cellco Partnership d/b/a Verizon Wireless, and its Operating Subsidiaries, EB-15-MD-005 (Federal Communications Commission)

Massachusetts Technology Park Corporation v. Axia Netmedia Corporation, KCST USA, Inc., 01-17-0004-3049 (American Arbitration Association)

Schuylkill Health System et al. v. Cardinal Health 200, LLC & Owens & Minor Distribution, Inc., 12-cv-07065-JS (E.D. Pa. Dec. 13, 2013)

Crafting a Successful Incentive Auction: Stakeholders' Perspectives (U.S. Senate, Committee on Commerce, Science, and Transportation) (Dec. 10, 2013)

SOCAN Tariff 22.A (Online Music Services, 2011-2013), *CSI Online Music Services* (2011-2013), *SODRAC Tariff 6 - Online Music Services, Music Videos* (2010-2013) (Copyright Board Canada)

Meda Pharmaceuticals Inc. v. Apotex, Inc and Apotex Corp., 01-14-0001-6315 (Am. Arbitration Ass'n)

In Re: Lipitor Antitrust Litigation End Payor Actions, 12-cv-02389-PGS-DEA (D. N.J. Sep. 5, 2013)

The Satellite Television Law: Repeal, Reauthorize, or Revise? (U.S. House of Representatives, Committee on Energy and Commerce) (Jun. 12, 2013)

Salud Services, Inc. et al v. Caterpillar, Inc., 1:12-cv-23927 (S.D. Fla. Oct. 20, 2012)

Wallach v. Eaton Corp., Civ. No. 10-260-SLR (D. Del. Sep. 26, 2012)

In Re Airline Baggage Fee Antitrust Litigation, Civil Action No. 1:09-Md-2089-Tcb (N.D. Ga. Aug. 31, 2012)

In the Matter of Review of Wholesale Services and Associated Policies, File No. 8663-C12-201313601 (Canadian Radio-Television and Telecommunications Commission)

Patricia Reiter v. Mutual Credit Corporation, et al., 8:09-cv-0081 AG (RNBx) (C.D. Cal.)

Miguel V. Pro and Davis Landscape et al. v. Hertz Equipment Rental Corporation, 2:06-CV-3830 (DMC) (D.N.J.)

Apotex, Inc., v. Cephalon, Inc., Barr Laboratories, Inc., Mylan Laboratories, Inc., Teva Pharmaceutical Industries, Ltd., Teva Pharmaceuticals USA, Inc., Ranbaxy Laboratories, Ltd., and Ranbaxy Pharmaceuticals, Inc., 2:06-cv-02768-MSG (E.D. Pa. Feb. 23, 2011)

The Ohio State University v. New Par D/B/A Verizon Wireless, 2:15-cv-2866 (S.D. Oh.)

Memberships

American Economics Association

American Bar Association Section of Antitrust Law

Reviewer

Journal of Risk and Insurance

Journal of Competition Law and Economics

Journal of Risk Management and Insurance Review

Journal of Regulatory Economics

Managerial and Decision Economics

Telecommunications Policy

APPENDIX 2: MATERIALS RELIED UPON

Bates Documents and Deposition Exhibits

ACCRED000130608

ACCRED000131301

ACCRED000284988

Bench Dep. Ex. 247 (ARBB 0000196)

Blackwell Dep. Ex. 97 (ILM043057)

Blackwell Dep. Ex. 98 (ASC 033749)

Carmichael Dep. Ex. 227 (ASC 538171)

Carmichael Dep. Ex. 228 (ASC 465500)

Carmichael Dep. Ex. 229 (ASC 554987)

CF0056635

Cook Dep. Ex. 236

Hayes Dep. Ex. 118

Hayes Dep. Ex. 119

Hayes Dep. Ex. 121 (TWOJINN-00017486)

Hayes Dep. Ex. 122

Holtschneider Dep. Ex. 204

Jeffrey Stanley Dep. Ex. 211

Lauricella Dep. Ex. 65 (SEAVIEW-00026865)

Lauricella Dep. Ex. 69 (SEAVIEW 00006051)

Lauricella Dep. Ex. 74 (TWOJINN-00006630)

Nairin Dep. Ex. 172 (AIA_000043629)

Nairin Dep. Ex. 178 (ASC 061709)

Pltf. Ex. 201 (ASC 555573)

Shields Dep. Ex. 137 (FCS000069813)

Shields Dep. Ex. 138

Stanley Dep. Ex. 210

Thompson Dep. Ex. 78 (BANKERS_000004362)

Wood Dep. Ex. 151

Ziemer Dep. Ex. 38 (CF0056620)

Ziemer Dep. Ex. 43 (CF0067516)

Ziemer Dep. Ex. 45 (CF0066216)

Data Productions

2024-11-26 (VOL002).pdf

ACCRED000349255_HIGHLY CONFIDENTIAL

ACIC_000212493

ASC - CA Forfeiture Data - HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY(700096472.1)

Forfeiture PDF Conversions

ILM - CA Forfeiture Data - HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY(700095094.1).xlsx

SEAVIEW-00117911.pdf

SEAVIEW-00165193

TWOJINN-00020670

Depositions

Deposition of Brian Nairin (Sept. 5, 2024)

Deposition of Craig Stanley (Aug. 23, 2024)

Deposition of Donald Blackwell (June 13, 2024)

Deposition of Fred Anschultz (May 29, 2024)

Deposition of George Stahlman, Jr. (Sept. 25, 2024)

Deposition of Jane Un (Oct. 14, 2024)

Deposition of Jeffrey Stanley (Sept. 16, 2024)

Deposition of Jonathan Schneider (Aug. 22, 2024)

Deposition of Lisa Thompson (June 12, 2024)

Deposition of Mark Francis (May 7, 2024)

Deposition of Michael Bench (Nov. 20, 2024)

Deposition of Michael Ziemer (May 30, 2024)

Deposition of Mike Wood (Jul. 31, 2024)

Deposition of Robert Hayes (Jul. 18, 2024)

Deposition of Sean Cook (Nov. 15, 2024)

Deposition of Sean O'Brien (May 14, 2024)

Deposition of Sharon Jallad (Jun. 27, 2024)

Deposition of Steven Mehr (Sept. 24, 2024)

Deposition of Topo Padilla (Nov. 25, 2024)

Deposition of William Carmichael (Sept. 27, 2024)

Deposition of William Shields (Jul. 24, 2024)

Deposition of Yousuf Nabi (Sept. 18, 2024)

Legal Documents

(Im)Balance of Power: How Market Concentration Affects Worker Compensation and Consumer Prices, Testimony to the House Committee on Economic Disparity and Fairness in Growth (Apr. 6, 2022)

Breaking the News – Journalism, Competition, and the Effects of Market Power on a Free Press, held by the Senate Subcommittee on Competition Policy, Antitrust, and Consumer Rights (Feb. 2, 2022)

Brown Shoe Co. v. United States, 370 U.S. 294 (1962)

Cal. Code Regs. tit. 10, § 2081

Cal. Penal Code § 1269(b)

Cal. Penal Code § 1298

Cal. Penal Code § 1299.01

Cal. Penal Code §1305

Cung Le, et al. v. Zuffa, LLC d/b/a Ultimate Fighting Championship, No. 2:15-cv-01045-RFB-BNW, ECF No. 839 (D. Nev. Aug. 9, 2023)

In re Air Cargo Shipping Servs. Antitrust Litig., No. 06-MD-1775 JG VVP, 2014 WL 7882100 (E.D.N.Y. Oct. 15, 2014)

In re Capacitors Antitrust Litigation (No. III), case No. 17-md-02801-JD, 2018 WL 5980139 (N.D. Cal. Nov. 14, 2018)

In re Delta/AirTran Baggage Fee Antitrust Litig., 317 F.R.D. 675 (N.D. Ga. 2016)

In re High-Tech Employees Antitrust Litigation, 985 F. Supp. 2d 1167, 1206 (N.D. Cal. Jan. 1, 2013)

In re JUUL Labs, Inc., Marketing, Sales Practices, and Products Liability Litig., No. 19-md-02913-WHO, ECF No. 3327 (N.D. Cal. Jun. 28, 2022)

In re Lidoderm Antitrust Litig., No. 12-md-02521, 2017 WL 679367 (N.D. Cal. Feb. 21, 2017)

In re MacBook Keyboard Litig., No. 5:18-cv-02813-EJD, 2021 WL 1250378 (N.D. Cal. Mar. 8, 2021)

In re Packaged Seafood Prods. Antitrust Litig. 332 F.R.D. 308 (S.D. Cal. 2019)

In re Pharm. Indus. Average Wholesale Price Litig., 491 F. Supp. 2d 20, 36-37 (D. Mass. 2007)

In re Pharm. Indus. Average Wholesale Price Litig., 582 F.3d 156 (1st Cir. 2009)

In re Polyurethane Foam Antitrust Litig., 314 F.R.D. 226, 286 (N.D. Ohio 2014)

In re: Broiler Chicken Grower Antitrust Litig. (No. II), No. 6:17-cv-00033-RJS-CMR (E.D. Ok. May 8, 2024)

In Re: Pepperdine University Tuition and Fees Covid-19 Refund Litigation, Master File No. 2:20-cv-04928-DMG, ECF No. 115 (C.D. Cal. Sept. 26, 2023)

In Re: Pork Antitrust Litig., No. 0:18-cv-01776, ECF No. 1887 (D. Minn. Mar. 29, 2023)

In Re: University of Southern California Tuition and Fees COVID-19 Refund Litigation, No. 2:20-cv-4066-DMG, ECF No. 213 (C.D. Cal. Sept. 29, 2023)

Johnson v. Arizona Hosp. and Healthcare Assoc., No. CV 07-1292-PHX-SRB, 2009 WL 5031334 (D. Ariz. Jul. 14, 2009)

Meijer, Inc. v. Abbott Laboratories, No. C 07-5985 CW, 2008 WL 4065839 (N.D. Cal. Aug. 27, 2008)

Merger Guidelines, U.S. Department of Justice and the Federal Trade Commission (Dec. 18, 2023)

Michael Miazza, et al. v. Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, No. C-696918 (Parish of East Baton Rouge Jul. 13, 2021)

Natchitoches Parish Hosp. Serv. Dist. v. Tyco Int'l, Ltd., 262 F.R.D. 58 (D. Mass. 2008)

Nitsch v. Dreamworks Animation SKG Inc., 315 F.R.D. 270 (N.D. Cal. 2016)

Olean Wholesale Grocery Cooperative, Inc. v. Bumble Bee Foods, No. 19-56514, 31 F.4th 651 (9th Cir. 2022)

Regeneron Pharms., Inc. v. Novartis Pharma AG, 96 F.4th 327 (2d Cir. Mar. 18, 2024)

Reviving Competition, Part 1: Proposals to Address Gatekeeper Power and Lower Barriers to Entry Online, held by the House Subcommittee on Antitrust (Feb. 23, 2021)

Simon and Simon, PC d/b/a City Smiles and VIP Dental Spas v. Align Technology, Inc., No. 20-cv-03754-VC (N.D. Cal. Nov. 29, 2023)

Southeast Missouri Hospital and St. Francis Medical Center v. C.R. Bard, No. 1:07cv0031 TCM, 2008 WL 4372741 (E.D. Mo. Sept. 22, 2008)

Todd v. Exxon Corp., 275 F.3d 191 (2nd Cir. 2001)

United States v. E. I. du Pont de Nemours & Co., 351 U.S. 377 (1956)

Literature

Aaron S. Edlin and Daniel L. Rubinfeld, *Exclusive or Efficient Pricing? The Big Deal Bundling of Academic Journals*, 72 Antitrust L.J. 119-157 (2004)

ABA Section of Antitrust Law, Antitrust Law Developments (ABA 7th ed. 2012)

Achim Wambach and Andreas R. Engel, *Surety Bonds with Fair and Unfair Pricing*, 36 The Geneva Risk and Insurance Review 36-50 (2011)

Aleix Calveras, Juan-Jose Ganuza, and Esther Hauk, *Wild Bids. Gambling for Resurrection in Procurement Contracts*, 26(1) Journal of Regulatory Economics 41-68 (2004)

American Bar Association, Proof of Conspiracy Under Federal Antitrust Laws (ABA 1st ed. 2010)

American Bar Association, Proving Antitrust Damages, Legal and Economic Issues (ABA 3rd ed. 2017)

Avijit Hazara, *Using the Confidence Interval Confidently*, 9(10) JOURNAL OF THORACIC DISEASE, 4126 (2017)

Carl Shapiro, *Antitrust: What Went Wrong and How to Fix It*, 35(3) Antitrust 33-45 (2021)

Christa Brown, *Do the Math: Money Bail Doesn't Add Up for San Francisco*, Office of the Treasurer & Tax Collector City & County of San Francisco (Jun. 2017)

Daniel A. Crane, *Market Power Without Market Definition*, 90(1) Notre Dame L. Rev. 31-79 (2014)

Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, 88-98 (Pearson Addison Wesley 4th ed. 2005)

George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84(3) The Quarterly Journal of Economics 488-500 (1970)

George E. Rejda, Principles of Risk Management and Insurance (Pearson 10th ed. 2008)

Jeffrey Wooldridge, Introductory Econometrics: A Modern Approach (Thompson 4th ed. 2009)

Jonathan Baker and Daniel Rubinfeld, *Empirical Methods in Antitrust Litigation: Review and Critique*, 1 American Law and Economics Review 386-435 (1999)

Jonathan Baker and Timothy Bresnahan, *Economic Evidence in Antitrust: Defining Markets and Measuring Market Power* in Paolo Buccirossi, ed., Handbook of Antitrust Economics 1-42 (MIT Press 2008)

Joseph E. Stiglitz, *Information and the Change in the Paradigm in Economics*, 92(3) The American Economic Review 460-501 (2002)

Joshua Page et al., *A Debt of Care: Commercial Bail and the Gendered Logic of Criminal Justice Predation*, 5(1) The Russell Sage Foundation Journal of the Social Sciences 150-172 (Feb. 2019)

Kevin Caves and Hal Singer, *Applied Econometrics: When Can an Omitted Variable Invalidate a Regression?*, Antitrust Source (2017)

Leigh Thompson, The Truth About Negotiations (FT Press 1st ed. 2008)

Margaret C. Levenstein and Valerie Y. Suslow, *What Determines Cartel Success?*, 44(1) Journal of Economic Literature 43-95 (2006)

Martin Bland and Douglas Altman, *Statistics Notes: Transformations, Means, and Confidence Intervals*, 312 BMJ 1 (Apr. 27, 1996)

N. Gregory Mankiw, Principles of Microeconomics (Cengage 8th ed. 2018)

Phillip Areeda and Herbert Hovenkamp, Antitrust Law: An Analysis of Antitrust Principles and their Application (Wolter Kluwer 4th ed.)

Pretrial Detention Reform: Recommendations to the Chief Justice, Judicial Branch of California, Pretrial Detention Reform Workgroup (Oct. 2017), https://www.courts.ca.gov/documents/PDRReport-20171023.pdf

R. Carter Hill, William E. Griffiths, and Guay C. Lim, Principles of Econometrics (John Wiley & Sons 5th ed. 2018)

Ricky Siu Wong, *Knowledge of Opponents' Power in Power-Asymmetric Negotiations: Whose Knowledge Shapes the Structure of Outcomes?*, 11(2) Contemporary Management Research (2015)

Robert C. Marshall and Leslie M. Marx, The Economics of Collusion, Cartels and Bidding Rings (The MIT Press 2012)

Robin L. Pinkley, Margaret A. Neale, and Rebecca J. Bennett, *The Impact of Alternatives to Settlement in Dyadic Negotiation*, 57(1) Organizational Behavior and Human Decision Processes 97-116 (1994)

Roger Fisher, William L. Ury, and Bruce Patton, Getting to Yes: Negotiating Agreement Without Giving In (Penguin 2nd ed. 2011)

Selling Off Our Freedom, ACLU Campaign for Smart Justice (May 2017), https://www.aclu.org/wp-content/uploads/publications/059_bail_report_2_1.pdf

The Devil in the Details: Bail Bond Contracts in California, UCLA School of Law Criminal Justice Reform Clinic (May 2017), https://static.prisonpolicy.org/scans/UCLA_Devil%20_in_the_Details.pdf

Theon van Dijk and Frank Verboven, *Quantification of Damages*, 3 Issues in Competition Law and Policy 2331-2348, in ABA Section of Antitrust Law (2008)

Thomas Krattenmaker, Robert Lande & Steven Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 Georgetown Law Journal 241-269 (1987)

Timothy Brennan, *Bundled Rebates as Exclusion Rather Than Predation*, 4(2) Journal of Competition Law and Economics 335-374 (2008)

Vivek Mani and Darwin V. Neher, *Antitrust Impact in Class/Collective Actions*, Cornerstone, Global Legal Group (Nov. 13, 2020), https://www.cornerstone.com/wp-content/uploads/2022/01/Antitrust-Impact-in-Class-or-Collective-Actions.pdf

William G. Cochran, SAMPLING TECHNIQUES, 3rd ed., John Wiley & Sons (1977)

William M. Landes and Richard A. Posner, *Market Power in Antitrust Cases*, 94 Harvard Law Rev. (1981)

Publicly Available Materials

Accredited – CDI rate filing no. 06-7980 (Oct. 18, 2006)

Accredited – CDI rate filing no. 99-2958 (Mar. 10, 1999)

Accredited – CDI Rate Filling no. 00-12469 (Sept. 1, 2000)

Accredited – CDI Rate Filling no. 10-5444 (Jul. 31, 2010)

Accredited – CDI Rate Filling no. 17-2088 (Mar. 14, 2017)

American Contractors Indemnity Company – CDI Rate Filling no. 08-2395 (Apr. 30, 2008)

Ariel Nelson et al., *Commercialized (In)justice Litigation Guide*, National Consumer Law Center (Jun. 2020), https://www.nclc.org/wp-content/uploads/2022/09/WP_Litigation_Guide.pdf

Bail Agent or Agency, California Department of Insurance, https://www.insurance.ca.gov/0200-industry/0050-renew-license/0200-requirements/bail-agent.cfm (last visited Dec. 7, 2024)

Bail Agents, California Department of Insurance, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailAgents (last visited Dec. 7, 2024)

Bail Bonds and Cash Bails, San Diego County Sheriff's Department (Mar. 2022), https://apps.sdsheriff.net/PublicDocs/SB978/Human%20Resource%20Services%20Bureau/Professional%20Staff%20Development/Inmate%20Processing/DIA%20Training/DIA%20Training%20Manual/Section%205%20Bail%20Bonds%20and%20Cash%20Bails.pdf

Bail Bonds, California Department of Insurance, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/ (last visited Dec. 7, 2024)

Bail Schedules, California Department of Insurance, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/#BailSchedules (last visited Dec. 7, 2024)

Bankers Insurance Company – CDI Rate Filing no. 09-4748 (Jun. 10, 2009)

Bond Postings, United States District Court Central District of California, https://www.cacd.uscourts.gov/court-procedures/filing-procedures/bond-postings (last visited Dec. 10, 2024)

CDI Rate Filing Database Public portal, California Department of Insurance, https://interactive.web.insurance.ca.gov/apex_extprd/f?p=186:1:299756363645::NO:RP,1:: (last visited Dec. 8, 2024)

Coordinates 34.0578844, -118.2327878, Google Maps, https://www.google.com/maps/search/Bail/@34.0578844,-118.2327878,18.25z?entry=ttu&g_ep=EgoyMDI0MTIwNC4wIKXMDSoASAFQAw%3D%3D (last visited Dec. 9, 2024)

County of Sacramento Felony and Misdemeanor Bail Schedules for Persons in Pretrial Custody, Superior Court of California, https://www.saccourt.ca.gov/criminal/docs/bail-schedule.pdf (last visited Dec. 7, 2024)

Crime Statistics, California Department of Justice, https://openjustice.doj.ca.gov/exploration/crime-statistics (last visited Dec. 8, 2024)

Dave Jones, *Recommendations for California's Bail System*, California Department of Insurance (Feb. 2018), https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/CDI-Bail-Report-Draft-2-8-18.pdf

Fact Sheet: Profit over People, Center for American Progress (Jul. 6 2022), https://www.americanprogress.org/article/fact-sheet-profit-over-people/

Federal Funds Effective Rate, FRED, https://fred.stlouisfed.org/series/FEDFUNDS (last visited Dec. 8, 2024)

Financial Casualty & Surety – CDI Rate Filling no. 04-8381 (Sept. 2024)

Flow Chart of Bail Collection Process After Forfeiture, California Department of Insurance, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/Flow-Chart-of-Bail-Collection-Process-After-Forfeiture.pdf (last visited Dec. 7, 2024)

How Courts Work, ABA (Sept. 9, 2019), https://www.americanbar.org/groups/public_education/resources/law_related_education_network/how_courts_work/bail/

Inmate Bail Frequently Asked Questions, San Mateo County Sheriff's Office, https://www.smcsheriff.com/inmate-bail-frequently-asked-questions (last visited Dec. 10, 2024)

Julia Kagan, *Loss Cost: What it Means, How to Calculate*, Investopedia (Aug. 7, 2023), https://www.investopedia.com/terms/l/loss-cost.asp

Lance Pugmire, *Bail Bond Chief Takes Plea Deal*, Los Angeles Times (Jun. 26, 2004), https://www.latimes.com/archives/la-xpm-2004-jun-26-me-bailplea26-story.html

Lexington - CDI rate filing No. 15-10267 (Dec. 1, 2015)

Market Yield on U.S. Treasury Securities at 1-Year Constant Maturity, Quoted on an Investment Basis, Federal Reserve Bank of St. Louis, https://fred.stlouisfed.org/series/DGS1 (last visited Dec. 9, 2024)

Market Yield on U.S. Treasury Securities at 30-Year Constant Maturity, Quoted on an Investment Basis, FRED, https://fred.stlouisfed.org/series/GS30 (last visited Dec. 8, 2024)

Median Household Income of California, FRED, https://fred.stlouisfed.org/series/MEHOINUSCAA646N (last visited Dec. 8, 2024)

Payment Methods, Superior Court of California County of Santa Clara, https://santaclara.courts.ca.gov/forms-filing/payment-

methods#:~:text=Payment%20is%20accepted%20by%20cash,3.5%25%20convenience%20fee%20per%20transaction (last visited Dec. 7, 2024)

Payment Options and Information, Superior Court of California County of Orange, https://www.occourts.org/divisions/collections/payment-options (last visited Dec. 7, 2024)

Payment Options and Information, Superior Court of California County of San Bernandino, https://dev.sb-court.org/divisions/traffic/payment-options-and-information (last visited Dec. 7, 2024)

Price Fixing, Federal Trade Commission, https://www.ftc.gov/advice-guidance/competition-guidance/guide-antitrust-laws/dealings-competitors/price-fixing (last visited Dec. 8, 2024)

Private Passenger Auto Class Plan Filing Instructions, State of California Department of Insurance (Apr. 15, 2011), https://www.insurance.ca.gov/0250-insurers/0800-rate-filings/upload/ClassPlanInstructions.pdf

Prop 103 Consumer Intervenor Process, California Department of Insurance, https://www.insurance.ca.gov/01-consumers/150-other-prog/01-intervenor/index.cfm (last visited Dec. 8, 2024)

Ratemaking Glossary, National Council on Compensation Insurance, https://www.ncci.com/Articles/Documents/II_Ratemaking-Curriculum-Glossary.pdf?cacheversion=469857095 (last visited Dec. 8, 2024)

Resident Population in California, FRED, https://fred.stlouisfed.org/series/CAPOP (last visited Dec. 8, 2024)

SF Bail Fact Sheet, Superior Court of California, County of San Francisco, https://sf.courts.ca.gov/system/files/general/bail-fact-sheet-2024.pdf (last visited Dec. 7, 2024)

State Licensing Handbook, Chapter 19: Bail Bond Agents, National Association of Insurance Commissioners, https://content.naic.org/sites/default/files/inline-files/Chapter%2019.pdf (last visited Dec. 10, 2024)

Utah Project on Antitrust and Consumer Protection, The University of Utah, https://utahproject.utah.edu/ (last visited Dec. 9, 2024)

What is a Bail Agent, CBAA, https://cbaa.com/bail-agent-portal/ (last visited Dec. 10, 2024)

Trial Materials

Accredited's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories to Surety Defendants (Jul. 24, 2024)

ACIC Responses and Objections to Plaintiffs Fourth Set of Interrogatories (Jul. 7, 2024)

AIA R&O Pls Rogs (Set 4) (Jul. 10, 2024)

American Surety Responses to Plaintiffs Interrogatory No. 6 Set Four (Jul. 10, 2024)

Bankers Response to Pls 4th Set of Rogs (Jul. 31, 2024)

C&F Defendants Responses to Fourth Set of Interrogatories (Jul. 17, 2024)

CHIC R&Os to Pls Rogs (Set 4) (Jun. 11, 2024)

FCS-Obections & Responses to Plaintiffs' Fourth Set of Rogs (Jul. 22, 2024)

ILM's response to Plaintiffs Interrogatory No. 6 Set Four (Jul. 10, 2024)

In Re California Bail Bond Antitrust Litigation, Corrected Third Consolidated Amended Class Action Complaint, filed May 9, 2022

Lexington National Insurance Corporation's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 10, 2024)

Seaview's Responses and Objections to Plaintiffs' Fourth Set of Interrogatories (Jun. 10, 2024)

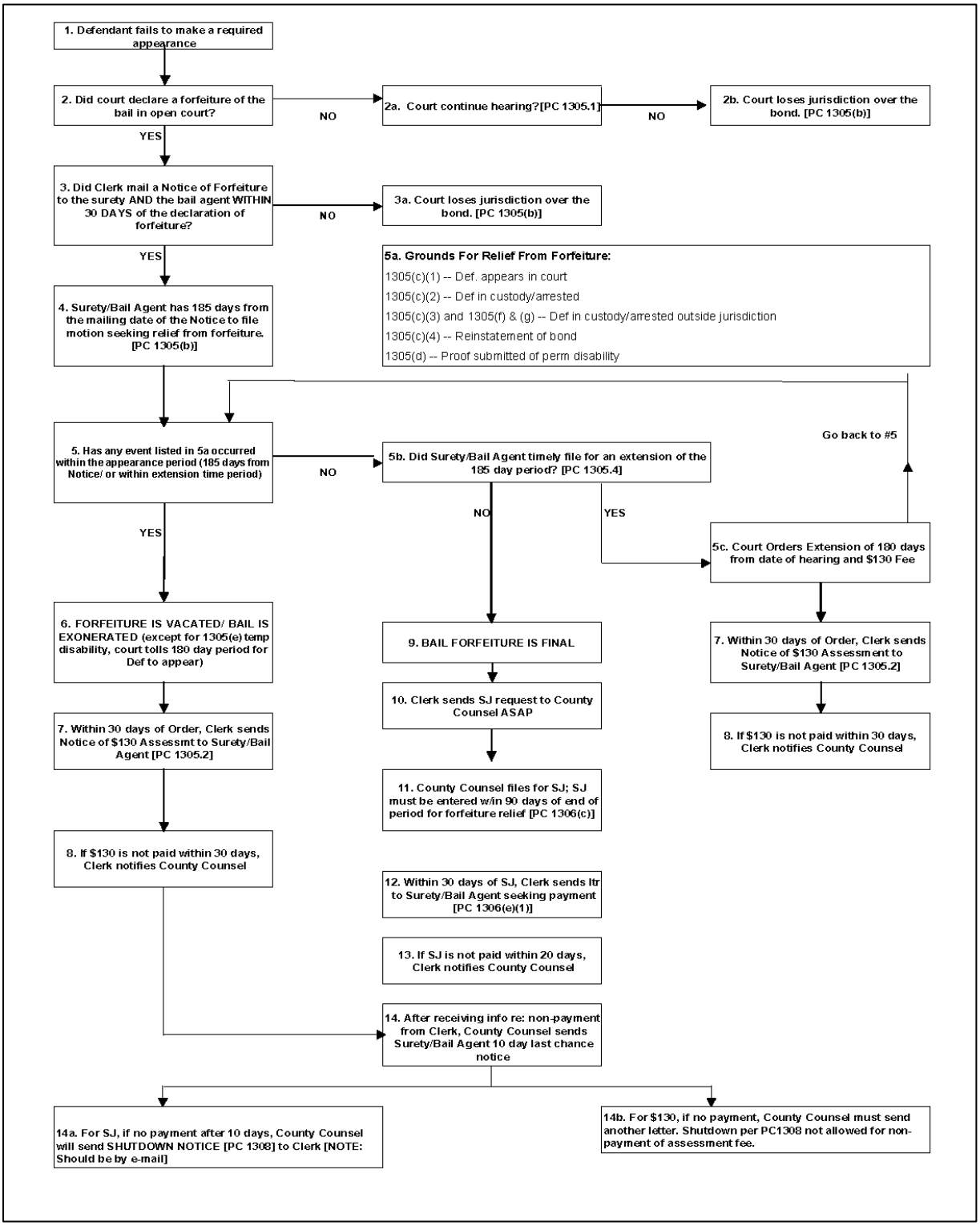
Sun Surety's Response to Fourth Set of ROGS (Jul. 12, 2024)

Universal Fire's Response to Fourth Set of ROGS (Jul. 12, 2024)

Williamsburg R&O Pls Rogs (Set 4) (Jul. 10, 2024)

APPENDIX 3: APPENDIX EXHIBITS

EXHIBIT 40: FORFEITURE FLOW CHART



Source: *Flow Chart of Bail Collection Process After Forfeiture*, CALIFORNIA DEPARTMENT OF INSURANCE, https://www.insurance.ca.gov/01-consumers/170-bail-bonds/upload/Flow-Chart-of-Bail-Collection-Process-After-Forfeiture.pdf (last visited Dec. 11, 2024).

EXHIBIT 41: FORFEITURE PROCESS AND FINALIZATION INCIDENCE BY FILED RATE TYPE, BY SURETY

Defendant	Filed Rate Type	Forfeiture Process Incidence	Forfeiture Finalized Incidence
[redacted]	[redacted]	[redacted]	[redacted]

Notes: (1) The Filed Rate Type classifications are based on CDI filings. Only bonds issued between 2016 and 2022 are included in the analysis because of the overlap between sampled sureties with respect to Filed Rates. *See* Exhibit 9, Exhibit 11: Filed Rates by Defendant, *supra*. (2) The Probability of Forfeiture is computed by calculating the count of all Forfeiture events for each "Filed Rate Type" as a percent of all bonds issued of the same types, regardless of whether it was forfeited or not. The four sureties that provided this data are: ACIC, Lexington, Sun, and Universal. Outliers were removed. For details, *see* ¶94. (3) Only Lexington produces data on "Qualified-2" Filed Rate Type. (4) Some Filed Rate Types were excluded due to insufficient sample size; the three types listed represent over 95% of all bonds issued by the four sureties. (5) Lexington doesn't produce "Forfeiture Process" data, it was excluded from the relevant calculations.
Source: Surety Data. *See* Singer Workpapers.

EXHIBIT 42: SUMMARY OF SAMPLED AGENCY DATA (CENSUS)

[1]	[2]	[3]	[4] = [3] / [2]
Agent	**Sample Bond Amount**	**Sample Rebate**	**Rebate Percent of Bond Amount**
[redacted]	[redacted]	[redacted]	[redacted]

Source: Agency and Surety Data

EXHIBIT 43: SUMMARY OF SAMPLED AGENCY DATA (RANDOM SAMPLE)

[1]	[2]	[3]	[4] = [3] / [2]
Agent	**Sample Bond Amount**	**Sample Rebate**	**Rebate Percent of Bond Amount**
[redacted]	[redacted]	[redacted]	[redacted]

Source: Agency and Surety Data

EXHIBIT 44: ESTIMATED POPULATION-WIDE REBATE RATE

[1]	[2]	[3]	[4]
Population Type	**Rebate Percent of Bond Amount**	**Percent of Surety Data Represented**	**Respondents' Percent of Represented**
[redacted]	[redacted]	[redacted]	[redacted]

Source: Agency and Surety Data.

APPENDIX 4: SURETY LOSSES FROM FORFEITURE

1. **Accredited:** [redacted][375] [redacted][376] [redacted][377]
2. **ACIC:** [redacted][378]
3. **Allegheny:** [redacted][379] [redacted][380] [redacted][381] [redacted][383] [redacted][384]
4. **ASC:** [redacted][385]
5. **Bankers:** [redacted][386]

375. Accredited's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 24, 2024) at 10-11.
376. ACCRED000349255_HIGHLY CONFIDENTIAL.xlsx.
377. *Id*. at -9254.
378. ACIC_000212493.xlsx [redacted]"; ACIC's Responses and Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 10, 2024) at 5-6 [redacted]).
379. AIA's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 10, 2024) at 5.
380. *Id*. at 6.
381. *Id*. at 6.
382. Francis Dep. at 96:14-97:16.
383. Francis Dep. at 101:4-21.
384. Francis Dep. at 102:1-17.
385. American Surety's Responses & Objections to Plaintiffs Fourth Interrogatories No. 6 (Jul. 10, 2024); ASC - CA Forfeiture Data - HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY(700096472.1).xlsx.
386. Bankers' Responses to Plaintiffs' Fourth Set of Interrogatories (00350644xE15DC) (Jul. 30, 2024).

6. **CHIC:** [redacted][387] [redacted][388] [redacted][389]
7. **Danielson:** Defendant settled and did not supply this data.
8. **FCS:** [redacted][390] [redacted][391]
9. **IFIC:** *See Allegheny*.
10. **ILM:** [redacted][392] [redacted]

387. O'Brien Dep. at 45:15-17 [redacted] O'Brien Dep. at 74:23-75:14 [redacted]

388. CHIC's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jun. 11, 2024) [redacted]

389. *Id*.

390. FCS's Objections & Responses to Plaintiffs' Fourth Set of Interrogatories (Jul. 19, 2024).

391. Shields Dep. at 54:11-19 [redacted].

392. ILM's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories No. 6 (Jul. 10, 2024) [redacted] Blackwell Dep. at 80:20-25 [redacted]

393. Blackwell Dep. at 38:11-20 [redacted]").

[redacted][394] [redacted]

[redacted].[395]

11. **Lexington:** [redacted]

[redacted].[396] [redacted]

[redacted].[397]

12. **Lexon:** Defendant settled and did not supply this data.
13. **North River:** Crum and Foster produced a single document for all three Sureties (North River, Seneca, US Fire). [redacted]

[redacted].[398] ([redacted].)

14. **Seaview:** [redacted]

[redacted].”[399]

15. **Seneca:** *See North River.*
16. **Sun Surety:** [redacted]

[redacted][400]

17. **US Fire:** *See North River.*
18. **Universal:** [redacted]

394. Blackwell Dep. at 39:21-39:11.

395. [redacted]

396. Lexington National Insurance Corporation’s Responses & Objections to Plaintiffs’ Fourth Set of Interrogatories (Jul. 10, 2024).

397. Lexington National Insurance Corporation’s Response to Plaintiffs’ Fourth Set of Interrogatories to Surety Defendants (Jul. 10, 2024) [redacted]) (emphasis added).

398. Ziemer Dep. at 149:16-25 (“[redacted]).

399. Seaview’s Responses & Objections to Plaintiffs’ Fourth Set of Interrogatories (Jun. 10, 2024) at 5.

400. Sun Surety’s Responses & Objections to Plaintiffs’ Fourth Set of Interrogatories (Jul. 12, 2024) at 6.

of [redacted].[401] [redacted] [redacted]"[402]

19. Williamsburg: [redacted].[403]

401. Universal Fire's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 10, 2024) at 6 [redacted].

402. *Id.* [redacted].

403. Williamsburg's Responses & Objections to Plaintiffs' Fourth Set of Interrogatories (Jul. 10, 2024) at 9 ("[redacted]