FINRA Office of the Chief Economist | Working Paper NON-TECHNICAL SUMMARY The Selection of Claims in Securities Arbitration for Settlement: A Text-Based Analysis Stephanie Denis, Matthew L. Kozora, Minwen Li, and Jonathan Sokobin December 31, 2021

Using a set of claims made in the FINRA Dispute Resolution Forum ('the Forum') around the downgrade of Puerto Rican municipal securities, we investigate the decision to settle a dispute in securities arbitration. In securities arbitration, parties agree to abide by the decisions of a neutral third-party. Potentially more important than arbitral decisions (i.e., awards to either party), however, is the role of the arbitration proceedings to faciliate a settlement. For example, according to statistics published by FINRA., approximately seventy percent of customer claims against brokerage firms and individual brokers (i.e., industry parties) result in a direct settlement by parties or are settled via mediation. The Forum operates the largest securities dispute resolution forum in the U.S.

We address two key questions in this paper. First, how does the strength of the customer claim, i.e., the ability of customers to evidence the liability of industry parties, relate to the decision to settle? Second, how does the similarity of the customer claim to previous claims, and thus the amount of information which may be available describing a potential settlement or award, relate to the decision to settle?

We first build a simple model informed by the academic literature to motivate our empirical tests. The model makes three predictions. First, stronger customer claims result in greater settlements and awards. Second, stronger customer claims are more likely to settle than weaker customer claims. This second predictions is the result of the additional stakes industry parties may incur (e.g., increase in future claims) as a potential award increases. Finally, parties are more likely to settle when customers bring claims more similar to previous claims. In these instances, more information is available to parties which describes a potential settlement or award.

We then empirically investigate these expected relationships. We apply natural language processing (NLP) methods to analyze the Statements of Claim (SOCs) filed by customers in FINRA arbitration. NLP extracts information from text that can be then used to test our hypotheses. In line with

recent literature, we construct three empirical measures to describe the information content of an SOC: the total number of meaningful words (document length), its average similarity to previously filed SOCs (document similarity), and the percentage of negative words to total meaningful words (negative tone). We use document length as a proxy for the strength of the customer claim, and document similarity as a proxy for the amount of information available which describes a potential settlement or award. We also examine negative tone for its potential relationship with strategic disclosure and impression management.

We focus our analysis on customer claims concerning investments in Puerto Rico municipal bonds. The cases represent approximately two-fifths of all customer claims filed and closed during the sample period, and provides us with a clean setting to test for the effects of claim strength and similarity while limiting the potential differences in the characteristics of the claims, and the securities and underlying events which led to the claims. First, we find that stronger customer claims, captured by longer SOCs, are associated with a higher total customer payout and a higher likelihood of settlement. Second, we find that more similar SOCs are associated with a higher likelihood of settlement. And finally, find that SOCs with a more negative tone are associated with a lower likelihood of settlement and a lower total customer payout. This last result is consistent with the notion that a customer may employ a negative tone in an attempt to sway arbitrators or other parties to the case, potentially in place of additional facts or evidence supporting the case.

Arbitration is an important way for customers to resolve securities disputes with industry parties. Our study suggests that securities arbitration helps facilitate settlements between parties and recompenses claimants based on the merits. For example, the ability of customers to evidence the liability of industry parties positively relates to the payout they receive. In addition, parties are more likely to settle a claim and forego an award when it is more beneficial for the industry party to settle or the parties are better able to negotiate a settlement amount. In general, the findings also suggest that cases that settle may share different characteristics from those cases that instead result in an award. As all prior studies on securities arbitration concern cases that result in an award, our research suggests that inferences made from just those cases may be subject to a severe selection bias.