

# Attorney as Arbitrators

Stephen J. Choi, Jill E. Fisch, and  
Adam C. Pritchard

# Becoming an Arbitrator

- \$80 Application Fee
- \$125 tuition for training program
- Online course (w/ exam)
- 4 hour onsite classroom training
- Additional online course on expungement

“Arbitrators are not bound by case precedent or statutory law. Rather, they are guided in their analysis by the underlying policies of the law, and are given wide latitude in their interpretation of legal concepts.”

--NASD, The Neutral Corner (June, 2006)

# Fanam, LLC vs. Merrill Lynch (04-05063)

## AWARD

After considering the pleadings, the testimony and evidence presented at the hearing, the Panel has decided in full and final resolution of the issues submitted for determination as follows:

1. Respondent is liable for and shall pay to Claimant compensatory damages in the amount of \$700,000.00, plus interest at a rate of 9% per annum from April 30, 2003 to date of payment of the Award.
2. Any and all relief not specifically addressed herein, including punitive damages, is denied.

# Hypotheses

- Attorneys who represent brokerage firms will make lower arbitration awards.
- Attorney-arbitrators with a strong Democrat political preference grant significantly different awards compared with attorney-arbitrators with a strong Republican political preference.
- Attorneys who represent brokerage firms will make lower arbitration awards only when they serve as chairs.
- Attorneys who represent brokerage firms will make lower arbitration awards when they serve with other arbitrators with the same background.

# Data Set

- Years: 1992-2006
- 427 arbitrators (selected from Chairs in 1998-2000 arbitration awards)
- 6724 arbitration awards

# Attorneys as Arbitrators

<b>Status</b>	<b>Number of Arbitrators</b>	<b>Percent</b>
Attorney	301	70.5%
Attorney_Investor	19	4.5%
Attorney_Brokerage	13	3.1%
Attorney_Both	38	8.9%
Not Attorney	126	29.5%
<b>Total</b>	<b>427</b>	<b>100.0%</b>

# The Dependent Variable

$$\text{Comp. Ratio} = \frac{\text{Awarded Compensation}}{\text{Claimed Compensation}}$$

- Does not include pain and suffering, punitive, or other exemplary damages
- Typically dependent on number of shares purchased (or sold) and direct losses from the transaction

# Attorneys as Arbitrators

Comp. Ratio ←

OLS Regression  
w/ Robust  
Standard Errors

Also use  
Tobit Model  
w/ errors  
clustered on  
arbitrators

Attorney  
Attorney\_Investor  
Attorney\_Brokerage  
Attorney\_Both  
Inexperienced

## Subject Matter

- Suitability
- Churning
- Unauthorized Trades
- Failure to Execute
- Misrepresentation
- Conversion

## Size

- Claimed Compensation
- Claimed Compensation<sup>2</sup>
- Number of Arbitrators

## Strength of Case

- Resp. Failed to Appear
- Punitive Damages
- CRD Expungement

## Settlement

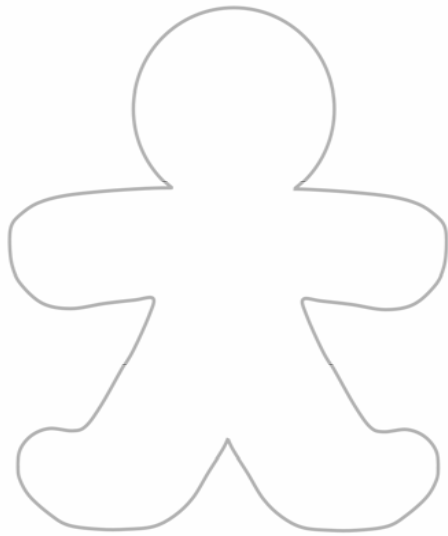
- Reported Settlement
- Unreported Partial Settle.

## State Controls

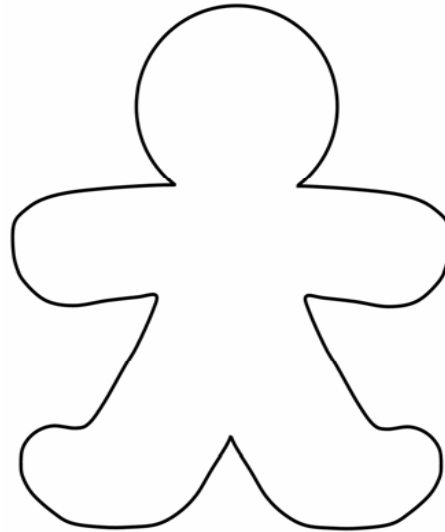
- Median State Income
- State Population
- Median Partner Income  
[Alternative: State Fixed  
Effects]

Year Fixed Effects

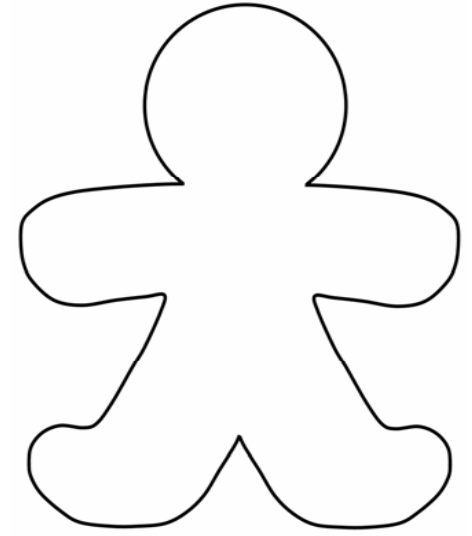
# Arbitrator Panel



Public  
Chair



Public

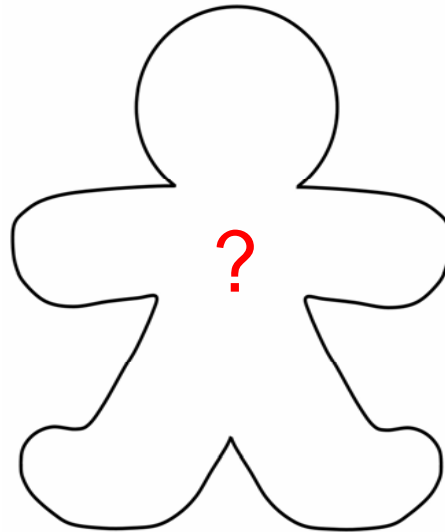


Industry

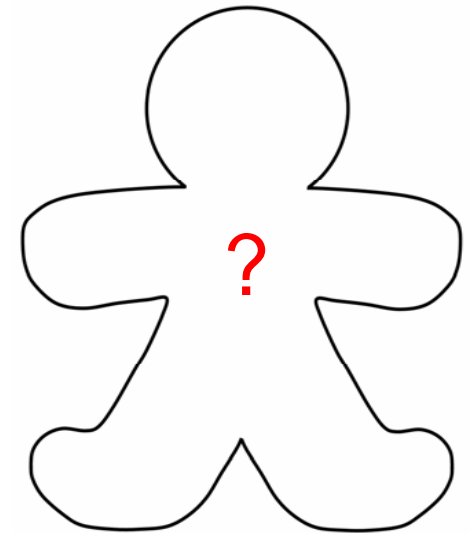
# Arbitrator Panel



Public  
Chair

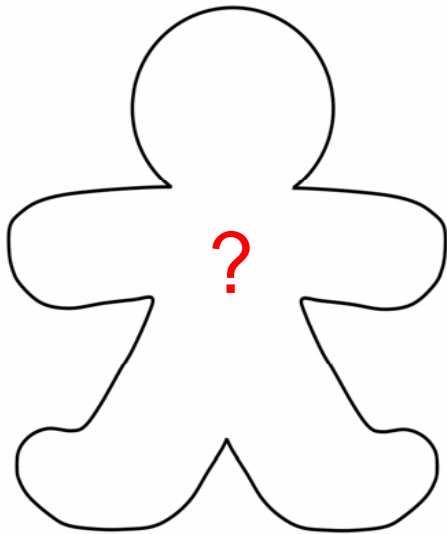


Public



Industry

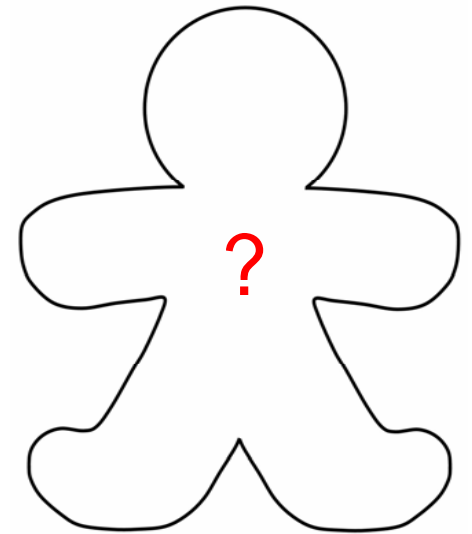
# Arbitrator Panel



Public  
Chair



Public



Industry

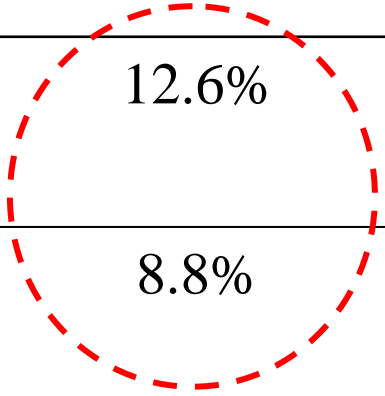
# Attorney as Arbitrators

Variables	Model 1
Attorney	-0.022* (-1.980)
Attorney_Investor	-0.006 (-0.330)
Attorney_Brokerage	-0.079** (-3.180)
Attorney_Both	0.013 (0.550)
Inexperienced	-0.037* (-2.040)
N	5782
Adj R2	0.1557

Only Attorney\_Brokerage remains significant in Tobit Model w/ errors clustered on arbitrators

# Political Preference of Attorney-Arbitrators

<b>Political Party</b>	<b>Number</b>	<b>Percent</b>
Democrat	652	12.6%
Republican	456	8.8%
Neither	4069	78.6%
<b>Total</b>	<b>5177</b>	<b>100.0%</b>



# Political Preference

Variables	Model 1
Attorney	-0.025* (-2.170)
Democrat_Attorney	0.040* (2.350)
Republican_Attorney	-0.022 (-1.170)
Attorney_Investor	-0.007 (-0.370)
Attorney_Brokerage	-0.081** (-3.240)
Attorney_Both	0.008 (0.320)
Inexperienced	-0.037* (-2.030)
N	5781
Adj R2	0.1575

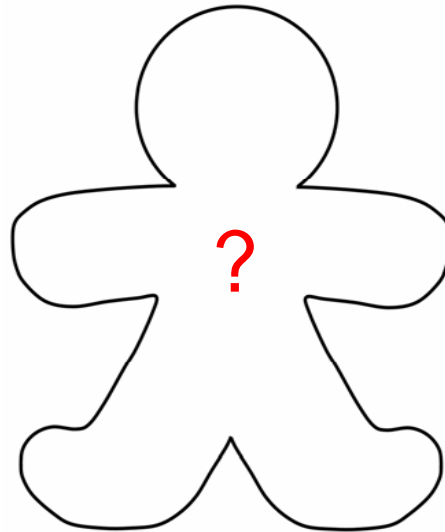
Similar results  
in Tobit w/ errors  
Clustered on  
arbitrators.

Democrat\_Atty  
and  
Attorney\_Brok.  
are significant

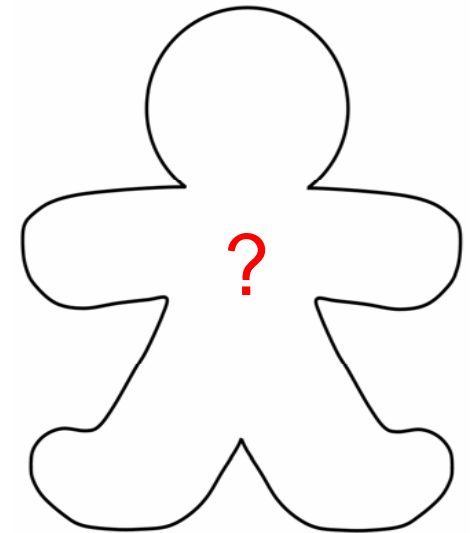
# Arbitrator Panel



Public  
Chair



Public



Industry

# Other Attorney Characteristics

Variables	Model 1	Variables	Model 1 Continued
Chair_Attorney	-0.041* (-2.470)	Other_Attorney	-0.075** (-3.090)
Chair_Atty_Rated	-0.006 (-0.490)	Other_Atty_Rated	0.021 (0.890)
Chair_Atty_Top_LawSchool	0.056** (2.620)	Other_Atty_Top_LawSchool	0.066 (1.490)
Chair_Atty_Securities_Practice	0.010 (0.500)	Other_Atty_Securities_Practice	-0.015 (-0.380)
Chair_Atty_Solo_Practice	0.025+ (1.890)	Other_Atty_Solo_Practice	0.036 (1.610)

# Other Attorney Characteristics Cont.

	0.003 (0.130)		-0.015 (-0.410)
Chair_Attorney_Investor		Other_Attorney_Investor	
Chair_Attorney_Brokerage	-0.079** (-2.730)	Other_Attorney_Brokerage	-0.092 (-1.590)
Chair_Attorney_Both	-0.007 (-0.270)	Other_Attorney_Both	0.035 (0.590)
Chair_Attorney_Democrat	0.041* (2.140)	Other_Attorney_Democrat	0.023 (0.650)
Chair_Attorney_Republican	-0.001 (0.060)	Other_Attorney_Republican	0.027 (0.650)
		Inexperienced	-0.035+ (-1.910)
		N	5776
		Adj R2	0.1576

Tobit w/ errors clustered on arbitrator generates similar results except:  
Other\_Atty\_Brokerage is significant at the 5% level

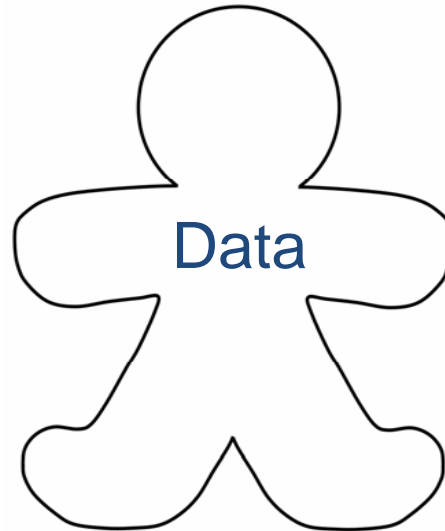
# Small Sample Data Set

- Years: 1998-2000
- 427 arbitrators (all chairs)
- 439 arbitration awards
- All three-arbitrator panels

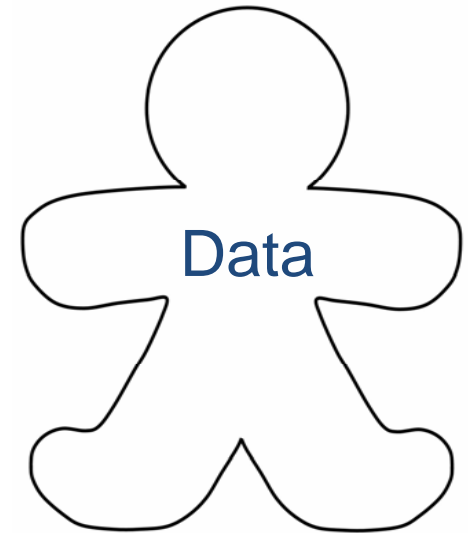
# Arbitrator Panel



Public  
Chair



Public



Industry

# Additional Variables

- Other Arbitrators on the Panel
- Number of Hearings
- Length of Arbitration Award
- Claimant has an attorney (or not)
- Respondent has an attorney (or not)
- Top Accused Brokerage Firm as Respondent (or not)

# Attorney Panels

Variables	Model 1	Variables	Model 1
Chair_Atty	-0.041 (-1.000)		
Chair_Atty_Investor	0.003 (0.050)	Panel_Atty_Investor	0.039 (0.530)
Chair_Atty_Brokerage	-0.163** (-3.890)	Panel_Atty_Brokerage	-0.058 (-1.090)
Chair_Atty_Both	-0.013 (-0.180)	Panel_Atty_Both	0.062 (0.680)
		Top Accused Brokerage	-0.138** (-3.660)
		Inexperienced	-0.048 (-1.130)
		Claimant Atty Present	0.089+ (1.840)
		Respondent Atty Present	-0.193** (-2.900)
		N	380
		Adj R2	0.3685

Tobit model generates similar results

# Attorney Coalitions

Variables	Model 1	Variables	Model 1
Chair_Atty	-0.045 (-1.090)		-0.045 (-1.090)
Chair_Atty_Investor	-0.016 (-0.270)	Coalition_Atty_Investor	0.291** (3.410)
Chair_Atty_Brokerage	-0.177** (-3.850)	Coalition_Atty_Brokerage	-0.023 (-0.260)
Chair_Atty_Both	0.001 (0.020)	Coalition_Atty_Both	-0.217+ (-1.710)
		Top Accused Brokerage	-0.138** (-3.690)
		Inexperienced	-0.048 (-1.100)
		Claimant Atty Present	0.092+ (1.880)
		Respondent Atty Present	-0.199** (-3.040)
		N	380
		Adj R2	0.3707

Tobit model generates similar results except:

Coalition\_Atty\_Brokerage is significant at the <1% level

Coalition\_Atty\_Both is not significant

# NASD Reforms

- 1998 Reforms
- 2004 Reforms

# Prior Literature

## Kondo (2007)

- Pro-brokerage firm arbitrators selected more often post-2004 reforms
- Attorneys selected more often as arbitrators post-2004 reforms (Kondo views this as an increase in “expertise”).

# Reforms: Arbitrator Fixed Effects

Variables	Model 1
Post 1998 Reforms	-0.047** (-3.610)
Post 2004 Reforms	0.002 (0.050)
Inexperienced	-0.057** (-2.940)
N	5124
Adj R2	0.1688

# Reforms: Arbitrator Pooled Model

Variables	Model 1
Attorney	-0.035* (-2.200)
Democrat_Attorney	0.040+ (1.910)
Republican_Attorney	0.021 (0.710)
Attorney_Investor	-0.017 (-0.690)
Attorney_Brokerage	-0.129** (-3.710)
Attorney_Both	0.018 (0.570)

# Reforms: Arbitrator Pooled Model Cont.

Post 1998 Reforms	-0.057** (-2.710)
Attorney x Post 1998 Reforms	0.017 (0.670)
Atty_Democrat x Post 1998 Reforms	0.024 (0.620)
Atty_Republican x Post 1998 Reforms	-0.062 (-1.520)
Atty_Investor x Post 1998 Reforms	0.011 (0.290)
Atty_Brokerage x Post 1998 Reforms	0.102+ (1.950)
Attorney_Both x Post 1998 Reforms	-0.001 (-0.020)

Atty\_Brokerage +  
Post 1998 Reforms +  
Atty\_Brokerage x Post 98 Reforms  
= -0.084

# Reforms: Arbitrator Pooled Model Cont.

Post 2004 Reforms	-0.036 (-0.680)
Attorney x Post 2004 Reforms	0.085 (1.110)
Atty_Democrat x Post 2004 Reforms	-0.070 (-0.430)
Atty_Republican x Post 2004 Reforms	-0.114 (-0.850)
Atty_Investor x Post 2004 Reforms	-0.054 (-0.500)
Atty_Brokerage x Post 2004 Reforms	0.062 (0.300)
Attorney_Both x Post 2004 Reforms	-0.008 (-0.030)
N	5124
Adj R2	0.1587

# Issues

- Settlement Problem?
- Dependent Variable?
- Other Tests?

## **Attorneys as Arbitrators**

Stephen J. Choi

Jill E. Fisch

A.C. Pritchard

Draft #3: 11 December 2007

### **Abstract**

We study the role of attorneys as arbitrators in securities arbitration, using a dataset of 426 randomly selected arbitrators and their 6724 arbitration awards from 1992 to 2006. We find that arbitrators who also serve as advocates for brokerage firms or brokers as in other arbitrations are significantly more likely to award less compensation to investor-claimants. This relation between representing brokerage firms and arbitration awards remains significant even when we control for political outlook. We find no significant effect for attorney-arbitrators who represent investors or both investors and brokerage firms. We report that personal preference (as proxied through political affiliation) correlates significantly with awards granted by attorney-arbitrators. We also find that the position of chair is important in assessing the arbitrator's influence. The effects that we observe are significant only if the arbitrator is chair of the arbitration panel. Coalitions among the other arbitrators are also important. If the chair and another panelist possess a common attribute, the effect on the arbitration award increases. Finally, we provide evidence that the 1998 NASD reforms to the arbitration process did ameliorate, but did not eliminate, the effect that attorneys who represent brokers have on outcomes. We find no significant effect from the NASD's 2004 reforms.

## 1. Introduction

In 1989, the United States Supreme Court in *Rodriguez de Quijas v. Shearson/American Express, Inc.* overruled its prior decision in *Wilko v. Swan* and held that mandatory arbitration provisions in brokerage customer agreements are enforceable.<sup>1</sup> Since that decision, virtually all customer agreements contain a clause requiring disputes between the customer and the broker to be submitted to arbitration. The vast majority of these arbitrations take place in a forum administered by the National Association of Securities Dealers (NASD, n/k/a FINRA). During our sample period, the NASD handled approximately 90% of customer claims against brokers (the remaining 10% are handled by the NYSE). The number of claims filed per year fluctuates, averaging 5000 to 6000 cases and peaking at almost 9000 in 2003. Since 1996, the NASD has handled approximately 70,000 claims.

The volume of NASD arbitrations has grown substantially in response to the *Rodriguez* decision. The fact that arbitration is now ubiquitous in the securities industry makes it difficult to evaluate the results of NASD arbitrations in terms of fairness to claimants; there is no baseline or alternative dispute resolution mechanism with which to compare the process.<sup>2</sup> There is some evidence available going back before arbitration became the industry standard. In 1992, the GAO published the results of a study of arbitration awards during an eighteen month period in 1989 and 1990. The GAO found that claimants received an award of monetary damages in 59% of arbitrations and received, on average, 61% of claimed damages. Comparing this to AAA arbitrations in which claimants received awards in 60% of cases and received an average of 57% of

---

<sup>1</sup> 490 U.S. 477 (U.S. 1989)

<sup>2</sup> See 2000 GAO Report regarding unpaid awards at 4-5.

claimed damages, the GAO found no basis to conclude that the arbitration process was systematically biased in favor of the industry. In 2000, the GAO published an updated reporting reflecting data from 1992 to 1998. That study found that investor win rates had declined to an average of 51% over the time period, but reasoned that this decline might be the result of an increase in settled claims rather than a pro-industry bias, concluding that “the declining win rate could indicate little or no change in the fairness of the arbitration process.” More recent data indicates that the investor win rate has continued to decline. Statistics provided by FINRA indicate that investors received an award of monetary damages or other non-monetary relief in 42% of the cases decided in 2006.<sup>3</sup>

Since the early 1990s, the arbitration procedure has been subject to criticism. Despite the absence of solid evidence one way or the other on the fairness of the process, arbitration has been consistently criticized as favoring the securities industry over the interests of investors.<sup>4</sup> The inescapable fact is that the arbitration process is run by the NASD, so it is necessarily dominated by the NASD’s members. The NASD created an Arbitration Policy Task Force in 1994 to evaluate and respond to a number of criticisms, including claims that the system was biased or industry-dominated. Although the NASD’s Task Force found no evidence of bias, a number of its recommendations were designed to improve the perceived and actual fairness of the system, leading to rules changes in 2004 and 2007, and increased updating and affirmation by arbitrators that their disclosure is adequate.

---

<sup>3</sup> See 1992 GAO report comparing percentage to claimant win rate of 60% in AAA arbitrations.

<sup>4</sup> See, e.g., Gretchen Morgenstern, *Is this Game Already Over*, N.Y. Times, June 18, 2006 (reporting criticisms of arbitration process including industry-domination, arbitrator bias, inadequately disclosed conflicts of interest, delays and more).

The criticisms of the NASD's process focus, in particular, on the use of industry arbitrators—including, among others, those with present or recent employment ties with securities brokerage firms. NASD arbitrations involving requested awards of \$50,000 or more involve three arbitrators, one industry arbitrator and two public arbitrators. The rationale for the industry arbitrator is to bring expertise to the resolution of disputes that typically involve the legitimacy of broker practices. The tradeoff, however, is that arbitrators affiliated with industry may have a skewed view of the claims presented by investors.

Critics have also challenged the definition of a public arbitrator. In some cases, they have argued that the definition of a public arbitrator, which excludes individuals who exceed certain financial and relationship thresholds, is insufficiently stringent to preserve the neutrality of the public arbitrators. Most notably, the financial thresholds do not exclude attorneys who commit only a small portion of their practice to representing brokerage firms; such attorneys are also classified as public. Moreover, some commentators claim that the standards are inadequately enforced and that arbitrators with significant conflicts or industry ties are able to serve as public arbitrators despite the limitations of the rules.

This study attempts to shed some empirical light on the role that attorney play as arbitrators in securities arbitration (termed “attorney-arbitrators”). Unlike judges, who are universally trained as lawyers, there is no requirement that securities arbitrators be members of a bar. Nonetheless, attorneys are the dominant players as arbitrators; lawyers served as arbitrators in 77% of the awards in our sample. Unlike judges, attorneys who serve as arbitrators continue to play other roles, including serving as advocates for

investors and brokerage firms. Does service in these roles make a difference when the same lawyers serve as arbitrators?

To explore this question, we analyze a dataset of 426 randomly selected arbitrators and their 6724 securities arbitration awards from 1992 to 2006. We find that attorney-arbitrators who have represented brokerage firms are significantly less generous with arbitration awards. We do not, however find evidence of the opposite relation: attorneys who represent investors in arbitration proceedings are not more generous when they serve as arbitrators, nor are arbitrators who represent both investors and brokerage houses. The relation appears to be primarily driven, however, by the presence of an attorney who has represented a brokerage firm serving as the chair of an arbitration panel. We find no significant relation between attorneys who have represented brokerage firms and award size when that attorney is not the chair of the arbitration panel. Coalition effects, nonetheless, exist. While not important alone, other panel arbitrators with similar views may help reinforce the preferences of a chair arbitrator.

We proceed as follows. We lay out the background on NASD arbitration procedures and survey prior literature in Part 2. Part 3 sets forth our hypotheses. Part 4 describes our sample and variables, and reports the results of our empirical tests. Part 5 concludes.

## **2. Background**

### **2.1. NASD Procedures**

The NASD rules establish two categories of arbitrators – public and non-public. Under the current procedures, claims for less than \$25,000 are resolved through a

simplified procedure involving a single arbitrator who resolves the case without a formal hearing. Claims for between \$25,000 and \$50,000 receive a hearing conducted by a single arbitrator, although any party has the right to request a three person panel. If the claim is heard by a single arbitrator, the NASD rules require that the arbitrator be a public arbitrator unless the parties agree otherwise. Claims for \$50,000 or more are resolved by a panel consisting of three arbitrators. If the case is heard by a three person panel, the rules provide that the panel will be composed of two public arbitrators and one non-public arbitrator. Thus each three person panel must include an industry arbitrator.

The NASD rules specify a variety of professional and personal characteristics that result in an arbitrator being classified as industry rather than public. Under the rules now in effect, current and former professionals in the securities industry as well as other professionals with significant industry ties, including attorneys, accountants and other professionals whose firms derive 10% or more of their revenues from industry clients may not be classified as public arbitrators.<sup>5</sup> Persons who work as investment advisors, persons who work for an affiliate of a securities firm, and persons with a parent, child or spouse in the securities industry do not qualify as public arbitrators.<sup>6</sup> Public arbitrators are thus intended to be industry outsiders or “neutrals.” Non-public arbitrators, commonly known as industry arbitrators, include current and former brokers, bankers and other securities professionals. The category also includes attorneys, accountants and other professionals who have devoted 20% or more of their professional work to industry

---

<sup>5</sup> 10308. Selection of Arbitrators  
(5) "public arbitrator"

<sup>6</sup> See Finra, The Neutral Corner - April 2007, <http://www.finra.org/ArbitrationMediation/ResourcesforArbitratorsandMediators/GeneralInformationandReference/TheNeutralCorner/P019055> (indicating in response to inquiry that the acceptance of an unpaid internship at a securities firm by an arbitrator's adult child will disqualify that arbitrator as a public arbitrator for a five year period).

clients.<sup>7</sup> The rules have been amended several times, most recently in 2004<sup>8</sup> and 2007,<sup>9</sup> in an effort to eliminate potential conflicts and biases from the category of public arbitrators.<sup>10</sup>

Since November 1998, arbitrators for NASD arbitrations have been chosen through a list selection system administered by the Director of Dispute Resolution, termed the Neutral List Selection System (or NLSS).<sup>11</sup> During most of the time period involved in our study, the NASD provided the parties in each case with two separate lists, one consisting of public arbitrators and the other consisting of non-public arbitrators, in a roughly two-to-one ratio. At first the practice to provide a list of 8 public arbitrators and

---

<sup>7</sup> 10308. Selection of Arbitrators

(4) "non-public arbitrator"

<sup>8</sup> The 2004 amendments (effective July 19, 2004) :

Increased from three years to five years the period for transitioning from a non-public to public arbitrator after leaving the securities industry.

Clarified that the term "retired" from the industry includes anyone who spent a substantial part of his or her career in the industry.

Prohibited anyone who has been associated with the industry for at least 20 years from ever becoming a public arbitrator, regardless of how long ago the association ended.

Excluded from the public arbitrator roster attorneys, accountants, or other professionals whose firms have derived 10 percent or more of their annual revenue in the previous two years from clients involved in securities-related activities.

Provided that investment advisors may not serve as public arbitrators.

Amended the definition of immediate family member to add parents, children, stepparents, stepchildren, as well as any member of the arbitrator's household (thus excluding persons with immediate family members employed in the securities industry).

<sup>9</sup> In 2005, the NASD amended the definition of public arbitrator to exclude individuals who work for (or who have an immediate family member who works for) an entity that controls, is controlled by, or is under common control with, a broker/dealer. The NASD also amended its rules to that individuals registered through broker-dealers may not be public arbitrators, even if they are employed by a non-broker-dealer (such as a bank). This amendment became effective on Jan. 15, 2007.

<sup>10</sup> The NASD recently has proposed an amendment that would prohibit an attorney, accountant or other professional from being classified as a public arbitrator if the person's firm derived \$50,000 or more in annual revenue in the past two years from professional services to a broker, brokerage firm or other industry client relating to any customer disputes concerning an investment account or transaction. The SEC is soliciting comments on the proposed rule.

<sup>11</sup> The NASD's Neutral List Selection System (NLSS) went into effect on November 17, 1998. The NLSS was proposed by the NASD Arbitration Policy Task Force as part of its 1996 Securities Arbitration Reform Report and modeled after the list selection system used by the American Arbitration Association. The report recommended that panels for larger cases continue to be composed of one industry member and two public arbitrators. The report recommended improving the quality of arbitrators by increased arbitrator compensation, better training, expanding the arbitrator pool and requiring arbitrator evaluation of co-panelists. The report also made some highly controversial recommendations concerning the availability of punitive damages in arbitration awards.

4 non-public arbitrators, but this was later increased to 10 and 5, respectively. The lists were generated by an NASD computer program using a rotational method, although the computer eliminated arbitrators with obvious conflicts of interest. Along with the lists, the parties were also provided with background information on each arbitrator, including a copy of that arbitrator's Arbitrator Disclosure Report. Parties were allowed to request additional information on the arbitrators, and the NASD director was required to forward that request to the arbitrators.

Each party was allowed to strike an unlimited number of arbitrators on the list for any reason. The parties each then ranked the remaining arbitrators, ranking the public and non-public arbitrators separately. The NASD Director then appointed a panel consisting of the two public and one non-public arbitrators who have received the highest combined rankings from the parties. If, after the parties' strikes were exercised, an insufficient number of arbitrators remained on the lists to fill the panel, the Director would complete the panel by appointing additional arbitrators whose names were produced through computer selection.

The parties had the right, in the first instance, to designate the chair of the panel by agreement. If the parties were unable to agree, the chair was appointed by the Director, and was to be the public arbitrator who has received the highest combined ranking "as long as the person is not an attorney, accountant, or other professional who has devoted 50% or more of his or her professional or business activities, within the last two years, to representing or advising public customers in matters relating to disputed securities or commodities transactions or similar matters." If this is the case, the Director

was to appoint the other public arbitrator as chair. Thus in no case was a non-public arbitrator to serve as chair unless the parties consented.

In 2007, the NASD modified the list selection system in several ways. First, and most important, the NASD moved to a system in which it maintains three separate rosters of arbitrators – public arbitrators, non-public arbitrators and chair-qualified arbitrators. Lists of eight potential arbitrators would be generated from each roster and sent to the parties. The parties are now permitted only four strikes from each list rather than an unlimited number of strikes, although additional arbitrators can be challenged for cause. The rationale for this change was to reduce the frequency with which the generation of additional lists would be required. The NASD also shifted the computer procedure used to generate the lists from a rotational system to random selection [check this]. The modified procedures are reflected in the new customer code, which became effective June 14, 2007.

Arbitrators are chosen from a pool of almost 7000 available arbitrators of which approximately 58% are public arbitrators and 42% are industry arbitrators. Arbitrators are paid \$200 for each hearing session, with the chair receiving an additional \$75/day. Arbitrator candidates are not required to possess any particular qualifications beyond at least five years of full-time, paid business or professional experience and at least two years of college level credits.<sup>12</sup> Since 1993, however, the NASD has required new arbitrators to go through its comprehensive basic arbitrator training program; since 1998, new arbitrators have been required to pass an examination.

---

<sup>12</sup> [http://www.finra.org/web/groups/med\\_arb/documents/mediation\\_arbitration/p017271.pdf](http://www.finra.org/web/groups/med_arb/documents/mediation_arbitration/p017271.pdf) (arbitrators manual p. 1). The college credit requirement was added in 2003.

FINRA imposed additional new qualification requirements on chairs as part of its 2007 revisions (after the period of our study). In addition to the requirement that chairs be public arbitrators, the rules now provide that, to be eligible for the chairperson roster, arbitrators must have completed chairperson training or have substantially equivalent training and experience and either (a) have a law degree, be a member of the bar and have served as an arbitrator on at least two cases or (b) have served as an arbitrator on at least three cases.

The NASD offers a non-binding mediation program in addition to the more formal arbitration procedure. During the period 2003-2007, according to the NASD's statistics, approximately 70-80% of claims filed were settled or resolved through means other than an arbitrator decision, 3-4% of cases were resolved by arbitrators based on written submissions and 18-24% were resolved after a formal hearing.

## **2.2. Prior Literature**

Several commentators have attempted to evaluate the fairness of the NASD arbitration process. To date, these studies have been inconclusive. First, general studies of win rates or award ratios offer limited evidence of fairness in the absence of a basis for assessing the merits of the claims. Second, efforts to assess potential arbitrator bias empirically are hampered by the lack of background information on individual arbitrators. As Gary Shorter explained: "the evidence that the arbitration process is devoid of a pro-industry bias does not appear to be definitive."<sup>13</sup>

In the late 1990s, Gary Tidwell, then-Director of Neutral Training and Development for NASD Regulation, supervised a survey of participant perceptions of the

---

<sup>13</sup> CRS Report for Congress in 2005 (Securities Arbitration: Background and Questions of Fairness at 3).

fairness of the arbitration process. The study reviewed evaluations submitted by investors in NASD arbitrations over a fifteen month period between Dec. 1, 1997 and April 1, 1999. According to the Tidwell report, 93.49% of respondents agreed that their cases were handled fairly and without bias and 91.67% of respondents rated the arbitrators as good or excellent. The response rate for the survey, however, was only 10-20%.

In 2002, Professor Michael Perino was retained by the Securities & Exchange Commission to prepare a report analyzing Arbitrator Conflict Disclosure requirements in SRO arbitrations.<sup>14</sup> The Perino Report considered whether the then-existing SRO disclosure requirements were sufficient to assure investors that arbitrators were neutral and impartial. Perino did not conduct his own empirical analysis but, relying on the GAO and Tidwell studies described above, concluded that “the available evidence on arbitration outcomes does not suggest that arbitrators tend to have pro-industry biases.” Perino also concluded that existing disclosure requirements were generally adequate, although he recommended that the arbitrator rules be amended “to emphasize that all conflict disclosures are mandatory.” He also recommended that the definition of public arbitrator be reexamined, in particular to assess whether an arbitrator should be disqualified based on the industry ties of a non-household family member.

A working paper by Jiro Kondo examines the role of arbitrator bias and expertise in the selection of arbitrators.<sup>15</sup> Using data from NASD arbitrations from 1991 to 2004,

---

<sup>14</sup> Report to the Securities and Exchange Commission Regarding Arbitrator Conflict Disclosure Requirements in NASD and NYSE Securities Arbitrations (Nov. 4, 2002). The purpose of the report was to determine whether California’s newly adopted ethics standards regarding disclosure of arbitrator conflicts of interest should be applied to SRO arbitrations.

<sup>15</sup> Self-Regulation and Enforcement in Financial Markets: Evidence from Investor-Broker Disputes at the NASD (2006).

Kondo found that lawyers and pro-industry arbitrators are more likely to be selected to serve on panels. The pro-industry bias of arbitrator selection, however, occurred only after the NASD rule change in 1998 moving from NASD selection of panels to the list selection system. He concluded that party control of selection results in the brokerage firms, which are more likely to be repeat players, dominated the selection process and producing panels more likely to contain arbitrators who tend to side with large brokerage firms. Kondo treated the increased probability that an attorney would get selected after the 1998 reforms as evidence that parties select more for expertise post reforms. In this paper, we test whether attorneys represent expertise or, in contrast, may themselves face their own set of conflicts and biases.

Most recently, Edward S. O’Neil and Donald R. Solin studied almost 14,000 NASD and NYSE arbitrations that occurred between 1995 and 2004.<sup>16</sup> The researchers conducted their research without the cooperation of the NASD and in fact were forced to engage in litigation in order to obtain the right to use the award data for their study. The study reports that investor win rates – cases in which the investor received an award of any amount – dropped from a high of 59% in 1999 to 44% in 2004. In cases in which investors were successful, the study found they recovered roughly 50% of the amount claimed. Cases involving larger claims and larger brokerage firms resulted in smaller investor recoveries. The authors also calculated expected recoveries and compared those recoveries to the costs of pursuing an arbitration claim including forum fees, legal fees and the cost of expert witnesses. The study did not focus on arbitrator characteristics, panel composition or potential bias. Nonetheless, the authors concluded that an

---

<sup>16</sup> Mandatory Arbitration of Securities Disputes – A Statistical Analysis of How Claimants Fare (2007).

investor's chance of receiving a substantial award against a major brokerage firm in SRO arbitration is approximately 12%.<sup>17</sup>

One additional concern that might be traced to the role that attorneys play in arbitration is the extent to which arbitration has come to resemble litigation. Extended discovery, extensive discovery disputes and abuses in the discovery process are widely reported.<sup>18</sup> Not surprisingly, the length of time required to resolve a claim through the arbitration process has increased substantially. SRO arbitration was originally viewed as preferable to litigation in part because it was relatively fast and inexpensive.<sup>19</sup> The overall turnaround time for a NASD arbitration is now more than thirteen months. Although this is still significantly faster than litigation,<sup>20</sup> it is far from an expedited process.

### **3. Hypotheses**

Our principal focus is on the role that attorneys play as arbitrators, and in particular the role that conflict of interest may play in their arbitration awards. We posit that attorneys who represent brokerage firms and brokers in arbitration are likely to be skeptical of investors' claims for compensation generally, leading them to be less generous with arbitration awards. Conversely, we predict that attorneys who represent

---

<sup>17</sup> Indeed, the damages awarded by the arbitrator may overstate the investors actual recovery. In June 2000, the GAO issued a report revealing that a substantial percentage of SRO awards had not been paid. Securities Arbitration: Actions Needed to Address Problem of Unpaid Awards (2000). The GAO's report indicated that about 80% of the \$161 million awarded to investors, primarily in the form of NASD-administered awards, was unpaid. The NASD responded to this report by establishing procedures to monitor the payment of awards and, in its 2003 follow-up report, the GAO indicated that the percentage of unpaid rewards had declined substantially. Nonetheless, the number of unpaid awards, particularly by defunct brokerages, remained significant.

<sup>18</sup> See Shorter.

<sup>19</sup> Ruder 1998.

<sup>20</sup> See Lackritz testimony.

investors in arbitration are likely to be skeptical of the integrity of brokerage firms and brokers, leading them to be more generous with arbitration awards. We predict no effect either way for attorneys who represent both brokerages and investors.

**H1:** Attorney-arbitrators who represent brokerage firms (investors) will make lower (higher) arbitration awards.

We also posit that the personal preferences of attorney-arbitrators will affect the awards they grant in arbitrations. Because arbitrators only loosely need to follow existing law, do not need to provide reasons, and face only a remote possibility of judicial review, arbitrators have large discretion in how to handle any particular case. Within the leeway created by discretion, attorney-arbitrators may decide based on their personal preferences. In particular, we hypothesize that the political preference of arbitrators will affect their awards.

**H2:** Attorney-arbitrators with a strong Democrat political preference grant significantly different awards compared with attorney-arbitrators with a strong Republican political preference.

The effect of these predilections is likely to be magnified when the arbitrator serves as the chair of the arbitration, given the important role that that the chair plays in managing the proceedings, admitting evidence, etc. Moreover, the effect is also likely to be amplified if another arbitrator on the panel has shares the same background with the chair, what we call a coalition effect.

**H3:** Attorneys who represent brokerage firms (investors) will make lower (higher) arbitration awards when they serve as chairs.

**H4:** Attorneys who represent brokerage firms (investors) will make lower (higher) arbitration awards when they serve with other arbitrators with the same experience.

#### **4. Empirical Tests**

##### **4.1 Description of Dataset**

We obtained NASD arbitration awards from the FINRA arbitration awards online site and from the LEXIS database. To generate a random set of arbitrators, we randomly selected 15 arbitration awards per month for the years 1998 to 2000; we refer to this as our “small sample”. Arbitrations that resulted in awards in the 1998 to 2000 period likely were filed prior to 1998, allowing us to generate a starting sample of arbitrators who were active prior to the 1998 reforms. We identified the chair in each arbitration award involving an investor as the claimant; we used the set of all chairs in the randomly selected awards as our sample of arbitrators. We focus on chairs to select those arbitrators who are more likely to have influence over arbitrations. Using this procedure, we obtained a total of 427 arbitrators.

For each of the 427 arbitrators, we then collected information on the arbitration opinions as provided in the FINRA and LEXIS databases from 1/1/1992 to 12/31/2006. We only looked at arbitration opinions involving an investor-claimant. Panel A of Table 1 reports the year breakdown of our sample of arbitration awards.

**<<Insert Table 1 About Here>>**

As reported in Panel B of Table 1, the arbitration proceedings took place in 44 different jurisdictions (including Puerto Rico and the District of Columbia). The

jurisdictions with the largest number of arbitrations including California (1,247), New York (969), and Florida (565).

## **4.2 Variable Description**

The dependent variable for the majority of our tests is the Compensation Ratio, defined as the compensatory award (or settlement if reported) divided by the requested compensation amount in any specific arbitration. The claimants in arbitration decide how much to request as compensation. Limits exist, nonetheless, on the ability of claimants to request overly large amounts as compensation. Claimants may request punitive or exemplary damages as well as damages for pain and suffering. However, these are listed separately in the arbitration award (and we do not treat this as part of the compensatory damages). Instead, the compensatory damages will typically turn on the number of securities involved in a particular transaction multiplied by the losses the investor-claimant incurred on the securities. Because information on the number of securities transacted (as well as price change on the shares) is knowledge also in the hands of the broker or brokerage firm respondent, claimants have little leeway to adjust these numbers and therefore the requested compensation amount.

A number of factors may affect the Compensation Ratio. To control for these other factors, our models employ a number of control variables relating to the subject matter of the dispute, selection of the dispute for arbitrator resolution, panel makeup, award, and state in which the arbitration occurred.

Subject matter controls include indicator variables for six common areas of arbitration, using all other areas as the base case. Suitability is defined to equal 1 if the

arbitration involved a suitability claim, including claims relating to “know your customer,” NYSE Rule 405, and NASD Rule 2310 issues, and 0 otherwise. Churning is defined to equal to 1 if the arbitration involved a churning, excessive trading, or excessive commission claim and 0 otherwise. Unauthorized Trades is defined to equal 1 if the arbitration involved an unauthorized trading claim and 0 otherwise. Failure to Execute is defined to equal 1 if the arbitration involved an unauthorized trading claim and 0 otherwise. Misrepresentation is defined to equal to 1 if the arbitration involved an unauthorized trading claim and 0 otherwise. Lastly, Conversion is defined to equal 1 if the arbitration involved a theft, conversion, unauthorized withdrawals, or self-dealing claim and 0 otherwise. Panel A of Table 2 reports on the frequency of the subject matter claims in our arbitration sample. Misrepresentation (68%) and suitability (50%) claims are the most common.

**<<Insert Table 2 About Here>>**

We also include controls intended to deal with selection effects. Panel B of Table 2 reports on the settlements in our sample. The variable Reported Settlement is defined to equal 1 where the arbitration resulted in a full or partial settlement and the settlement amount was reported as part of the arbitration award (and included therefore in the Compensation Ratio variable) and 0 otherwise. Awards that settle may represent different strength cases than those that do not settle.

Settlements that are not reported may occur in two situations: where non-settling respondents continue on to a reported arbitration judgment (omitting the settlement) and where there are no remaining non-settling respondents. We include the reported awards for the non-settling respondents with an unreported settlement and identify these awards

using the Unreported Partial Settlement indicator variable. Unreported Partial Settlement is defined to equal 1 where the arbitration resulted in a unreported partial settlement and the award (if any) against the remaining non-settling respondents was reported and 0 otherwise. All other things being equal, we expect that awards in the case of an Unreported Partial Settlement should be lower due to the settlement of a subset of the respondents. Our model omits those arbitrations that result in an unreported full settlement. The omission of unreported settlements may lead to sample selection bias. We address this bias later in the paper.

Panel C of Table 2 provides summary statistics on our opinion controls. Opinion controls focus on characteristics of the specific arbitration that may affect the Compensation Ratio. Claimed Compensation is included because the absolute level of the compensation requested may affect the Compensation Ratio awarded. Arbitrators may be less willing to grant a higher Compensation Ratio for larger Claimed Compensation amounts, all other things being equal. Large claims are more likely to be inflated by the claimant than small ones. Moreover, arbitrators may flinch from awarding a large award against a broker or small brokerage firm if they believe that it could pose a threat of insolvency. It's one thing to grant an award amounting to a 20% Compensation Ratio for a Claimed Compensation amount of \$100,000 compared; it's more difficult to achieve the same 20% Compensation Ratio for a Claimed Compensation amount of \$100 million. The mean Claimed Compensation for our sample is \$620,000, but the median is a much more modest \$91,000. The Compensation Ratio is less skewed, with a mean award of 32% of the claim and a median of 11%. To take in account possible non-

linearity in the relationship between Compensation Ratio and Claimed Compensation, we also include a squared term for Claimed Compensation.

We also include a control variable for arbitrator experience, *Inexperienced*, set to one if the award is from the first year that the arbitrator appeared in the dataset, and zero otherwise. Arbitrators new to the job may be reluctant to make large awards because it may reduce their chances for future selection. The number of arbitrators is correlated with the size of the Claimed Compensation amount. The NASD typically requires a panel of three arbitrators for Claimed Compensation amounts of over \$50,000. The overwhelming majority of the awards in our sample came from three-arbitrator panels.

Several opinion controls deal with the strength of the case; stronger cases should result in a higher Compensation Ratio. Unfortunately, we have no direct measure of the strength of the claimant's case, so we rely on three proxies. *Respondent Failed to Appear* is defined to equal 1 if the any of the respondents failed to appear at the arbitration hearing and 0 otherwise. Respondents may not appear if their case is weak; alternatively, failing to appear itself may lead the arbitrators to view the respondents' case as less meritorious. At least one respondent failed to appear in 12% of the awards in our sample. The imposition of punitive damages on at least one respondent indicates a relatively strong case for the claimant because punitive damages are unwarranted absent evidence of intentional wrongdoing. The *Punitive Damages* variable is defined to equal 1 if punitive damages were imposed on any of the respondents in the arbitration award and 0 otherwise. Punitive damages are rarely awarded, showing up in only 4% of our sample. Our final proxy for the strength of the case, *CRD Expungement*, is to equal 1 if the CRD record of any of the respondent-brokers was expunged and 0 otherwise. Arbitrators may,

at their discretion, choose to expunge the CRD records for a broker involved in arbitration. All other things being equal, we treat a CRD expungement as an indication that the respondents' case stronger relative to the claimants' case. We consider this proxy to be the noisiest of the three; arbitration panels have been consistently criticized for awarding expungement without an adequate basis.

Finally, our models include state controls for the state in which the arbitration hearing took place. We measure our state controls as of 1999, the mid-point of our dataset. We treat the state controls as exogenous to the variables in our dataset. The controls include the median household state income (State Income), the state population in millions (State Population) and the average partner salary for the state (Partner Income). States with higher income may have a different investor clientele than states with lower incomes. States with larger population may correspond with more concentrated legal services and, consequently, higher quality legal representation and arbitrators. Lastly, higher law firm salaries correlates with an increased opportunity cost for qualified individuals to serve as arbitrators, leading arguably to lower quality arbitrators.

### **4.3 Financial Conflicts of Interest**

We estimate the following equation for each award using ordinary least squares and robust standard errors:

$$\begin{aligned}
\text{Compensation Ratio}_i = & \alpha + \beta_{1i}\text{Attorney}_i + \\
& + \beta_{2i}\text{Attorney\_Investor}_i + \beta_{3i}\text{Attorney\_Brokerage}_i \\
& + \beta_{4i}\text{Attorney\_Both}_i + \beta_{5i}\text{Inexperienced}_i + \sum \beta_{ji} \text{Subject Matter}_{ji} \\
& + \sum \beta_{ki} \text{Opinion Controls}_{ki} + \sum \beta_{li} \text{State Controls}_{li} \\
& + \text{Year Effects} + \varepsilon_i
\end{aligned}$$

[NOTE: Model will be changed to TOBIT model with errors clustered on arbitrators].

To test the Financial Conflict Hypothesis, we include a series of independent variables to test the importance of a financial conflict of interest among attorneys who serve as arbitrators. The base case is defined to be non-attorney arbitrators. Attorney is defined as 1 if the arbitrator is an attorney and 0 otherwise. Attorney\_Investor is defined to equal 1 if the arbitrator has acted as an attorney for investors and not for brokerage firms or brokers in arbitration proceedings and 0 otherwise. Attorney\_Brokerage is defined to equal 1 if the arbitrator has acted as an attorney for brokerage firms or brokers and not for investors in arbitration proceedings and 0 otherwise. Attorney\_Both is defined to equal 1 if the arbitrator has acted as an attorney for brokerage firms or brokers as well as for investors in arbitration proceedings and 0 otherwise. We also include an independent variable for whether the arbitration is in the arbitrator's first year in our dataset (excluding 1992, the first year covered by our data set) (Inexperienced). The model also includes subject matter, opinion, and state controls.

<<Insert Table 3 About Here>>

Model 1 of Panel B of Table 3 reports the results of our first model. We find partial support for the Financial Conflict Hypothesis. Attorneys acting as arbitrators generally correlate with lower awards; the coefficient on Attorney is negative and significant at the 5% level. The coefficient on Attorney\_Brokerage is negative and

significant at the <1% level. Arbitrators who also acted as an attorney for a brokerage firm are far less likely to give higher arbitration awards to claimants. This result is consistent with the view that financial conflicts of interest may affect arbitration awards. Arbitrators who act as attorneys for brokerage firms or brokers have a financial incentive to side with brokerage firms and brokers in customer arbitration proceedings. Looking at the other side of the coin, the coefficient for Attorney\_Investor is insignificant, as is the coefficient for Attorney\_Both. Inexperienced attorneys also make smaller awards. The coefficient on Inexperienced is negative and significant at the 10% level, which is consistent with proposition that those early in their arbitration careers may seek to give lower awards in the hopes that they will get selected more often by brokerage firms for future arbitration opportunities.

As a robustness test, we remove the state controls and use state fixed effects in Model 2. Model 2 reports the same qualitative results as Model 1, supporting the Financial Conflict Hypothesis with respect to attorneys who represent brokers or brokerage firms.<sup>21</sup>

The coefficients for many of the control variables are as expected. The Compensation Ratio increases where the respondent failed to appear and where arbitrators awarded punitive damages; stronger cases result in higher arbitration awards. Conversely, the Compensation Ratio is lower where the arbitrators granted an expungement of a broker's CRD record.

---

<sup>21</sup> As an additional robustness test, we re-estimate Models 1 and 2 of Table 3 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as the models in Table 3. We also re-estimate Models 1 and 2 of Table 3, replacing the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the models returned qualitatively the same results as the models in Table 3.

Settlement cases tend to result in a higher Compensation Ratio. The coefficient on Reported Settlement is positive and significant at the <1% level. Brokerage firms and brokers tend to settle the very strongest cases, either out of a desire to avoid a worse outcome from the arbitrators, or to minimize the publicity surrounding such cases. Interesting, even awards for non-settling respondents in cases that involve an unreported partial settlement also correlate with a higher Compensation Ratio.

#### **4.4 Political views**

The bias found in Models 1 and 2 of Table 3 based on the arbitrator's role in representing brokerage firms may arise, not from the experience of serving in a role that creates financial conflict of interest, but may instead reflect the underlying preferences of the arbitrators who take on the roles. Attorneys who are skeptical of compensation may choose to represent brokerage firms rather than investors. Arbitrators who believe that investors should take a "caveat emptor" attitude and undertake better due diligence before investing may tend to side against customers in arbitration awards. An arbitrator who is more pro-investor under the exact same set of facts may side with the customers and grant higher arbitration awards.

To assess whether personal preferences (in this case political preference) affects arbitration awards, we construct a proxy for the likely political preferences of the attorney-arbitrators with respect to investor awards. We searched the opensecrets.org website for information on political contribution by our attorney-arbitrators to federal political candidates. Where an arbitrator contributed money only to Republicans, we identified the arbitrator as a Republican. Likewise, arbitrators who contributed to Democrats we labeled as Democrat. Panel A of Table 4 reports on the breakdown of our

attorney-arbitrators based on this classification. Because we focus on those who actually contribute money to political campaigns, arbitrators who we term either Republican or Democrat are likely not only affiliated with a specific political party but also hold strong views aligned with that party. Note that the proxy is underinclusive; the overwhelming majority (78.6%) made no reported political contributions.

We estimate the following equation for each arbitration award using ordinary least squares and robust standard errors:

$$\begin{aligned} \text{Compensation Ratio}_i = & \alpha + \beta_{1i}\text{Attorney}_i + \beta_{2i}\text{Democrat\_Attorney}_i \\ & + \beta_{3i}\text{Republican\_Attorney}_i \\ & + \beta_{4i}\text{Attorney\_Investor}_i + \beta_{5i}\text{Attorney\_Brokerage}_i \\ & + \beta_{6i}\text{Attorney\_Both}_i + \beta_{7i}\text{Inexperienced}_i + \sum \beta_{ji} \text{Subject Matter}_{ji} \\ & + \sum \beta_{ki} \text{Opinion Controls}_{ki} + \sum \beta_{li} \text{State Controls}_{li} \\ & + \text{Year Effects} + \varepsilon_i \end{aligned}$$

[NOTE: Model will be changed to TOBIT model with errors clustered on arbitrators].

The model adds to Model 1 of Panel B of Table 3 independent variables for whether an attorney-arbitrator displays a Democrat or Republican personal preference (Democrat\_Attorney and Republican\_Attorney).

**<<Insert Table 4 About Here>>**

Model 1 of Panel B of Table 4 reports our results. The coefficient on Democrat\_Attorney is positive and significant at the 5% level; the coefficient on Republican\_Attorney is negative and insignificant (the difference between the two coefficients is significant at the <1% level). Democrat attorney-arbitrators give significantly higher awards than Republican attorney arbitrators. This differential supports the view that personal preferences have a significant effect arbitration awards.

Model 1 also reports that the coefficient for Attorney\_Brokerage continues to be negative and strongly significant, suggesting that financial conflicts may influence the views of attorney-arbitrators on cases.<sup>22</sup>

#### **4.5. Importance of the Arbitration Chair**

For our main sample of 6724 arbitrations we only collect data on our starting set of arbitrators. Given the labor required we do not collect information on the other arbitrators (if any) on the arbitration panel. The lack of information on the other arbitrators introduces a possible omitted variable problem. We address this potential problem in two ways. First, in this section, we code for whether the arbitrator in our sample is the chair of the arbitration proceeding or not. Second, in the next section, we collect more detailed information on the arbitration and all the arbitrators for a random sub-sample of our arbitrations.

The arbitrator who occupies the chair position typically controls the presentation of evidence and other aspects of the arbitration proceeding. We hypothesize that the chair therefore occupies an outsized role in determining the outcome of the arbitration. To test the importance of the chair's influence, we estimate the following equation for each award using ordinary least squares and robust standard errors:

---

<sup>22</sup> As a robustness test, we re-estimate the models of Table 4 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as the models in Table 4. We also re-estimate the models of Table 4, replacing the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the models returned qualitatively the same results as the models in Table 4.

$$\begin{aligned}
\text{Compensation Ratio}_i = & \alpha + \beta_{1i}\text{Chair\_Attorney}_i + \beta_{2i}\text{Chair\_Democrat\_Attorney}_i \\
& + \beta_{3i}\text{Chair\_Republican\_Attorney}_i + \beta_{4i}\text{Chair\_Attorney\_Investor}_i \\
& + \beta_{5i}\text{Chair\_Attorney\_Brokerage}_i + \beta_{6i}\text{Chair\_Attorney\_Both}_i \\
& + \beta_{7i}\text{Other\_Attorney}_i + \beta_{2i}\text{Other\_Democrat\_Attorney}_i \\
& + \beta_{8i}\text{Other\_Republican\_Attorney}_i \\
& + \beta_{9i}\text{Other\_Attorney\_Investor}_i + \beta_{10i}\text{Other\_Attorney\_Brokerage}_i \\
& + \beta_{11i}\text{Other\_Attorney\_Both}_i + \beta_{12i}\text{Inexperienced}_i + \sum \beta_{ji} \text{Subject Matter}_{ji} \\
& + \sum \beta_{ki} \text{Opinion Controls}_{ki} + \sum \beta_{ji} \text{State Controls}_{ji} + \text{Year Effects} + \varepsilon_i
\end{aligned}$$

[NOTE: Model will be changed to TOBIT model with errors clustered on arbitrators].

The model divides the arbitration as attorney variables (Attorney\_Investor, Attorney\_Brokerage, and Attorney\_Investor) into two groups based on whether the arbitrator was the chair in the particular arbitration proceeding. The division allows us to test whether the position of the arbitrator matters in the arbitration. Model 1 of Table 5 reports our results.

<<Insert Table 5 About Here>>

The coefficient on Chair\_Attorney\_Brokerage is negative and significant at the <1% level. In contrast, the coefficient on Other\_Attorney\_Brokerage, while also negative, is not significantly different from zero. Similarly the coefficient on Chair\_Democrat\_Attorney is positive and significant at the 5% level. The coefficient on Other\_Democrat\_Attorney is not significantly different from zero. For both financial conflicts as well as personal preferences, only the chair arbitrator position is important in our model. As a robustness test, we remove the state controls and use state fixed effects in Model 2. Model 2 reports the same qualitative results as Model 1.

Our test omits the identity and preferences of the other arbitrators on the arbitration panel. The results do strongly suggest, however, that the arbitrator that

matters most is the chair. And where the chair has a financial conflict of interest, this appears to affect the arbitration award.<sup>23</sup>

#### **4.6 Other Attorney Characteristics**

Do other attorney characteristics, such as education and experience, affect the level of arbitration awards? To analyze this question, we collect additional information from Martindale-Hubbell about the attorneys who serve as arbitrators in our sample. As proxies for general attorney skill, we create two indicator variables: *Atty\_Rated*, which is coded as 1 if Martindale-Hubbell reported an “AV” or “BV” rating for the attorney-arbitrator, and 0 otherwise; and *Atty\_Top\_LawSchool*, which is coded as 1 if the lawyer graduated from a law school ranked in the top ten by U.S. News & World Report in 1991, and 0 otherwise. As proxies for familiarity with the subject matter of securities arbitration, we create two additional indicator variables: *Atty\_Securities\_Practice*, coded as 1 if securities law is listed as within the attorney’s practice in Martindale-Hubbell, and 0 otherwise; and *Atty\_Solo\_Practice*, which is coded as 1 if a lawyer practices alone, rather than with a firm. Many of these attorneys are drawn to securities arbitration based on their experience with arbitration generally, rather than securities law in particular. Each of these variables is used to create interaction variables based on whether the arbitrator is the chair or not, similar to the models presented in Table 5.

---

<sup>23</sup> As a robustness test, we re-estimate the models of Table 5 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as the models in Table 5. We also re-estimate the models of Table 5, replacing the *Claimed Compensation*<sup>2</sup> term with an indicator variable, *Million*, for whether the requested compensation amount was greater than one million dollars. Unreported, the models returned qualitatively the same results as the models in Table 5.

We estimate the following equation for each award using ordinary least squares and robust standard errors:

$$\begin{aligned}
 \text{Compensation Ratio}_i = & \alpha + \beta_{1i}\text{Chair\_Attorney}_i + \beta_{2i}\text{Chair\_Democrat\_Attorney}_i \\
 & + \beta_{3i}\text{Chair\_Republican\_Attorney}_i + \beta_{4i}\text{Chair\_Atty\_Rated}_i \\
 & + \beta_{5i}\text{Chair\_Atty\_Top\_LawSchool}_i + \beta_{6i}\text{Chair\_Atty\_Securities\_Practice}_i \\
 & + \beta_{7i}\text{Chair\_Atty\_Solo\_Practice}_i + \beta_{8i}\text{Chair\_Attorney\_Investor}_i \\
 & + \beta_{9i}\text{Chair\_Attorney\_Brokerage}_i + \beta_{10i}\text{Chair\_Attorney\_Both}_i \\
 & + \beta_{11i}\text{Other\_Attorney}_i + \beta_{12i}\text{Other\_Democrat\_Attorney}_i \\
 & + \beta_{13i}\text{Other\_Republican\_Attorney}_i + \beta_{14i}\text{Other\_Atty\_Rated}_i \\
 & + \beta_{15i}\text{Other\_Atty\_Top\_LawSchool}_i + \beta_{16i}\text{Other\_Atty\_Securities\_Practice}_i \\
 & + \beta_{17i}\text{Other\_Atty\_Solo\_Practice}_i + \beta_{18i}\text{Other\_Attorney\_Investor}_i \\
 & + \beta_{19i}\text{Other\_Attorney\_Brokerage}_i + \beta_{20i}\text{Other\_Attorney\_Both}_i \\
 & + \beta_{21i}\text{Inexperienced}_i + \sum \beta_{ji} \text{Subject Matter}_{ji} + \sum \beta_{ki} \text{Opinion Controls}_{ki} \\
 & + \sum \beta_{li} \text{State Controls}_{li} + \text{Year Effects} + \varepsilon_i
 \end{aligned}$$

[NOTE: Model will be changed to TOBIT model with errors clustered on arbitrators].

The results are presented in Table 6 (with the coefficients for the control variables omitted from the table for ease of exposition).

<<Insert Table 6 About Here>>

Of the new variables, *Atty\_Top\_LawSchool* and *Atty\_Solo\_Practice* are positive and significant (at the 1% and 5% level, respectively) when attorneys with those characteristics serve as chairs, but not otherwise, meaning that these attorneys tend to be more generous with arbitration awards. While we can only speculate, perhaps solo practitioners tend not to represent brokerage firms or brokers and represent primarily individual investors. *Atty\_Rated* and *Atty\_Securities\_Practice* are both insignificant, so we find no evidence of a relation between attorney skill or experience and award outcomes.

As reported in Table 6, our main results continue to hold with the addition of additional attorney-arbitrator characteristic variables. Attorney-arbitrators who represent brokers or brokerage firms (and act as chair in the arbitration) correlate with lower awards. Similarly, Democrat attorney-arbitrators are significantly (at the <1% level) more likely compared with Republican attorney-arbitrators to give higher awards to investor-claimants.<sup>24</sup>

A possible sample selection bias may exist in our tests. We focus only on reported awards and settlements. However, unreported settlements may display different characteristics compared with our observed sample. On the one hand, following Priest-Klein (1984) model predicts that the omission of these cases results in more evenly matched cases remaining in the sample. Any correlation we observe between arbitrator characteristics and award outcome therefore is more likely due to bias in the decisionmaking of the arbitrator and less due to differences in the strength of the specific respondent and claimant cases.

On the other hand, particular arbitrator characteristics may lead to a greater likelihood of settlement. Claimants may realize that attorney-arbitrators who represent brokers and brokerage firms, for example, tend to skew awards in favor of brokers and brokerage firms. Claimants may settle such cases rather than risk such a skewed award. The omission of such settlements from our sample may result in our tests understating the degree of bias among the attorney-arbitrators in our sample.

---

<sup>24</sup> Unreported, we re-estimate the model in Table 6, replacing the hearing state characteristic variables with state fixed effects and obtain qualitatively the same results. As a further robustness test, we re-estimate the model of Table 6 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as in Table 6. We also re-estimate the model of Table 6, replacing the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the model returned qualitatively the same results as the model in Table 6.

To ascertain whether our attorney characteristic variable of interest correlate with the propensity to settle, we test whether certain attorney characteristics correlate with an increased propensity to settle using our sample of settlements and arbitration awards.<sup>25</sup> We estimate a logit model where Settlement is the dependent variable and equal to 1 where there is a settlement and 0 otherwise. We use the same independent variables as in our attorney characteristic model in Table 6 above with two changes. First, we drop the Reported Settlement and Partial Unreported Settlement independent variables; second we drop any variables related to the arbitration outcome, including CRD Expungement and punitive damages (since we lack such info for the non-reported settlements in our sample). Unreported, only whether the Chair is an attorney who has securities practice experience is significantly related to the propensity to settle (increasing significantly the likelihood of a settlement); none of the other coefficients on the attorney characteristic variables are significant, including the financial conflict and personal preference related variables.

#### **4.7. The Mix of Arbitrators**

To assess the importance of the mix of arbitrators on an arbitration panel, we narrow our sample to the initial small sample used to select our arbitrators. This sample consists of 429 randomly selected awards from 1998 to 2000. Panel A of Table 7 summarizes the number of arbitrations in our sub-sample by year.

**<<Insert Table 7 About Here>>**

---

<sup>25</sup> Kondo (2007) employs a similar procedure to assess the importance of sample selection bias in his sample of arbitrations.

For each arbitration in our sub-sample, we collect similar attorney and political contribution information for the other arbitrator members of the panel. The Chair versions of the arbitrators as attorney variables refer to whether one of our sample arbitrators (all chairs in the sub-sample of arbitration awards) acted as an attorney in a prior arbitration award. The Panel versions of these variables is set equal to 1 if either of the two other arbitrators acted as an attorney in an arbitration and 0 otherwise (whether for investors only, brokerage firms and brokers only, or both).

We expand on the opinion controls used in the full sample model to include the number of hearings in the arbitration as a measure of the complexity of the arbitration (Number of Hearings). We also include the length of the arbitration opinion as another measure of opinion complexity (Opinion Length). To control for the strength of the presentation of the case, we add indicator variables coded as 1 if the claimant is represented by counsel (Claimant Attorney Present) or the respondent is represented by counsel (Respondent Attorney Present), respectively, and 0 otherwise. Better presentation may lead to better outcomes. These variables may also correlate with case strength – claimants with strong cases are more likely to be able to attract an attorney to work on a contingency fee basis, while respondents with no defenses may not bother to hire counsel.

As an additional control, we include `Top_Accused_Brokerage_Firm`, set to 1 if any of the respondents was one of the top 10 brokerage firms in terms of investor arbitration complaints (**CITATION FROM JILL**). A brokerage firm that faces a large number of complaints may have a greater incentive to invest in a legal defense against these complaints, leading to lower awards. Conversely, such a brokerage firm may have

systemic problems that may indicate that claims against such firms are more meritorious, leading to higher awards. Descriptive statistics on these additional variables are presented in Panel B of Table 7, along with the descriptive statistics for the small sample for the variables used in the prior models.

We estimate the following equation for each arbitration award using ordinary least squares and robust standard errors:

$$\begin{aligned} \text{Compensation Ratio}_i = & \alpha + \beta_{1i}\text{Chair\_Attorney\_Investor}_i \\ & + \beta_{2i}\text{Chair\_Attorney\_Brokerage}_i + \beta_{3i}\text{Chair\_Attorney\_Both}_i \\ & + \beta_{4i}\text{Panel\_Attorney\_Investor}_i + \beta_{5i}\text{Panel\_Attorney\_Brokerage}_i \\ & + \beta_{6i}\text{Panel\_Attorney\_Both}_i + \beta_{7i}\text{Top\_Accused\_Brokerage\_Firm} \\ & + \beta_{8i}\text{Inexperienced}_i + \sum \beta_{ji} \text{Subject Matter}_{ji} + \sum \beta_{ki} \text{Opinion Controls}_{ki} \\ & + \sum \beta_{li} \text{State Controls}_{li} + \text{Year Effects} + \varepsilon_i \end{aligned}$$

[NOTE: Model will be changed to TOBIT model with errors clustered on arbitrators].

Model 1 of Panel B of Table 8 reports our results.

<<Insert Table 8 About Here>>

Only the negative coefficient on Chair\_Attorney\_Brokerage is significantly different from zero. An arbitrator who serves as chair and also acts as an attorney in arbitrations representing only brokerage firms and brokers is significantly more likely to give lower arbitration awards to investor-claimants. As with the results for the full sample, the presence of a financial conflict for the non-chair arbitrators is not significant. The Top\_Accused\_Brokerage\_Firm variable is negative and significant, suggesting that brokerages that are repeat players may defend more vigorously.<sup>26</sup>

---

<sup>26</sup> As a robustness test, we re-estimated both Models 1 and 2 of Panel B of Table 8 with the addition of indicator variables for whether the arbitration took place in the three states with the largest number of arbitrations in our sample (New York, California, and Florida). Not reported, the models had the same qualitative results as the models in Panel B. As a further robustness test, we re-estimate the models of

We find similar results in Model 2 when we add independent variables for whether the chairs or the other panel attorney-arbitrators have made political contributions. The coefficient on Chair\_Republican\_Attorney is negative and significant at the <1% level while the coefficient on Chair\_Democrat\_Attorney is positive and insignificant; the difference between the two coefficients is significant at the 10% level. In contrast, the coefficients on Panel\_Democrat\_Attorney and Panel\_Republican\_Attorney are not statistically significant. Only the personal political preference of the chair appears to affect the arbitration award.

The models in Table 8 assess the influence of the Chair arbitrator and the other two arbitrators separately. We also test whether the presence of coalitions between the Chair and a like-minded arbitrator is significant. We modify Model 2 of Table 8, removing the attorney and political party variables for the other panel arbitrators and instead add new variables for whether a Chair arbitrator who is an attorney in other arbitrations is joined by at least one other arbitrator who also is of the same type. For example, Coalition\_Attorney\_Investor is set equal to 1 if the Chair is an attorney solely for investors in arbitrations and at least one other arbitrator on the same panel is also an attorney solely for investors in arbitration and 0 otherwise. Model 1 of Table 9 reports our results.

**<<Insert Table 9 About Here>>**

As with the other models above, only the Chair\_Attorney\_Brokerage coefficient is significant (and negative) in Model 1. However, once a chair who is an attorney solely

---

Table 8 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as the models in Table 8. We also re-estimate the models of Panel B of Table 8, replacing the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the models returned qualitatively the same results as the models in Panel B of Table 8.

for investors is paired with a same type arbitrator on the same panel, the investor arbitration award is now significantly larger. The coefficient on Coalition\_Attorney\_Investor is positive and significant at the 5% level. On the other hand, the coefficient on Coalition\_Attorney\_Both is negative and significant at the 10% level. When an arbitrator chair who is an attorney for other arbitrations representing both investors and brokerage firms or brokers is paired with a similar arbitrator on the same panel, the arbitration results in significantly lower awards for investor-claimants.<sup>27</sup> Evidence exists that coalition of like-minded arbitrators result in a greater shift in the arbitration award than where only a single arbitrator has a particular type of predisposition toward the arbitration.

In Model 2 of Table 9 we add the political preference variables for both chair attorney-arbitrators as well as for coalitions between the chair arbitrator and like-minded arbitrators on the same panel. The model omits Coalition\_Democrat\_Attorney due to a lack of datapoints. The political preference of the chair arbitrator is significantly correlated with the arbitration award. The coefficient on Chair\_Republican\_Attorney is negative and significant at just above the 5% level while the coefficient on Chair\_Democrat\_Attorney is positive and insignificant; the difference between the two coefficients is significant at the 10% level. In contrast, the coefficient on Coalition\_Republican\_Attorney variable is not significantly different from zero. We find

---

<sup>27</sup> As a robustness test, we re-estimate the models of Table 9 for only those arbitration awards that did not result in a partial or full settlement. Unreported, these models returned qualitatively the same results as the models in Table 9. We also re-estimate the models of Table 9, replacing the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the models returned qualitatively the same results as the models in Table 9.

no evidence that coalitions are important in the impact of personal preference on arbitration awards.

#### **4.8. Testing the Impact of the NASD Reforms**

Our set of tests relates to the reforms adopted in 1998 and 2004 by the NASD. Those reforms were intended to enhance the fairness of the process, thereby helping investors--but they sought to achieve that goal through very different mechanisms. The 1998 reforms put the onus on parties to exclude arbitrators that they perceived to be biased against them, while the 2004 reforms restricted the category of public arbitrators, placing more stringent limits on ties to the securities industry. The 1998 reforms would benefit claimants only if they were on a level playing field with brokerage firms in the arbitration process. If brokerage firms, as repeat players, had greater access to information about arbitrators and greater resources to spend on the selection process, the 1998 reforms might benefit them more instead of investors. On the other hand, claimants' attorneys are also repeat players who compile data on arbitrators on their awards, so the change in the selection process may have been a wash. The 2004 reforms seem unambiguously to reduce potential conflict of interest, although the limitations imposed may not have been sufficiently rigorous to make a significant difference.

Kondo (2007) found that the 1998 reforms tilted the selection of arbitrators toward more pro-brokerage firm arbitrators. Kondo's study of selection effects however faces the problem that the pool of all available arbitrators is not publicly available. The NASD does not release information on the pool of all available arbitrators. Thus, Kondo's tests are unable to control for the background pool of available arbitrators

(which may have shifted over time). Kondo also reports that more attorneys are selected as arbitrators after the 1998 reforms, leading him to conclude that expertise increased among arbitrators after the 1998 reforms.

Given the problems with testing selection, our tests focus on how particular arbitrators changed their behavior in response to the incentives created by the reforms. If, for example, the reforms gave brokerage firms greater clout, we expect that arbitrators may have shifted their awards toward lower awards against brokerage firms in the post-reform time period.

Accordingly, we pose both these hypotheses in null form.

**H5:** The 1998 reforms had no significant effect on the incentives of arbitrators to side for (or against) brokerage firms and brokers.

**H6:** The 2004 reforms had no significant effect on the incentives of arbitrators to side for (or against) brokerage firms and brokers.

To test the impact of the 1998 and 2004 reforms, we re-estimate the models in Table 3 using the full 1992-2006 sample, excluding arbitrations commenced in 1998 and 2004. For each model in Table 3 we remove the year fixed effects and substitute two indicator variables, Post 1998 Reforms and Post 2004 Reforms, for whether the arbitration is initiated after 1998 or 2004. We remove all arbitrator specific variables and instead use arbitrator fixed effects. The use of arbitrator fixed effects allows us to control for arbitrator characteristics in assessing the impact of the 1998 and 2004 reforms. Arbitrator fixed effects allows us to examine how any specific arbitrator changed her

awards subsequent to the 1998 and 2004 reforms due to the incentive effects of these reforms. Model 1 of Table 10 reports our results.

**<<Insert Table 10 About Here>>**

From Model 1, note that the coefficient for the 1998 reforms is negative and significant at the <1% level. Thus, more party involvement in the selection process correlates with a decline in the magnitude of investor arbitration awards. Although it is difficult to assign causality, at the very least the evidence is inconsistent with the view that this reform assisted investor claimants. We can speculate that brokerage firms, as repeat players in the process may have had an advantage in collecting information about the tendencies of arbitrators, thus allowing the firms to use the selection process more strategically. The coefficient for the 2004 reforms is insignificant. The 2004 reforms did not tilt the balance toward investors or brokers and brokerage firms one way or the other.

As a robustness test, we re-estimate Model 1 with the exclusion of state control variables and the addition of state fixed effects. Model 2 reports that this substitution did not change the qualitative results of Model 1. Some arbitrators in our sample started as arbitrators after the 1998 reforms. Model 3 focuses only on arbitrators that started as arbitrators prior to 1998 to assess the impact of the reforms on arbitrators who were initially selected in the pre-1998 regime. Model 3 reports the same qualitative results as Model 1.<sup>28</sup>

To assess how the relationship between arbitration awards and different arbitration characteristics varied with the reforms—particularly characteristics of

---

<sup>28</sup> As a robustness test, we re-estimate Model 1 of Table 10 for only those arbitration awards that did not result in a partial or full settlement. Unreported, the model returned qualitatively the same results as the models in Table 10. We also re-estimate Model 1 of Table 10 replace the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the model returned qualitatively the same results as the models in Table 10.

attorneys acting as arbitrators—we re-estimated the models in Table 3 with the inclusion of interaction terms between these two reform indicator variables each of the three arbitration attorney indicator variables (Attorney\_Investor, Attorney\_Brokerage, and Attorney\_Both). We also include interaction terms between the two reform indicator variables and the political party of attorney-arbitrators acting as the chair. Model 1 of Table 11 reports the results.

**<<Insert Table 11 About Here>>**

Note from Model 1 of Table 11 that the coefficient on Attorney\_Brokerage is negative and significant at the <1% level. The coefficient on the Post 1998 Reforms indicator variable is equal to -0.129 and significant at the <1% level. Consistent with the arbitrator fixed effects model in Table 10, the 1998 Reforms correlate generally with reduced awards. The interaction term for Post 1998 Reforms x Attorney\_Brokerage, however, is positive and significant, suggesting that those changes correlate with a reduced incentive for attorneys who represent brokers or brokerages to skew their awards. The sum of Attorney\_Brokerage, Post 1998 Reforms and Attorney\_Brokerage x Post 1998 Reforms is equal to -0.084 (significant at the 5.5% level). While the 1998 Reforms generally increased the tilt against investors, the level of bias for attorney-arbitrators that represent brokers or brokerage firms did not increase after the reforms, and if anything decreased. In contrast we have no evidence that the 2004 reforms had a similar effect. The coefficients on Post 2004 Reforms and Attorney\_Brokerage x Post 2004 Reforms are not significantly different from zero.

Model 1 of Table 11 also reports that the coefficient on Democrat\_Attorney is positive and significant at just above the 5% level, consistent with the view that the

personal beliefs of the attorney-arbitrators matters to how they decide awards. The 1998 Reforms did not affect the level of personal preference bias among attorney-arbitrators. The coefficient on Democrat\_Attorney x Post 1998 Reforms is positive and insignificant; the coefficient on Republican\_Attorney x Post 1998 Reforms is negative and insignificant. If anything, the reforms may have increased the amount of personal preference bias. Similarly, the 2004 Reforms also did not significantly affect personal preference bias.

As a robustness test, we re-estimate Model 1 with the exclusion of state control variables and the addition of state fixed effects. Model 2 reports that this substitution did not change the qualitative results of Model 1. Some arbitrators in our sample started as arbitrators after the 1998 reforms. Model 3 focuses only on arbitrators that started as arbitrators prior to 1998 to assess the impact of the reforms on arbitrators who were initially selected in the pre-1998 regime. Model 3 reports the same qualitative results as Model 1 with one difference. The coefficient on Republican\_Attorney x Post 2004 Reforms is negative and significant at the <1% level. If anything, the 2004 reforms may have exacerbated the political bias of attorney-arbitrators.<sup>29</sup>

## **5. Conclusion**

Both financial conflicts of interest and personal preferences affect arbitration awards. We report evidence that attorney-arbitrators are influenced by a financial

---

<sup>29</sup> As a robustness test, we re-estimate Model 1 of Table 11 for only those arbitration awards that did not result in a partial or full settlement. Unreported, the model returned qualitatively the same results as the models in Table 11. We also re-estimate Model 1 of Table 11 replace the Claimed Compensation<sup>2</sup> term with an indicator variable, Million, for whether the requested compensation amount was greater than one million dollars. Unreported, the model returned qualitatively the same results as the models in Table 11. Lastly, we re-estimate Model 1 of Table 11 only for cases without a partial or full settlement. Unreported, the model returned qualitatively the same results as the models in Table 11.

conflict of interest stemming from their desire to represent brokers or brokerage firms in arbitration related litigation. Attorney arbitrators who represent brokers or brokerage firms award significantly lower arbitration awards. Those attorney-arbitrators with strong personal preferences based on political affiliation also award systematically differential arbitration awards. Democrat attorney-arbitrators award significantly greater awards than Republican attorney-arbitrators.

The 1998 reforms correlate with a shift toward lower awards for any given arbitrator. The ability to influence the selection of the arbitrators appears to tilt the incentives of arbitrators to cater more toward the interest of brokers and brokerage firms. Perhaps brokers and brokerage firms, as repeat players, are better able to assess and strike arbitrators who do favor the position of the brokers and brokerage firms. On the other hand, investors appear able to focus on obvious conflicts of interests. Arbitrators with an obvious conflict, such as attorney-arbitrators, moderate their tendency to side with brokers and brokerage firms in the post 1998 reform time period.

Investors are less able to screen for other conflicts, including the personal preference of arbitrators. The level of political bias for attorney-arbitrators does not diminish for any given arbitrator after the 1998 or 2004 reforms. The lower visibility of political-personal preferences may make them less susceptible to investor screening; attorney-arbitrators with such preferences therefore face less incentive to moderate these preferences post reforms.

## Appendix

### APPENDIX A: VARIABLE DEFINITIONS

Variable	Definition
Attorney_Investor	Indicator variable equal to 1 if the arbitrator has acted as an attorney for investors and not for brokerage firms or brokers in arbitration proceedings and 0 otherwise.
Attorney_Brokerage	Indicator variable equal to 1 if the arbitrator has acted as an attorney for brokerage firms or brokers and not for investors in arbitration proceedings and 0 otherwise.
Attorney_Both	Indicator variable equal to 1 if the arbitrator has acted as an attorney for brokerage firms or brokers as well as for investors in arbitration proceedings and 0 otherwise.
Inexperienced	Indicator variable equal to 1 if the award in question was decided in the first year that the arbitrator's awards appear in the dataset (other than in 1992) and 0 otherwise.
Suitability	Indicator variable equal to 1 if the arbitration involved a suitability claim, including claims involving "know your customer", NYSE Rule 405, and NASD Rule 2310 issues, and 0 otherwise.
Churning	Indicator variable equal to 1 if the arbitration involved a churning, excessive trading, or excessive commission claim and 0 otherwise.
Unauthorized Trades	Indicator variable equal to 1 if the arbitration involved an unauthorized trading claim and 0 otherwise.
Failure to Execute	Indicator variable equal to 1 if the arbitration involved a claim that the broker or brokerage firm failed to execute a transaction, failed to monitor an account properly, improperly executed a transaction, or engaged in activities that resulted in errors in a customer account and 0 otherwise.
Misrepresentation	Indicator variable equal to 1 if the arbitration involved misrepresentation, fraud, failure to disclose, Rule 10b-5, common law fraud, or deceptive sales tactic claim and 0 otherwise.
Conversion	Indicator variable equal to 1 if the arbitration involved a theft, conversion, unauthorized withdrawals, or self-dealing claim and 0 otherwise.

Claimed Compensation	Amount of claimed compensation in dollars by the arbitration claimants.
Compensation Ratio	The total amount of compensation award divided by the claimed compensation amount.
Number of Arbitrators	Number of arbitrators involved in the arbitration.
Respondent Failed to Appear	Indicator variable equal to 1 if the any of the respondents failed to appear at the arbitration hearing and 0 otherwise.
Punitive Damages	Indicator variable equal to 1 if punitive damages were imposed on any of the respondents in the arbitration award and 0 otherwise.
CRD Expungement	Indicator variable equal to 1 if the CRD records of any of the respondent-brokers was expunged and 0 otherwise.
Reported Settlement	Indicator variable equal to 1 if the arbitration resulted in a full or partial settlement and the settlement amount was reported and 0 otherwise.
Unreported Partial Settlement	Indicator variable equal to 1 if the arbitration resulted in a partial settlement and the settlement amount was not reported (but the award for the non-settling respondents was reported) and 0 otherwise.
Chair_Ratio	Number of arbitration in which a specific arbitrator served as chair divided by the total number of arbitrations for the specific arbitrator
State Income	The median household income for the state in 1999.
State Population	The population of the state in millions measured in 1999.
Partner Income	The average partner salary reported for 1999 for the state.

---

**Table 1**  
**Summary Statistics**

**Panel A**

<b>Year</b>	<b>Frequency</b>	<b>Percent</b>
1992	331	4.92
1993	316	4.70
1994	324	4.82
1995	424	6.31
1996	614	9.13
1997	620	9.22
1998	849	12.63
1999	538	8.00
2000	434	6.45
2001	299	4.45
2002	291	4.33
2003	403	5.99
2004	557	8.28
2005	496	7.38
2006	228	3.39
<b>Total</b>	<b>6724</b>	<b>100.00</b>

**Table 1 Continued**

**Panel B**

<b>State</b>	<b>Freq.</b>	<b>Percent</b>	<b>State</b>	<b>Freq.</b>	<b>Percent</b>
AK	4	0.07%	MO	112	1.99%
AR	9	0.16%	MT	1	0.02%
AZ	125	2.22%	NC	123	2.19%
AI	1	0.02%	NE	31	0.55%
CA	1,247	22.19%	NJ	7	0.12%
CO	228	4.06%	NM	39	0.69%
CT	7	0.12%	NV	57	1.01%
DC	102	1.81%	NY	969	17.24%
FL	565	10.05%	OH	171	3.04%
GA	110	1.96%	OK	21	0.37%
HI	24	0.43%	OR	64	1.14%
IA	2	0.04%	PA	198	3.52%
ID	1	0.02%	PR	2	0.04%
IL	121	2.15%	SC	5	0.09%
IN	14	0.25%	TN	36	0.64%
KS	1	0.02%	TX	316	5.62%
KY	54	0.96%	UT	31	0.55%
LA	79	1.41%	VA	39	0.69%
MA	78	1.39%	VT	1	0.02%
MD	53	0.94%	WA	73	1.30%
MI	309	5.50%	WI	66	1.17%
MN	123	2.19%	WV	1	0.02%

**Table 2**

<b>Panel A</b>					
<b>Type of Claim</b>	<b>Frequency</b>		<b>Percent</b>		
Suitability	3324		49.72%		
Churning	1145		17.13%		
Unauthorized Trades	1637		24.49%		
Failure to Execute	1223		18.29%		
Misrepresentation	4545		67.99%		
Conversion	290		4.36%		

<b>Panel B</b>			
<b>Outcome</b>	<b>Frequency</b>		<b>Percentage</b>
No Settlement	5965		88.7
Settlement	759		11.3
Reported	51		0.8
Unreported Partial Settlement	211		3.1
Unreported Full Settlement	497		7.4
<b>Total</b>	<b>6724</b>		<b>100.0</b>

<b>Panel C</b>					
<b>Variable</b>	<b>Mean</b>	<b>25%</b>	<b>Median</b>	<b>75%</b>	<b>Standard Deviation</b>
Claimed Comp. (\$ millions)	0.620	0.025	0.091	0.273	12.628
Compensation Ratio	0.324	0.000	0.112	0.656	0.391
Inexperienced	0.064	0.000	0.000	0.000	0.244
Number of Arbitrators	2.616	3.000	3.000	3.000	0.783
Respondent Failed to Appear	0.121	0.000	0.000	0.000	0.326
Punitive Damages	0.044	0.000	0.000	0.000	0.205
CRD Expungement	0.155	0.000	0.000	0.000	0.362
Median State Income (1999)	43248.9	39927.0	43393.0	47203.0	4018.9
State Population (1999)	15.839	6.175	15.111	20.044	10.366
Median Partner Income (1999)	234647	228080	217790	246380	30097

**Table 3**  
**Attorneys as Arbitrators**

<b>Panel A</b>		
<b>Status</b>	<b>Number</b>	<b>Percent</b>
Attorney	5177	77.0%
Attorney_Investor	465	6.9%
Attorney_Brokerage	197	2.9%
Attorney_Both	308	4.6%
Not Attorney	1547	23.0%
<b>Total</b>	<b>6724</b>	<b>100.0%</b>

<b>Panel B</b>		
<b>Variables</b>	<b>Model 1</b>	<b>Model 2</b>
Attorney	-0.022* (-1.980)	-0.017 (-1.470)
Attorney_Investor	-0.006 (-0.330)	-0.001 (-0.060)
Attorney_Brokerage	-0.079** (-3.180)	-0.079** (-2.980)
Attorney_Both	0.013 (0.550)	-0.001 (-0.030)
Inexperienced	-0.037* (-2.040)	-0.036* (-2.000)
Suitability	-0.014 (-1.390)	-0.017+ (-1.710)
Churning	-0.028* (-2.370)	-0.024* (-2.060)
Unauthorized Trades	0.021+ (1.860)	0.020+ (1.800)
Failure to Execute	-0.004 (-0.300)	-0.003 (-0.230)
Misrepresentation	0.009 (0.820)	0.008 (0.800)
Conversion	0.052* (2.070)	0.061* (2.420)

Claimed Compensation	-0.012** (-3.860)	-0.008** (-2.660)
Claimed Compensation <sup>2</sup>	0.000** (3.780)	0.000* (2.580)
Number of Arbitrators	-0.023** (-3.510)	-0.022** (-3.360)
Respondent Failed to Appear	0.236** (15.090)	0.235** (15.130)
Punitive Damages	0.309** (14.150)	0.307** (14.090)
CRD Expungement	-0.137** (-10.470)	-0.135** (-10.350)
Reported Settlement	0.228** (4.810)	0.238** (4.920)
Unreported Partial Settlement	0.181** (6.390)	0.182** (6.450)
Median State Income (1999)	0.000 (-0.030)	
State Population (1999)	0.000 (0.530)	
Median Partner Income for State (1999)	0.000** (-3.680)	
Constant	0.486** (6.740)	0.328** (11.200)
N	5782	5893
Adj R2	0.1557	0.1541
Year Fixed Effects	Yes	Yes
State Fixed Effects	No	Yes

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

+ Coefficient significant at the 10% level or less.

\* Coefficient significant at the 5% level or less.

\*\* Coefficient significant at less than the 1% level.

**Table 4**  
**Personal Preferences of Arbitrators**

Panel A		
Political Party of Attorneys	Number	Percent
Democrat	652	12.6%
Republican	456	8.8%
Neither	4069	78.6%
<b>Total</b>	<b>5177</b>	<b>100.0%</b>

Panel B		
Variables	Model 1	Model 2
Attorney	-0.025* (-2.170)	-0.019+ (-1.650)
Democrat Attorney	0.040* (2.350)	0.033+ (1.940)
Republican Attorney	-0.022 (-1.170)	-0.015 (-0.770)
Attorney_Investor	-0.007 (-0.370)	-0.002 (-0.110)
Attorney_Brokerage	-0.081** (-3.240)	-0.082** (-3.080)
Attorney_Both	0.008 (0.320)	-0.006 (-0.280)
Inexperienced	-0.037* (-2.030)	-0.035* (-1.990)
Constant	0.493** (6.820)	0.328** (11.220)
N	5781	5892
Adj R2	0.1566	0.1545
Subject Matter Controls	Yes	Yes
Opinion Controls	Yes	Yes
State Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
State Fixed Effects	No	Yes

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

+ Coefficient significant at the 10% level or less.

\* Coefficient significant at the 5% level or less.

\*\* Coefficient significant at less than the 1% level.

**Table 5**  
**Arbitration Chair**

Variables	Model 1	Model 2
Chair_Attorney	-0.020 <sup>+</sup> (-1.690)	-0.014 (-1.160)
Chair_Democrat Attorney	0.042* (2.220)	0.033 <sup>+</sup> (1.740)
Chair_Republican Attorney	-0.034 (-1.560)	-0.027 (-1.220)
Chair_Attorney_Investor	-0.005 (-0.220)	-0.001 (-0.060)
Chair_Attorney_Brokerage	-0.083** (-2.950)	-0.085** (-2.910)
Chair_Attorney_Both	0.003 (0.120)	-0.009 (-0.360)
Other_Attorney	-0.038* (-2.420)	-0.035* (-2.180)
Other_Democrat Attorney	0.026 (0.740)	0.031 (0.870)
Other_Republican Attorney	0.016 (0.400)	0.023 (0.560)
Other_Attorney_Investor	-0.020 (-0.580)	-0.011 (-0.300)
Other_Attorney_Brokerage	-0.078 (-1.400)	-0.073 (-1.260)
Other_Attorney_Both	0.029 (0.510)	0.002 (0.030)
Inexperienced	-0.035 <sup>+</sup> (-1.920)	-0.033 <sup>+</sup> (-1.860)
Constant	0.490** (6.750)	0.324** (10.960)
N	5776	5887
Adj R2	0.1562	0.1540
Subject Matter Controls	Yes	Yes
Opinion Controls	Yes	Yes
State Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
State Fixed Effects	No	Yes

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

- <sup>+</sup> Coefficient significant at the 10% level or less.
- <sup>\*</sup> Coefficient significant at the 5% level or less.
- <sup>\*\*</sup> Coefficient significant at less than the 1% level.

**Table 6**  
**Other Attorney Characteristics**

<b>Variables</b>	<b>Model 1</b>	<b>Variables</b>	<b>Model 1 Continued</b>
Chair_Attorney	-0.041* (-2.470)	Other_Attorney	-0.075** (-3.090)
Chair_Democrat_Attorney	0.041* (2.140)	Other_Democrat_Attorney	0.023 (0.650)
Chair_Republican_Attorney	-0.033 (-1.550)	Other_Republican_Attorney	0.027 (0.650)
Chair_Atty_Rated	-0.006 (-0.490)	Other_Atty_Rated	0.021 (0.890)
Chair_Atty_Top_LawSchool	0.056** (2.620)	Other_Atty_Top_LawSchool	0.066 (1.490)
Chair_Atty_Securities_Practice	0.010 (0.500)	Other_Atty_Securities_Practice	-0.015 (-0.380)
Chair_Atty_Solo_Practice	0.025+ (1.890)	Other_Atty_Solo_Practice	0.036 (1.610)
Chair_Attorney_Investor	0.003 (0.130)	Other_Attorney_Investor	-0.015 (-0.410)
Chair_Attorney_Brokerage	-0.079** (-2.730)	Other_Attorney_Brokerage	-0.092 (-1.590)
Chair_Attorney_Both	-0.007 (-0.270)	Other_Attorney_Both	0.035 (0.590)
		Inexperienced	-0.035+ (-1.910)
		Constant	0.503** (6.770)
		N	5776
		Adj R2	0.1576
		Subject Matter Controls	Yes
		Opinion Controls	Yes
		State Controls	Yes
		Year Fixed Effects	Yes

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

- + Coefficient significant at the 10% level or less.
- \* Coefficient significant at the 5% level or less.
- \*\* Coefficient significant at less than the 1% level.

**Table 7**  
**Small Sample Summary Statistics**

<b>Panel A</b>					
<b>Year</b>		<b>Freq.</b>		<b>Percent</b>	
1998		155		36.1	
1999		134		31.2	
2000		140		32.6	
<b>Total</b>		<b>429</b>		<b>100.0</b>	

<b>Panel B</b>					
<b>Variable</b>	<b>Mean</b>	<b>25%</b>	<b>Median</b>	<b>75%</b>	<b>Standard Deviation</b>
Claimed Comp. (\$ millions)	0.307	0.048	0.090	0.232	1.042
Compensation Ratio	0.373	0.000	0.200	0.815	0.408
Inexperienced (Chair)	0.112	0.000	0.000	0.000	0.315
Number of Prior Awards (Chair)	11.8	3.0	8.0	16.0	12.6
Respondent Failed to Appear	0.223	0.000	0.000	0.000	0.417
Punitive Damages	0.095	0.000	0.000	0.000	0.294
CRD Expungement	0.102	0.000	0.000	0.000	0.303
Claimant Attorney Present	0.865	1.000	1.000	1.000	0.342
Respondent Attorney Present	0.826	1.000	1.000	1.000	0.380
Number of Hearings	5.3	3.0	4.0	7.0	4.2
Opinion Length	4.6	4.0	4.0	5.0	1.1
Top Accused Brokerage	0.095	0.000	0.000	0.000	0.294
Median State Income (1999)	43383.1	39927.0	43393.0	47493.0	4171.1
State Population (1999)	16.084	5.484	15.111	20.044	10.871
Median Partner Income (1999)	232935.2	217790.0	228080.0	285120.0	29254.3

**Table 8**  
**Small Sample Panel Composition**

Variables	Model 1	Model 2
Chair_Attorney	-0.041 (-1.000)	-0.029 (-0.670)
Chair_Democrat_Attorney		0.010 (0.210)
Chair_Republican_Attorney		-0.113* (-2.060)
Chair_Attorney_Investor	0.003 (0.050)	0.006 (0.110)
Chair_Attorney_Brokerage	-0.163** (-3.890)	-0.183** (-4.110)
Chair_Attorney_Both	-0.013 (-0.180)	-0.024 (-0.320)
Panel_Democrat_Attorney		0.150 (0.910)
Panel_Republican_Attorney		-0.099 (-1.000)
Panel_Attorney_Investor	0.039 (0.530)	0.034 (0.450)
Panel_Attorney_Brokerage	-0.058 (-1.090)	-0.063 (-1.180)
Panel_Attorney_Both	0.062 (0.680)	0.070 (0.770)
Top Accused Brokerage Firm	-0.138** (-3.660)	-0.142** (-3.700)
Inexperienced	-0.048 (-1.130)	-0.049 (-1.130)
Claimant Attorney Present	0.089+ (1.840)	0.080+ (1.660)
Respondent Attorney Present	-0.193** (-2.900)	-0.197** (-2.970)
Claimed Compensation	-0.164** (-4.030)	-0.001 (-0.020)

Claimed Compensation <sup>2</sup>	0.016** (3.560)	0.006 (0.150)
Respondent Failed to Appear	0.208** (3.450)	-0.048 (-1.360)
Punitive Damages	0.426** (7.580)	0.030 (0.710)
CRD Expungement	-0.088 <sup>+</sup> (-1.780)	-0.004 (-0.110)
Number of Hearings	0.000 (0.060)	0.043 (0.490)
Opinion Length	0.007 (0.440)	-0.164** (-4.020)
Reported Settlement	0.342 (1.190)	0.016** (3.540)
Unreported Partial Settlement	0.002 (0.020)	0.203** (3.360)
Constant	0.408 <sup>+</sup> (1.760)	0.421** (7.670)
N	380	380
Adj R2	0.3685	0.3682
Subject Matter Controls	Yes	Yes
Year Fixed Effects	Yes	Yes
State Controls	Yes	Yes

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

<sup>+</sup> Coefficient significant at the 10% level or less.

<sup>\*</sup> Coefficient significant at the 5% level or less.

<sup>\*\*</sup> Coefficient significant at less than the 1% level.

**Table 9**  
**Small Sample Arbitrator Coalitions**

Variables	Model 1	Model 2
Chair_Attorney	-0.042 (-1.020)	-0.029 (-0.690)
Chair_Democrat_Attorney		0.004 (0.080)
Chair_Republican_Attorney		-0.110 <sup>+</sup> (-1.960)
Chair_Attorney_Investor	-0.016 (-0.260)	-0.016 (-0.270)
Chair_Attorney_Brokerage	-0.161 <sup>**</sup> (-3.580)	-0.178 <sup>**</sup> (-3.800)
Chair_Attorney_Both	-0.001 (-0.010)	0.000 (0.000)
Coalition_Democrat_Attorney		--
Coalition_Republican_Attorney		-0.008 (-0.070)
Coalition_Attorney_Investor	0.265 <sup>**</sup> (2.750)	0.295 <sup>**</sup> (3.490)
Coalition_Attorney_Brokerage	-0.017 (-0.200)	-0.031 (-0.330)
Coalition_Attorney_Both	-0.223 <sup>+</sup> (-1.770)	-0.230 <sup>+</sup> (-1.820)
Top Accused Brokerage Firm	-0.133 <sup>**</sup> (-3.560)	-0.132 <sup>**</sup> (-3.530)
Inexperienced	-0.047 (-1.120)	-0.050 (-1.150)
Claimant Attorney Present	0.100 <sup>*</sup> (2.010)	0.092 <sup>+</sup> (1.860)
Respondent Attorney Present	-0.197 <sup>**</sup> (-3.000)	-0.198 <sup>**</sup> (-3.020)
Constant	0.394 <sup>+</sup> (1.660)	0.458 <sup>+</sup> (1.880)
N	380	380
Adj R2	0.3687	0.3690
Subject Matter Controls	Yes	Yes
Opinion Controls	Yes	Yes
State Controls	Yes	Yes

---

Year Fixed Effects	Yes	Yes
--------------------	-----	-----

---

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

- <sup>+</sup> Coefficient significant at the 10% level or less.
- <sup>\*</sup> Coefficient significant at the 5% level or less.
- <sup>\*\*</sup> Coefficient significant at less than the 1% level.

**Table 10**  
**The Effect of Reforms on Arbitrator Incentives**

**Panel A: Arbitrator Fixed Effects Model**

Variables	Model 1	Model 2	Model 3
	Full Sample	Full Sample	Pre-1998 Arbitrators Only
Post 1998 Reforms	-0.047** (-3.610)	-0.048** (-3.730)	-0.045** (-3.370)
Post 2004 Reforms	0.002 (0.050)	0.012 (0.320)	-0.005 (-0.130)
Inexperienced	-0.057** (-2.940)	-0.058** (-3.070)	-0.072** (-3.480)
Constant	0.489** (2.640)	0.332 (1.570)	0.463* (2.460)
N	5124	5227	4745
Adj R2	0.1688	0.1688	0.1632
Arbitrator Fixed Effects	Yes	Yes	Yes
Subject Matter Controls	Yes	Yes	Yes
Opinion Controls	Yes	Yes	Yes
State Controls	Yes	No	Yes
State Fixed Effects	No	Yes	No

**Note.** Dependent variable is Compensation Ratio. The models exclude arbitrations started in the years 1998 and 2004. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

<sup>+</sup> Coefficient significant at the 10% level or less.

\* Coefficient significant at the 5% level or less.

\*\* Coefficient significant at less than the 1% level.

**Table 10 Continued**

<b>Panel B: Arbitrator Pooled Model</b>			
<b>Variables</b>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>
	Full Sample	Full Sample	Pre-1998 Arbitrators Only
Attorney	-0.035* (-2.200)	-0.027+ (-1.680)	-0.038* (-2.360)
Democrat_Attorney	0.040+ (1.910)	0.035+ (1.650)	0.047* (2.190)
Republican_Attorney	0.021 (0.710)	0.024 (0.820)	0.023 (0.760)
Attorney_Investor	-0.017 (-0.690)	-0.013 (-0.510)	-0.018 (-0.730)
Attorney_Brokerage	-0.129** (-3.710)	-0.129** (-3.610)	-0.124** (-3.550)
Attorney_Both	0.018 (0.570)	0.003 (0.090)	0.018 (0.570)
Post 1998 Reforms	-0.057** (-2.710)	-0.054* (-2.560)	-0.055* (-2.370)
Attorney x Post 1998 Reforms	0.017 (0.670)	0.008 (0.340)	0.013 (0.500)
Democrat_Attorney x Post 1998 Reforms	0.024 (0.620)	0.025 (0.640)	0.016 (0.380)
Republican_Attorney x Post 1998 Reforms	-0.062 (-1.520)	-0.048 (-1.190)	-0.059 (-1.360)
Attorney_Investor x Post 1998 Reforms	0.011 (0.290)	0.015 (0.370)	0.008 (0.210)
Attorney_Brokerage x Post 1998 Reforms	0.102+ (1.950)	0.105* (2.010)	0.097+ (1.790)
Attorney_Both x Post 1998 Reforms	-0.001 (-0.020)	-0.004 (-0.080)	-0.008 (-0.130)
Post 2004 Reforms	-0.036 (-0.680)	-0.026 (-0.480)	-0.010 (-0.160)
Attorney x Post 2004 Reforms	0.085 (1.110)	0.072 (0.900)	0.051 (0.590)
Democrat_Attorney x Post 2004 Reforms	-0.070 (-0.430)	-0.145 (-0.950)	-0.080 (-0.490)

Republican_Attorney x Post 2004 Reforms	-0.114 (-0.850)	-0.122 (-0.910)	-0.246** (-3.890)
Attorney_Investor x Post 2004 Reforms	-0.054 (-0.500)	0.003 (0.030)	-0.017 (-0.160)
Attorney_Brokerage x Post 2004 Reforms	0.062 (0.300)	0.054 (0.260)	0.121 (0.460)
Attorney_Both x Post 2004 Reforms	-0.008 (-0.030)	0.078 (0.320)	0.009 (0.040)
Inexperienced	-0.050** (-2.800)	-0.048** (-2.730)	-0.072** (-3.680)
Constant	0.541** (6.910)	0.348** (14.460)	0.524** (6.430)
N	5124	5227	4745
Adj R2	0.1587	0.1497	0.1523
Arbitrator Fixed Effects	No	No	No
Subject Matter Controls	Yes	Yes	Yes
Opinion Controls	Yes	Yes	Yes
State Controls	Yes	No	Yes
State Fixed Effects	No	Yes	No

**Note.** Dependent variable is Compensation Ratio. The t-statistics (in parentheses) are calculated using Huber-White robust standard errors. Variable definitions are in the Appendix.

<sup>+</sup> Coefficient significant at the 10% level or less.

<sup>\*</sup> Coefficient significant at the 5% level or less.

<sup>\*\*</sup> Coefficient significant at less than the 1% level.