



# The effect of an agent's expertise on National Football League contract structure



Michael Conlin<sup>a,\*</sup>, Joe Orsini<sup>b</sup>, Meng-Chi Tang<sup>c</sup>

<sup>a</sup> Michigan State University, Marshall-Adams Hall, 486 W Circle Dr. Rm 110, East Lansing, MI 48824, United States

<sup>b</sup> Stanford University, United States

<sup>c</sup> National Chung Cheng University, Taiwan

## HIGHLIGHTS

- The monetary terms of an NFL contract do not vary with an agent's expertise.
- The expertise of an agent does affect contract structure.
- How an agent's expertise affects contract structure depends on the salary cap.

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## ABSTRACT

There is extensive theoretical research focusing on the ways in which principal–agent interactions vary depending on the agent's expertise or knowledge. While the empirical research testing the implications of these models involves a broad array of experts ranging from lawyers to physicians to real estate agents, we are not aware of any empirical research that focuses on how the level of an agent's expertise affects outcomes. This paper contributes to the empirical research on delegation to experts by considering agents representing football players in contract negotiations with National Football League (NFL) teams. Using whether and for how long an agent is certified with the NFL Players' Association as a proxy for expertise, we find that the monetary terms of the contract do not vary with an agent's expertise, conditional on the contract structure. However, we do find that an agent's expertise does affect the contract structure – specifically, contract duration and incentive clauses. These results suggest that while minimal expertise is required to understand the appropriate monetary compensation associated with a given contract structure, expertise is required to fully grasp the tradeoffs when negotiating the contract structure.

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## 1. Introduction

Individuals and firms (principals) often delegate tasks to others that require a certain expertise or knowledge which they do not possess. These perceived experts (agents) have defined tasks to perform and are compensated for their services. There is extensive theoretical research focusing on how the expertise or knowledge of the agent affects the principal's selection of the agent, the scope of the agent's tasks and the structure of the compensation. There is also theoretical research that considers the incentive of the expert to acquire additional information. Sobel (1993) develops a model where the principal may prefer an uninformed agent to an informed agent when there exist more than two outcomes. Dai et al.'s (2006) principal–agent model suggests that both the structure of the agent's compensation and the constraints imposed

on the agent's actions should depend on the agent's knowledge. Aghion and Tirole (1997) analyze a principal–agent model where the agent's incentive to acquire information increases with the amount of authority the principal relinquishes to the agent. Lewis and Sappington (1997) demonstrate that providing an agent the incentive to acquire information may require a contract with an extreme reward structure, while Szalay (2005) suggests that constraining an agent's action set can increase the agent's incentive to acquire information. Dai, Lewis & Lopomo's model demonstrates that tying compensation to specific tasks can influence an agent's incentive to acquire information.

The empirical research involving delegation to experts tests some of the predictions from these theoretical models and considers a broad range of environments, including the behavior of experts such as lawyers, physicians and real estate agents. Most of these empirical papers consider how an expert's behavior changes with her incentives. For example, Helland and Tabarrok (2003) consider how changes in the contingency fee structure for lawyers affect the settlement of medical malpractice suits, while Gruber and Owings (1996) identify a negative correlation between a state's

\* Corresponding author. Tel.: +1 517 355 0285; fax: +1 517 432 1068.  
E-mail address: [conlinmi@msu.edu](mailto:conlinmi@msu.edu) (M. Conlin).

fertility and cesarean deliveries. [Iizuka \(2012\)](#) provides convincing evidence that Japanese physicians, who can profit by dispensing prescription drugs, are more likely to prescribe brand-name drugs because of the higher markups. [Levitt and Syverson \(2008\)](#) find that homes owned by real estate agents are more likely to sell for a higher price and are more likely to be on the market longer than other comparable homes. There is limited empirical work on the benefits associated with hiring an expert. Using data from a final-offer arbitration system used by New Jersey police officers and fire fighters, [Ashenfelter and Dahl \(2012\)](#) find that there is a benefit associated with hiring an agent but that this benefit is fully offset when the other party also hires an agent. We are not aware of any research that focuses on how the level of an agent's expertise affects outcomes.

This paper contributes to the empirical research on delegation to experts by considering agents representing football players in contract negotiations with National Football League (NFL) teams. While the tasks performed and compensation received do not vary significantly across these sports agents, the level of experience possessed by these agents does. More experienced agents are likely to have greater expertise and knowledge regarding the contract negotiation process. We proxy for an agent's experience, and thereby his expertise/knowledge, by whether and for how many years the agent has been certified by the NFL Players Association (NFLPA). Using contract information on 1872 players drafted prior to the implementation of the NFL salary cap (1986–91) and on 1782 players drafted after its implementation (2001–07), we then test whether the terms and structure of the negotiated contracts vary depending on the agent's expertise.

We find that, conditional on the contract structure, the terms of the contract do not vary with an agent's experience. Specifically, conditional on contract length and inclusion of an incentive clause, our empirical results indicate that a player's signing bonus and base salary do not vary with whether and for how long the agent has been certified.<sup>1</sup> However, we do find that agent experience does affect the contract structure in terms of the length of the contract, the existence of an incentive clause and the structure of the incentive clause(s). Experienced agents are more likely to negotiate a shorter contract with an incentive clause (for years prior to the salary cap) and structure the incentive clause in a manner that has less impact on the team's salary cap (for years with the salary cap).<sup>2</sup> The likely explanation for these empirical results is that while it is relatively easy for an inexperienced agent to understand the appropriate monetary compensation associated with a given contract structure, it is more difficult to understand the tradeoffs when negotiating the contract structure.

Appropriate monetary compensation is readily discernable because agents are requested to submit the terms of a player's contract within 48 hours of signing that contract to the NFLPA, who then provides other agents access to these terms. This, along with the provision of contract terms from prior years, results in agents having a great deal of information on the monetary compensation of other drafted players. This information facilitates what is commonly referred to as a "slotting process" where a player's compensation is slightly less than the player drafted immediately before and slightly more than the player drafted immediately after himself.<sup>3</sup> The fact that agents have this signing bonus/base

salary information, and that a dollar in signing bonus/base salary is comparable across contracts/players, enables even inexperienced agents to understand the appropriate monetary compensation based on when the player was selected in the draft.

In contrast, it is much more difficult for an inexperienced agent to infer the tradeoffs associated with incentive clauses and contract duration. Agents rarely obtain the specifics of the incentive clauses in other contracts, and even when they do, it is often difficult to infer the value of these incentive clauses because it depends on a player's position and the team. If a running back drafted immediately before an offensive lineman agrees to a contract that contains a \$40,000 payment if the running back gains 1000 yards, how does the offensive lineman's agent determine what a comparable incentive clause is? This comparison depends on numerous factors, including whether the team that drafted the running back prefers running to passing and whether other running backs on the team will see significant playing time. A similar explanation holds for contract duration. The value of a three year compared to a four year non-guaranteed contract depends on when the player was drafted, whether the team that drafted the player has a reputation of developing draft choices, and the player's position. In addition, if all other players drafted in close proximity of a specific player sign three year contracts, it is difficult for the specific player's agent to infer the appropriate tradeoffs associated with negotiating a two or four year contract. As an agent acquires more experience, he is better able to understand the tradeoffs associated with incentive clauses and contract duration.<sup>4</sup> This explains why contract structure does vary with an agent's experience but, conditional on contract structure, monetary payments do not.<sup>5</sup>

The implications of our empirical results are two-fold. First, we demonstrate that an agent's expertise does influence the aspects of the contract that are most difficult to understand in terms of the tradeoffs. This is likely relevant in other principal-agent environments where the agent's tasks vary in complexity and agents with more expertise are superior at performing the complex tasks. This will obviously affect the scope of the agent's tasks, compensation structure and the incentive of the agent to acquire additional expertise. Second, much of the empirical research on contracts, especially research involving the compensation of professional athletes, strictly focuses on compensation and does not consider contract structure.<sup>6</sup> Our results suggest that this research may be missing some important differences across contracts.

## 2. Data and summary statistics

The NFL conducts a draft in late April, during which players from the collegiate level are selected by a specific team. All teams are

<sup>4</sup> All else equal, drafted players prefer contracts of shorter duration because they can generally expect to receive a much higher yearly salary in their subsequent contracts if they perform well. The increase in pay between the last year of one contract and the first year of the next contract tends to be greater than the increase in base salary between two years covered under the same contract. As the NFL Player's Association puts it in the 1991 edition of *On the Sidelines*, "Historically, career earnings have been larger when contract lengths have been shorter ... rookies with two-year packages ... have done better than entering players with longer deals".

<sup>5</sup> Our empirical results also suggest that experienced agents reach contractual agreement after a longer negotiation period; resulting in the player missing the start of training camp. Perhaps experienced agents also better understand that a player missing the start of training camp imposes a cost on the team and that this cost induces the team to make a more lucrative contract offer after training camp begins. See [Conlin \(1999\)](#) and [Conlin and Emerson \(2003\)](#) for evidence suggesting that this delay provides a credible signal to the team.

<sup>6</sup> There exists an important body of empirical research that does focus on contract structure including [Joskow \(1987\)](#), [Leffler and Rucker \(1991\)](#) and [Bandiera \(2007\)](#). [Chiappori and Salanié \(2003\)](#) provide a concise review of this empirical literature.

<sup>1</sup> We also condition on the player's selection number in the draft, the team, the player's position, and draft year as well as other player and team characteristics.

<sup>2</sup> [Leeds and Kowalewski \(2001\)](#) and [Larsen et al. \(2006\)](#) address how the salary cap and free agency affect player compensation and the competitive balance within the NFL.

<sup>3</sup> The practice of "slotting" is not an explicit rule and the contract depends not only on when the player was drafted, but also other factors such as the position of the player.

given a draft pick in each round and the order of the picks is based on how the team performed in the prior season. When a player is drafted by a particular team, that team has exclusive rights which prevent other NFL teams from negotiating with that player—unless the other NFL team trades for the player's rights. In early July, drafted players who have reached contractual agreements attend their team's training camp. At training camp, players improve their conditioning, learn their team's plays and compete against other NFL teams in exhibition games. Players who have not signed a contract cannot attend training camp. Almost all players sign contracts before the regular season begins, in late August or early September.

Our data consist of contract information for drafted players from two time periods: 1986 through 1991 and 2001 through 2007. The earlier time period is prior to a salary cap negotiated between the NFL and the NFLPA in their 1993 Collective Bargaining Agreement (CBA). While a number of changes have occurred in the CBA post-1993, the basic structure of the salary cap has not. The most significant changes for our analysis are the restriction in the **2006 Collective Bargaining Agreement (CBA)** on the maximum length of a drafted player's contract and the changes in what constitutes a restricted free agent, an unrestricted free agent and a "franchised" player.<sup>7</sup> Some minor changes have also occurred in the draft. Specifically, the number of NFL teams (each of which has drafting rights) has increased from 28 in 1985 to 32 in 2007, the number of rounds in a draft has decreased from twelve in the earlier time period to seven in the later time period and 32 "compensatory picks" were awarded (each year from 2001 thru 2007) to teams that lost players due to free agency.

While some players represent themselves or have a family member/friend negotiate their contract, most hire professional agents who specialize in representing professional athletes. In 2003, the NFLPA restricted an agent's compensation to be a maximum of three percent of the contract's value but this rate is negotiable.<sup>8</sup> In addition to this compensation, agents often receive compensation for providing additional services to the player such as negotiating promotional deals. Once a player is drafted, a representative of the drafting team negotiates contract terms with the player's agent/representative. These negotiations almost always result in a contractual agreement where the player signs what is often termed a "Standard Form Contract". (See Appendix C of the 2006 CBA for a sample of this contract.) Besides the amount of the signing bonus, base salaries, contract length, and (on occasion) incentive clauses, the contracts signed by players drafted prior to the salary cap were largely standardized. Those contracts signed in the 2001 through 2007 drafts were less standard because the structure of the contract influenced how much the player compensation is counted against the team's rookie compensation pool. This "pool" is the maximum compensation the team is allowed to allocate to rookies based on salary cap restrictions. Along with incentive clauses, the signing bonus and annual base salaries determine how much the player's contract counts toward the team's rookie compensation pool. In general, when calculating how a contract is counted against the rookie compensation pool,

signing bonuses are distributed evenly over the duration of the contract and whether the "value" of an incentive clause is counted depends on whether the incentive clause is "likely to be earned".<sup>9</sup> While the salary cap did result in differences, the base salaries and incentive clauses were not guaranteed and the signing bonus was guaranteed for almost all contracts in both time periods.

Our dataset contains contract information, the player's college and the date of agent certification provided by the NFLPA. The NFL provided training camp starting dates for the different teams while team information (including win–loss records, attendance, stadium capacity and head coach tenure) was collected from the NFL Record and Fact Books. Finally, information on whether the draft picks attended a Division IA college football program was collected from the Official National Collegiate Athletic Association College Football Records Books.

**Table 1** contains the variables' means and standard deviations for the 1872 draft selections from 1986 through 1991 and for the 1782 draft selections from 2001 through 2007.<sup>10</sup> The signing bonus and annual base salary are the primary means of compensation for NFL players. **Table 1** indicates that while base salaries provide player's with the majority of their compensation, signing bonuses are significant (especially for players drafted in the first round). Signing bonuses and base salaries did increase significantly across the time periods and the fact that there were five more rounds in the early time period contributed to this large increase. As the table indicates, the average rookie pool valuation for the later time period is \$481,000 and there was significant variation in this valuation depending on when the player was selected. In terms of contract structure, the average contract length for the 1986–91 selections is approximately a year less than for the 2001–07 selections (2.736 years compared to 3.809 years). The five additional rounds in the 1986–91 drafts contribute to this difference because early round draft choices usually sign longer contracts than late round choices. This also explains why the fraction of draftees from Division IA schools is much less for the early time period—players from smaller football programs are more likely to be drafted in the later rounds. Draftees in the early time period are also less likely to have an incentive clause in their contract and less likely to sign a contract before the start of training camp. The main reason incentive clauses are more prevalent in the 2001–2007 drafts is because providing compensation in the form of incentive clauses allows teams to better manage their salary cap. In terms of agent certification, **Table 1** indicates that a third of the draftees selected in the 1986–1991 drafts were represented by a certified agent while 93.7% of the 2001–2007 contracts were negotiated by agents who were certified. For those represented by a certified agent, the average number of years between certification and contract negotiation is 4.41 for 1986–91 and 13.26 for 2001–07.<sup>11</sup> As for the number of years between certification and contract negotiation, **Fig. 1** presents this distribution for 2001–07 contracts. As the figure depicts, the number of years ranges between 0 and 25 with a concentration between 13 and 19 years as well as a significant mass at 0.

### 3. Empirical specification and estimation

We first estimate a set of specifications to test whether, conditional on structure, a contract's monetary compensation

<sup>7</sup> Section 5 of Article XVII of the 2006 CBA states: "The initial Players Contract of a Rookie, including any Club option, may not exceed four years in length, except that the initial Player Contract of a Rookie drafted with a selection in the first half of the first round (e.g., the first sixteen of thirty-two selections in the 2006 Draft), including any Club option, may not exceed six years in length, and the initial Player Contract of a Rookie drafted with a selection in the second half of the first round, including any Club option, may not exceed five years in length". Articles XVIII and XIX of the CBA provide the details on restricted free agents, unrestricted free agents and the "franchise" designation.

<sup>8</sup> A player can also compensate his representative on a fixed fee or an hourly basis. However, most agents' compensation is a function of the contract terms (i.e., a contingent fee).

<sup>9</sup> See Section 7 of Article XXIV of the 2006 CBA for a detailed discussion of how incentive clauses and signing bonuses are accounted for in salary cap calculations.

<sup>10</sup> We have information on all contracts reported to the National Football League Players Association (NFLPA). Approximately 95% of all drafted players in 1986 through 1991 reported the contractual terms to the NFLPA and almost 100% reported from the 2001 thru 2007 drafts.

<sup>11</sup> For players represented by more than one agent, we define the number of years between certification and contract negotiation based on the agent who first became certified.



Fig. 1. Number of years agent certified prior to draft for the 2001–2007 contracts.

Table 1  
Descriptive statistics means and standard deviations.

	1986–91 drafts	2001–07 drafts
Signing bonus (in \$1000)	139 (324)	612 (1125)
Average annual base salary (in \$1000)	123 (99.5)	469 (411)
Rookie pool valuation (in \$1000)		481 (427)
Contract duration (years)	2.736 (0.805)	3.809 (1.024)
Incentive clause (= 1 if incentive clause, 0 otherwise)	0.033 (0.179)	0.262 (0.440)
Rookie training camp (= 1 if sign after training camp, 0 otherwise)	0.504 (0.500)	0.409 (0.492)
Agent certified prior (= 1 if agent certified prior to draft, 0 otherwise)	0.334 (0.472)	0.937 (0.244)
Number of years agent certified prior to draft	4.408 (1.945)	13.258 (5.656)
Agent ever certified (= 1 if agent ever certified, 0 otherwise)	0.426 (0.495)	0.941 (0.237)
Selection number in draft	161 (95)	128 (74)
Fraction of empty seats in stadium for team in prior year	0.182 (0.143)	0.055 (0.081)
Number of team wins in prior year	7.769 (2.965)	7.877 (3.054)
College division (= 1 if Div IA college program, 0 otherwise)	0.791 (0.407)	0.914 (0.280)
Stadium capacity (10,000)	6.802 (0.919)	6.971 (0.611)
Increase in stadium capacity from prior year	0.067 (0.251)	0.079 (0.269)
Decrease in stadium capacity from prior year	0.025 (0.155)	0.042 (0.200)
Population of team's MSA (in 1,000,000)	4.782 (4.935)	5.008 (4.955)
Tenure of team's head coach (years)	5.723 (6.381)	3.960 (3.045)
Total number of observations	1872	1782

varies with the agent's experience. The measures that we focus on are signing bonus and average annual base salary because they comprise the large majority of a contract's compensation and are easily comparable across contracts. We then test whether an agent's experience affects the contract structure by considering the duration, whether the contract has an incentive clause and the contract's rookie pool compensation. We find that conditional on contract duration and incentive clause inclusion, signing bonus and average annual base salary do not vary with an agent's experience. Our results do indicate that more experienced agents sign shorter contracts containing an incentive clause. While the relationship between agent's experience and incentive clause inclusion is not

statistically or economically significant for 2001–07 selections, more experienced agents do negotiate contracts which count less against the rookie pool compensation. Noting that signing bonus and average annual base salary do not vary with agent's experience, this result suggests that the structure of the incentive clauses or some other aspects of the contract do in fact vary with the agent's experience. Perhaps more experienced agents understand how to structure incentive clauses in a manner which does not count against a team's rookie pool.

We test whether a contract's monetary compensation varies with agent experience by regressing signing bonus and average annual base salary on team, player, draft and agent characteristics along with contract duration and incentive clause indicator variables. The team characteristics included as covariates consist of the fraction of empty seats in the prior season, number of wins in the prior season, stadium capacity, whether stadium capacity increased or decreased by over 1000 seats from the prior year, MSA population and head coach tenure.<sup>12</sup> The set of regressors also includes team specific indicator variables to control for unobserved, time-invariant team characteristics. The player characteristics include whether the player competed in a Division IA college football program and a full complement of player position indicator variables. The player's selection number in the draft, indicator variables for the round in which the player was selected, and indicator variables for the year of the draft are also included as regressors. These team, player and draft characteristics control for non-agent factors that are likely to influence contract negotiations and the contract structure.<sup>13</sup> Finally, to test whether an agent's experience affects the contract structure, the set of regressors includes whether the agent was certified prior to the contract negotiations. For the 2001–07 data, we also include the number of years the agent was certified prior to the contract negotiations.<sup>14</sup>

We estimate generalized least squares models for these compensation measures and the coefficient estimates associated with these specifications are contained in Table 2. For the 1986–91 drafts, the effect of being represented by a certified agent is economically and statistically insignificant in terms of the signing bonus and base salary. For the 2001–2007 drafts, the coefficient estimates indicate that being represented by a certified agent results in a slightly lower signing bonus and slightly higher base salary. Neither of these estimates is statistically significant, in part, due to the fact that less than seven percent of agents are not certified. While the negative point estimates associated with years certified suggest that signing bonus and base salary decrease with agent's experience, these estimates are economically and statistically insignificant.

We now test how an agent's experience affects contract structure by regressing contract length, an indicator for the

<sup>12</sup> Annual MSA population measures are constructed by interpolating and extrapolating population counts from the decennial census.

<sup>13</sup> Tang (in press) uses the same datasets as this paper to test whether expected surplus and specificity of investment affect contract length. He proxies for these using many of the same team, player and draft characteristics.

<sup>14</sup> From 1986 thru 1991, the benefit an agent derived from being certified by the NFLPA was much less than in the later years. In recent years, the NFLPA has provided much more assistance to players deciding which agent to select and this has increased the agent's benefit of being certified by the NFLPA. As the NFLPA Director of Salary Cap and Agent Administration Mark Levin states: "We have files on every agent. We can tell a player what contracts an agent has negotiated, who they represent, what fees they charge and most importantly, whether the Committee on Agent Regulation and Discipline has ever taken action against the agent". (<http://www.nflplayers.com/user/content.aspx?fmid=178&lmid=443&pid=2557&stype=n&weigh=443,0,2557,n>). This results in far fewer agents being certified and makes years since certification a much less reliable proxy for agent experience in the early time period. Therefore, we did not include years since certification as a regressor when estimating the models using this early time period.



**Table 2**  
Contract compensation.

	1986–1991 drafts		2001–2007 drafts	
	Signing bonus	Base salary	Signing bonus	Base salary
Agent certified prior (= 1 if agent certified prior to draft)	–0.76 (7.36)	0.34 (1.70)	–91.74 (97.39)	11.75 (22.98)
Years agent is certified prior to draft			–2.01 (2.87)	–0.99 (0.90)
Selection number in draft	–3.25** (0.62)	–0.80** (0.13)	–5.41** (1.29)	–3.49** (0.47)
Fraction of empty seats in stadium for team in prior year	–15.29 (48.72)	–11.51 (12.75)	564.59 (647.61)	53.95 (235.72)
Number of team wins in prior year	0.57 (2.66)	0.44 (0.52)	–5.36 (7.14)	–9.40** (2.28)
College division (= 1 if player competed in Div IA college program)	2.93 (4.14)	2.45** (1.21)	17.58 (27.19)	–1.60 (8.27)
Stadium capacity (10,000)	–14.23 (12.67)	3.33 (3.03)	75.56 (100.90)	–22.08 (27.59)
Increase in stadium capacity from prior year	0.94 (20.59)	3.77 (3.85)	–5.38 (97.42)	2.41 (20.61)
Decrease in stadium capacity from prior year	–5.85 (15.10)	2.76 (4.03)	–180.98 (120.41)	6.44 (29.22)
Population of team's MSA (in 1,000,000)	–9.22 (17.97)	–1.77 (3.80)	122.64 (78.62)	–25.42 (21.04)
Tenure of team's head coach (years)	–2.41 (1.97)	–0.40 (0.31)	–10.44 (8.73)	1.80 (2.89)
Position fixed effects	YES	YES	YES	YES
Round fixed effects	YES	YES	YES	YES
Team fixed effects	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES
Contract duration fixed effects	YES	YES	YES	YES
Incentive clause indicator	YES	YES	YES	YES
R-squared	0.786	0.887	0.559	0.705
Number of observations	1872	1872	1767	1770

Notes: The standard errors in parentheses are robust to arbitrary heteroskedasticity.

\*\* Statistically significant at 0.05 level.

inclusion of an incentive clause and rookie pool compensation on the team, player, draft and agent characteristics included as covariates in the compensation specifications. We also include contract duration and incentive clause indicator variables as covariates in the rookie pool specification. Because contract length is a count variable that ranges from one to six years in the early period and from one to seven years in the later period, we estimate a binomial regression model when considering contract length. Specifically, we assume that the conditional mean of the length to be estimated equals  $np(\mathbf{X}_i; \beta)$ , where  $\mathbf{X}_i$  contains the set of regressors,  $p(\cdot)$  is a probability function estimated by the logit model and  $n$  is the maximum contract length.<sup>15</sup> We estimate a probit model when considering how the agent's experience affects whether the contract includes an incentive clause and a generalized least squares regression model in the specification pertaining to rookie pool valuation. The binomial, probit, and generalized least squares regression models are estimated separately for the 1986–91 and 2001–07 data.

The coefficient estimates associated with these models are shown in Table 3. For the 1986–91 drafts, the marginal effects corresponding to the coefficients associated with having a certified agent indicate that an agent being certified decreases the contract duration by 0.05 years (coefficient of  $-0.035$ ) and increases the probability of an incentive clause by one percentage point

(coefficient of 0.368).<sup>16</sup> As for the 2001–07 drafts, the marginal effects of having an agent certified ten years earlier are to decrease the expected contract duration by 0.07 years and increase the probability of an incentive clause by one percentage point (with this increase not being statistically significant). The rookie pool estimates indicate that having an agent who was certified ten years earlier results in contract that counts almost \$12,000 less toward the rookie compensation pool.<sup>17</sup>

The other coefficient estimates in the contract duration specification indicate that players drafted in the early rounds of the draft, quarterbacks and players from smaller college football programs (Non-Division IA) are likely to sign longer contracts. The estimates indicate that while certain team, player and draft characteristics included as regressors influence contract length, they do not appreciably affect whether the contract contains an incentive clause. Finally, these other coefficient estimates indicate that players selected later in the draft, by teams that won many games in the prior season, agree to contracts that count more toward the rookie pool.

Table 3 also contains estimates from a probit regression that considers how the team, player, draft and agent characteristics affect the probability that a player/agent agrees to contractual terms prior to the start of training camp. These estimates

<sup>15</sup> Since contract length in the sample is a count variable ranging from one to six or one to seven, multiplying the estimated probability function by six or seven guarantees the fitted values for contract length fall within this range. If we use ordinary least squares, it is possible to obtain fitted values of contract length that are negative. Moreover, although count data are often assumed to have the Poisson distribution, the Poisson regression may produce some fitted values exceeding the upper bound of the sample.

<sup>16</sup> Because the Houston Texans entered the NFL in 2002 and therefore the prior year variables are missing; the twelve observations of 2002 Houston Texans draft choices are not included in Table 2 regressions (resulting in the number of observations being 1770 instead of 1782). The number of observations is less when the dependent variable is incentive clause (1261 compared to 1872) because certain team and round indicators are perfect predictors of whether contracts have an incentive clause.

<sup>17</sup> For both before and after the salary cap, the qualitative results do not change appreciably if the number of drafted players an agent represents in our dataset is used to proxy for agent experience.

**Table 3**  
Contract structure and negotiation duration.

	1986–1991 drafts			2001–2007 drafts			
	Contract duration	Incentive clause	Training camp	Contract duration	Incentive clause	Rookie pool	Training camp
Agent certified prior (= 1 if agent certified prior to draft)	–0.035** (0.017)	0.368** (0.129)	0.240** (0.068)	0.059 (0.040)	–0.004 (0.171)	–7.23 (18.51)	–0.023 (0.181)
Years agent is certified prior to draft				–0.004** (0.002)	0.004 (0.006)	–1.17* (0.64)	0.013** (0.006)
Selection number in draft	–0.004** (0.001)	–0.017* (0.010)	–0.001 (0.005)	–0.002* (0.001)	–0.003 (0.004)	–3.96** (0.35)	0.005 (0.003)
Fraction of empty seats in stadium for team in prior year	0.102 (0.131)	0.389 (1.046)	0.995** (0.505)	–0.217 (0.184)	0.945 (0.905)	108.62 (162.62)	–0.444 (0.855)
Number of team wins in prior year	0.001 (0.005)	0.021 (0.041)	0.026 (0.020)	–0.007* (0.004)	0.001 (0.016)	–8.94** (1.56)	0.020 (0.015)
College division (= 1 if competed in Div IA college program)	–0.055** (0.019)	0.051 (0.160)	0.029 (0.079)	–0.026 (0.031)	0.092 (0.125)	–2.54 (6.69)	0.183 (0.127)
Stadium capacity (10,000)	–0.069 (0.044)	–0.712 (0.641)	–0.272 (0.176)	0.017 (0.037)	0.226 (0.181)	–11.86 (20.99)	0.197 (0.176)
Increase in stadium capacity from prior year	–0.037 (0.049)		0.285 (0.185)	–0.100** (0.032)	–0.039 (0.166)	0.10 (18.64)	0.106 (0.157)
Decrease in stadium capacity from prior year	–0.104* (0.057)	6.387 (4.013)	–0.320 (0.235)	–0.050 (0.039)	–0.026 (0.192)	–23.40 (21.88)	–0.144 (0.195)
Population of team's MSA (in 1,000,000)	–0.162** (0.053)	–0.803 (0.675)	0.047 (0.176)	0.029 (0.033)	0.159 (0.194)	2.98 (15.46)	–0.246 (0.173)
Tenure of team's head coach (years)	0.013** (0.003)	–0.030 (0.021)	0.026** (0.012)	0.007 (0.004)	0.006 (0.021)	0.47 (2.10)	0.005 (0.021)
Position fixed effects	YES	YES	YES	YES	YES	YES	YES
Round fixed effects	YES	YES	YES	YES	YES	YES	YES
Team fixed effects	YES	YES	YES	YES	YES	YES	YES
Year fixed effects	YES	YES	YES	YES	YES	YES	YES
Contract duration fixed effects	NO	NO	NO	NO	NO	YES	NO
Incentive clause indicator	NO	NO	NO	NO	NO	YES	NO
R-squared	0.167	0.191	0.140	0.263	0.184	0.851	0.265
Log-likelihood	–2255	–200	–1115	–2292	–831		–881
Number of observations	1872	1261	1872	1770	1770	1770	1770

Notes: The standard errors in parentheses are robust to arbitrary heteroskedasticity.

\* Statistically significant at 0.10 level.

\*\* Statistically significant at 0.05 level.

indicate that experienced agents are more likely to have protracted negotiations that extend beyond the start of the NFL team's training camp. Perhaps experienced agents are not only better informed in terms of the tradeoffs associated with contract duration, but also better informed on the benefits associated with extending negotiations into the team's training camp. Conlin (1999) and Conlin and Emerson (2003) describe the primary costs associated with protracted negotiations and the benefit in terms of negotiating a more favorable contract.

#### 4. Conclusion

This paper presents evidence suggesting that, conditional on the contract's structure, the compensation a player receives is not affected by his agent's expertise; however, the paper does find a systematic relationship between the structure of the negotiated contracts and agent expertise. Specifically, experienced agents are more likely to negotiate shorter contracts that include an incentive clause (earlier sample) or count for less against the rookie pool (later sample).

We argue that our empirical results are likely the result of experienced agents having a better understanding of the more complicated aspects of the negotiation process: while it is relatively easy for agents to infer the compensation that a player is likely to receive via the "slotting" exhibited by compensation data, the trade-offs regarding contract length and incentive clauses are more complex and not well understood by inexperienced agents. When an agent has spent several years negotiating and observing contracts, however, she is likely to better grasp these more subtle aspects of the bargaining process.

This paper makes novel contributions to the empirical literature on delegation to experts in contract negotiations. While most of the existing empirical literature focuses on how an expert's behavior changes with her incentives, this is the first study of which we are aware that is able to make a connection between an agent's level of expertise and the outcomes of that agent's negotiations. As mentioned, we have no data on agent compensation, so we cannot conclude whether and to what extent the apparent benefits of agent experience uncovered here are offset by differences in agent fees. Further research in this area could analyze both the benefits and costs associated with a more experienced agent and thus examine the hypothesis that an expert agent is indeed a worthwhile investment.

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