

**Player Remuneration in Professional Team Sports Leagues:
Is there a Trade-off between Pay and Contract Length?**

Empirical Evidence from the NBA

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Please do not quote, comments are warmly welcome.

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Is there a Trade-off between Pay and Contract Length in Professional Team Sports?

Abstract

Until recently, the transfer of professional teamplayers between European clubs placed limits on the operations of a free market in that there were rules restricting the terms placed on such transfers. However, the ruling of the European Court of Justice in December 1995 in the “*Bosman case*” declared that such arrangements were contrary to the provisions of article 48 of the EEC treaty. The effects of the ruling –a redistribution of property rights from the clubs to the players- induced an increase of average player salaries and longer contract duration. Using data from the National Basketball Association (NBA) the paper discusses a highly similar reallocation of property rights in North America and tests empirically the -so far- inconclusive question, if remuneration and contract-length are complementary or substitutes.

1. Introduction and Research Question

In December 1995 the European Court of Justice decided that the rules governing the national transfer systems in professional soccer, and player limits on the number of foreign nationals under contract to any one club, were contrary to the Treaty of Rome which guarantees the free movement of workers within the European Union.

In Germany, for example, the rules of the transfer system specified that a club was always entitled to ask for a fee from a former player's new club¹, even if the player's contract with his old team had expired. From an economic point of view, one of the predictable consequences of the "Bosman-ruling" is that teams will sign their players to longer-term contracts, because nowadays transfer fees are in accordance with the Treaty of Rome only if the player is still under contract. Players whose contract is about to elapse are free to negotiate with any team they wish. If the old team is not willing to offer the player terms at least as favorable as another team that wants to sign him, the athlete is free to move. In this case, his old team is no longer entitled to claim compensation from the player's new club.²

It is very likely that the resulting redistribution of property rights (from the team to the player) will have specific consequences. On the one hand, average player incomes will rise and on the other hand, average contract duration will increase too, developments that can indeed be observed since the season 1996/97 in all major European soccer leagues.

¹ The principal reason for that is, that the certainty of receiving a fee for the services of out of contract players acts as an incentive to clubs to invest in training players.

² This kind of labor arrangements were first observed in Major League Baseball (MLB) in 1975, when the league underwent a significant institutional change. Prior to that year club owners held virtual monopsony power in the negotiation relationship with players. All players contracts contained a required agreement or "reserve clause" that allowed for negotiations exclusively with the current holder of their contracts. The ruling agreement liberated certain players from reserve clause bounds. These players, whose eligibility is based on seniority, are "free agents" and may essentially bid their services to all teams at the expiration of their current contract.

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Since then, team managers keep arguing that long-term contracts lead to a deterioration of player motivation. Employment contracts that guarantee earnings over a designated future time, so the argument goes, induce shirking.³ Whether this is really the case, remains open, because so far only anecdotal evidence has been presented to support the assumption.

Given this background, the goal of this paper is twofold:

- Firstly, we develop two competing hypotheses. One is derived from the principal-agent-theory that assumes a conflict of objectives between profit maximizing teams and utility maximizing players. In this view, contractually secured income may entice the player to shirk if the utility sacrificed with effort is not offset with income. The other hypothesis is derived from the tournament literature and goes like this: Secured income contracts are employed as an incentive mechanism to reward the most productive players. Thus, long-term contracts can be seen as part of a lucrative compensation package for a small number of exceptional players.
- Secondly I will use data from the North American "National Basketball Association"(NBA) to test whether players signing long-term contracts have to pay for the increase in security by accepting lower salaries or whether long-term contracts and high salaries are complementary rather than substituting contract components. Using data from one of the North American Major Leagues has several advantages:
 - Comparable data for one of the European soccer leagues is simply not available, although using data from professional soccer is much easier to come by than firm specific data. In contrast to the US, player income and especially contract terms are not disclosed in Europe.
 - As mentioned above, in the United States the courts have initiated a redistribution of property rights similar to the one induced by the Bosman-ruling in the mid 1970s already, when they abolished the "reserve rule". It is very likely, therefore,

³ Economic theory implies that guaranteed long-term employment contracts induce players to behave opportunistically. Theory does also suggest that risk-averse players (employees) will prefer long-term contracts whereas a risk-loving agent does also consider a short-term contract.

that team owners and players have fully adapted and adjusted their respective behavior to the new circumstances.

Before presenting the data and empirical findings, we will first derive two partially rival hypotheses that will then be tested and after I conclude with a short summary and some implications for further research.

2. Competing Hypotheses

Theories of contract length generally view optimal contract duration as trading off the marginal benefits against the marginal costs of increasing contract length. In recent years, numerous articles and books have analyzed the costs as well as the benefits of increasing contract lengths. Obviously, the most important advantages of long-term contracts are the following:

- improvements in the allocation of risk,
- the promotion of relations-specific investments, and
- the spreading of contracting costs over time.

However, these advantages may come at a high price. The value of a known expiration date in the near future exposes the worker to the discipline of the market. If the worker believes that his future wages will depend upon his past performance, he may be induced to put forth effort that is otherwise difficult to observe.⁴ If contractual wages cannot be made contingent on output because writing and enforcing such contracts is too costly, then fixed term contracts of a short duration are necessary in order to provide the worker with an incentive to put forth effort. For that reason, shorter contracts with more frequent renegotiations reduce the level of shirking, but they also reduce the worker's readiness to invest in the acquisition of relation-specific human capital. In addition to that they lead to a less efficient allocation of risk and they require that contracting costs

⁴ Nearing the end of the employment contract it is most likely that players will try to maximize effort. Recontracting and renegotiation is close by and the players' recent performance is well known by team managers, audiences and player-scouts. Hence, keeping a good reputation is vital for the player's succeeding contract's salary and duration.

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are borne more frequently. Finite contracts are therefore more likely when recontracting costs are small and/or when the return to effort is large. In sum, the optimal contract length minimizes the sum of contracting and shirking costs.

We assume that contract expiration permits wage revisions that incorporate new information on the worker's productivity while within-contract renegotiations are prohibited. Without developing an elaborate formal model, consider a worker whose ability a_t is known to follow a random walk with increments, d_t

$$(1) \quad a_t = a_{t-1} + d_t$$

His total productivity y_t is the sum of his ability a_t , his effort e_t and temporary noise, z_t

$$(2) \quad y_t = a_t + e_t + z_t$$

I further assume that all firms observe y_t and know its past values. However, the components of y_t cannot be observed independently. Moreover, despite its observability y_t is only partly suitable for contractual wage contingencies.

It can be shown that the worker will put forth effort during the last periods of the contract and no effort before this period. The intuition behind that strategy is that the worker perceives he will be rewarded for effort during the recontracting period. As long as recontracting is sufficiently distant, the perceived future gain from effort outweighs its current direct cost. Therefore, only during the last periods of the contract effort is incentive-compatible. Under these conditions, workers who are highly productive will choose a contract of short duration only to commit themselves to be exposed to the market's wage revisions. Having made such a constraining commitment, their unobservable effort becomes incentive compatible. Thus, we would anticipate a trade-off between wages and contract length, which leads us to the first hypothesis of empirical testing:

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Hypothesis 1a

The longer the duration of the contract, the lower c.p. the worker's wage.

If, however, secured long-term contracts are used as an incentive mechanism another result is more likely to occur:

- Long-term contracts may be used to recognize and reward the most productive employees. Workers are normally awarded long-term contracts only after they have proved themselves as exceptional or at least consistent producers. In this sense, the reward of a long-term contract is consistent with Lazear's delayed compensation model: Workers are undercompensated early in their career but are motivated to work hard in order to stay with the firm and collect their due compensation later in their career. This results because holding out payment until late in the individual's lifetime alters the worker's incentives to reduce his effort on the job.^{5 6}
- Likewise, the reward of a long-term contract may be part of a lucrative compensation package designed to increase competition among workers. In a "Lazear and Rosen-world", long-term contracts may serve as tournament incentives for which workers compete by increasing their individual effort levels.⁷
- Moreover, long-term contracts may be the result of an efficient risk management on the part of the firm. If long-term contracts can be observed most frequently for highly productive and consistent workers, these contracts are apparently designed to secure the services of the most important actors (who are also the ones most desired by the firm's competitors).

⁵ Economists have concerned themselves with the relationship between a worker's wage rate and his productivity. Since workers are the agents of the owners of the firm, it is not automatic that the interests of workers and owners coincide. Hence, Lazear argues that an upward-sloping age-earnings-profile performs such a task. Age-earnings profiles pay workers less than the value of marginal products when they are young and more than the value of marginal products when they are old.

⁶ In my Ph.D. thesis I try to bring some more light into that aspect: Using data from four major-league team sports (Basketball NBA; Ice hockey NHL; American Football NFL and Baseball ABL/NBL) it is possible to test empirically three economic theories. These are Gary Becker's human capital model, Ed Lazear's seniority-pay approach and Boyan Jovanovic's matching theory.

⁷ Lazear and Rosen (1981).

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Summarizing, we would expect pay and contract duration to be complementary rather than substituting contract components. This aspect will be analyzed by using the following hypothesis:

Hypothesis 1b:

The longer the duration of the contract, the higher c.p. the worker's wage.

If information asymmetries cannot be reduced ex ante, but only after the worker has joined the firm, it is very likely that "movers" (persons departing the firm after their contract has expired and joining another firm) are paid less than otherwise identical "stayer" (persons signing a new contract with their old firm). The intuition is straightforward. Since the old firm has more reliable information about the worker (there is less quality uncertainty here) than any other potential employer, the latter will not only pay less than what the worker would earn if he stayed with his former employer, but the new employer will also offer the worker a short-term contract only.⁸

Hypothesis 2:

Players moving to another employer will suffer an income decrease and face shorter contract length.

3. Data, Models, and Empirical Findings

The data set is hand-collected and is drawn from two primary sources, the *Sporting News Register* and the *Sporting News Guide*. It consists of all players that appeared in at least one regular season game in any of the NBA-seasons 1990/91-1999/2000. The total number of observations is about 4500, with some players being active in all 10 seasons and others in only one of them.⁹ While single player performance figures (games played,

⁸ Although that some of the information asymmetries might be mitigated due to the measurable performance indicators the "new" club can not completely assess in how far the newly acquired player integrates with the team. Even if a player's statistics reveal high productivity he might simply not match personally to the team.

⁹ These are either rookie players (no experience) who just entered the league or veteran players who play their last season.

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minutes, field goals, free throws, three points, rebounds, assists, blocks, turnovers, steals etc.) and individual characteristics (age, career duration, years with current team) are available for all athletes¹⁰, this is not the case for player salaries and contract duration.¹¹ The former information is missing for approximately 6% of the population, the latter for about 52%. Complete information is available for 2031 "player years" (45,4%). Moreover I computed gini-coefficients to capture pay dispersion for each squad over the 10 years and furthermore gini-coefficients to measure productivity inequality for each team. This investigation however, is not part of this paper.

Table 1: Summary Statistics

<i>Player Characteristics</i>	Mean	Std Dev
Career Length	5,74	3,93
Years with Current Team (tenure)	2,39	2,18
All Star Games ¹²	0,46	1,56
Draft Number	32,84	32,66
<i>Player Statistics (Performance measures)</i>		
Minutes per Game	21,21	10,87
Scoring Performance per Minute(SP)	0,59	0,25
Non-Scoring Performance per Minute(NSP) ¹³	133,12	177,60
<i>Contract Characteristics</i>		
Annual Salary (in US\$)	2.000.700	
Contract Duration (in years)	3,62	2,40

¹⁰ There are 1002 different players for the whole 10 years of investigation.

¹¹ Although it is all but easy to acquire data in the field of sports, income figures and contract terms are much harder to obtain. This is in particular true for an amount of 4500 observations.

¹² Each year play the best players from the East versus the best from the West in an exhibition game.

¹³ Harder (1992). NSP is a composite measure of passive performance and team attributes ability. It is computed using the variety of explanatory variables as the following formula: rebounds+ assists + blocks+ steals - (field goals attempted – field goals made) - (free throws attempted – free throws made)/minutes. SP are the direct points (offensive skills).

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Using the data described in table 1, we estimate three different regression models.

- Model (1) is a standard Mincer-type wage equation that tries to identify player salaries determinants.¹⁴ Since this model has been estimated in a large number of studies already,¹⁵ it serves as a reference model, against which Model (2) and Model (3) will be evaluated. Moreover, our estimates should be far more reliable than the ones presented in the literature so far, because the data set used here is considerable larger and covers a much longer period of time.
- To the best of my knowledge, Model (2) has not yet been estimated. A variable measuring the length of the individual player's contract is added to the simple specification of model (1). This should allow to discriminate between hypotheses (1a) and (1b). While the former hypothesis postulates a trade-off between contract duration and player income, the latter postulates that higher incomes and longer contracts should instead be found simultaneously.
- Model (3) extends model (2). First, a dummy variable measuring a team change is added and, second, an interaction term (team change times contract length) is included into the specification. Since the new team is less informed about a player's abilities and motivation than his old team, a team change should c.p. lead to an income reduction. However, in the case of "superstars" who sign long term contracts when joining a new team, the effect of a longer duration should compensate the loss of income that accompanies a team change.

The three models are of the following general form and will be estimated using the statistical package *STATA 6.0*. (where $\alpha_1 - \alpha_{12}$ are estimated parameters).

¹⁴ Ignoring contract length issues the data set estimates the salary determination model with 4260 valuable observations.

¹⁵ See i.e. Dabschek (1975a); Jones and Walsh (1988); Idson and Kahane (1998) and Frick, Lehmann and Weigand (1999).

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$$(1) \ln(Y) = \alpha_0 + \alpha_1 DN + \alpha_2 ASG + \alpha_3 PY + \alpha_4 PY^2 + \alpha_5 YCT + \alpha_6 YCT^2 \\ + \alpha_7 MPG + \alpha_8 SP + \alpha_9 NSP + X' TD + X' YD + \varepsilon$$

$$(2) \ln(Y) = \alpha_0 + \alpha_1 DN + \alpha_2 ASG + \alpha_3 PY + \alpha_4 PY^2 + \alpha_5 YCT + \alpha_6 YCT^2 \\ + \alpha_7 MPG + \alpha_8 SP + \alpha_9 NSP + \underline{\alpha_{10} CL} + X' TD + X' YD + \varepsilon$$

$$(3) \ln(Y) = \alpha_0 + \alpha_1 DN + \alpha_2 ASG + \alpha_3 PY + \alpha_4 PY^2 + \alpha_5 YCT + \alpha_6 YCT^2 \\ + \alpha_7 MPG + \alpha_8 SP + \alpha_9 NSP + \alpha_{10} CL + \underline{\alpha_{11} TC} + \underline{\alpha_{12} CL * TC} \\ + X' TD + X' YD + \varepsilon$$

with $\ln(Y)$: log of annual salary

DN: draft number¹⁶

ASG: number of all-star games

PY: years as a professional

YCT: years with current team

SP: scoring performance

NSP: non-scoring performance

CL: contract length

TC: new contract signed with new team (0=no; 1=yes)

X' TD: each model is estimated with team-dummies

X' YD: each model is estimated with year-dummies

ε : random error term

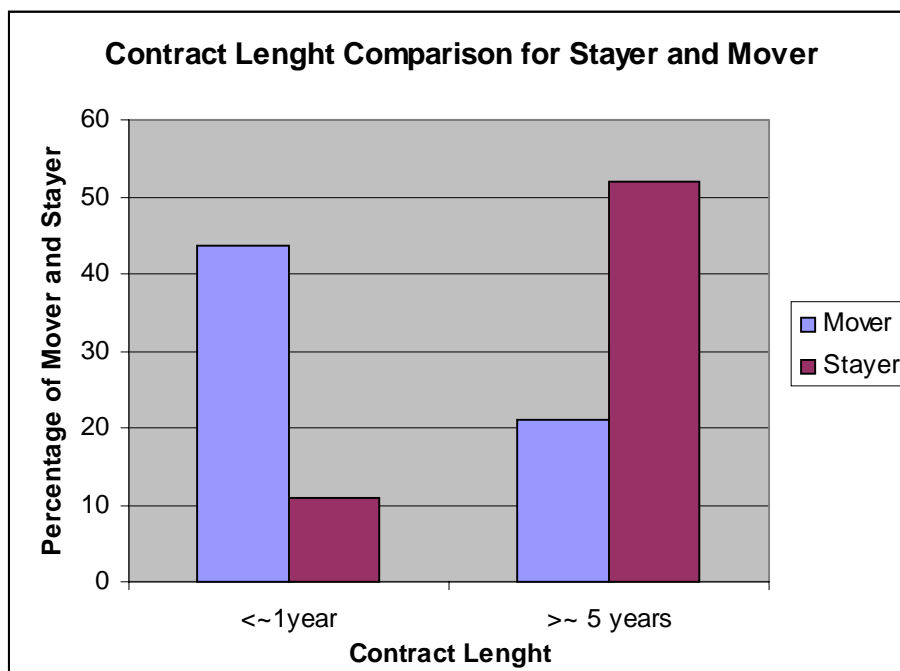
¹⁶ The NBA draft mechanism is conducted at the end of the season and is a very important institution in all major-league sports. The draft is the principal device for the franchises (teams) to secure new talent or rebuild after a losing season. The rules of the draft dictate the order in which professional teams get to select amateur college basketball players. Before 1985, the first pick in the draft was determined by a coin toss between teams of the Western and Eastern Conference with the worst win-loss records. The rest of the teams in the league then selected players in the inverse order of their prior regular season records, with the best team picking last in each round. To reduce the incentive for teams to underachieve deliberately so as to get one of the best picks, the draft lottery was inaugurated in 1985 and further developed in 1993. In 1993 the draft lottery was a weighted system. The team with the worst record of the 11 nonplay-off teams has a 17 percent chance of getting the number-one draft pick, the next worst team has a 15 percent chance and the probability descends to a 1 percent chance for the team with the best record among those eligible for the lottery. Hence, the draft lottery enforces competitive balance in the league and leads to relatively equal playing strength between league members and holds the competition "entertaining".

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The inclusion of the squared terms in above equations captures both the positive effect of experience and the negative effect of aging and controls additionally for non-linearity. Again, following Mincer (1974) an inverted U-shaped experience effect is predicted, indicating the concave income profile meaning that salaries increase with longer career length and/or further tenure. Since we have a model with an endogenously determined right hand side variable -because contract duration and salary are determined simultaneously- the latter two models are estimated by an instrumental variables approach (2SLS), while model (1) is estimated using ordinary least squares (OLS).

Perhaps a plain look signals us something about which part of the joint hypothesis 1 we might detect. Figure 1 displays the percentages of players signing contracts of different lengths. It appears that 43,7% of those joining a new team ("*mover*") sign contracts with duration of at most one year. Long term contracts of five years and more are offered to slightly more than a fifth of all movers. On the other hand, 52% of those remaining with their old franchise ("*stayer*") sign contracts of at least five years. Here the percentage of contracts of at most one year is less than 11%.

Figure 1: Contract Length for Movers and Stayers.



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Table 2 reveals that player salaries increase with contract length - irrespective of whether the player remains with his old team or joins a new one. Only if a player signs a contract with a duration of at least 10 years (less than 2% of all contracts) he has to accept a lower salary (on average, players appear for approximately six seasons in the NBA). We would expect age to have only a slight negative effect on performance when the player is little past the peak, but the decline gains in magnitude as the player ages. Hence, the drop in salary after playing 10 years basketball might be because players age and this is not leveled-off by the gain of experience.

Table 2: Contract Duration and Average Annual Income in US\$.^{17 18}

Contract Duration	Stayer	Mover	MI in % of SI*
< 1 year	73.000	49.000	67
1 -2 years	1.444.643	440.608	31
3 - 4 years	2.206.075	1.387.155	63
5 - 6 years	3.400.300	2.541.188	74
7 - 9 years	4.524.213	3.350.347	75
10 years and more	4.278.857	2.038.000	48
Total	2.883.100	1.143.000	40

* Mover's Income as percentage of Stayer's Income.

Let us now turn to the results. Estimates of equation 1-3 are reported in Table 3. As can be seen, all parameters influence the standard salary determination model (modell1) in the forecasted manner, that is, these coefficients have the sign as anticipated and are statistically significant. More than 62% of the variance in player earnings is explained by the independent variables, according to the adjusted R-squared value obtained from the regression, a finding that is also in accordance with the one reported in other studies.

¹⁷ Numbers are not inflated yet, but the Consumer Price Index (CPI) is accessible.

¹⁸ For performance statistics on movers and stayers see appendix.

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For example a player who scores 1,0 point per minute instead of the average 0,6 points earns c.p.15,4% more than the average performing athlete. Likewise, a player competing 25 minutes per game on the field instead of the average 21 minutes has a 20% higher income. The same is happening with the draft variable. If our expectation is correct, a lower draft pick indicates better talent and players should be compensated more. Hence estimates of α_1 should be negative. The coefficient of the draft variable indicates that being picked at 15th instead of 33rd (average) pays-off in an 18% higher salary. Similarly, all-star players who demonstrate unusual skills that attract fans should earn greater salaries, all else equal. The all-star coefficient displays that a player who has one standard deviation more all-star games than the average player c.p. earns 12% more money.

Model (2) displays that the coefficients estimated in model (1) suffer from an "omitted variable bias": Especially the coefficients of the career and the tenure variables are significantly trimmed (by about 60% and 50% respectively) once the length of the contract is controlled for. Moreover, contract length has a significantly positive influence on player salaries. Signing a four- instead of a three-year contract (3,6 years is the average) goes hand in hand with a 25%-increase in annual earnings.

Model (3) shows that the influence of contract length on player salaries differs significantly between stayer and mover. While stayers enjoy a 15%-increase in earnings with every additional year of contract length, movers suffer a 77%-decrease.¹⁹ However, some players can compensate this loss by signing contracts of an unusually long dura-

¹⁹ At first hand this income reduction seems unreasonable large and might not only be explained by information asymmetries. There is again one further institutional aspect that must be considered here, which is the so-called "salary cap". The salary cap is a maximum dollar amount teams can spend on player contracts. A salary cap is also necessary to maintain competitive balance in the league. Without a salary cap, teams with deeper pockets can simply outspend the remaining teams for the better free agents. The basic idea is that a team can only sign a free agent if the total salaries for the team will be below the salary cap. So a team with deep pockets is playing on a level playing field with every other team. To avoid that salary cap restriction teams try to bypass that obstacle and sign movers by just paying them very little in their first year of new-contracting, but annual income growth heavily in the following years of new-contracting. Thus, that effect might take place in the 2SLS model and must be tested next. Nevertheless, it won't be that at all. More likely is a mixture of asymmetric information regarding the new club and escaping the salary cap.

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tion. Guaranteed contracts that are concluded for a period of at least eight years make the mover better off than an otherwise identical stayer who re-signed for the same period of time. However, only 22 out of 986 movers (2,2%) are able to sign a contract of eight or more years.

Table 3: The Determinants of Player Salaries in the NBA (1990/91-1999/2000).

Variable	Model (1)	Model (2)	Model (3)
DN	-0,011 (-16,95)***	-0,006 (-10,92)***	-0,007 (8,80)***
ASG	0,073 (4,25)***	0,046 (3,17)***	0,046 (3,06)***
PY	0,103 (5,90)***	0,040 (2,57)*	0,054 (3,16)***
PY ²	-0,005 (-4,74)***	-0,00004 (-0,04)+	-0,001 (-0,86)+
YCT	0,268 (10,17)***	0,122 (5,32)***	0,096 (2,52)*
YCT ²	-0,017 (-7,23)***	-0,007 (-3,57)***	-0,005 (-1,80)+
MPG	0,049 (20,10)***	0,035 (16,14)***	0,030 (12,54)***
SP	0,361 (4,34)***	0,367 (5,20)***	0,40 (5,84)***
NSP#	0,045 (3,48)***	0,032 (2,90)***	0,044 (4,35)***
CL	-	0,246 (28,10)***	0,148 (3,03)***
TC	-	-	-0,775 (-11,21)***
TC*CL	-	-	0,174 (4,37)***
CONST	11,73 (89,30)***	11,41 (100,25)***	12,66 (61,59)***
Adj. R ² * 100	62,6	73,1	74,1
F-Value	76,9	121,1	293,6
N of Cases	2.031	2031	2031

* p < .10; ** p < .05; *** p < .01; + n.s. (t-values in brackets).

Coefficient multiplied by 100.

Model (1) includes 28 team dummies (reference team: Cleveland Cavaliers), nine year dummies (reference year: 1996/97) and two position dummies (reference position: guard). The dummies control for local and season specific events.^{20 21}

4. Concluding Remarks and Implications for Further Research

According to the estimates, there is no trade-off between contract length and player income. To the contrary: Apparently, the two contract components are highly complementary - the longer the contract, the higher the player's income. The findings support hypothesis (1b) postulating that long-term contracts are used to reward the best and the most consistent players, who succeeded in an intra-team tournament. This does not contradict agency-theory, but implies that long-term contracts are employed to reveal players who are unlikely to shirk. This result may be extended to other professions where secured contracts are used as an incentive mechanism, which sorts for the most productive workers. Since information asymmetries are higher when a player joins a new team, movers are less likely to get long-term contracts. Moreover, movers are paid less than otherwise identical stayer.

The next step to be taken is to calculate the "insurance premium" movers have to pay by accepting significant reductions in pay. Using the decomposition method developed by Oaxaca and Blinder, it is possible to calculate what a mover would earn if he stayed with his old team and compare this with his actual earnings. Although team change is - in a strict sense- not an exogenous variable, the number of players who re-signed with

²⁰ With a view to greater clarity the dummy coefficients are not included in the table above, but are available upon request.

²¹ There is a very good example for that aspect: The 1998/99 year (season) dummy has a significantly negative slope, indicating that salaries were considerable lower in that season with reference to 1996/97. In 1998/99 the NBA locked-out their players, due to exaggerated wage demands. Instead of the 82 regular season games, only 60% (50 games) were played in that season. Some additional information to the above mentioned salary cap: In 1997/98 the cap was \$27 million, in 1998/99 \$30 million and in 1999/00 \$34 million, whereas only \$12 million at the outset of our evaluation in 1990/91.

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their old team and a few years later joined another team (or vice versa first joined another team and then signed a second contract there) is sufficiently high to rule out that the figures to be calculated suffer from a methodological bias.

Moreover, the greatest incentive to shirk exists in the period directly following the signing of a new contract, which has the least bearing on future income. Conversely the period in which the contract elapses provides the greatest incentive to put forth effort, as it is the most important in the determination of prospective income. In other words, a player who will become free-agent at the end of a season may play with greater effort and intensity than they might otherwise in order to impress potential employers. Therefore, the second step to be taken is the following: I will compare annual changes in performance for players with short and long-term contracts as they approach the period of renegotiation as well as players that have just signed contracts of different length.

Appendix

Table A1

The Performance of Stayers and Movers. Mean Comparison.

Performance Measure	Stayer	Mover	Difference
Draft Number	26,4	37,7	***
All Star Games	0,75	0,17	***
Professional Years	6,4	5	***
Years with Current Team	3,6	1,1	***
Minutes per Game	25,3	17,4	***
Scoring Performance	0,62	0,54	***
Non-Scoring Performance	175,7	92,1	***
Contract Duration in Years	4,5	2,7	***
Salary in US\$	2.883.100	1.143.000	***

*** $p < .01$

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