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Finders, Keepers; Losers, Weepers. An Empirical Analysis on the Ability to Recognize Talent in the NBA

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Abstract. Regardless of the specific definition, talent is a valuable resource that can provide a competitive advantage. Businesses understand the significance of attracting and retaining top talent. They use tools such as job richness, career opportunities, shared goals, and competitive salaries to recruit skilled individuals. For these very reasons top-tier companies are at clear advantage compared to smaller, less attractive firms, and this advantage is destined to endure since career mobility across top companies is limited.
In this paper I try to investigate if companies that can exert a lesser attraction power toward promising prospects can "beat the market" and select skilled yet overlooked talent.
To explore this aspect, I chose the National Basketball Association (NBA). In the NBA talents entering the job market can't choose they preferred destination, and where for teams missing out on talent is costly, because hiring options are limited and strictly regulated.
The research question can be formulated as follows: "Has any team, on a regular basis, selected players that outperformed their expected value?". My results show that some organizations distinguished themselves, some for the good, some for the bad, in the process of ex-ante talent recognition.

Keywords: Talent management, sport management, National Basketball Association

1 Introduction

Talent may refer to many things, all of them desirable, even if at different levels, different times, with different intensity, and by different categories of people or organizations. Talent is, in fact, diverse. The term may relate to the different sets of skills, knowledge, or abilities possessed by individuals, as highlighted by Gallardo-Gallardo et al.. (2013). Even though talent is not fungible, i.e., what could be regarded as highly desirable and valuable in a specific occasion could be useless, up to the point of being detrimental in another (in which case we would no longer define such a trait as talent), talent is nonetheless a valuable resource that can provide a competitive advantage. As all other resources, talent is highly context-specific, and is rare, difficult to imitate, and costly to acquire. However, merely controlling talent is not a guarantee of success. Success can only be achieved through effective management of human capital, a bit of luck, and an efficient organizational structure to take advantage of it (Barney 1989; 1991; Barney and Hesterly 2005).
In an economic landscape that's moving further and further away from the traditional manufacturing business models and toward a knowledge-intensive, service-based economy (Li et al. 2024), organizations are fully aware of importance of the two-step process of attracting and retaining top talent (Tenakwah 2024). The tools at their disposal vary widely, including elements as job richness, career opportunities, shared goals, and competitive salaries to recruit skilled individuals. However, when push comes to shove, larger companies can browse the proverbial daisy and carefully select the most talented candidates with relatively low risk, because they can attract a high number of promising applicants, offer them relatively short-term contracts, and retain only those that show the more desirable traits after the trial period.
Eventually, companies that fail to create a positive work environment, offer growth opportunities, or provide work-life balance will struggle to retain talent, but there is no denying that only a selected number of companies can be listed as "dream job destinations" for new talent in a specific industry, as mobility in top CEOs' careers remains extremely limited (Koch, Forgues, and Monties 2017)

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Due to the influx of applicants, all companies must determine indicators to navigate through the vast stream of hiring requests (Judge et al. 1995). Some wonder if strategies like interviews, internships, short-term contracts, or evaluating candidates' educational backgrounds can aid in making informed hiring decisions (Miller, Xu, and Mehrotra 2015), but there is no denying that, all other conditions equal, the probability of hiring skilled individuals is a function of the initial pool of candidates and the resources to assess each profile's potential.

Companies that are not top tier are at a clear disadvantage from this perspective: for starters, they may receive fewer resumes because of their relatively inferior attraction power. Secondly, they might struggle to retain talent for the same reason, i.e., organizational limitations in terms of career opportunities, prestige, or sheer size (Narayanan 2016), leading to a suboptimal talent selection and retention process. Smaller companies are presented with limited possibilities and, at the same time, face more costly hiring-mistake-related risks.

Despite fully erasing such glaring gaps in terms of desirability being virtually impossible, and considering the higher cost related to making the wrong choice for smaller organizations, the goal of this paper is to investigate if such companies, that must be more careful in choosing among a restricted number of applicants, can "beat the market" and find diamonds in the rough, i.e., skilled, yet underrated and overlooked talent. By this, I don't mean being able to recruit elite prospects among the relatively few applicants commanded by a small market company, but simply if some companies show the ability to choose candidates that overperform compared to the premises.

To investigate this research question, I decided to focus on the sports industry, particularly the National Basketball Association (NBA). The choice of this specific industry is intended as a form of controlled environment, as NBA teams, at the same time, attract the most talented players from all over the world and face constraints in hiring talent, with limits on the number of players they can select annually from a common talent pool. The selection process is regulated by a strict procedure in which teams choose aspiring players based on the team's previous year records, with the last team choosing first. This has a twofold implication: on the one hand, it means that talents can't choose their preferred destination, and therefore securing the services of top talent does not depend on the attractiveness of the specific organization, albeit teams can deploy several tactics to increase their ranking in the picking order and the number of players they can pick each year. Evidence shows that both alternatives come at a non-insignificant cost and do not guarantee superior performance (D. Berri 2018). On the other hand, the limited number of prospects that can be enrolled each year means that missing out on talent is costly.

Despite Motomura et al. (2016 showing that a team cannot build its success solely by stockpiling new talent, but must also operate integrating, developing, and managing successfully old and new recruits, the question of superior scouting ability remains. Has any team regularly selected players that outperform their expected value, or is it just another myth to be dispelled? Do superior recruiting skills exist in a competitive industry in which failure is extremely costly? Despite contractual limitations on the maximum salary a player can earn (Kesenne 2000), players' salary distribution (Curcic 2024) is looking more and more similar to that of a superstar economy (Rosen 1981; Adler 1985), is looking more and more similar to that of a superstar economy and the latest agreement between the owners' union and the players' union, signed in 2023, is likely to make the phenomenon even more apparent (Camilli 2021; Toporek 2023).

This paper is structured as follows: After a brief introduction of the NBA and its basics mechanisms in terms of job market and talent selection, I will illustrate the reasons that led me to use this industry to explore the dynamics of talent identification and selection. Section 3 will describe the data and the methodology I used to answer the research question, and analysis and discussion will follow.

2 Talent Selection in the NBA

In this section, I will explore if companies can try to overcome limitations in the privileged access to talent using superior talent recognition skills, i.e., if some organizations are, on a constant basis, able to hire new, worthy employees that were overlooked by other companies. This is of course not to say that

such companies proved to select top-tier talent regardless of their competitors' decisions, or that their selection process constantly yields results that surpass those of companies with privileged access to talent. Star companies will keep exercising their unparalleled attractiveness and therefore have a higher probability of securing the most talented prospects. Rather, the goal is to ascertain if, on a regular basis, some companies can hire professionals that failed to draw the attention of the top companies, and such employees prove, over a reasonable period of time, to overperform in comparison to expectations linked to their curricula and, in some cases, even when compared to their peers selected before them. Given the extremely high number of variables involved in the process, linked, but not limited to issues, both on the demand and on the supply side, related to timing, economic environment, willingness to move, size, language and cultural barriers, and so forth, my attention was drawn by an industry in which most of those variables are somehow levelled: the sports industry, and more specifically the National Basketball Association.

2.1 NBA Introduction

The NBA is one of the four great North American professional leagues, among the National Hockey League (NHL), the National Football League (NFL), and Major League Baseball (MLB), while Major League Soccer (MLS) is an emerging league but its numbers can't compare to the other four, let alone major European leagues (Moore n.d.). Conversely to European sport leagues, American sports leagues are associated with profit-maximizing behaviour (Garcia-del-Barrio and Szymanski 2009; Szymanski and Hall 2003; Zimbalist 2003),), i.e., teams behave as competitive firms and value the economic results of their activities more than other aspects typically associated with sports.
Therefore, because of the turnover level, all have drawn the interest of management and economics scholars, other than that of sport economics and sport management ones (Poppo and Weigelt 2000; Foss, Knudsen, and Montgomery 1995; Groothuis and Hill 2004; Hakes and Turner 2009; Chatterjee, Campell, and Wiseman 1994; Chatterjee and Yilmaz 1999; Caldwell 2010; Rottenberg 1956).
Salaries, trade rules, and all matters related to players and teams' relationships are regulated by the Collective Bargaining Agreement, i.e., an agreement "between the NBPA [National Basketball Players Association] and the NBA sets out the terms and conditions of employment for all professional basketball players playing in the National Basketball Association, as well as the respective rights and obligations of the NBA Clubs, the NBA, and the NBPA"("CBA - National Basketball Players Association" n.d.; Coon n.d.).
Under this agreement, the NBA introduced a salary cap in the 1984–85 season, whose function is described by Hausman and Leonard: "The collective bargaining agreement between the NBA and the Players' Association allows the league to impose on each NBA team a salary cap that limits the total amount the team can spend on player salaries" (1997, p. 589). The cap is calculated as a percentage of the league's revenue from the previous season. The NBA has a so called "soft cap", since numerous exceptions are allowed, such as the "Larry Bird exception", that allows teams to exceed the salary cap to re-sign their own players who played for the team for three straight seasons, and many others.
Further details about the salary cap, its history and basic mechanics can be found in Hill & Groothuis, (2001); Kesenne, (2000); and Staudohar, (1998).

2.2 NBA as a Controlled Environment to Investigate Talent Selection

The American basketball league is, in fact, a multi-billion-dollar industry (Ozanian and Teitelbaum 2023), able to attract the attention of professional players from all over the world: suffice it to say that only 4 of the winners of the "Most Valuable Player Award" over the last 10 years were Americans, and European or African players won the last six editions of the award. The number of international players has increased steadily over the last 20 years, and all performance measures indicate that their impact is comparable to that of American-born players (Bueno 2024).

On the demand side, NBA teams cannot exert, during the initial selection process, any kind of specific attraction to lure the most promising players, but they must go through a predetermined process that decides ex-ante the order in which each team will be able to select a prospect. Despite this not proving true during the rest of their career (Berry III 2022), players cannot choose their preferred destination either. For a team, drafting a player means acquiring the exclusive rights to negotiate a contract with the player, but the player is not forced to sign. However, refusing to comply with the draft result, or even expressing preferences (or dislikes) toward a specific team before the Draft, could result in a stalemate between the player and the team, with no other team allowed to interfere unless the first team looks for a trade. This aspect per se eliminates, or strongly mitigates, differences in terms of organizational attractiveness and puts all teams on the same level in terms of access to talent. The maximum salary of each rookie contract is entirely determined by the order in which players are selected, with early picks granting richer and longer contracts.
On the supply side, the average salary of an NBA player is far superior to the highest salary of the second league in order of importance, i.e., the European championship Euroleague ("2023-24 NBA Team Salary Cap Tracker" n.d.; "The Top 10 Euroleague Salaries (2023-24) - Eurohoops" n.d.; Blum 2024), meaning that the NBA is able to draw attention from the best basketball players from all over the world. All players who declared themselves eligible will enter next year's draft.
Skill set-wise, the roles (positions) in basketball are just five, making the talent pool much more homogeneous than what we could find across, but also within, most industries, or even companies. Furthermore, the very concept of "position" has become less and less relevant, and traditional physical and skill-wise traits that separate, for example, tall and strong players from quick and agile ones have blurred over the years, as more and more teams embraced the philosophy first introduced by Hall of Fame player and coach Don Nelson, called "Nellie ball," which in turn relies on the idea of positionless basketball ("What Is Nellie Ball in Basketball? | Sports Definitions" n.d.; Nelson 2016).
Therefore, from the demand side, the industry is relevant, attractive, and competitive, and from the supply side players are selected from a worldwide pool of talents and present strongly overlapping skillsets.
Given the premises, I believe that investigating the talent selection strategies of NBA teams could help to shed light on the possibility of beating the market, i.e. exploring if, given the cards they were dealt, some teams were able, again, on a regular basis, to select players that exceed, in terms of performance, their draft position.

2.3 The NBA Draft Process

Because it's in the League's best interest to keep game outcomes as uncertain as possible (Coates, Humphreys, and Zhou 2014; Bougheas and Downward 2003; Dawson and Downward 2005; Schreyer, Schmidt, and Torgler 2016), since its foundation in 1947, the NBA has introduced a player selection mechanism (the Draft) to enhance competitive balance, i.e., to prevent richer teams from acquiring the most talented players at other teams' expense.
Initially designed as territorial picks swap (until 1966), then based on the Coin flip, it finally evolved into the Lottery system (since 1985). For a detailed description of the Draft process and its evolution, see Gerchak, Mausser, and Magazine (1995). In a nutshell, all players must enter the league via the draft process, which starts with an "eligibility" statement from the player himself. Once a player declares himself eligible, at the end of each season, teams can select, in inverse order of the previous season's ranking, two players each, in 2 rounds, using the two picks each team is endowed with. It is also worth noting that picks can be traded and swapped, and/or combined with current or future assets, according to teams' needs and expectations. If a player is selected by a team, he can either join the team or refuse to do so. If he chooses the latter, no other team can sign him. If a player does not get selected by any team in either of the two rounds, he can eventually sign with any team that expresses interest in his services. First and second-round picks' salaries are determined by the so-called "Rookie scale," which regulates the amount, the length, and all other details of a player's first contract. The earlier a player is

drafted, the better his contract will be. Undrafted players do not have to comply with the rookie scale and can sign a contract that can exceed the rookie-scale, albeit this possibility is merely theoretical, since highly regarded prospects do not easily fall out of the Draft.
Drafting strategies may vary, depending on the team's current situation: contending teams, i.e., teams that can realistically believe they have the resources necessary to compete for the title, will enter the Draft with drastically different perspectives than those of teams that are in a "rebuilding phase," i.e., recognize that their current stock of assets is not adequate to meet the team's aspirations. The former will likely look for prospects able to contribute from the start, or for players that draw interest from other teams (typically those in a rebuilding phase) that will be willing to swap such prospects with more consolidated players that could help a contending team but at the same time would be detrimental to a team pursuing a longer-term project (remember that pick order is determined in inverse order of the previous season's standing). Teams in a rebuilding phase, conversely, could select promising players that might not fit with the current roster composition but present a very high future upside. Two superstar players in the same role are often considered less desirable for a contending team than a superstar and a good player in two different, complementary positions. If a franchise already has a superstar player at the center position, picking a potential superstar center in the draft maximizes the value if the picked player could, in the immediate future, be traded to a team that, for example, has two valuable forwards and no centers. Furthermore, superstar players are difficult to trade because they easily eat up a lot of salary space, making it hard for a team to enrol several superstars without falling into severe tax penalties caused by exceeding the Salary cap.

2.3 "Tanking" as a Strategy to Select Talent

As I mentioned before, one could argue that a common strategy for a losing team to become more competitive is to deliberately lose as many games as possible for multiple seasons (Taylor and Trogdon 2002). This way, the team could gather very high picks, which usually turn out to be the most valuable players in the Draft. This strategy, commonly called "tanking," has proven unsuccessful for several reasons (Soebbing and Humphreys 2013; Motomura et al. 2016; D. Berri 2018; Soebbing and Mason 2009). Simply stockpiling promising players without the organizational and managerial skills to nurture and integrate them into a cohesive team is a waste of resources, while teams that succeeded (at various levels) have shown the ability to select, train, and manage prospects (which sometimes means trading them to other teams in exchange for other players).

2.4 Determining a player's talent

For the purposes of this paper, we can overlook the complexity and the subtleties of the Salary cap (the mechanism regulating the maximum and minimum payroll expenditure for a team under the current CBA), and all other norms that regulate team transactions and contract extensions. Our main interest is in what happens at the end of a player's rookie contract: the team has the option of advancing him a qualifying offer, a one-year contract for a modest amount of money. If the team fails to do so, at the end of the rookie contract the player becomes an unrestricted free agent, i.e., can negotiate a new contract with any team in the league. If the player accepts the qualifying offer, he's linked with the team for one more year, during which he cannot be traded, and becomes an unrestricted free agent when such contract expires. If the qualifying offer was made and refused, the player is a restricted free agent, i.e., can either negotiate an extension with his current team or start talks with other teams, but his previous team can match any proposal offered by other teams and retain the player. Of course, nothing prevents teams and players from extending the contract before its natural expiration, and this is sometimes the case with players and teams that are extremely satisfied with each other. Finally, the maximum amount of the second contract is determined by the CBA, but it is unrelated to the initial contract. So far, a player's second contract can be as high as 30% of the salary cap. So, for example, if Player A signs an extension with Team Y, with a salary cap of $100 million, his second contract cannot exceed $30 million. Most

CBAs included exceptions for such a roof, sometimes in the order of 10-15%, in case the player distinguished himself by winning one or more of the several seasonal awards.

3. Data and Method

As a measure of player talent, I decided to consider the ratio between the actual salary of the first year of the second contract and the maximum amount that the player could get as the measure of a player's value.

In other words, if a player is offered a second contract that matches (and in some cases exceeds) the maximum as prescribed by the current CBA, that means that a) the team is extremely pleased with the player's performance, and b) the team is afraid that any offer below the maximum might be surpassed by other teams, and therefore lose the player in free agency. A team could play the waiting game and match an eventual other team's bid, but this would likely result in the same level of monetary expenditure, with the undesirable drawback of a player that feels like his team tried to take advantage of him or didn't fully trust his potential. Most top-level prospects are re-signed by the team that originally drafted them, for a salary very similar to the maximum allowed. Mid-level and lower-tier players are offered lower contracts and, in some cases, are released by the team, either because other teams extended offers that they are not interested in matching, or because they are not part of the team's future plans. Such players can look for a deal with other teams or exit the league.
Since the number of bidders is relatively high (currently 30, 22 since 1980), and the number of available players is limited, I expect the NBA to work as a competitive market, i.e., players are offered contracts that reflect the league's expectations about their skills, with three possible outcomes: a) the player is extended for the maximum allowed by the CBA, all exceptions included; b) the player is signed for a value between the maximum and the minimum, as per CBA rules; or c) the player cannot find another contract and leaves the league. It is worth noting that the new contract can be signed by any team besides the original one, even if all CBAs allow the latter to offer slightly better conditions (one more contract year, higher per-year salary increases, and so on). This is all part of a set of exceptions designed to prevent small market teams from losing their best players after their rookie contract expires, but the differences are not so relevant to make a player re-sign if he is dissatisfied with the team. Out of 1357 observations, only 64 players obtained a contract equal to the maximum allowed by the current CBA, 11 of which exceeded that value, indicating that the incentives to overpay for their own players (just because the team could do so) are effectively mitigated by the Salary cap consideration and by the competitive structure of the industry.
Once this relatively simple value measure was calculated, I proceeded to estimate the correlation between the pick order and the player's value. If a very high correlation emerged, this would imply that the Draft is an extremely effective way to select talent, and high draft picks are the forbearers of young, promising players. This would contradict previous results from a number of scholars, who showed the ineffectiveness of a strategy relying on losing seasons in order to accumulate future talent (Motomura et al. 2016; Soebbing and Mason 2009; D. Berri 2018). Still using player value as the dependent variable, I then proceeded to analyze if any team proved to be more effective than others at selecting promising players, using a simple linear regression model that included the team effect.

3.1 Performance Indicator: Ratio between Actual and Theoretical Maximum Salary

It is quite intuitive that teams would prefer to choose players sooner rather than later. The NBA Draft is a nationally televised show and, given the restriction on selecting new players, teams invest a lot of time and resources in scouting for the best players in each class. Several sports analysts, magazines, and the League itself keep track of the performances of the best prospects throughout several years of their early career and publish regularly updated "mock drafts" trying to predict which player will be selected at which position and by which team. However, "prediction is very difficult, especially about the future,"

and sometimes Draft night reserves some surprises, with players falling unexpectedly low in the draft, or being picked way before their expected position. On average, first-round picks tend to have longer careers, or at least show a much higher probability of seeing their career extended beyond their rookie contract. Therefore, the first and most important indicator of a good choice of talent is the fact that the player will prove himself worth of a second contract. However, being a rotation player, albeit in the most competitive league in the world, is a formidable achievement for a specific person, but almost a consolatory prize for an organization that aims to improve its competitive position. The NBA, as well as many other professional sport leagues, is a superstar economy (Adler 1985; Hamlen 1991; D. J. Berri and Schmidt 2006; Lucifora and Simmons 2003; Krueger 2005; Hoegele, Schmidt, and Torgler 2014; Rosen 1981), i.e., several good players cannot replicate the performance of a single superstar player. Therefore, teams try to choose as early as possible, in the hope of selecting a player able to significantly contribute to the team's success. Unfortunately for them, data show that early picks do not necessarily convey the highest return, and therefore a recruitment strategy mainly based on gathering, through any means necessary, a high volume of first-round picks is not a guarantee of team success (Motomura et al. 2016; Soebbing and Mason 2009). As mentioned, players can sign a second contract for an amount between the League's maximum and minimum value, as per the CBA in effect at the time of signing the contract.

3.2 Data Collection

I collected data for all NBA seasons from 1995, the year when the 30% of the Salary cap rule was first implemented, to 2017. Such data include all drafted players, pick order, the team that picked the player, whether he immediately joined the League, and if he was extended prior to the expiration of his rookie contract. Afterwards, I compared the salary of the first year of their second contract with the maximum allowed by the CBA for the relative year, obtaining values that range from 1.55 to zero. Out of 1357 observations over 22 seasons, only 11 players signed an extension that was worth more than the expected 30% of the Salary cap of the given year, proving that the bar set by the League to benefit from one of the exceptions is extremely high, and such cases should not be treated as outliers, but simply as very talented players. During the same period, 686 players didn't find a team willing to sign them to a second contract.
Keeping track of early extensions and of "draft and stash" players (i.e., players, usually from overseas, that for a number of reasons do not join the League immediately after the draft) was crucial, since a player's tenure in the League starts when they are actually enrolled, not when they are drafted, and this has implications in terms of the Salary Cap, and in turn of the maximum contract they can sign. There is also the possibility that some of the draft and stash players may join the League at a future moment, even several years after being drafted, if ever.
Full descriptive statistics of the dataset and number of players that were in drafted and stashed or extended before the termination of their rookie contract can be found in Table 1Table 1 and Table 2

Table 1: Descriptive Statistics

	N	Mean	Std Dev	Minimum	Maximum
Year	1357	.	.	1995	2017
Pick	1357		.	1	60
Sal	1357	3179290	5281236	0	30559200
Maxsal	1357	16000804	6226636	9000000	28103550
Value	1357	,21	,31	,00	1,56

Legend:
Year: the season in which the player was drafted
Pick: the number at which the player was drafted
Sal: the salary of the first year of the second contract (in USD)

Maxsal: the maximum amount for a second contract as per CBA (in USD) Value: the ratio between the actual and the maximum salary

Table 2: Number of Draft and Stash and Early Extended Players

	Frequency	Percent
Early Extension	16	1,2%
No	1341	98,8%
Draft and Stash	86	6,3%
No	1271	93,7%
Total	1357	100,0%

4 Analysis and Results

At first, I calculated the correlation between the pick order and the value of the second contract, to see if the Draft order is a good predictor of a player's talent.
As expected, the result was as expected but didn't show a perfect correlation (see Table 3) of -1.
The intensity of the correlation and its sign indicate that early picks usually allow teams to select players that live up to their expectations. However, four years is a relatively long period of time for a person, even more so for a professional athlete in an extremely competitive environment and, even assuming flawless scouting and evaluation procedures, injuries, a new training or dietary regime, or even a change in one's life priorities can result in sometimes dramatic differences between the value attributed to a player by NBA scouts and analysts and his effective performance by the end of the first contract..

Table 3: Correlation between Pick Number and Player Value

	Pick	Value
Pick Pearson Correlation	1,000	-,548
Sig. (2-tailed)		,000
N	1357	1357
Value Pearson Correlation	-,548	1,000
Sig. (2-tailed)	,000	
N	1357	1357

I then proceed estimating a multiple linear regression model having the player's value as the dependent variable, and a dummy team variable and the pick order as the explanatory variables.
The results are shown in Table 4

Table 4: Linear regression of Value by Pick Number and Team

Source	SS	df	MS		Number of obs =	1,357
F(38, 1318) =	16.91					
Model	41.7609143	38	1.09897143		Prob > F =	0.0000
Residual	85.639056	1,318	.064976522		R-squared =	0.3278
					Adj R-squared =	0.3084
Total	127.39997	1,356	.093952781		Root MSE =	.2549

Value	Coefficient	Std. err.	t	P>|t|	[95% conf. interval]

Pick	-0.0099938	0.0004174	-23.94	0.000	-0.01081	-0.00917
BOS	0.0275097	0.0481822	0.57	0.568	-0.06701	0.122032
BRK	0.1601301	0.1022056	1.57	0.117	-0.04037	0.360634
CHA	0.0152129	0.0665462	0.23	0.819	-0.11534	0.145761
CHH	0.1177064	0.0785269	1.5	0.134	-0.03635	0.271758
CHI	0.0585487	0.0486517	1.2	0.229	-0.03689	0.153992
CHO	-0.1659253	0.1190416	-1.39	0.164	-0.39946	0.067606
CLE	0.0950672	0.051762	1.84	0.066*	-0.00648	0.196612
DAL	0.0073663	0.0524434	0.14	0.888	-0.09552	0.110248
DEN	0.0755157	0.0507231	1.49	0.137	-0.02399	0.175023
DET	0.1055594	0.0498639	2.12	0.034**	0.007738	0.203381
GSW	0.0709045	0.0524298	1.35	0.176	-0.03195	0.17376
HOU	0.043203	0.0507328	0.85	0.395	-0.05632	0.142729
IND	0.1154209	0.0540072	2.14	0.033**	0.009471	0.221371
LAC	0.0535901	0.0536784	1	0.318	-0.05171	0.158895
LAL	0.0779478	0.0517061	1.51	0.132	-0.02349	0.179383
MEM	-0.0215173	0.0576923	-0.37	0.709	-0.1347	0.091661
MIA	0.0436882	0.0549376	0.8	0.427	-0.06409	0.151463
MIL	0.0610678	0.0488542	1.25	0.212	-0.03477	0.156908
MIN	0.0484396	0.0483972	1	0.317	-0.0465	0.143384
NJN	0.0103219	0.0571078	0.18	0.857	-0.10171	0.122354
NOH	0.0784716	0.0762416	1.03	0.304	-0.0711	0.22804
NOK	-0.1923737	0.1190089	-1.62	0.106	-0.42584	0.041094
NOP	0.0953316	0.1095373	0.87	0.384	-0.11955	0.310218
NYK	-0.0504667	0.0540155	-0.93	0.35	-0.15643	0.055499
OKC	0.03321	0.0723119	0.46	0.646	-0.10865	0.175069
ORL	-0.0331699	0.0501743	-0.66	0.509	-0.1316	0.06526
PHI	0.0430487	0.0475606	0.91	0.366	-0.05025	0.136351
PHO	-0.006034	0.0507311	-0.12	0.905	-0.10556	0.093488
POR	-0.0114695	0.0490915	-0.23	0.815	-0.10778	0.084837
SAC	0.028614	0.0517218	0.55	0.58	-0.07285	0.13008
SAS	0.1245349	0.0515357	2.42	0.016**	0.023434	0.225636
SEA	0.1061342	0.0524032	2.03	0.043**	0.003331	0.208937
TOR	0.1120322	0.0541052	2.07	0.039**	0.005891	0.218174
UTA	0.0527438	0.047965	1.1	0.272	-0.04135	0.14684
VAN	0.155884	0.078528	1.99	0.047**	0.00183	0.309938
WAS	0.0483631	0.0540227	0.9	0.371	-0.05762	0.154343
WSB	0.2443334	0.1510612	1.62	0.106	-0.05201	0.54068
cons	0.4588108	0.0365533	12.55	0.000	0.387102	0.53052
*significant at the 0.1 level; ** significant at the 0.05 level						

The p-value of the F-Test allows us to reject the null hypothesis that there are no differences between teams in terms of the ability to select players that will receive a high second contract despite a relatively

low pick number. The R-Squared is 0.3278, not extremely high, but satisfactory per se, and even more considering the extreme simplicity of the regression model.
Looking at the specific P Tests, teams do not show substantially different success in their drafting strategies, except for 7 of them: Cleveland, Detroit, Indiana, San Antonio, Seattle, Toronto, and Vancouver. All these teams seem to outperform their peers and to be able to select players that, after their rookie contract, are worth more than what their picking order would predict. In the discussion session, I will try to analyse this result using both anecdotal and statistical evidence.

5 Discussion

Looking at the results, there is one element that links almost all the teams that showed a superior ability to recruit prospects: they are small market teams. It is very hard to give a universally accepted and rigorous definition of "small market team," even if the term is immediately understandable and widely used by fans and press alike. I followed this line of reasoning: even if the decision of the destination through which to enter the league is essentially up to the team that picks the player, his bargaining power increases during his career, topping when he becomes an unrestricted free agent (i.e., when he is completely able to decide his next employer). But, albeit limited, restricted free agents have some bargaining power, too, so one could argue that teams lacking other incentives are forced to overpay for the services of a player to keep him happy and to not look for greener pastures somewhere else. Since professional athletes' decisions are not exclusively motivated by retribution (McCann 2006),), I define a small market team as a team that lacks the attractiveness to win a player's preference beyond direct monetary considerations. Playing in a bigger market means a wider audience, increased media coverage, more visibility and popularity, and, in turn, could help the player to sign more lucrative contracts with the sponsors. Looking back at the list of teams linked to superior talent recognition capabilities, apart from Toronto, all of them are commonly associated with the small market team definition. Therefore, one could argue that being at a disadvantage when it comes to attracting unrestricted free agents to join the team, and having a consequent abundance of salary cap room not occupied by high-end veteran contracts, small market teams may have the incentive to re-sign their own players for the maximum allowed by the CBA, despite their effective value on the open market. By doing so, the team would secure the highest level of talent allowed by their condition, and at the same time would avoid the penalty imposed by the CBA to teams below the salary floor, i.e., the minimum payroll for any team.
Further investigation, though, suggests a different explanation: I summarize the results of the 7 teams from 1985 until 2021 in Table 5. Except for Vancouver, that might indeed have been forced to overpay for the services of their restricted free agents, all other teams show a performance track that put them way above league average, indicating that the retribution of their players might have been appropriate.

Table 5: Team performances 1985-2021

Team	Playoffs	Conf.	Div.	Champ.	Record	Win %	Win.S
Cleveland	19	5	6	1	1597-1608	0.498	23
Detroit	22	5	9	3	1596-1610	0.498	19
Indiana	25	1	6	0	1663-1549	0.518	19
San Antonio	25	6	16	5	1930-1281	0.601	28
Seattle *	11	1	5	0	1052-884	0.543	13
Toronto **	13	1	7	1	1096-1214	0.474	12
Vancouver ***	0	0	0	0	101-359	0.220	0
* The franchise relocated to Oklahoma City in 2009; **The franchise entered the League in 1995; ***The franchise entered the league in 1995 and relocated to Memphis in 2001							
Legend							

Playoffs: number of seasons in which the team qualified for the postseason tournament; Conf.: Number of Conference titles won; Div: Number of Division titles won; Record: Cumulative win-loss record; Champ.: Championships won; Win%: Ratio of wins over total games played; Win.S; Number of seasons with more wins than losses (Win%>50%)

For simplicity's sake, I will discuss the results of the two franchises that differ the most: the San Antonio Spurs and the Vancouver Grizzlies. Founded in 1967, over the observation period San Antonio was able to win 5 NBA titles, surpassed only by the Los Angeles Lakers (9) and the Chicago Bulls (6). They had 28 winning seasons and a cumulative win share of 60%. Over a much shorter period (the franchise was part of NBA's expansion plan in 1995 and was relocated to Memphis in 2001), the Vancouver Grizzlies never qualified for the postseason tournament, didn't record a single winning season, nor any other significant result.
Vancouver's results might be skewed because of the short observation time. However, comparing Vancouver's record with Toronto's, that entered the league at the same time, we can see a clear distinction in performance, as shown in Table 6

Table 6: Toronto - Vancouver Performance Comparison (1995-2001)

Team	Playoffs	Conf.	Div.	Champ.	Record	Win %	Win.S
Toronto **	1	0	0	0	182-278	0.396	2
Vancouver ***	0	0	0	0	101-359	0.220	0

Toronto not only won considerably more games than Vancouver but ended the last two seasons with a winning record (45 and 47 wins over 82 games, respectively) and in 2000-2001 also qualified for the Playoffs.
Therefore, it is probably safe to say that Vancouver actually overpaid to re-sign their own players, but San Antonio's resume clearly indicates a team that used their picks wisely, and the result is even more exceptional considering the total number of winning seasons (remember that pick order is inverse to the previous year's results), indicating that San Antonio's picks were often mid to late first and second rounders
The other teams, as well, show positive performances, with the three teams that, over the observation period, didn't show a winning record, compensated for that by winning a championship each (Cleveland, Detroit, Toronto). Indiana and Seattle, both with winning records, didn't win a title from 1985 to 2021 (2008 in the case of Seattle), but both played in the NBA finals once.

6 Conclusion

My analysis shows that smaller companies may try to compensate for their inferior attractiveness towards prospective employees by investing in the evaluation and selection of candidates. The simple regression model used proved to be able to identify quite effectively different levels of performance in the candidate selection process. However, current data do not allow control for a different explanatory variable, i.e., the ability to nurture talent. The six of the seven teams identified in the analysis were probably very good at finding players that overperformed compared to their pick number, and eventually were able to retain them, also thanks to the exceptions included in the CBA, but it is not possible to ascertain how the same players would have performed in a different team. And by this, I don't simply mean that the team that chose them was the best situation possible (eventually, this is exactly what the Draft is about: finding the best candidate for your needs). Rather, I wonder how much the organizational environment, the coaching (an activity that goes far beyond simply deploying the best team for the occasion), or the very organizational culture helped those players to maximize a potential that must have already been there, but probably needed help to fully express itself. Despite this would go beyond the scope of this exploratory analysis, which aimed to determine whether differences in drafting strategies

existed, including organizational variables could give better insights about how to maximize an organization's human capital potential.

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