

Dynamics of IPL Auction, Pricing, And Strategy

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Abstract- The Board for Cricket Control in India (BCCI) is the regulator for cricket in India. To finance its activities, it has initiated many activities. The Indian Premier League (IPL) is its flagship revenue generator. Like many other professional sports leagues, IPL follows an auction format for player recruitments. Auction in common terms refers to the sale of assets (players here) through a common bidding process that can be of varying nature (oral auction, sealed-bid auction, etc). IPL has concluded 14 seasons and witnessed multiple auctions, strategic moves, and valuation of players (in terms of pricing) by franchisees to strengthen their squads and increase their chances of fielding a strong team to win the tournament. BCCI also holds auctions for tenders of media rights and sponsorships. Being the sole regulator, BCCI enjoys a monopoly status over all the potentials companies and brands vying for these tenders.

This paper offers a study of the application of auction theory and the monopoly behavior in cricket administration of India, with special emphasis laid on the IPL. It also provides an inter-alia study about how teams actually go about their strategies, payoffs, and alternative options, as well as how they maximize their team's strength at the auction table while evaluating leadership skills, player personality, player value, pricing trends, budget constraints, and so on.

Keywords- Cricket, IPL, auction, monopoly, strategy, pricing

INTRODUCTION

Cricket is the most popular sport in India, attributing largely to the fact that its cricket team is amongst the most successful in the world. Indian cricket thrives being under the private entity BCCI, while other sports in India usually remain under red-tapism being largely under government's influence. Being a private entity, BCCI enjoys the privileges and liberty of generating multiple revenue streams. Being not financed by the government motivated BCCI to look for innovative revenue streams, such as media rights, sponsorships and the flagship Indian Premier League.

As the sole regulator of cricket, BCCI enjoys a monopoly status over cricket in India.

The *Indian Premier League (IPL)* has managed to

achieve the distinction of being among the richest, most profitable and lucrative sports leagues in the world. The glamour of the league revolves around marquee players, Bollywood film stars and the riches. Ever since its inception in 2008, the league has yielded win-win results for well-nigh all the parties associated. Such parties include business and Bollywood tycoons in the form of franchise owners; the television, marketing and advertising industries as broadcasters and sponsors, the players and the brainchild BCCI itself. Today, the league has a great deal of glamour associated with it and it has inspired multiple similar leagues in other sports and regions, giving a glimpse of its success.

The Indian Premier League, a domestic franchise-based T-20 cricket event in India, was launched in 2008 by BCCI Vice-President Lalit Modi, after having talks with IMG executive Andrew Widblood. After winning the T-20 World Cup in 2007, the first event in the T-20 format, it was a significant step forward for Indian cricket. The excitement generated by that world cup victory was expectedly enormous, and the launch of the IPL was expected to generate a buzz not only in India but also around the world, as all of India's top players, as well as marquee players from the international circuit, were set to compete in this league.

The reception to the league was overwhelmingly positive, with prominent business tycoons and Bollywood stars like Mukesh Ambani, Shah Rukh Khan vying for ownership stakes in the numerous franchises competing in the competition. Despite cricket not being an Olympic sport, a large amount of money was injected into the league and it indeed provided a tremendous rate of return as 13 years later, i.e. today in 2021, IPL is one of the richest sports leagues in the world.

Sponsorships, franchise contributions (and selling rights), and annual auctions are just a few of the primary variables that have allowed the IPL to reach such lofty heights in just over a decade. It always made sure that money was fed into the system, ensuring not just the proper operation of the league but also large

profits for the BCCI. However, for all of the sponsors, merchandisers, investors, and other parties who have put a lot of money into this league, there must be a plan, profit, or incentive for them to participate.

The tournament has previously also been held outside of India, in South Africa, and the United Arab Emirates, with the BCCI reaping substantial revenues. Auctions, advertisements, and other ownership and sponsorship rights have all helped franchises make a lot of money. What drives this trend or what are the dynamics underlying IPL Auction, Valuation of different players and sponsors, and the techniques that work via all of these variables becomes a question of comprehension.

But, like any other wealthy, successful organisation, BCCI has had to deal with its fair share of criticism. BCCI has had to cope with a variety of hurdles and scenarios throughout its relatively successful path thus far, from the *Competition Commission of India (CCI)* disputing BCCI's dominance in the sports industry to tensions in the sale of IPL media rights and the monopoly of the *Star Network*. As a result, it's critical to comprehend and analyse the numerous variables at play in such large- scale, high-stakes auctions.

There have been 14 seasons of IPL (2021). The 14 seasons have provided ample information on auction trends and the behavior of the franchises.

IPL Sponsorship

In contrast to the *open English oral process* that occurs at yearly IPL auctions, the sponsorship process for this showpiece competition has always been performed through a *closed bidding process*. Sponsorship rights (title rights) are sold on a contract- by-contract basis through formal EOIs (Expression of Interest) and subsequent bidding processes, which means that contracts of varying lengths, such as one year, two years, or even five years, can be linked. There are normally no entry hurdles or restrictive/biased measures throughout the process, however, sponsors with a strong brand value and/or previous experience with the BCCI/IPL committee have a little edge when it comes to shortlisting the final bidders (sponsors). Sponsors are finally shortlisted through the process as mentioned above and are accordingly given the rights for that particular IPL season. DLF, Pepsi, Vivo, and Dream 11 so far have managed to ink contracts with BCCI over the past 14 years of the IPL. The value of the IPL title sponsorship rights has increased

exponentially with passing time and given the craze and increasing popularity for the sport in India, the number is only expected to multiply further in the future. However, things have been far more complicated when the auction for *IPL media rights* has occurred in the past.

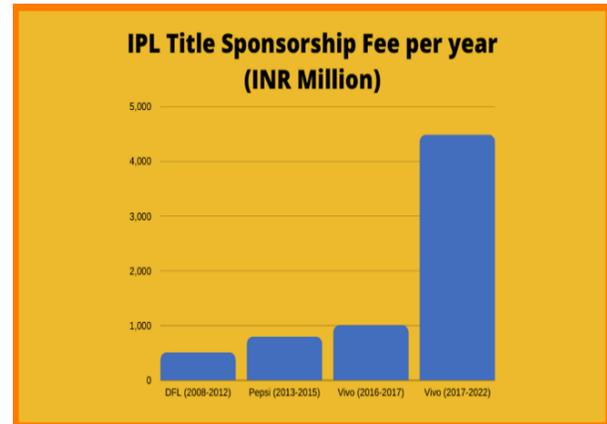


Image 1. Exponential rise of the value of IPL's media rights

IPL MEDIA RIGHTS: A MONOPOLY WITHIN A MONOPOLY

Starting from the 1990s, BCCI, for the first time gave away its media rights to the then national broadcaster in *Doordarshan TV*. Since DD was the sole national broadcaster (or to a large extent) back then, it allowed DD to charge BCCI for giving it access to the only outlet back then for the Indian matches, thereby establishing its monopoly. However, a couple of decades forward, when cricket became a fantasy in India and IPL came to the fore, the story changed.

As previously stated, the IPL does not only involve the trade or auction of players who participate in the league, but also various additional rights such as broadcast rights and title sponsorship rights.

However, in many instances, the auction process for the IPL's media rights has proven to be significantly more contentious and contested, such as a company's monopolization in the league due to exclusive or extensive rights in the domain of the sport.

To get things into relevance, back in 2013, BCCI had been imposed a hefty penalty by the *Competition Commission of India (CCI)* for abusing its *dominant position* in the name of IPL to promote its commercial interests and business activities. BCCI in its defense had passed the baton to different media houses across India, asking them to refrain from any activity that involves the name of IPL, be it in any form, i.e., in the

form of IPL logo, IPL franchise names/logos, etc. On behalf of BCCI, *Copyright Integrity Advisory Pvt. Limited (India)* sent an order regarding restrained use of print media where BCCI stated that a “*newspaper or any print media source cannot use a third-party source to advertise a news page dedicated to IPL (or even use any kind of commercial logos or syndicated columns consisting of any symbolic presentations pertaining to IPL or BCCI)*”.

However, this incident wasn’t the last where the BCCI or IPL had been scrutinized for abusing its dominance in the media domain. Tracing back to 2017, Dish TV had written to the Indian government against BCCI and the IPL committee for giving away the entire IPL broadcasting rights to Star Network. Dish proclaimed that such a move could create a monopolistic situation in the sports broadcasting market. Star acquiring IPL telecasting rights in the media rights of the auction also meant that the cost for consumers (i.e., television/media-related prices/rates) was likely to increase with Star being the ‘sole supplier monopolist’¹ in the market.

Adding on to the same, even before winning the rights of IPL, Star was already the lone sponsor for all cricketing events in India. Dish’s and others’ stands which resonated the same were also passed on to CCI and TRAI to look into the matter.

In 2018, CCI had ordered a detailed investigation against BCCI for alleged abuse of dominant position with regards to running professional domestic leagues in India. BCCI was accused of excluding the informant (*Pan India Infraprojects*) or any of its group companies for participating in tenders for media rights of IPL. BCCI had restrained the organization of ICL (Indian Cricket League, a parallel to IPL) by Pan India Infraprojects as well as excluded it from the downstream market by disallowing it to bid for IPL media rights.

Formally, CCI’s order stated that “*Sports federations engaged in the organization of tournaments/leagues are put to advantage if they also possess the authority to approve the organization of similar events by others and set conditions for such organizations*”. The BCCI supposedly had taken advantage of the same.

The informant (*Pan India Infraprojects*) during the preliminary conference of May 2, 2018, had highlighted the fact that BCCI was continuing with similar restrictions and clauses for the 2018-23 cycle. BCCI was imposed upon a heavy financial penalty for the same (which was close to 5% of their average annual

turnover) although eventually, Star India had won the deal for IPL’s media rights for the 2018-23 cycle.

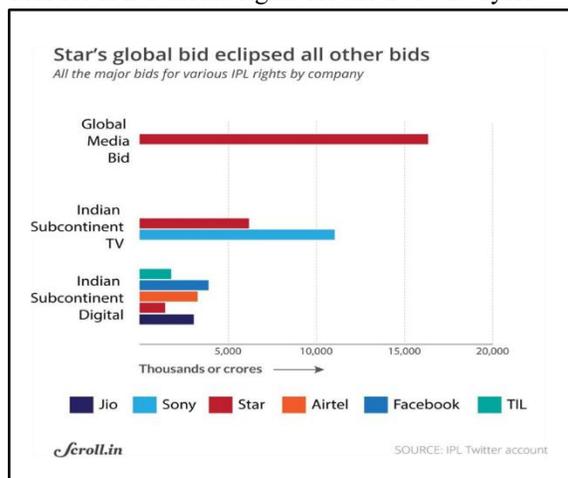


Image 2. Bids received by BCCI for media rights

The intentions of Star were pretty much clear from the outset as they had bid a whopping amount of over 15,000 Crores (16,347 Crores) for acquiring *Global Media Rights* of the Indian Premier League. The magnitude of the bid by Star wasn’t just visible from the graph above where it outbid its competitors but also from the fact that Star’s bid was approximately equivalent to the GDP of Maldives and greater than the GDP of Bhutan as well as comfortably crossed the amount which Sony had paid in 2008 for acquiring rights in the initial 10 year period.

However, even the emergence of a monopoly is like two sides of a coin. The first side of the coin, which is generally seen by everyone is the dominance and the market power that Star obtains not only in the field of cricket or IPL but on the television circuit as a whole during the summer season (April-May) as IPL grabs the maximum attention among viewers worldwide amidst other sports or shows that run during the same timeline.

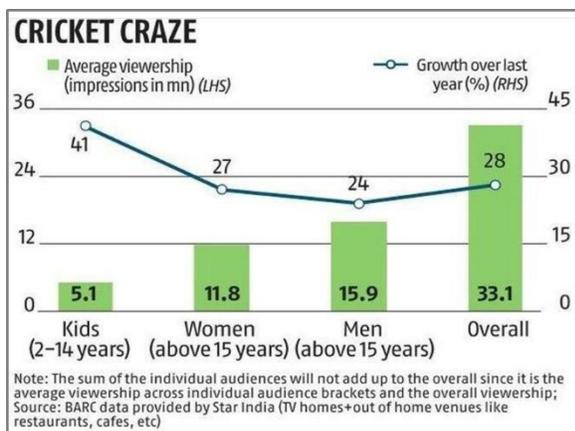


Image 3. Viewership Trends

283 million viewers for IPL in the opening week of 2019 across different age groups

Data Source: BARC data provided by Star India

The other side of the coin is a little complicated. A monopolist (like Star here) due to the superiority over its fellow competitors may get complacent and the product or service that it is offering (like broadcasting through different means) may progressively decline in quality due to inferiority/lack of competition. However, if the market is a highly competitive one or the monopolist/dominant body in the market like Star, in this case, is vary of the potential threats and competition it may face from its rivals in the long run, it would aim to establish a position in the market that helps them control pricing, market power as well as crimp the competitiveness that may arise in its domain.

Star, just like another monopoly Sky Sports from the United Kingdom was along the same lines and thereby was willing to spend extra money to keep the competition away.

Table 1.

Tournament	Cost per game (In \$ million)
IPL	8.47
NFL	22.47
MLB	20.63
EPL	13.15
NPL	1.99

Source: Indian Express

Thus the over-expenditure that may be inferred above from the graph is equivalent to a *deadweight loss*, i.e., the excess money or resources spent on maintaining market power, dominance in the cricket media market, or any

other related activities which could have been more efficiently utilized elsewhere. What motivates businesses like Stars to incur these deadweight losses is the success of this league. Having witnessed the immense popularity, an association of people with the sport, franchise or player, potential revenue-generating sources, etc, IPL is almost a “guaranteed success” in business (via potential earnings through hikes in DTH rates, endless streams of advertising, etc) means hence such deadweight losses can easily be recovered through the league.

However, as an exception, the COVID-19 pandemic in 2020 was a threat to this “guaranteed success” as the cancellation of the 2020 season would have meant huge financial losses for the BCCI and the franchises. The abandonment of the 2021 season mid-way through the league in May 2021 had also posed a similar threat. However, these threats didn’t actually come true as both the seasons had been successfully completed.

THE WORKING OF IPL AUCTION

As mentioned earlier, IPL Auction is a perfect example of the *Oral (English) auction*. What this also implies is that the possibility of playing a *cooperative game* in such auctions is minimal given the spontaneous and live nature of the auction where simultaneous bids are made within seconds and subsequently, the player is sold at the maximum bidding value (first-price auction where sales price = highest bid). Also, the prospect of a cooperative in such auctions becomes even more difficult as there are at least 8-10 bidders involved during the auction of players meaning that even if one bidder (say franchise) betrays or plays a non-cooperative move (in case the IPL auction is assumed as a cooperative game), all the franchises and auction variables (the price of the players) are affected, meaning that the teams won’t be able to maximize returns from their strategies.

The only best strategy that can be adopted by IPL franchises during the live auction is to keep bidding until the rival bidder opts out. However, some major factors influence this.

IPL franchises do not have the same budget, amount of players, or team compositions with them before the commencement of the IPL auction. Franchises have the option of keeping players who have played for them in the previous (latest) season before the commencement

of any IPL auction (apart from the mega auction). The procedure/tactics of retaining players differ from one team to the next. Teams like Chennai Super Kings and Mumbai Indians have in the past preferred to keep the majority of their players for subsequent seasons due to their success in the league, whereas Punjab Kings and Rajasthan Royals, who have been among the most inconsistent teams in the IPL, have largely retained only a handful of players going into the auction. According to IPL rules, teams can have a minimum of 18 and a maximum of 25 players after the auction, of which only 8 can be retained. Furthermore, not every player in a franchise is of equal value. Most uncapped domestic/international players are valued at less than 5 crores, whereas marquee players like Mahendra Singh Dhoni (Chennai Super Kings) and Rohit Sharma (Mumbai Indians) get paid above 15 crores for a full IPL season.

All of this means that, because each team has a distinct number of players and budgetary limits, each player has a varied reservation price. For one franchise, a certain amount of money for a certain player may be the best deal, whereas, for other teams, it may be a steal (getting a player for far less than the franchise's reservation price) or a winners' curse (paying more than the franchise's reservation price for a particular player), so the best strategies will vary as per expected payoffs from players, budgetary constraints, team compositions, etc.

As a result of these techniques, IPL franchises frequently strive to raise the bids of players they don't even intend to buy so that the winning bid exceeds the reserve price, or, to put it another way, the player is bought at an overpriced price, resulting in a winner's curse. This means that the winning team's reserve price for a certain player will have to adjust its price expectations or auction methods for upcoming rounds (since they have over-spent on only one player). This would provide competitor franchisees an advantage in later rounds because they would have a larger budget than the club that overspent on one player.

In the 2017 IPL Auctions, a similar situation arose when one of the marquee English cricketers, Benjamin Andrew Stokes, was sold for Rs 14.5 crore to the Rising Pune Supergiant franchise (now defunct) following a five-way bidding war between all the franchises. However, because RPS only had a total budget of Rs 17.20 crores when the auction began, this was an

"overspend." As a result, they could only afford to buy second-string players at bargain costs. . As it turned out, the RPS franchise's gamble didn't pay off, as Stokes had a terrible season, while cheaper additions like Jaydev Unadkat (who cost only Rs 30 lakhs) were one of the few bright lights in an otherwise disappointing season for the Rising Pune Supergiant franchise.

DOMINANT STRATEGIES/ BARGAINING POWER IN IPL AUCTIONS

Reducing the number of bidders or the frequency with which bids are made is one of the most popular techniques to strengthen negotiating power during auctions. Things get a little more complicated in an IPL Auction. An IPL Auction has a certain number of bidders (8-10). As a result, the only option left is to reduce the amount of bids in an auction. In this situation, instead of raising the bidding bar on a regular basis, one team could wait until the auctioneer sells the player at the final possible minute, allowing:

1. The bidder receives a fair representation of all franchises' valuations of that specific player.
2. The winner's curse can be prevented because all of the franchises' strategies will be public.
3. Most importantly, despite all of their planning, rival bidders can be taken off guard if a new bidder bids for a player at the last minute. As a result of this action, older bidders may end up outbidding each other for that player, or they may miss out on a chance to get their chosen player on the club.

PRICING OF PLAYERS IN AUCTION

As discussed above, the allocation of players to any team is done by an auction, held every year before the commencement of the season. BCCI allocates an equal amount to all teams for every season. In the 2021 auction, this amount was ₹ 85 crores. Teams have an option to retain their current players by extending their past contracts. There is no restriction to the number of players a team can retain, hence the teams end up with an imbalance concerning the amount in their 'purse' during the actual auction. In 2021, Kolkata Knight Riders and Sunrisers Hyderabad spent 74.25 crore on retaining 17 and 22 of last season's 25-man squad respectively, leaving them with just 10.75 crores to fill up the remainder of their squad at the auction.

The team that bids the highest for a player secures the

right to include the particular player in their team. One would think, rather naturally, that primarily, the pricing of a player would depend on the quality of his gameplay. However, multiple instances from the previous auctions have proved that this is not the case. Thus, multiple variables are taken into account while setting the base price by the league management, as well as by team owners while deriving their buying strategy. Some of the common factors that are considered are age, stardom, play style among others. It is believed that Cricket, being a game of three formats and T20 being the fastest one, generally attracts young players with an aggressive playstyle. Aged players are conventionally believed to be suited for longer formats. However, Hemanta Saikia, Dibyojyoti Bhattacharjee, Atanu Bhattacharjee (2015) concluded quite the opposite.

VALUATING PERFORMANCE OF A PLAYER

Runs scored and wickets taken are the most common metrics used to evaluate a player's performance. Given the club's 13-year history, an experienced player's performance can be gauged by his previous seasons' results. Performance in International T20s, ODIs, and Tests with descending relevance can be used for a more comprehensive evaluation.

The domestic career of an uncapped player might be used as a benchmark. The strike rate and the economic rate are also useful indicators.

Performance helps a player to gain traction and come into the highlight. Hence, it can be said that performance is the prerequisite for all the other factors to come into play.

As all the franchises don't have a regular sum of amount, neither necessarily an equivalent wagon of players, the valuation of a player can highly change because of these external factors.

Preference of one factor over other. Performance is the dominant factor for any purchase for all teams. Experience is another factor that can largely affect a buying decision. Among other factors like age, stardom, leadership qualities, etc, it is difficult to generalize the domination of one over another. A safe conclusion is that all these factors don't necessarily act uniformly across all teams, given their composition is different. For example, Glenn Maxwell, purchased for 10+ crores for 3-4 consecutive seasons, was known as the "million

dollar baby" but didn't perform for Mumbai Indians and Punjab kings. He got into RCB for a similar value and is their leading run-scorer in 2021

Borooah and Mangan (2011) argued that the IPL auction system was built on publicly available knowledge. The knowledge not in the public domain was absent in the setting-up of price. For example, an Indian player may be known for his negative behavior in the dressing room, but such knowledge of instances might not be on the surface for foreign nationals.

The IPL auction format also favors the players that are auctioned first. This is because most franchises exhaust their kitties before the arrival of final players as a contingency. This hampers both the experience of franchises as well as the player with internal connections, teams can exploit this loophole by placing their preferred players at the end of the auction.

This (un)random nature of the order of players also hampers with developing an efficient strategy for the franchises. For example, say a team prefers player X over player Y. They want to bid on player X first, and only if they lose the player to another team, would they want to bid on player Y. A rather rational strategy like this can, that however, not be conducive in case player Y is auctioned before X.

Various critics suggest that the draft auction system should be highly considered in place of the conventional English auction. This would significantly smoothen the auction system. It would make strategizing easier and also reduce the time involved in the auction.

ECONOMICS OF IPL

The primary motive of IPL was to capitalize on the growing popularity of the fastest format of cricket, T20. The BCCI gives tenders to broadcasters, which is the primary source of income from the IPL. It also charges its share from the sale of tickets of matches. For foreign cricket boards, BCCI gives 20% of the salary of a player to his respective cricket board. The advertisements broadcasted during the matches, jersey sponsors, kit sponsors, pay a share of money to the BCCI.

The amount a player is auctioned for is his salary for that season. In case it is a multi-year contract, the bid amount is paid to the player for every season.

The league's model incentivizes winning matches. The

winner takes home a hefty sum which is divided amongst the players and the franchises.

Base Price. The base price of a player is decided by the player himself. This can depend on factors like whether he is a capped or an uncapped player, his form, his availability (all or some matches), etc. Thus, even a player has to make a decision that is optimum to maximize his pay-out. If he sets his base price too high, he might go unsold altogether. Karnik (2010) is one of the earliest papers that suggested the application of hedonic modeling to calculate players' incomes.

Thus the price of a player is a function of different variables. For the sake of simplicity, we would be limiting our study to runs scored, wickets taken, age, nationality, strike rate.

$$P(x) = f(\text{RUNS, WICK, MATCHES, AGE, NATION, SR})$$

PLAYER UTILITY AND VALUATION BY IPL FRANCHISES

IPL Auction or any auction occurs through a specific sequence, i.e., players are announced in a specific order. This order or arrangement is indeed a critical one as the players whose name appears earlier in the auction can expect higher bids for themselves due to the greater availability of the budget with the franchises. As the auction goes on, naturally the budget the franchises have with them also decreases and the players coming, later on, get lower and lower bids or in some cases, are not even picked due to the lack of money with the franchises (during the auction).

The IPL Auction of 2014 can be taken as a reference point. The three most expensive players in the league, namely *Yuvraj Singh* (₹14 Crores), *Dinesh Karthik* (₹12.5 Crores), and *Kevin Pietersen* (₹9 Crores) were approximately sold out within the first 6-7 bids placed in the auction. Putting the same into mathematical terms, there was a maximum total of 273 Crores in total at the auction table which could be spent by all the franchises and after the bid of the above 3 players, 36 Crores or at least 15% of the net auction money was exhausted within these 3 bids (Given all franchises spend their entire budget). The scatter plot below justifies the same as the concentration of players bid at higher values kept on decreasing as more and more cricketers started to appear in the auction. After 100 players were put forth at the auction table, the bids for the remaining players were almost negligible.

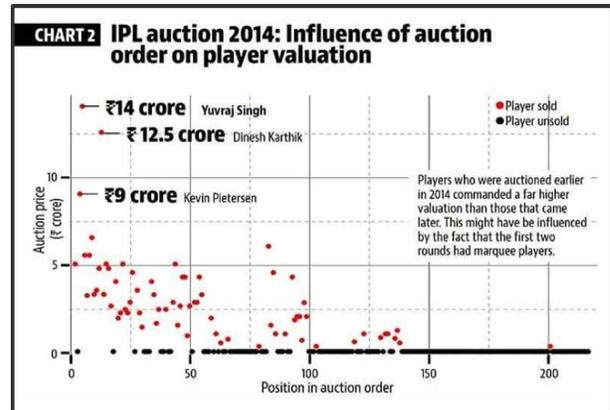


Image 4. Auction order and player valuation

Players that register for an IPL auction are sorted into different categories such as marquee players, star players, capped overseas players, uncapped players, etc. based on the performance record and experience of the players. This sorting is done by the auctioneer in the IPL auction who groups different sets of players as per the above criteria and subsequently during the auction, the auctioneer handpicks player tokens starting from the marquee players group to the uncapped players' group to display them at the auction table. Similarly, base prices are allotted to players³) as per their worth and performance. The minimum base price that a player can be allotted is ₹ 10 lakhs, which is generally given to uncapped domestic Indian players and unknown overseas players whereas the maximum base price that a player can have is ₹2 crores (as per auction rules till 2020) which is generally the case with top players in World Cricket like Virat Kohli, AB De Villiers, etc.

However, one should note that changing the order of players presented at the auction table won't necessarily change the bidding amount obtained for different players. Franchises come up with a detailed analysis of all the players participating in the auction and raise the bid/purchase only those players who are supposedly the best fit for them. Putting up the names of *uncapped players* first and *marquee players* last won't result in uncapped players getting much of a magnificent raise in the amounts which they are receiving.

On the contrary though, if the auction order is decided randomly without any categorization (like dividing into the marquee, capped, uncapped players), bidding values may get altered. For instance, marquee players are generally expected to cross bids over ₹8 Crores, and hence the franchises accordingly strategise and budget their money to win the bid for that particular player.

However, if one marquee player appears at the start of the auction and one, say at the end, the dynamics may change. Marquee players are generally the costliest buys for the franchises but if one of the marquee players appear at the end, franchises have two possible scenarios:

- a) Save money at the end to buy that player and forgo buys/bids of other stars/domestic players that appear in the auction rounds.
- b) Buy other stars/domestic players from the auction pool rather than waiting for just 1 or 2 marquee players which the franchise may/may not win the bid for.

Many franchises in such a scenario may opt for the second option. This is indeed the best possible strategy as a particular marquee player can successfully be purchased by one team only and therefore teams need to have a “back up” or cover for such players if they are not won through the auction bid. Secondly, it is an arduous task to have an estimate or a reservation price for the marquee players present in the auction because of the spontaneous, oral nature of the auction where often players are “over-bid” leading to a winner’s curse. Whenever an auction strategy is discussed, the valuation of the involved assets (players in the case of IPL) is one of the most important factors. Valuation of players is a very relative terminology and differs from franchise to franchise as per their needs and team compositions. To study the same, the concept of utility or utils can be used for evaluating players where different variables⁴) like U_b (for measuring the utility of batting), U_w (for measuring the utility of bowling), etc. can be used to compute the strength of the team.

The utility of the players can also be evaluated in multiple ways. One way is to measure the utility variable as the proportion of money spent by the franchise for purchasing a particular type of player. Higher is the value of the utility variable for one particular type of players, say, bowlers, more is the team’s need or dependence on such type of players, and therefore that type of player/player is highly valued by the franchise in comparison to rival bidders.

Secondly, talking about the individual credentials of players, when the sum of all of the utility variables is 1 (when variables are measured between 0 and 1), the player is expected to be an asset and a good return on investment, however, the sum of these variables can also be greater than 1 as nowadays, many players also

contribute in the game through their secondary skillsets, like a batsman who can chip in 1-2 overs or a bowler who is also an excellent fielder. Keeping all these variables in perspective, franchises bid the highest for the player, who has the highest utility variable value. As mentioned above, player valuation or utility derivation is a relative concept and varies from one franchise to another.

One can cite the former from the IPL Auctions of 2020 through the strategies of two IPL franchises: Royals Challengers Bangalore and Kings XI Punjab (Now Punjab Kings).

ROYAL CHALLENGERS BANGALORE

Total budget for IPL 2020 auctions = ₹ 27.90 Crores

Total money spent at IPL 2020 auctions = ₹ 21.50 Crores

Type of Player	Money spent (in Cr.)	Money spent as proportion of total budget (in Cr.)	Utility ($U_b/U_w/U_f$)
Bowlers	16.5 Crores	$(16.5/21.5) \times 100 = 76.74\%$	0.77 (U_w)
Batsmen	5 Crores	$(5/21.5) \times 100 = 23.26\%$	0.23(U_b)

KINGS XI PUNJAB (Now Punjab Kings)

Total budget for IPL 2020 auctions = ₹ 42.70 Crores

Total money spent at IPL 2020 auctions = ₹ 26 Crores

Type of Player	Money spent (in Cr.)	Proportion of total budget	Utility ($U_b/U_w/U_f$)
Batsmen	12.50 Crores	$[12.5/26] \times 100 = 48\%$	0.48 (U_w)
Bowlers	13.50 Crores	$[13.5/26] \times 100 = 52\%$	0.52(U_b)

Evaluating the utility of players based on factors other than price valuation can be a complicated task. However, if references are taken from different utility models in the past, such valuation is possible.

Let U_b = Batting Utility of a player (For Batsman) U_w = Bowling Utility of a player (For Bowler)

Where U_b and U_w lie between 0 and 1.

Now, certain assumptions have to be taken to determine “how good” the player is for his respective team/franchise. Franchises generally consider multiple variables while determining the extent of utility that a player provides to their team but for the purpose of simplicity, we have taken batting average as the sole variant for measurement of batting utility and would take bowling average for the same purpose in case of a bowler.

Following are the scales on the basis of which utility values will be given to players.

Batting Average	(Batting Utility)
40+	1

35+	0.75
30+	0.5
25+	0.25

Bowling Average	(Bowling Utility)
Below 35	0.25
Below 30	0.5
Below 25	0.75
Below 20	1

Apart from these defined values, additional utility will also be added for the player. Additional utility can be computed from the secondary skill set for the player (Like bowling for a specialist batsman). Again, multiple variables can be considered for measuring the bowling utility for the player but for the sake of simplicity, we would take the bowling economy rate of the player for a batsman and batting strike rate for a bowler.

EVALUATION OF ADDITIONAL UTILITY

Bowling Economy	Additional Utility
9+	0
Between 8 and 9	0.5
Below 8	1

Batting Strike Rate	Additional Utility
Less than 110	0
110-130	0.5
130+	1

One can interpret the same now through examples of some IPL players as given below:

Player	Ub	Uw	Additional Utility	Total Utility
Virat Kohli (Batsman)	0.75	0	0.5	$(1.25/2) \times 100 = 62.5\%$
Jasprit Bumrah (Bowler)	0.75	0	0	$(0.75/2) \times 100 = 37.5\%$
Ravindra Jadeja (All Rounder)	0.25	0.5	1	$(1.375/2) \times 100 = 68.7\%$

Data Source: Cricbuzz

NOTE:

- 1) For specialist bowlers and batsmen only one of the utility variables, i.e., U_b or U_w is measured whereas for all-rounders both variables are considered.
- 2) The analysis is based on performances of players in their entire IPL career and data provided by Cricbuzz.
- 3) There are many influencing factors for a player like

Captaincy, Experience, Franchise loyalty but we have limited the variables so as to simplify evaluations.

- 4) For all-rounders (Ravindra Jadeja), we have taken the additional utility variable as the higher of the variable between batting strike rate and bowling economy.
- 5) For all-rounders (Ravindra Jadeja), weightage is given to additional utility as 1 util and weightage of 1 util is computed from the mean of batting and bowling utility, since the player is an allrounder.
- 6) The total evaluation is done on a scale of 2 where 1 util is the utility for batting skills/bowling skills and 1 for additional utility, however, evaluation scale can differ depending on franchise's needs and budget.

AUCTION STRATEGIES V/S SUCCESS IN THE LEAGUE

There has been and can be innumerable speculations about the best possible strategic theories in an auction, how to avoid winner's curse, measuring player's utility, and ensuring optimal use of budget allocated to teams but the success of all these strategies can only be validated by comparing it with the performance of players in the league as per the money invested on them. We will have a look at some of the regular teams of the league to understand the same.

Chennai Super Kings and Mumbai Indians

Chennai Super Kings (CSK) and Mumbai Indians (MI) have been by far the most consistent and successful side of this league over its 14 seasons. CSK and MI at the auction table have mostly gone for smart buys (between 5-8 Crores maximum for a player) rather than extravagant or over-expensive buys (like over 10-12 Crores). Another key point of their strategy is the consistency in their retention (that is the players a team retains from their previous season before coming to the auction table). Even if the payoff (which here is in terms of runs/wickets) is low for a player for a particular season, CSK and MI often go with the same strategy and investment over the next season. All in all, the pricing and auction strategies done by CSK and MI management are generally consistent and not affected by external variables like current form, age, etc. They largely rely on their valuation and research and maintain consistency to have higher returns from the player in the long run, if not in a particular season. It is

safe to say that CSK and MI with combined 9 titles out of the 14 editions of IPL have had the right kind of strategies in place.

Table 2. Justifying consistency in selection by CSK and MI

Data Source: Indian Express

Punjab Kings (PBKS) and Rajasthan Royals (RR) One of the most inconsistent sides in terms of retaining players and also largely underperforming in the IPL where they have reached the final only once out of 14 occasions (which they lost), Punjab Kings have been among the teams that have entered the IPL Auction with a huge purse of money and have often spent heavily on their buys. However, they are fairly inconsistent with their selections and retentions and their expectation or valuation of players is generally from a short-term perspective hoping that those valuations yield immediate rewards. The case has been similar with the inaugural champions Rajasthan Royals, who have been very inconsistent with player choices and have gone up for very expensive buys like *Chris Morris (16.25 Crores)*, *Ben Stokes (12.5 Crores)* to beef up their squads. These strategies adopted thus far by PBKS and RR have been largely ineffective as their “expected star performers” have generally been underwhelming and didn’t hog the limelight for their team.

Table 3. Incurring of heavy expenses (over 10 Crores) by RR and PBKS during IPL Auctions

Player	Franchise	Year	Final Price
Glenn Maxwell	PBKS	2020	10.75 Cr
KL Rahul	PBKS	2018	11 Cr
Jaydev Unadkat	RR	2018	11.5 Cr
Ben Stokes	RR	2018	12.5 Cr

Data Source: CNBC 18 Sports

Table 4. Nature of short-term recruitments by PBKS and RR

Player	Franchise	Time with Franchise
Mohammed Kaif	RR	2008-2009
Graeme Smith	RR	2008-2010
Morne Morkel	RR	2009-2010
Yusuf Pathan	RR	2008-2010
Praveen Kumar	PBKS	2011-2013
Simon Katich	PBKS	2008-2009
David Hussey	PBKS	2011-2013

Data Source: IPLT20 - The official IPL website

Royal Challengers Bangalore (RCB) and Kolkata Knight Riders (KKR)

RCB are among the 3 IPL sides that have failed to clinch the silverware in IPL since its commencement in 2008. KKR too have been titleless for the past 8

Player	Franchise	Time with Franchise
Ravindra Jadeja	CSK	2012-Current
Rohit Sharma	MI	2010-Current
Dwayne Bravo	CSK	2011-Current
Kieron Pollard	MI	2010-Current
Ravichandran Ashwin	CSK	2009-2015
Michael Hussey	CSK	2008-2015

editions of the league. The auction strategies of both the franchises to a large extent have been lopsided where they have highly invested in their batting and even have some of the most fierce batters in the cricketing world but their bowling has been something which has nullified the effort of the batsmen. Also, both RCB and KKR in terms of their retention and auction strategies have had a mixed approach where on occasions they have retained faith in their players and not spent big bucks in the auction to buy recruits but have also gone the other way where they have released many players and invested heavily on some to get them into their squad. For instance, RCB have invested heavily (over 10 Crores) in purchasing fast bowlers like Chris Morris, Tymal Mills, Mitchell Starc whereas they retained faith in their marquee batsmen like Chris Gayle, AB De Villiers, Virat Kohli for many seasons. KKR also have spent big bucks on *Pat Cummins (16.5 Crores)* and retained faith in their Indian batsmen in recent times.

The winner’s curse is not only a financial loss or an over expenditure for the bidding franchise but it can also take a toll on the potential performance of the player due to the burden of the money that he is receiving. Following are some prime examples of players, who were clearly over-bid and over-valued by the franchises and were paid hefty amounts of over 10 Crores for the season. *Richard Thaler’s* quote in ‘*The Making of Behavioural Economics*’ where he stated that “When many bidders compete for the same object, winner of the auction is often the bidder who most overvalues the object being sold” can justify the auction strategies by the franchises for these respective players.

These players were among the topmost and the costliest buys of their respective seasons and undoubtedly, almost all of the 8 franchises had put forth a bid for these players expecting them to yield healthy returns (score more runs/wickets/catches).

Contrarily though, the “winner’s curse” had a strong

bearing on these players' minds as the players failed all expectations and had mediocre returns with bat/ball. One may also compare the performances of the players before the IPL season and during the IPL season to understand the same.

Table 5. Buying blunders in IPL

Player	Year	Franchise	Selling Price (Final Bids)	Performance
Yuvraj Singh	2015	DC	16 Cr	Batting Average 19, Costing Rs 6.5 lakhs per run
Glenn Maxwell	2013	MI	10 Cr	Batting Average 12
Jaydev Unadkat	2018	RR	11.5 Cr	Bowling Economy 9.65
Chris Morris	2020	RR	16.25 Cr	8.5 batting average, 19.09 bowling average

Jaydev Unadkat, the leading wicket-taker of his franchise Rising Pune Supergiant in the 2017 season was the most expensive bowler for his franchise RR in the following season with an economy of 9.65. Similarly, Glenn Maxwell after his impressive six-hitting ability in the Big Bash League of Australia only scored a total of 36 runs in the 3 games that he played.

Player	Year	Wickets	Economy
Jaydev Unadkat	2017	24	7.02

Unadkat's impressive performance in 2017 IPL before 2018 Auction

Role of RTM Card in Auction Dynamics

Right to Match or RTM card during an IPL Auction allows the existing franchises to retain their existing players, who had played for them in the previous (latest) season. With the help of an RTM card, a team can just match the winning bid and purchase the player for that particular season.

What this implies is that the RTM Card to a great extent can avoid the winner's curse as the team with the RTM card doesn't need to place or raise a bid for the player to win it from its rivals and hence the rival bidders too can't exactly estimate the auction strategies and the reservation price that the team with the RTM card has making it difficult for rival bidders to strategize and raise the price for that player to let a winner's curse take place.

However, the utility of an RTM card is maximum when there are fewer, say only 1-2 franchises bidding for a particular player. The logic is that as the number of bidders grows, so does the number of bids, potentially

leading to a price war. Price wars have the potential to exceed a franchise's reservation price for a certain player, bringing the "winner's curse" back into play.

For the very same reason, franchises pre-retain (retaining before getting auction) their marquee players and use RTM only for those players whom they believe were costing them a hefty amount in the previous season or some star players/uncapped players whose bids are expected not to go very high.

Price Discrimination in IPL

Price discriminatory practices are not only observed in the corporate world and financial domains but also in the field of cricket. In International Cricket, a similar practice was observed in the 2019 World Cup where the price of certain fixtures (involving heavyweights like India) had a *330% premium* being charged compared to other games involving Tier II and Tier III teams (like matches involving Sri Lanka, Bangladesh) which weren't as attractive. The concept was followed up in IPL as well where many franchises having an extensive fan base or were located in the popular cities of India like the Chennai Super Kings and the Mumbai Indians took advantage of their popularity. People coming to watch the matches of CSK and MI were charged higher prices in comparison to games involving other franchises. It was kind of a resemblance of *third degree price discrimination*⁵ where different consumer groups (audiences) for different matches (like marquee matches) were charged different prices.

Additionally, prices of IPL tickets also changed on a daily basis depending upon the *match ups, timings of the game (afternoon/evening), weather conditions, day (holiday/working day), etc* although with certain constraints from BCCI. Keeping this and the profit making opportunities that come in front of BCCI with these price changes, BCCI also schedules some key fixtures at certain dates and timings to ensure greater media attention, larger public attendance and hence exercise price discriminatory practices like above to reap maximum profits.

Cultivation of Fan Base and Revenue Generation

Cultivating a fan base is extremely critical for increasing *television revenue, sponsorships, and merchandise sales*. The generation of a strong fan base doesn't necessarily correlate with a team's performances but the popularity of the franchise is generally governed by the history and the culture of the

city along with its association with the sport. B-Towns and capital cities like Delhi, Mumbai, Chennai, etc generally have an early advantage with a readymade fan base but the BCCI has always been trying to put its best foot forward in ensuring that all franchisees get equal representation in terms of media attraction. For the same, BCCI over the years has also hosted matches at neutral grounds like at Mohali, Visakhapatnam, etc. to ensure that different cities and different groups of people can associate themselves with the league.

The owners and marketing strategies used by different teams are another influential aspect in developing fan bases and revenue streams. Because of their celebrity status, the Kolkata Knight Riders and Punjab Kings, whose owners are Shah Rukh Khan and Preity Zinta, respectively, get a lot of media attention. The Mumbai Indians, who are owned by Mukesh Ambani, are projected to have very strong business and marketing tactics, as evidenced by the various commercials, promotions, and initiatives (*ESA-Education and Sports for All*) that MI has taken in comparison to other teams. Such promotions coupled with the B-Town status of Mumbai always meant that they were among the most followed franchises in the league.

BARRIERS TO ENTRY

The BCCI had undoubtedly created a *monopoly* in the field of private T-20 leagues in India. BCCI is not only a regulator of the IPL and domestic cricket matches in India but requires all private parties associated with organizing any form of cricket matches at a recognized level in India to get approval from the BCCI. However, the BCCI to date has given official recognition only to the Indian Premier League (IPL) whose organizer is the BCCI itself and had banned ICL (Indian Cricket League) in the past, only after a few years when it was launched in parallel with the IPL. Thus BCCI with its regulatory powers often misuses them to prevent other parties from hosting cricket or cricket-related events* in India. Adding to the same, BCCI has also put barriers regarding indulgence of foreign cricket boards and authorities with the Indian players. For instance, as per the rules of BCCI, a player with an Indian citizenship can only participate in tournaments which are recognized by BCCI, failing so, the player shall be terminated from representing India at any level in future. These barriers thus ensured that BCCI had control over organizational and profit-making ventures from the IPL as well as its fantasy players who would

for obvious reasons only participate in the IPL and not ply their trades for other bodies/leagues.

Underproduction due to monopoly status

BCCI and IPL's magnitude of dominance can be studied through some monopoly/cost curves. In a monopoly, the market demand curve and the monopoly firm's demand curve are the same since it is the only firm in the market. Consequently, a monopolist firm can sell more only by lowering its cost (the AR curve is downward sloping).

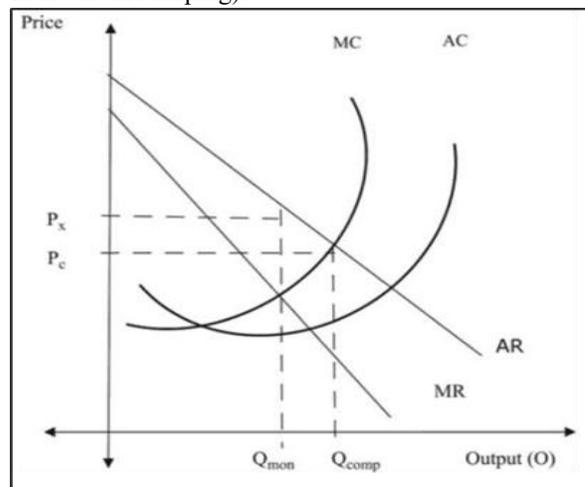


Figure I.

BCCI is a private cricket organizing body and hence at all occasions would look to maximize profits. To increase profits, BCCI would keep on increasing the output of cricket telecasts or cricket leagues till the point where marginal revenue derived from the broadcast is equal to marginal cost. The short-run equilibrium will be at a point where the MR curve cuts the MC curve from below. However, the thing to note here is that the *socially efficient equilibrium*⁶ (i.e., the point where the MC curve cuts the AR curve from below) occurs at the Price P_c and Output Q_{comp} but on the contrary, BCCI is producing at a higher price P_x and lower output Q_{mon} to earn excessive profits. In cricketing terms, there is underproduction of cricket telecasts and private T-20 leagues (apart from the IPL) due to BCCI's monopoly. That is why at a *lower output*⁷ (number) of cricket matches and league matches (all of which are profit-making sources for the BCCI), BCCI is charging higher prices due to its market dominance and to ensure maximum profits.

REFERENCE

- [1] *Economics and Law in India, Bimal et. Al*
- [2] *Auction of Players in Indian Premier League: The Strategic Perspective Sonali Bhattacharya; Shubhasheesh Bhattacharya*
- [3] *Pricing of Players in the Indian Premier League, U. Dinesh Kumar and Kshitiz Ranzan*
- [4] *Pricing of Cricketers: Two IPL Auctions, Ajit Karnik*

Foot note:

¹ *Star earlier only had Star Cricket as its cricket channel and several other channels like Neo Sports, Sony, etc used to exist parallely. However, Star has a far-fetched monopoly now with different channels like Star Sports 1, Star Sports 2, and Star Sports channels in different regional languages.*

³ *Players decide their base prices themselves but firstly they are divided into categories such as capped and uncapped players. Uncapped players are allowed to charge a base price of ₹ 10 lakh, ₹ 20 lakh, and ₹ 30 lakh with ₹ 10 lakh as a minimum.*

Capped players can have base prices of up to ₹ 2 crores.

⁴ *Different utility variables, like fielding, batting average, bowling average, strike rate, etc. can also be used if needed or required*

⁵ *Third Degree Price Discrimination: Price discrimination practice where consumers are divided into different groups and different prices are charged to each group.*

⁶ *Socially Efficient Equilibrium: Refers to a point where demand equals marginal cost. The point generally occurs at a lower output and higher price than the market equilibrium.*

⁷ *Earlier both Indian Premier League (IPL) and Indian Cricket League (ICL) used to exist parallely. BCCI's monopoly however ensured that ICL was banned and only the IPL was hosted in India. This meant that the BCCI had to host a fewer number cricket matches as well as generate more profits through IPL. (ICL wasn't a very profitable league for BCCI)*