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To push for stardom or not: A rookie's dilemma in the Tamil movie industry

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Abstract There is a trend today among successful rookies (SRs) in the Indian Tamil film industry to try to get on a fast track to stardom, running the risk of failure or being replaced with a new entrant. The study examines the rationale for this, and the options available to the actor and the producer. Using a Decision Theory oriented approach we develop and solve a model, and using the data collected in the field we assign values to the parameters in the model and derive the current equilibrium in the market. We also conduct a numerical analysis to see which factors most affect the decision. We find that the strategy may pay off for the SR when the probability of success is neither too high nor too low and when the producer invests in a film that pays attention to all its facets, and not just the lead role.

Introduction

The motion picture or movie industry is a key and perhaps the most vibrant component of the Indian economy. The number of movies produced annually in India is higher than that produced in Hollywood, USA. While Hollywood produces around 550 movies a year, the Indian movie industry produces more than 1000 movies ever year[1]. Around four million Indians 'go to movies' on any given day, and this number swells during festivals and holidays. Of the film producing cities in India, Mumbai (Bollywood) and Chennai (Kollywood) stand out in terms of their history, the availability of a large number of movie production houses, studios, actors, directors and other technical people. While Mumbai produces largely Hindi movies, Chennai produces Tamil and, to a smaller extent, Telugu movies. Our research focuses on the Tamil movie industry which on an average

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[1] Data and information given here and elsewhere in this manuscript are taken from the various trade journals and the interviews conducted by the authors with various industry experts, actors, directors and producers in the Tamil film industry. We interviewed some of the well known and highly knowledgeable personalities such as Mr. M. Saravanan, proprietor of the AVM Productions, Chennai, Mr. S.V. Sekar, a playwright and actor, Mr. Venkatprabu, a young and upcoming director, and Mr. Sangili Murugan, a producer and script-writer. We take this opportunity to thank all of them.

releases one Tamil movie every four days i.e. 90 movies in a year.

A movie is a multi-dimensional product and the success of a movie depends on several factors such as the story line, the script, the performance of the actors, the direction and music, and other technical aspects concerning light, sound and other hi-tech features including computer graphics. However, it seems an undisputable fact that in the Kollywood industry, the lead actor plays a major role in scripting the success of a movie.

Some of the lead actors, by starring in many successful movies over time, establish a larger-than-life image with the public, and get to become movie 'stars'. A few such stars were even able to use their movie image to become popular politicians and secure coveted positions in the government by winning elections. This goes to show the loyalty exhibited by fans towards their favorite actors, which in turn underscores the importance of an actor in a movie's success.

The high importance attached to the actors has one significant external impact. Many new faces come knocking on the doors of the industry in their aspiration to become actors, and although the success rate of a movie with a new face is relatively very low, producers are willing to give them a chance because they are inexpensive and readily available[2]. In fact, out of the total 90 movies produced in a year, 30 movies cast new faces. Given the high rate of movie production in Kollywood, one can always see a few 'rookies' or new faces scoring a successful hit on their debut. While this may often be attributed to luck, each successful rookie creates excitement in the industry because each is a potential future star. However, it is widely acknowledged that some of these successful rookies actually start believing that they are destined to be stars, and their resulting behaviour creates a new set of dynamics in the industry. Movie producers tend to view this disfavourably because stars are expensive. Let us explain this further.

It is important to note that *successful rookies* are different from actual stars. Stars are established actors who have acted in many successful movies in the past, and are characterised by two attributes: image and fan base. Image is the position the star has carefully crafted over the years (i.e. the type of role he plays in the movies, the type of dialogues he delivers, the type of songs he allows in his movie, the type of fights he engages in, etc.) and he rarely plays a role that could mar this positioning. The star's fan-base tends to support any movie starring this actor, ensuring some minimum of tickets sales for an average movie and huge returns for a successful movie[3]. Compared to an established star, a successful rookie lacks history, having come into acting recently, with the two or three hits, but without a concrete image or a sizeable fan base yet. The movie industry looks at the rookie cautiously but with interest. Although he could potentially become a star in future, he could also fail and become a non-entity in the movie world[4].

Why is studying the role of successful rookies interesting? The current state of the movie industry is different from the past. In the 1970s, 1980s and even in the early 1990s, rookies had to work hard for many years before gradually turning into stars. Today's successful rookies, however, want to run on a faster track and achieve star status quickly. For example, some of the successful rookies focus on proactively building fan bases and promoting themselves intensely through various media channels to project their image ahead of themselves. Some want the producers and directors to cast them in risky big-budget movies, use lead heroines, and use other tactics that would project them as stars[5]. They also start demanding large salaries, which poses a dilemma for the producers: Are these really potential stars trying to grab the future quickly, or lucky early-winners who might not last for long?

The successful rookie is in a dilemma too. He would like to move up to the next stage and become a star which would guarantee him a stable place in the industry. However, if his bid for stardom is premature and he fails in the attempt he might have to exit the movie industry altogether because of the ill-will created with the producers[6]. Staying the course may be an easier option but

[2] It takes roughly six months to a year to make a movie. Given the long time involved, the directors are usually very worried about the time commitment from the actors. An established actor may find it difficult to commit to long stretches of time for a movie shooting but a new face will have no such problems. This eases the movie making process for the director, and reduces the cost of the movie production significantly.

[3] To some degree, these fans are like die-hard consumers of Apple products who would not hesitate to buy any new product from Apple although some of these products might eventually fail in the market place. Said differently, these fan bases guarantee some minimum of ticket sales for the movies that cast their favourite actors even though the movie may fail eventually. If on the other hand the movie turns out to be good, these fans would indulge in repeat-buying and spread such a good word of mouth around that the movie would become a major hit, drawing huge sums of money for the producers.

[4] Some of Kollywood's successful rookies in the past 10 years include Jeeva, Simbu, Dhanush, Bharath, Arya, Vishal and Karthi.

[5] We are citing a website which mentions a particular actor rejecting a movie role because the director refused to employ the lead heroine. http://cinema.dinamalar.com/tamil-news/1710/cinema/Kollywood/Jeeva-in-Go-movie.htm. While this particular incident may not have anything to do with the behaviour we research in this paper, such incidents show that the recent successful rookies do take their careers seriously and try to shape them proactively.

[6] As mentioned elsewhere, when we met with some of the producers and directors including Mr. M. Saravanan of AVM Productions, Mr. Sangili Murugan (producer and script-writer), Mr. S.V. Sekar (actor and playwright), Mr. Venkat Prabhu (director) and Mr. Dhinesh (production manager and director), many of them, if not all, told us that the star-level treatment demanded by some of the successful rookies was a big problem for them to handle and so they look out for new faces all the time. Note however that not all of the successful rookies indulge in creating such ill-will. For reasons of confidentiality we cannot provide more particulars on this.

the revenues are low and the possibility of failure still exists. Further, there is the constant threat of new faces coming into the market place.

Producers on the other hand can choose between successful rookies and new faces. While opting for a successful rookie would increase the costs, settling for a new face, while keeping the costs low would increase the probability of failure. [7]

Our research question is as follows. Why do successful rookies try to get on a fast track to stardom? Why don't they stay the course for a few more years, prove themselves and let their history make them stars? What should a producer do in terms of hiring an actor for his movie given that there are successful rookies and new faces in the market? We use a decision model oriented approach to answer these questions. We use the data collected in the field to assign values to the various parameters in the model, and thereby derive the current equilibrium in the market. We also conduct a numerical analysis to see which factors most affect the decision.

The rest of the paper is organised as follows. In the next section we look at the extant literature to see if there are any research findings that have a bearing on our research. In Section 3 we develop the model, solve it and derive the key results using numerical analysis and find out what factors really drive successful rookies to behave like potential stars. In Section 4 we conclude the paper, giving directions for future research.

Literature survey

Serious research on the film industry can be said to have commenced in the marketing area in the 1990s. Over the past few years, the growing professionalism exhibited in the film industry has attracted many researchers to start looking at the strategies employed in this industry with an academic eye. Some of the topics that interest researchers are: finding the determinants of a successful film, evaluation of a 'right' production budget, and understanding the impact of award nominations, reviewers' ratings and word of mouth on the box-office collections (Brewer, Kelley, & Jozefowicz, 2009). Smith and Smith (1986) conducted an early study on the film industry to identify the determinants of a successful film. Numerous studies followed to further explore the determinants of a successful film, impact of different variables on the success of films, consumer adoption pattern of a new film, and impact of initial booking on the financial success of films (De Vany & Walls, 1997; Prag & Casavant, 1994; Sawhney & Eliashberg, 1996). Ravid (1999) analysed film revenues with respect to the various production costs involved but could not draw any major conclusion. However, De Vany and Walls (1996) conclude that a movie is so highly complex a product that it would be difficult to determine whether it would be a hit or a miss. In other words, one can say that in spite of the considerable research in the extant literature a lot of uncertainty rides on a movie's success.

However, one factor that does appear to have an impact on the success of a movie is the lead actor. A study conducted by Bagella and Becchetti (1999) concluded that the popularity of established actors significantly increased the chance of success of a film. This has a direct bearing on our research because this is true of the Tamil movie industry too, as we will show later. Eliashberg, Elberse, and Leenders (2005) studied the effect of employing established actors and stars on the financing of movies and found that stars enable easier financing of movies. In another study, it was found that the lack of appeal of the lead actors and critics' reviews would lead to performance risk which in turn would lead to financial risk (Desai, Leob, & Veblen, 2002). While analysing the economics of movie making, Vogel (1990) finds that producers tend to control cost of production and reduce their risk exposure because of the high failure probability in the movies. Taken in our research context, one could say that employing a new face is one way producers would attempt to reduce the cost of production.

In sum, the extant literature indicates that the success of a movie is still highly unpredictable but employing an established actor will enhance the probability of success, while at the same time producers are always on the look out to reduce their cost of production. Although much of this research pertains to Western movie productions, the results very well apply to the Tamil movie industry which is the focus of our research. In our study, we use these findings and ask a question that is very relevant to the Tamil movie industry. We ask why a successful rookie would try to push himself to become a star (thus incurring a huge investment risk for the producer) and how a producer would act strategically given that he has the choice of hiring an inexpensive new face in place of the recently successful but ambitious rookie. We study the resulting interaction between the two players in a stylised decision model framework.

Model for studying interaction between producer and rookie

There are two players acting strategically in our model. These are the producer of a movie (PR) who is ready to invest in a new movie, and the successful rookie (SR). We will first describe the strategies of the SR and then take up the PR for analysis.

Strategies of the successful rookie

The evolution process and the decision nodes of the strategies of a successful rookie are depicted in Figure 1. The SR has to decide if he wants to move himself up to star status immediately or wait for a period and prove himself once again and then try to move up in the second period. Thus, there are potentially two stages or periods. It is important

[7] Normally it costs around a few tens of crores of rupees for a big budget movie. The movies made with established actors are big budget not only because of the high salaries paid to the lead actors but also due to the extravagant ways they are designed in to accommodate the image of the stars. With a new face, the movie would be relatively inexpensive to make (Rs 0.5—1 crore i.e. 5 million to 10 million.) This information was gleaned from our discussion with some of the producers, and various reports published in the Tamil cine journals.

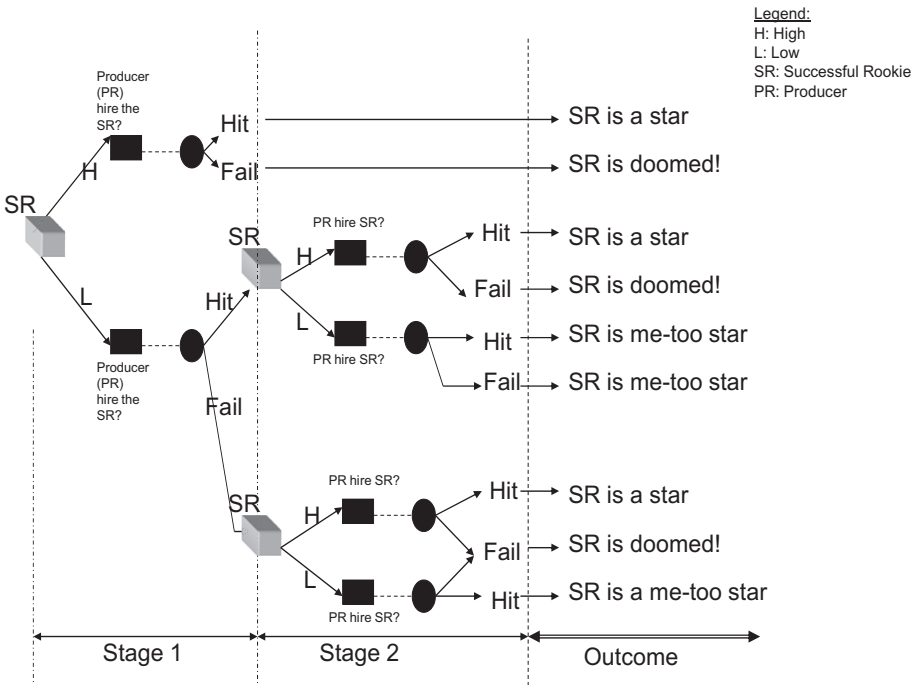

Figure 1 Strategies of the successful rookie: evolution process and decision nodes.

to note that each stage represents not just a year but a time span where the SR activates his specific strategy. At each stage, the SR has two options. In the first option, he can treat himself as a star and demand a high salary and ask the PR to make the movie to suit his aspiration. This typically means that the PR makes a high budget movie that projects the SR as a star. But the PR may not sign the SR for his movie because of the high cost involved and may go for a new face. In the second option, the SR can ask the PR to treat him as just a successful rookie, settle for a lower salary and let the producer decide on the movie project. Let us call these High and Low options.

There are three possible destinations for the SR at the end of this evolution process in his career. They are: becoming a star, becoming a me-too star and resulting in a total failure. The two stages we have assumed will determine his final destiny. Our discussions with movie producers and actors pointed to certain characteristics that define this evolution process. We use them to build our model. The three characteristics that we learnt about are:

(1) If the SR takes the High strategy at any of the two stages and scores a box-office hit he would become a star.
(2) If the SR takes the High strategy at any stage but fails to score a box-office hit, or if he takes the Low strategy in both the stages and fails in both the stages, he is deemed to be a total failure.
(3) In other cases, he would become a me-too star.

There are several points to note here. First, these characteristics are born out of the invaluable experience of the producers and actors, and hence are expected to hold in general although there could be exceptions. Second, looking at Figure 1 we see that out of the total nine possible outcomes of this two-stage process, three point to 'star', three point to 'me-too star' and three to 'total failure'. Although it looks like all three destinations are equally likely, this is not really so because the probabilities associated with each outcome are vastly different. For example, the probabilities associated with the 'star' outcome are very low. A third implication of the assumed evolution process is that an SR can never become a star unless he projects himself as one at some stage. The rationale is quite simple. Star status is obtained only if an actor achieves a clear, consistent and unique image in the public space, which cannot be achieved unless the actor takes a stand and announces it openly and with confidence to the market[8]. For example, Vijay, an actor who recently acquired star status, projected himself as 'a star who would act only in action-oriented movies', seeking only *masala* movies in the Tamil movie industry, i.e. those with a certain standard of music and dance sequences, 'thrills', engrossing fight scenes, a certain level of romance and a story to stitch all these together. It was only with this declaration of intent, we were told, that the producers were ready to invest in mega-budget movies starring him in the lead role. That image made Vijay a star. In contrast, Dhanush, a recent SR, has not been able to clearly define a position or find a unique and consistent image so far in spite of achieving three box-office hits with his first three movies.

Two stages of the successful Rookie's evolution process

We will now explain the two stages and the evolution process of a successful rookie's journey in detail.

[8] This is akin to any new product introduced in a consumer market.

Stage 1: If the SR chooses the High strategy, there will be a lower probability of the PR using him instead of a new face. If the PR does enrol the SR and if the movie is a box-office hit then the SR will be a star. The evolution process ends here. But if the movie fails in the box-office, the PR is less likely to consider him in the near future because he would have lost money and faith in the SR. So, the SR is doomed. The process ends here. Thus, if the SR chooses the High strategy, regardless of the outcome of the movie performance the process will end in stage 1 itself. There will be no stage 2.

If on the other hand the SR chooses the Low strategy, there will be a higher probability of his getting enrolled by the PR. If the SR is signed up, and if the movie is a box-office hit then the SR will have a higher probability of getting signed up in stage 2 also by the PR. He will not however become a star because the movie was not projecting him as a star to begin with, but the chances of becoming a star in the next stage increases. If on the other hand the movie fails in the box-office in stage 1, the PR may still be willing to give the SR another chance in the second stage because his monetary losses through the SR in stage 1 were not considerable, and more importantly, he knows that the failure of the movie cannot be attributed to the SR alone. Thus, with a Low strategy option in stage 1, the SR is destined to move on to stage 2.

Stage 2: (Note that stage 2 sets in if only if the SR had taken the Low strategy in stage 1.) If the movie had been a box-office hit in stage 1, then the SR once again faces two options: go for High strategy or stick to the Low strategy. With the High strategy, the probability of the PR signing the SR is higher than in stage 1 because the SR's movie has been a success in stage 1. A box-office hit in a stage 2 movie would propel the SR to become a star. If the movie is not a box-office hit, it would doom the SR to total failure.

If the movie had been a box-office hit in stage 1, and if in stage 2 also the SR chooses the Low strategy, then the probability of being hired by the PR gets to be much higher. In this case, given his success in the first stage, regardless of the result of the movie in stage 2 the SR would become a me-too star, whose status is lower than that of a star but not a total failure.

If the movie had been a failure in stage 1, the SR once again faces two options: go for High strategy or stick to the Low strategy. With the High strategy, the probability is much lower than in stage 1 for the PR to sign him because of the failure of the movie in stage 1. However, a box-office hit in stage 2 would propel the SR towards stardom. If the movie is not a box-office hit, it would doom the SR to total failure.

If the movie in stage 1 had been a failure, and in stage 2 also the SR chooses the Low strategy, then the probability of being hired by the PR is still positive but somewhat lower than in stage 1. If the ensuing movie becomes a box-office hit then the SR is a me-too star. If, however, the movie fails to become a box-office hit, it would doom the SR to total failure.

Strategies of the producer

At each stage, the PR will simultaneously make a decision on whether or not to hire the SR given the SR's strategy. The PR has two options at any stage. He can hire the SR or go for a new face. His choice will depend on the probability of success with either, the returns expected and how he updates these probabilities in stage 2 based on what happened in stage 1. We develop the PR's and the SR's strategies and the associated profits in the following section.

Strategies and associated profits (payoff)

Let us first take the PR and see with what probability he would hire the SR at either stage. Note that the PR has to choose between the SR and a new face[9]. In deciding between the SR and a new face, it is assumed that the PR follows the principle that is captured in the Hotelling's location model (Hotelling, 1929). In this location model, there are two competing firms located on two ends of a market street trying to attract the customers who are uniformly situated along that street. For our case, we have a similar situation. We have the producer as the customer, and the SR and the new face as the two competitors trying to appeal to the PR's movie. We assume a unit length [0, 1] as the market street, with the SR positioned at 0 and the new face at 1. We can say that the unit distance between the SR and the new face represents all other market factors that go into the PR's movie. These include the genre of the story (investigative, romance, action, etc.), music (will it be a musical?), lead heroine, fight sequence, etc. Suppose the PR has decided to make a movie that is a certain combination of all the other factors and that the only missing factor is the actor. We further assume that this particular movie can best be done if the PR can get an actor whose profile suits neither the SR nor the new face but someone in between the two. Let that 'ideal' actor for this movie be at a distance x from the SR on this unit dimension. Said otherwise, this point represents the actor that the PR will be thinking about for the movie he has in his mind. However, he has to choose either the SR who is at a distance of x units away from his ideal actor or the new face who is at a distance of 1-x from this ideal actor. Either way he incurs some misalignment cost, which we will explain later in more detail.

If the SR wants to choose the High strategy, we assume the following for the PR:

Cost to hire the SR at High strategy $= H$
Cost to make the movie that hires at $H = C_H$
Probability that the movie would be a box-office hit $= P_r$
Revenue from the movie $= R$ if it is a box-office hit,
$= 0$ otherwise.

Without loss of generality we assume that with a new face the PR will incur the following:

Cost to hire a new face $= 0$
Cost to make the movie that hires a new face $= C_b$

[9] Although other actors including reigning stars and other SRs are available we assume that the PR looks into only the focal SR and a new face. Later we will see how relaxing this assumption would affect the results.

Probability that the movie would be a box-office hit $= P_b$
Revenue from the movie $= R_b$ if it is a box-office hit,
$= 0$ otherwise.

Consider the point x from the 0 end. At this point:

Profits to PR by hiring the SR (who is a High) $= P_r R - [H + C_H] - 2xt$,
Profits to PR by hiring the new face $= P_b R_b - C_b - 2(1 - x)t$,

Where t is the cost of misalignment of a movie with respect to the actors at the end of the line. As mentioned earlier, the ideal actor needed is at distance x from the SR. By choosing the given SR instead, the PR is introducing a misalignment. He has to incur some cost to remove this misalignment and this cost is represented by '$2tx$' in our model. This is also called travelling cost in the economics literature. We typically make the cost to be '$2tx$' instead of 'tx' to indicate that the PR 'travels' from the ideal point to the SR *and* comes back to the ideal point to make the movie. However, it does not really matter whether the cost is modeled as 'tx' or '$2tx$'. If the PR chooses the new face instead, this alignment cost would be '$2t\ (1 - x)$'. It is important to appreciate the fact that a higher value for t implies that the PR is very particular about addressing this misalignment i.e. he is relatively less worried about what the SR costs. This in turn implies when t is high the High/Low strategies of the SR would have less impact on the PR's evaluation of the probability of hiring him than if t is of a smaller value. For the time being we will keep this as simply t.

Based on these two equations we can show that there exists a point $x1$ where the PR's profits are the same either way. Let $x1|$ High be the probability that the PR would hire the SR who chooses the High strategy, and this is given by:

$$x1|High = \frac{1}{2} + \frac{1}{4t}[(P_r R - P_b R_b) - (H + C_H - C_b)] \quad (1)$$

note that P_b is less than P_r because these are actually the 'expected' probabilities as seen by the PR, which we assume to be common knowledge (see also our discussion in Section 2). Similarly, it is commonly believed that R_b is less than R because the SR will have a wider market reach than a new face, but C_H is greater than C_b.

It is easy to derive the corresponding probability if the SR chooses to be L.

$$x1|Low = \frac{1}{2} + \frac{1}{4t}[(P_r R - P_b R_b) - (L + C_L - C_b)] \quad (2)$$

where,

Cost to hire the SR at Low strategy $= L$
Cost to make the movie that hires $L = C_L$
Probability that the movie would be a box-office hit $= P_r$
Revenue from the movie $= R$ if it is a box-office hit,
$= 0$ otherwise.

Note that $L < H$ and $C_L < C_H$ by construction. It is interesting to note that P_r and R are the same in expressions 1 and 2, i.e. regardless of how the movie is made and whether the SR is being projected as a star or an SR, the probability of success and returns from the movie are assumed to be the same. This is in line with industry wisdom: since the SR has no established image or fan base yet, the success of the movie would depend on how the audience like the film, and this would be independent of the type of SR. However, if the movie becomes a box-office hit, the image projected in the movie for the SR would propel him to stardom. So, the movie success is the cause here and is assumed to be exogenous to how the SR is treated or the movie is made to accommodate the expected image of the SR. This assumption leads to the following expression:

$$x1|High = x1|Low - \frac{1}{4t}[(H + C_H) - (L + C_L)] \quad (3)$$

Thus, the SR will always find himself to be more easily acceptable to the PR if he adopts a Low strategy as against adopting the High strategy. Note that as t increases the probability of hiring the SR who chooses the High strategy also increases. This is because, as mentioned earlier, when t is of larger value the importance paid to the actor's costs goes down.

For stage 1, expressions 1 and 2 give the probability that the SR will be hired by the PR. As explained earlier, if in stage 1 the SR adopts the High strategy there is no stage 2. We therefore focus on the SR adopting the Low strategy in stage 1. If the movie thus produced in stage 1 is a box-office hit, then the PR would like to place a higher probability on the SR in stage 2 because he has learnt something more concrete about the SR's capability as a potential future star. We capture this by the following expressions:

$$x2S1|High = \frac{1}{2} + \frac{1}{4t}[(\{P_r + \epsilon(1 - P_r)\}R - P_b R_b) - (H + C_H - C_b)] \quad (4)$$

$$x2S1|Low = \frac{1}{2} + \frac{1}{4t}[(\{P_r + \epsilon(1 - p_r)\}R - P_b R_b) - (L + C_L - C_b)] \quad (5)$$

where x2S1|High and x2S1|Low are the probabilities that the PR would hire the SR in stage 2 when the SR had given a box-office hit in stage 1. Here, ϵ is the learning parameter which takes the value between 0 and 1. Suppose, in stage 1, the movie was a failure. Then, the PR would modify the probabilities as follows to evaluate the probabilities of hiring the SR in stage 2:

$$x2F1|High = \frac{1}{2} + \frac{1}{4t}[(P_r(1 - \epsilon)R - P_b R_b) - (H + C_H - C_b)] \quad (6)$$

$$x2F1|Low = \frac{1}{2} + \frac{1}{4t}[(P_r(1 - \epsilon)R - P_b R_b) - (L + C_L - C_b)] \quad (7)$$

where x2F1|High and x2F1|Low are the probabilities that the PR would hire the SR in stage 2 when the SR's movie failed in stage 1.

Having developed the strategies of the PR, we turn our attention to the SR.

Let Π(High1) and Π(Low1) represent respectively the total profits accruing to the SR from adopting High strategy in stage 1 and Low strategy in stage 1.

$$\Pi(High1) = (x1|High)[H + P_r \Pi_s], \quad (8)$$

where $x1|High$ is the probability that the SR will be hired by the PR in stage 1 (given by expression 1), H is the fees charged by the SR, P_r is the probability that the movie is going to be a box-office hit and Π_s is the total discounted profits the SR will be acquiring as a star in future. Suppose the SR chooses Low strategy in stage 1. Then, total profits to him are:

$$\Pi(Low1) = (x1|Low)[L + P_r E(SR2|Suc1) + (1 - P_r)E(SR2|Fail1)], \quad (9)$$

where $x1|Low$ is the probability that the SR will be hired by the PR in stage 1 (given by expression 2), L is the fees charged by the SR for the movie in stage 1, P_r is the probability that the movie will be a box-office hit, E(SR2|Suc1) is the expected profits to the SR in stage 2 following the successful movie release in stage 1, $(1 - P_r)$ is the probability that the movie in stage 1 will be a failure at the box-office, E(SR2|Fail1) is the expected profits to the SR in stage 2 following the poor outcome of his movie in stage 1. Here we use the expected operator to indicate the options to choose from in stage 2.

Let us focus on stage 2 now. Suppose the SR has a box-office hit in stage 1. Then, he has two options in stage 2: High and Low, and the probability of getting hired (i.e. over a new face) by the PR is higher in either strategy because of the success in the previous stage. The SR will choose the strategy that will get him the better returns. Let Π(High2|Suc1) and Π(Low2|Suc1) denote the profits to SR in stage 2 in choosing the High and Low strategy respectively, given that he had a box-office hit in stage 1. These are given by:

$$\Pi(High2|Suc1) = (x2S1|High)[H + P_r \Pi_s] \quad (10)$$

where $x2S1|High$ is the probability that SR will be hired by PR in stage 2 if SR had given a box-office hit in Stage 1 and wants to be projected as a star in this stage (given by expression 4), H is the fees charged by the SR in stage 2, P_r is the probability the movie in stage 2 will be a box-office hit, and Π_s is the total discounted profits the SR will be acquiring as a star in future. Similar to expression 10, we produce the profits to the SR if he chooses Low strategy.

$$\Pi(Low2|Suc1) = (x2S1|Low)[L + \alpha \Pi_s] \quad (11)$$

where $x2S1|Low$ is the probability that the PR will hire the SR if the movie in stage 1 was a box-office hit and does not want to be projected as a star in stage 2 also (given by expression 5), L is the fees charged for the movie in stage 2, $\alpha\Pi_s$ is the total discounted profits the SR will be acquiring as a me-too star in future. Note that whatever happens to the movie in this situation, the SR will turn out to be a me-too star. This status enables the SR to earn in the long future a fraction of the earnings earned by a star, and this fraction is given by α, where $0 < \alpha < 1$. Going by the industry, α is roughly 30—80%. We can now state the expected returns to the SR in stage 2 following his box-office hit in stage 1.

$$E(SR2|Suc1) = \max\{\Pi(High2|Suc1),\ \Pi(Low2|Suc1)\} \quad (12)$$

Suppose the SR has a failed movie in stage 1. Then, he has two options in stage 2: High and Low, and the probability of getting hired (i.e. over a new face) by the PR is lower in either strategy because of the failure in the previous stage. The SR will choose the one that will get him the better returns. Let Π(High2|Fail1) and Π(Low2|Fail1) denote the profits to the SR in stage 2 in choosing the High and Low strategy respectively, given that he had a failed movie in stage 1. These are given by:

$$\Pi(High2|Fail1) = (x2F1|High)[H + P_r \Pi_s] \quad (13)$$

where $x2F1|High$ is the probability that the SR will be hired by the PR in stage 2 if the SR's movie had failed in stage 1 (given by expression 6), H is the fees charged by the SR in stage 2, P_r is the probability the movie will be a box-office hit in stage 2, and Π_s is the total discounted profits the SR will be acquiring as a star in future. Similarly, we produce the profits to the SR if he chooses Low strategy.

$$\Pi(Low2|Fail1) = (x2F1|Low)[L + P_r \alpha \Pi_s] \quad (14)$$

where $x2F1|Low$ is the probability that the PR will hire the SR if his movie in the previous stage had failed (given by expression 7), L is the fees charged for the movie in stage 2, P_r is the probability that the movie will be a box-office hit, and $\alpha\Pi_s$ is the total discounted profits the SR will be acquiring as a me-too star in future. Note that only if the movie is a box-office hit, will the SR turn out to be a me-too star; otherwise, he will be doomed to be a total failure. As mentioned earlier, the me-too star status enables the SR earn in the long future a fraction of the earnings earned by a star, and this fraction is given by α, where $0 < \alpha < 1$. Going by the industry, α is roughly 30—80%. We can now state the expected returns to the SR in stage 2 following his failed movie in stage 1.

$$E(SR2|Fail1) = \max\{\Pi(High2|Fail1),\ \Pi(Low2|Fail1)\} \quad (15)$$

Outcome of the process: a numerical analysis

The focus of this research paper is to find out what the SR would do: project himself as a star or stay the course of the SR status and try to move up to star status in the next stage after proving himself again. This involves comparing expressions 8 and 9 and then concluding whether the SR would act as a star (i.e. choose High strategy) or stay the course (i.e. choose the Low strategy). However, the profit functions and the other functions they in turn depend on are really complicated expressions with many industry parameters built in, and hence an analytical solution is very difficult, if not impossible, to get. Hence, we resort to numerical analysis and focus on those parameters that are of high interest to the industry.

We have the following parameters in the model:

Cost to hire the SR = H (High strategy), L (Low strategy)
Cost to make the movie = C_H (if the SR asks for High strategy), C_L (if the SR chooses Low strategy)
Probability that the SR's movie would be a box-office hit = P_r

Revenue from the movie = R if it is a box-office hit, 0 otherwise.
Cost to hire a new face = 0, Cost to make the movie that hires new face = C_b
Probability that the movie with a new face would be a box-office hit = P_b
Revenue from the movie with a new face = R_b if it is a box-office hit, 0 otherwise.
ϵ = learning parameter which updates the PR's probability of box-office hit of a movie with the SR.
t equals; cost of misalignment (explained earlier).
Π_s = discounted total future profits to the SR if he becomes a star.
α Π_s = discounted total future profits to the SR if he becomes a me-too star, where $0 < \alpha < 1$.

Of the numerous parameters, P_r, ϵ, H, α and t play a primary role, while the rest of the parameters can be thought of playing a secondary or reference role. For example, H and C_H can be clubbed together, and so there is no need to consider C_H separately. Since it is the difference between H and L that matters in evaluating the difference between the various probabilities in expression 1 through 6, we can keep L fixed and do what-if analysis on H alone. Following this, since L and C_L can be clubbed together, we do not need to analyse C_L separately. Similarly, it is the difference between Π_s and $\alpha\Pi_s$ that matters, and hence we need to focus only on α for the analysis. The returns to the PR, i.e. R and R_b, are actually scale parameters and do not affect the qualitative nature of the outcomes. Also, given the focus on P_r the role of P_b is reduced to a reference point. Hence, we focus on five parameters, namely, t, ϵ, P_r, H, α for our numerical analysis.

Based on the numerous discussions we had with producers, actors, and other important people in the industry, we assigned values to the parameters (Table 1). For example, in the industry, stars actually charge anywhere between five and 30 times the salary of an SR. We have L at 0.1 and test for various H, ranging from 0.5 to 4, which converts to a multiple of 5—40. Similarly, the probability of success of a movie with an SR and that with a new face were derived from the actual data we collected[10].

The parameters whose values are given as a range (i.e. t, ϵ, P_r, H, α) are the parameters to be used as what-if variables in the analysis.

We now discuss the results of our numerical analysis. Our objective is to find out if the SR would adopt a star-like position in stage 1 or not. In other words, we want to find out under what conditions he would choose to adopt High strategy in stage 1. Tables 2—4 present the results. In these tables, we use the terms 'High' to mean that the SR is adopting the High strategy in stage 1, and 'Low' to mean that the SR is adopting the Low strategy in stage 1.

Result 1: impact of P_r and H

We kept $t = 1$, $\epsilon = 0.1$, $\alpha = 0.8$ (rather a high fraction) and evaluated what the SR would do in stage 1 under different combinations of P_r and H. Since P_r is bounded and H has a natural limit (because L was kept at 0.1) we believe we cover a very wide range of the combinations. Note that each cell represents an industry scenario. Since we do not know the exact situation in the Tamil movie industry, we test over a wide range of possible scenarios. Also, although we covered more combinations in the actual analysis, in the interests of space we are providing only a few here. However, the results we could infer from these combinations are applicable to all the combinations.

Consider the row pertaining to $P_r = 0.20$ and the column pertaining to $H = 1.2$. If the industry practice is such that a star charges a fee of 1.20 (i.e. roughly 12 times that of a regular SR) and the probability of the SR-cast movie making a box-office hit is 0.20, then armed with this knowledge and the PR's probability evaluation of hiring him under different strategies, the SR would find it profitable to act like a star in stage 1 i.e. adopt a High strategy. Consider the same row but the column $H = 1.4$. Under this industry scenario, the SR would find it profitable to play the Low strategy i.e. by accepting a salary of L and asking the PR to project him as a regular rookie. His reason for doing this is that if H is high, the probability that the PR would move away from hiring him and go instead for a new face increases dramatically. When H is relatively smaller (i.e. up to 1.3) the prospects of star status are more attractive and the SR goes for the High strategy in stage 1.

Exactly at what point of H the SR would decide to resist the temptation to be treated like a star and ask to be treated like a normal rookie depends on the probability of his movie becoming a box-office hit. Recall that if it turns out to be a failure the SR would be doomed. For example, looking at the two rows pertaining to $P_r = 0.1$ and $P_r = 0.15$ and the column pertaining to $H = 1.3$ we see that if the P_r is low the SR would ask to be treated like a normal rookie. If the probability is low the SR is aware that the audience is less likely to make his movie a box-office hit and hence he would not risk asking for star treatment. However, looking at the two rows pertaining to $P_r = 0.50$ and $P_r = 0.55$ and the column pertaining to $H = 1.3$ we see that the *higher* probability of success is actually making the SR adopt the

Table 1 Values assigned to the parameters of the numerical analysis.

t	0.5—1.5
ϵ	0.1, 0.3
P_r	0.1—0.8
P_b	0.1
Returns to PR hiring SR: R	4
Returns with a new face: R_b	3
High strategy SR cost: H	0.5—4
Low strategy SR cost: L	0.1
Cost of movie with SR = H: C_H	1.2
Cost of movie with SR = L: C_L	1.2
Cost of movie with a new face: Cb	0.8
Cost of a new face	0
Π_S (total future returns for a star)	20
α	0.3, 0.8

[10] This is explained in detail in a later section.

Table 2 SR choosing high or low: Impact of combinations of P_r (probability that the SR's movie would be a hit) and H (Cost of hiring SR with high strategy) under $\{t = 1; \epsilon = 0.1; \alpha = 0.8\}$ setting.

P_r	$H = 0.5$—1.1	$H = 1.2$	$H = 1.3$	$H = 1.4$	$H = 1.5$
0.1	High	High	Low	Low	Low
0.15	High	High	High	Low	Low
0.2	High	High	High	Low	Low
0.25	High	High	High	High	Low
0.3	High	High	High	High	Low
0.35	High	High	High	High	Low
0.4	High	High	High	High	Low
0.45	High	High	High	High	Low
0.5	High	High	High	Low	Low
0.55	High	High	Low	Low	Low
0.6	High	Low	Low	Low	Low

Low strategy of asking to be treated like a normal rookie. The rationale behind this would be as follows: If he chooses the Low strategy in stage 1, he is very likely to get a box-office hit which would push up the chances of the PR hiring him in stage 2. This would make the overall probability of the second stage box-office hit much higher; moreover, even if the second stage results in an unsuccessful movie, the SR has some chance of making it to the me-too star status. Given that $\alpha = 0.8$ the me-too star status is not unsatisfactory. However, α needs to be sufficiently high. We will discuss the case of low α later.

Thus we find that if α is not low, the parameter P_r is a double-edged sword. If P_r is too low, it discourages the SR from taking the High strategy in stage 1 because of the poor chances of making it; if too high, it encourages the SR to move on to stage 2 by adopting the Low strategy in stage 1 and thus enhances his overall expected returns in stage 2 much higher than opting for High in stage 1. Extending this result one can argue that only when the probability of his movie being a box-office hit is in the mid-range will we find the SR adopting the High strategy in stage 1. In other words, neither a poorly performing SR nor a very strongly performing SR would rush in to move up to star status. It is those SRs in the 'grey area' who would try to act like stars too early in their careers.

Result 2: impact of t and P_r

Recall that a high value of t implies that the PR would spend a lot of money in aligning the actor to suit his ideal movie, and hence the importance of the SR's salary (H or L) and the probability of success (P_r) get reduced in his evaluation of whether to hire the SR or not. We will see the impact of this t on the SR's strategic decision in stage 1. The results are seen in Table 2 ($t = 1$) and Table 3 ($t = 1.5$).

Consider the columns pertaining to $H = 1.5$ in Table 2 and $H = 0.6$—1.6 in Table 3. Both columns pertain to $H = 1.5$. Consider all the rows pertaining to 0.1 through 0.6. Table 2 shows that the SR would choose Low strategy in stage 1 while Table 3 shows that the SR would choose High strategy in stage 1. The only difference between the two tables in the value assigned to parameter t. In Table 2 $t = 1$ while in Table 3 $t = 1.5$. What does this imply? With a higher value for t, the PR pays less importance to the SR's salary in hiring him and hence the SR would automatically push up his cost i.e. would project himself to be a star. This is an important result because it implies that the SR would be more likely to project himself as a star if the PR is investing in a movie that pays a lot of attention to all the attributes of the movie and not just to the cost of the actor. Note that the probability of success of the movie still remains the same but the producers put more focus on all the dimensions of the movie and are going for the 'right' actor for the movie.

Result 3: impact of α and P_r

In Tables 2 and 3, used to describe the first two results, we had assumed rather a high value for α (0.80).If we assume

Table 3 SR choosing high or low: Impact of combinations of P_r (probability that the SR's movie would be a hit) and H (Cost of hiring SR with high strategy) under $\{t = 1.5; \epsilon = .1; \alpha = 0.8\}$ setting.

P_r	$H = 0.5$—1.0	$H = 0.6$—1.6	$H = 1.7$—1.8	$H = 1.9$	$H = 2.0$	$H = 2.1$	$H = 2.2$
0.1	High	High	High	High	Low	Low	Low
0.15	High	High	High	High	Low	Low	Low
0.2	High	High	High	High	High	Low	Low
0.25	High	High	High	High	High	High	Low
0.3	High	High	High	High	High	High	Low
0.35	High	High	High	High	High	High	Low
0.4	High	High	High	High	High	High	Low
0.45	High	High	High	High	High	High	Low
0.5	High	High	High	High	High	High	Low
0.55	High	High	High	High	High	Low	Low
0.6	High	High	High	High	High	Low	Low
0.65	High	High	High	High	Low	Low	Low
0.7	High	High	High	Low	Low	Low	Low
0.75	High	High	Low	Low	Low	Low	Low
0.8	High	Low	Low	Low	Low	Low	Low
0.85	Low	Low	Low	Low	Low	Low	Low

Table 4 SR choosing high or low: Impact of combinations of P_r (probability that the SR's movie would be a hit) and H (Cost of hiring SR with high strategy) under $\{t = 1; \epsilon = 0.1; \alpha = 0.30\}$ setting.

P_r	$H = 0.5$—1.5	$H = 1.6$	$H = 1.7, 1.8$	$H = 1.9$	$H = 2.0$	$H = 2.1$	$H = 2.2$	$H = 2.3$	$H = 2.4$	$H = 2.6$
0.1	High	Low								
0.15	High	High	Low							
0.2	High	High	High	Low	Low					
0.25	High	High	High	High	Low	Low	Low			
0.3	High	High	High	High	High	High	Low	Low		
0.35	High	High	High	High	High	High	High	Low	Low	
0.4	High	High	High	High	High	High	High	High	Low	Low
0.45	High	High	High	High	High	High	High	High	High	Low
0.5	High	High	High	High	High	High	High	High	High	Low
0.55	High	High	High	High	High	High	High	High	High	Low
0.6	High	High	Low	Low	Low	Low	Low	Low	Low	Low

a low value for α, say 0.3, the results can be seen in Table 4.

Comparing Table 2 ($\alpha = 0.80$) and 4 ($\alpha = 0.30$) and considering therein columns pertaining to $H = 1.5$ we see that across all the values of P_r, the SR in the scenario of $\alpha = 0.80$ chooses to act as a rookie in stage 1, while in the scenario of $\alpha = 0.30$ he chooses to act as a star in stage 1. A low α means that if the SR becomes a me-too star instead of a star he would get only 30% of what a star would totally get in the future. In this industry scenario where the me-too star status is not bright, the strategy of moving to stage 2 is not as lucrative as it is in the industry scenario that has $\alpha = 0.8$. This will encourage the SR to choose High strategy if everything else remains the same across the two scenarios. This result complements results 1 and 2. For example, result 3 implies that result 1 will hold only if α is sufficiently high. How high that should be depends on the values the other parameters take in a specific situation.

Result 4: impact of ϵ

The parameter ϵ tells how the market updates the probability of success of the SR's movie in stage 2 using the result in stage 1. This is important only if the SR chooses the Low strategy in stage 1. The updating is done in both cases: if the movie at stage 1 is a box-office hit the probability of another box-office hit in stage 2 is $P_r(1 + \epsilon)$ while if it is a failure in stage 1 the probability of it being a box-office hit in stage 2 is $P_r(1 - \epsilon)$. So, the net effect of the updating parameter, as seen strategically by the SR, is not going to be significant. Our numerical analysis also showed that there is no significant change in the SR's decision in stage 1 when we changed the updating parameter from 0.1 to 0.3.

Having discussed four key results, we now consider the situation in the Tamil movie industry. Does it point to a condition that encourages the SR to project himself as a star before he actually becomes one?

Actual market conditions

Let us focus on the probability of a movie becoming a box-office hit with a new face (i.e. P_b) and that with the SR (i.e. P_r). We collected data on the Tamil movies released in the period 1981—2003 and analysed the success rate with new faces and established faces respectively. Out of the approximately 2100 movies released we could gather information on around 1660 movies. There were 256 new faces introduced in the industry in the period 1981—2003, which makes it roughly 14 new faces per year. Of the 1660 movies, 216 movies had failed new faces. These two facts imply that the success rate of a movie with a new face is 40/256 = which is 15.6% (Anandan, 2005). Our discussions with the producers and directors revealed that the probability figure would be much lower if we were to get information on all the movies released in the 1981—2003 period. Based on this, we estimated P_b around 0.10; this is what we used in all of our numerical analyses, including Table 2.

The probability of a movie becoming a box-office hit with an SR (i.e. P_r) is more difficult to evaluate because one cannot exactly mark when an SR actually became a star or a me-too star. We looked into the rate of hit movies that came out of a new face in (a) the third and fourth years of his career, (b) the fifth and sixth years of his career and (c) the seventh and eighth years of his career. Assuming that an unsuccessful new face would have most likely exited the industry within the first two years and most certainly within the first five years, and that the SR might be evolving into a star around the sixth to eighth year of his career, we took the mean of these three averages. This came out to be in the range of 0.22—0.28. Thus we put the value of P_r around 0.25.

Based on our discussion with the producers and various reports published in the cine journals, we found that it takes roughly around Rs 0.5 crore (5 million) to 1 crore (10 million) to make a movie with a new face while it could take around Rs 3 crores (30 million) to 5 crores (50 million) to make a movie with a star or an SR projecting himself to be a star[11]. Thus, the cost of making a movie for the SR projecting himself to be star is three to 10 times the cost of making a movie with a new face. In our numerical simulations, we had assumed a value of 0.1 for the movie with a new face, and hence the parameter H can be said to have

[11] These statistics do not include the cost of making a movie starring superstars. These superstar movies are called mega-budget movies and costs tens of crores of rupees.

a value between 0.3 and 1 (the method of evaluating H has been discussed in a previous section).

If we take $P_b = 0.1$, P_r to be around 0.25 and H to be in the interval 0.3—1, then from Tables 2, 3 and 4 see that the SR would find it optimal to project himself to be a star. This is true of both the high and low values of α. Thus, we can conclude that the market conditions in the Tamil movie industry are such that the SR would want to project himself to be a star.

Model refinement (Markov Chain)

The model proposed above is a simplified picture of the seemingly odd behaviour of successful rookies in the Tamil movie industry. Clearly, there are other ways to model the rationalisation of this behaviour, and we discuss one of them below[12].

An actor may pass through several stages before becoming a star eventually, but many taking that long route end up as me-too stars. Being an SR, one can take this long, traditional route or take a short cut and ask to be treated like a star immediately. Consider the long route first. Suppose the SR has a goodwill of n units acquired from his early movie successes. Further, if he could increase these n units to N units over time, he will be considered a star. For every movie he acts in during this period, there is however a probability P_1 that it would be a hit movie and $1 - P_1$ that it would be a flop. With every success during this run, he will gain 1 unit of goodwill and with every failure he will lose 1 unit. This is very similar to the Gambler's Ruin Problem (Stigler, 1990). The probability that the SR would eventually reach star status is given by $(1 - k^n)/(1 - k^N)$ where $k = (1 - P_1)/P_1$, provided P_1 is not half but between 0 and 1. Note here that $n = 0$ and N are absorption states. See Ross (1996) for the derivation and details.

If P_1 is lower than 0.5 this probability becomes zero, implying that the SR would only become a me-too star earning a return of $\alpha\,\Pi_s$ (where $0 < \alpha < 1$ and Π_s is the total returns to a star; see the previous sections for more details), while if P_1 is greater than 0.5 the probability of reaching star status (and thus earning the Π_s returns) increases with P_1. For example, let us say that the amount of goodwill units available with the SR is four and that to reach star status there should be 25 units accruing to the SR. In that case, if P_1 is 0.55 then the probability that he would become a star in the long run is also 0.55, but then if P_1 is 0.70 the probability of the SR becoming a star in the long run increases to 0.98. In the latter case, by providing the SR with such a high probability of becoming a star, the long route would become the natural choice. On the other hand consider a low P_1 (below 0.5). With the short route the expected returns are very small but with the long route there is always 'some' returns offered by the me-too star status, and so the long route again would be more advantageous. Thus, with either P_1 high or low, it is better for the SR to take the long route while for other intermediate values, the short route is better. This conclusion is very similar to what we arrived at in the previous section[13].

Another way to evaluate the strategies in this Markov model is to ask how long it would take the SR to reach the star stage and see if the SR can wait that long. The expected number of periods the actor would take to reach N goodwill points starting from n units is given by: $\frac{1}{(1-K)^2}[\{2\,k^{N+1} - (N+1)k^2 + N - 1\} - \{2k^{n+1} - (n+1)\,k^2 + n - 1\}]$, where N is the star stage, n is the SR stage, $k = (1 - P_1)/P_1$ (see Sheldon Ross, 1996). What is the impact of a large N? If P_1 is less than 0.5 then the expected number of periods he needs to become a star is an exponential function in N and so it almost becomes impossible for the SR to achieve the star status in his lifetime. He would very likely end up as a me-too star. On the other hand, if P_1 is higher than 0.5 the expression almost becomes linear in N and so a good performing SR would be able to reach star status sooner. Now, we can include the discount rate and then compare the returns with what the SR could achieve by taking the shorter route. We however leave the development of a full model for future research.

Conclusions, managerial implications and caveats

In this research we took the Tamil movie industry into focus and analysed the strategic decision making process of a successful rookie. There are many factors one could analyse in this industry and we decided to focus on the one that we found out to be critical, based on our discussions with producers, directors and actors. When his first few movies become successful, a rookie generally pushes himself to become a star and demands 'star' treatment from the producers but that is perceived as an arrogant posture by many producers in the industry because stars are typically formed after a long and gruelling movie experience. This very often leads to producers opting for new faces. Although the successful rookies are aware of this, they still try to push for stardom. In our research, we built a decision making model based on our in-depth discussion with some prominent producers and actors and analysed the conditions under which the successful rookies could strategically chase stardom, and when they could not.

Our analysis showed that when the probability of success of an SR's movie is assessed to be neither too high nor too low, the rookie would push himself to become a star immediately. A very low probability would discourage him because his failure in such an attempt would doom him forever, and a high probability would encourage him to prove himself further to the producers and to ensure higher returns in the long run. So, only those facing a moderate probability of scoring a hit would demand star treatment. A second finding is that the SR is more likely to project himself as a star if the producer invests in a movie that pays

[12] We thank a reviewer for encouraging us to look at using the Markov Chain method.

[13] Note that we use these numbers for demonstration purposes only. Also, note that the P_1 we use here is different from P_r we used in the previous sections since the frameworks are different.

attention to *all* the attributes of the movie (i.e. good story, stage setting, music, director, etc.) and looks at the perfect fit between the movie and the actor. Thirdly, if the industry is such that the me-too stars in the long run cannot make more than a small percentage of what a star makes, the successful rookie would try to become a star sooner because by waiting his chances of good returns from a me-too star status are not very high. This counter-intuitive result is born out of the possibility that the successful rookie finds the other alternatives to be such failing propositions that he prefers to project as a star even though he is aware the risk is high.

Applying the proposed model to the Tamil movie industry and evaluating the various parameters, we find that it is perfectly plausible for a new actor with two or three quick hits to put himself up to achieve star status. Although such a strategy may look optimal for an SR it may nevertheless appear to a producer that the SR has overreached himself—one of the producers we interviewed stated his preference for a new face or a proven star and not an 'arrogant' SR, who would demand an inordinate amount of money and attention.

What are the managerial implications of our findings? First, the industry should understand that the seemingly odd behaviour of successful rookies can be explained rationally and handled through a rational approach. Instead of looking for a new face for a movie, producers can look for ways to work with SRs; for example, SRs can be asked to share the risk in the production of the expensive movies that the PRs undertake to suit the aspirations of the SRs. Or, they can be asked to share their future revenues if the current movie pushes the rookie to stardom. Anyway, by understanding the factors driving the SRs to demand star status, producers can find ways to address their concerns and thereby reduce their own reliance on the new faces.

Secondly, SRs should be aware that they take the short cut from fear of an uncertain future coupled with the continuous stream of new faces in the industry. Once they become aware of their situation and their motives, they could look for solutions and explain their point of view to producers, reducing ill-will all around.

Thirdly, since the probability of achieving a hit determines an SR's demand for star treatment to a great extent, successful rookies facing a moderate probability of success can start asking how they can improve the odds and thereby reduce the need to demand star treatment.

Fourthly, a good movie is based not just on the contribution of the actor but on a full package that includes the script, story, dialogues, setting, etc. Our finding says that if a producer is thinking about hiring an SR for such a well thought-out movie then the demand for high salary or star treatment from the SR would become less relevant in the bigger scheme of things, and there would be more likelihood of the SR getting hired than in a movie where the actor is the only important part. This in turn suggests that the SR should seek out only those movies that pay attention to the whole package and not just to him! While this may appear counter-intuitive when an SR wants to be projected as a star, the strategy may work on the ground (as the recent success of an SR like Karthi has shown) and is in line with reasoning.

The Indian movie industry is coming of age, with production houses replacing independent producers. These production houses are companies that are professionally managed, and our findings will give them additional insights into this industry and thus help in their decision making process when they deal with various actors.

However, there are some caveats. First, there could be other 'irrational' reasons for the SR's demand for star treatment. For example, as borne out in our interviews, before becoming SRs, actors who enter the industry as new faces often encounter numerous problems, getting slim gains in return. Hence, even a minor success encourages them to initiate action to overcome this sense of insecurity. Also, the young age and inexperience of these successful rookies (most of them are in their early twenties) make them vulnerable to the fallout of sudden wealth and fame.

Secondly, our model has only one SR, and does not take into account factors such as the competitive spirit between the SRs, which might make them demand star treatment with more vigour. Another element that our model does not take into consideration is the role played by the currently reigning stars who might seem a better bet to the producers than an SR, at the same cost. However, reigning stars carefully pick movies that suit their image and hence avoid acting in too many movies in a given year. Thus, the producers are left with the option of an SR or a new face for many of their movies.

We believe that our results provide interesting insights that are useful for both producers and actors. It is to be hoped that this first step towards understanding the nuances in the film industry will spur academia's interest in its complexities.

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