

# Breakout from Bollywood? The roles of social networks and regulation in the evolution of Indian film industry

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## Abstract

This paper combines evolutionary perspectives with social network theory in order to explain the recent growth of a prolific and changing indigenous industry in an emergent economy, namely the Indian film industry in Mumbai, India, *Bollywood*. Using novel and original data, the paper argues that as the world's biggest commercial film cluster and a conspicuous growth phenomenon, Bollywood can be seen as a paradigmatic case for developing general insights into indigenous growth of industries in emerging economies. The paper demonstrates how the existence of a well-defined and geographically centered social network among producers, directors and other key roles in filmmaking in Mumbai influences the evolution of a 'Bollywood model' of filmmaking remarkably different from Hollywood's. The paper adds to social network perspectives in evolutionary theory by suggesting that, given certain social network structures, policy regulation and other environmental factors may be instrumental for industry evolution.

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## 1. Introduction

This paper combines evolutionary perspectives on industrial change with social network theory, in order to explain the recent growth of a prolific and changing indigenous industry in an emergent economy, namely the film industry in Mumbai (formerly Bombay), India, popularly known as *Bollywood*.

The somewhat humorous name applied to this cluster of film companies in Mumbai does not signify that it is a mere imitation of the US film cluster in Los Angeles. Bollywood has now developed a strong brand and is a hugely commercial industry with no state subsidies, a mix of big-budget and low-budget films, substantial marketing efforts and a relentless pursuit of blockbusters. Releasing 1041 films in 2005 (CBFC, 2006) and selling an estimated 3.6 billion tickets globally, India is the world's largest film producer (for comparison, USA released 535 films in 2005 (European

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Audiovisual Observatory, 2006) and sold 2.6 billion tickets (Kripalani and Grover, 2002). With 244 films released in 2004, Bollywood completely dominates the production of films in the Indian national language, Hindi (CBFC, 2006). Hence, albeit not the regional film cluster with the highest output (clusters in Hyderabad and Chennai produce more films), Bollywood has the greatest market penetration in India. Its size notwithstanding, due to low ticket prices, Bollywood's annual turnover (2005) of 575 million USD (CII/KPMG, 2006) is modest compared to other big film industries of the World. Hollywood had a 2005 collection of 23 billion USD (single top-budget Hollywood films now collect more than 200 million USD each)(MPA, 2006; European Audiovisual Observatory, 2006).

But recently, the economic performance of Bollywood has risen rapidly. In 2006, Bollywood was acknowledged by investors as one of India's central growth industries and in the process of becoming a future global giant. The revenues of the Indian film industry have grown 360% in the period 1998–2005, and 58% in the period 2001–2005. Producing 16% of Indian films in 2004, it accounts for more than 40% of the Indian film industry's revenues (CII and KPMG, 2005). CII and KPMG (2006) estimates 2006–2007 revenues growth for Bollywood to 16% (as compared to the Hollywood growth estimates of 7% for the same time period (Kapoor, 2005), but points out that the annual growth rate could reach as high as 30% by 2010. For 2007, a record output of 250 films is schemed, with more ambitious global distribution and marketing schemes than ever before. Bollywood is thus well on its way to becoming integrated in the global economy: Exports have grown 30–50% annually during the last five years to its present 16% of total revenues, and a further growth of over 20% is expected by 2010 (CII and KPMG, 2005).

This kind of rapid and large-scale growth of consumer industries in emerging economies is generally under-researched, and the paper adopts an evolutionary (or population ecology) perspective in order to explain it. This perspective proposes that lasting changes in the economic performance of a particular national industry or regional industrial cluster (population) are symptoms of industry *evolution* – systematic changes of industry practices and/or structures. Consequently, the paper's first research question is

**RQ 1.** Is the recent growth of Bollywood caused by industry evolution?

There is a range of theoretical arguments about the mechanisms of industry evolution (see Section 2). The paper investigates the mechanisms' relevance in the context of Bollywood by asking a second research question,

**RQ 2.** If the recent growth of Bollywood is caused by industry evolution, what are the mechanisms of such evolution?

The empirical analysis undertaken in the paper concludes that the growth of Bollywood is indeed caused by ongoing industry evolution, in the guise of a new organizational form (horizontal integration, in distribution and finance firms) and new practices (alliances between incumbent production firms and the aforementioned firms). However, the mechanisms of this evolution do not encompass a systematic spreading of the new integrated organizational form across the value chain, it is rather a slow transmission of the alliance practice along it. We conclude that the explanation for the nature of the evolutionary process is the structure and operation of a particular social network within Bollywood, but we also point out that necessary preconditions for evolution are found in the cluster's external environment, in the guise of consumer demand changes and new policy regulation. The paper's main contribution to theory lies in its pointing to the interplay between social network structures and environmental factors in the evolution of an industry, as well as its opening of an agenda of research into indigenous industry development in emerging economies, focusing upon this interplay.

The paper is structured thus. The second section of the paper outlines its theoretical foundations, Section 3 describes the methods and sources used for the study of Bollywood, and the fourth section presents the empirical analysis. This section is followed by a discussion section answering the research questions and drawing out theoretical implications of the empirical analysis. Section 6 is a brief conclusion.

## 2. Theoretical foundation

The reason for adopting an evolutionary perspective on Bollywood's growth is that there is little other theoretical foundation for understanding such a phenomenon of indigenous growth of an entertainment industry in an emerging economy. Previous research on growth industries in emerging economies first and foremost centers on the role of FDI (for overviews, see Razin and Sadka, 2002; Tamuli, 2006). On the other hand, existing research on indigenous industries in emerging economies deals with manufacturing, not entertainment or other knowledge-intensive industries (e.g. Nadvi and Schmitz, 1999; Mytelka and Farinelli, 2000; Schmitz, 2003; Das, 2005).

Evolutionary economics and population ecology (e.g. Hannan and Freeman, 1977; 1989; Nelson and Winter, 1982; Witt, 1993; Aldrich, 1999; Carroll and Hannan, 2000) focus upon systematic changes in a population of firms – typically, in the guise of changing organizational practices and/or industry structures (Aldrich, 1999; Witt, 1993). Such changes, or *industry evolution*, may bring lasting changes in employment, turnover, exports, or other aspects of aggregated economic performance. The evolutionary perspective views industry evolution as driven by mechanisms of *variation* (introduction of new organizational forms to an industry), *selection* (spread of such organizational forms through entry and exit of firms), and *transmission* (spread of new practices to incumbent firms, e.g. through imitation). In the context of Bollywood, there is theoretical support for expecting two particular organizational forms to spread.

First, we might expect that integrated forms, in the guise of media corporations or system houses, are likely to spread. *Horizontal integration* (i.e., rising firms sizes within single value chain activities such as production, marketing, distribution, or exhibition of films), is most valuable in marketing, distribution, and exhibition, because there are huge scale advantages related to diminishing costs here (Prag and Casavant, 1994; de Vany, 2004; Bakker, 2005; Eliashberg et al., 2006). In production, there are only limited scale advantages, and they relate to logistics and negotiation advantages of offering packages of several films to distributors. *Vertical integration* (i.e., joint ownership of several value chain activities) has proved very efficient in Hollywood: When producers also control distribution and exhibition, or when exhibitors or distributors also control production, they lower the effects of demand uncertainty on markets for feature films (de Vany, 2004; Epstein, 2006). A second organizational form that we might expect to be on the rise in Bollywood is an alternative to integration which is often found in emerging economies: Business groups (Boisot and Child, 1996; Khanna and Palepu, 2000; Granovetter, 2005; Luo and Chung, 2005; Khanna and Yefeh, 2005). Hybrids between the market and contractual vertical or horizontal integration, business groups are typically groups of separate firms with a long-term managerial relationship, such as clans or *keiretsus*, and they are able to span geographical distances and facilitate cross-border sales, marketing, and knowledge transfer (Boisot and Child, 1996; Luo and Chung, 2005; Bhagat et al., 2002). As entry to business groups is restricted and often based on kinship, group members may collaborate with low transaction costs (Williamson, 1975; 2000), due to trust and honor effects. There is ample evidence for such groups in manufacturing, trade and agriculture in emerging economies, including India (Lal, 1998; Bardhan, 1989; Khanna and Palepu, 2000; Ahlstrom and Bruton, 2006). For the film industry, business groups would have great relevance. Due to the need for shifting creative skills with shifting film production projects, integration of skill-holders is not efficient: Films have to be produced in temporary market networks (Lorenzen and Frederiksen, 2005). Business groups of large and diverse such networks that economize on transaction costs and even include marketing and distribution skills, would theoretically be both a flexible and cost efficient alternative to integration.

Social network theory (e.g., Barabasi et al., 2000; Burt, 1992; Wasserman and Faust, 1994; Watts et al., 2002) is currently adding new insights to evolutionary economics and population ecology into how industry evolution – the spread of new organizational firms and transmission of new practices within a population of firms – is influenced by social structure (Powell, 1990; Philips et al., 2000; Baum and Oliver, 1992; Carroll and Hannan, 2000; Powell et al., 2005). Analysis of how social networks shape organizational performance and industrial change is also spreading within film research (e.g., Baker and Faulkner, 1991; Faulkner and Anderson, 1987; Sorenson and Waguespack, 2006; Delmestri et al., 2005; Cattani et al., 2006). Two key observations can be stylized from this literature. First, a social network with short average *path length* (the average number of “degrees” between any two agents in the network) is good for transmission of new practices, as its members can easily reach each other and mobilize information, legitimacy or other resources, and learn from each other (Baum and Oliver, 1992; Carroll and Hannan, 2000; Cattani et al., 2006). Such a network may substitute for integration, as it holds transaction costs down among its members through reputation effects, social trust and reciprocity. Second, a social network with short path lengths but also a high degree of *clustering* (density of its interconnectedness) may be prohibitive to the spread of new organizational forms, as its closure and lack of opportunities (or “structural holes” (Burt, 1992)) blocks for new entries (Granovetter, 2005; Uzzi and Spiro, 2005).

In our empirical study of the possible role of industry evolution for Bollywood’s recent growth, we will focus upon the evolutionary mechanisms of transmission of new practices and spread of new organizational forms (such as integration and business groups), and we will analyze the social network structure of Bollywood in order to understand its influence upon the evolutionary process.

### 3. Method

We have chosen to undertake a case study of Bollywood in order not to test existing theory, but, on the contrary, approach a problem in order to inspire development of, or supplements to, theoretical ideas (Eisenhardt 1989; Yin,

1994). We treat Bollywood as a paradigmatic case study. A paradigmatic case is not representative of a particular population of cases, nor probabilistically selected. Instead, it is theoretically selected in order to provide as much inspiration as possible (for a discussion, see Flyvbjerg, 2004). Bollywood is extreme in the sense that it is the world's biggest film cluster in terms of output. By logic inference (Flyvbjerg, 2004), the study of Bollywood may suggest themes or even mechanisms that can form the basis for a research agenda pertaining to the growth of film industries outside the USA. Bollywood is also extreme in the sense that it represents one of the most striking growth phenomena in an emerging economies context, and hence, the study of Bollywood may suggest themes for an emerging research agenda pertaining to growth and internationalization of indigenous industries in emerging economies.

For the case study of Bollywood, we have chosen qualitative data for several reasons. First and foremost, there are little statistics that may illustrate the evolution of Bollywood. Indian statistical bureaus offer no regional data on the film industry's structure or employment, and film data from Indian sources and the International Movie DataBase are partial and do not list films' participants, budget, or performance. Hence, contrary to the US and European film industries, it is not possible at present to carry out a statistical actor-network analysis of the structure of social networks within Bollywood.<sup>2</sup> Concerning qualitative secondary data, it lies within cultural studies, anthropology or sociology rather than economics or management (see e.g. Rangoonwalla, 1975; Ramachandran, 1985; Valicha, 1988; Kazmi, 1998; Garga, 1996; Gokulsing and Dissanayake, 1998; Nandy, 1998; Prasad, 1998; Vasudevan, 2000; Dwyer and Patel, 2002; Kabir, 2001; Misra, 2002; Rajadhyaksha and Willemen, 2002; Kaur and Sinha, 2005; Dudrah, 2006). The scholarly works on the history and/or economics of the Indian film industry (the most notable being Jain, 1960; Barnouw and Krishnaswami, 1980; Kohli, 2003; 2006b; and Pendakur, 2003), or the industry reports made by industry associations or business magazines do not analyze the film cluster in Mumbai separately (Ganti, 2004, being a exception).

Furthermore, as we want to understand the mechanics or processes behind ongoing change (as opposed to merely accounting for a historical change or for the correlation of it with other phenomena), any historical sources need to be supplemented with qualitative data. Hence, we carried out a series of multiple, replicated case studies ("nested" in the overall Bollywood case)(Eisenhardt, 1989; Yin, 1994). The cases picked were the last three year's top earning Bollywood film projects. Given the high number of companies involved in each Hindi film and the general high exit and entry rate of companies in Bollywood, studying films tells us something about the evolution of the cluster that we would miss if we studied companies instead. Due to the lack of data, we did not intend to select a sample representative of all Bollywood film projects in the chosen time period, so we instead used theoretically deduced expectations (Eisenhardt, 1989) in order to construct a sample of *extreme cases* (Yin, 1994): Those film projects that, given their success, are most likely to represent the most economically viable practices, causing the greatest degree of transmission (imitation) to future Bollywood film projects. Out of a total population of the approximately 450 Bollywood films produced in 2003–2005, we selected a sample of the top ten earners for each year (identified by deducting production costs (as listed on [www.ibosnetwork.com](http://www.ibosnetwork.com)) from box office collections in the year of release (as listed on [www.ibosnetwork.com](http://www.ibosnetwork.com) and [www.imdb.com](http://www.imdb.com)) for the top 35 box office grossing films (all territories) for each year). This yielded a sample of 30 film projects, which we first analyzed using the films themselves and online resources. Then, through using multiple personal channels as well as cold calls for setting up meetings, we managed to undertake face-to-face interviews with producers (who were often also manager-owners) in 14 production companies, covering 23 of the case films. The interviews had a replicated structure, designed to increase their generalizability or their ability to suggest alternative interpretations (Eisenhardt, 1989; Yin, 1994). For different films, we asked the same questions regarding organizational forms and practices. We also checked for case-specific influences, looking at the factors in the participating production company's history as well as the external environment of the project that influenced organization and practices.

The multiple case studies yielded a remarkably coherent picture of certain dominant organization forms and practices, as well as the factors causing production companies to change and to choose different organizational forms or practices. From the 30 cases, we were able (with some precaution, and triangulating with the above mentioned secondary sources) to infer logically (Flyvbjerg, 2004) to the level of Bollywood as a whole, because the case studies were not a probabilistic sample but extreme cases. Consequently, we argue that the patterns revealed in the 30 nested case studies give a clear indication of the industry evolution of Bollywood as a whole. In order to check the validity of our conclusions, we triangulated the insights from the 30 case studies with interviews with key informants from within

<sup>2</sup> The authors are in the process of assembling the necessary data to ultimately undertake such a statistical analysis.

the Mumbai film industry (producers, managers, studio owners, and representatives from industry associations) and its supporting industries (such as finance and advertising) as well as talent (directors, actors, editors), plus data provided by the Indian media and the few available consultancy reports. A total of 58 interviews were carried out 2005–2008 in Mumbai, all semi-structured with duration between 1 and 3 h, and recorded and transcribed.

#### 4. Empirical analysis

In the following, we shall present some results of our study of Bollywood. We first sketch out the ongoing evolution of Bollywood, and explain how it is improving the economic performance of the cluster. Then, we analyze the social network conditioning the evolution, and lastly, we demonstrate how two environmental factors have been necessary to set in motion the evolutionary process.

##### 4.1. Industry evolution

Like in Hollywood, Bollywood's film productions fall into a core of commercially successful mainstream (and often high-budget) films made by a relatively stable community of producers, plus a periphery of lower-budget niche films made by a much larger (and more fluctuating) group of producers with less talent, luck, or ambition. But this is where the industry similarities end between Bollywood and Hollywood. All mainstream Hollywood films are produced, financed, distributed (and, to some extent, exhibited) by a handful of integrated media conglomerates (*News Corp, Walt Disney, Viacom, Time Warner, NBC Universal, and Sony*), and non-mainstream films are practically isolated from the mainstream system of finance and distribution. Contrary to that, Bollywood companies producing mainstream and blockbuster films are not noteworthy different than the peripheral firms in terms of ownership, size, or financial means and distribution — namely, an almost complete horizontal as well as vertical disintegration. After a period with relatively integrated studios prior to WWII, after Indian Independence in 1947, Bollywood films have been produced, financed, distributed, and exhibited in complex collaboration among hundreds of independent producers each owning a small-scale production company (with one or fewer annual releases), independent distributors (covering different regional territories), private financiers, and stand-alone cinema operators.

A partial change is now taking place, and we shall outline it in the following. The most important evolutionary trait is *the emergence of a new organizational form, horizontal integration, downstream in the value chain*. A handful of firms have entered Bollywood, focusing upon achieving economies of scale in distribution and finance, and this has influenced revenues and exports positively. Through distributing and promoting a range of films across different territories (including export territories), these firms take advantage of scale in marketing and distribution, releasing a large number of copies in cinemas in order to create crowding effects and pre-empt piracy, accessing new distribution channels such as TV and video, and investing enough in marketing to reap export markets. These firms are also of the size to take advantage of emerging possibilities for auxiliary revenues from films, such as computer games and ring tones and video clips for mobile phones. The most prolific of these firms is the Indian film processing company which prints most of Bollywood's releases, which, after attracting huge investments from India's biggest telecom corporation, is now moving into exhibition, distribution (particularly international), and finance of films. Two other new players are a major Hindi TV channel entering financing and distribution of films at a still bigger scale, in order to ensure a stable input of films and film-related content, and a big television production company and one of the biggest domestic film distributors, which also has started to finance and release films. These firms represent a new, horizontally integrated, and efficient way of distributing and financing films which is quickly winning market shares from the small-scale independent distributors who hitherto were dominant in each of their regional Indian territory. However, the ambitions of these firms to also vertically integrate have had less success so far. As they generally manage to produce less than half of their releases in-house, they still rely, to a wide extent, on buying films produced elsewhere and subsequently distributing and marketing them.

Hence, the entry of these horizontally integrated firms has not changed the fact that the overwhelming majority (in 2005, more than 90%) of Bollywood films — including mainstream blockbuster films — are still produced by small, specialized production companies. For example, all the top 30 earning films 2003–2005 were produced by such companies. There are now very conspicuous signs of *professionalization among these production companies*, and even if they stay horizontally disintegrated, professionalization has a positive impact upon exports. There are two groups of production firms that currently professionalize. Firms in the first and largest group are taking advantage of the

emergence of new players in distribution and finance, supplying them with the films they need. Such production companies, typically of high repute, continue to operate on a small scale, obtaining finance and distribution for the occasional, big-budget film through one of the new distribution and finance firms, rather than traditional small financiers and distributors. A handful of production firms now sign multiple film deals and upscale their output of films with relatively low budgets for systematic sales through the new distribution and finance firms. Through such strategic alliances, production companies stay disintegrated, but enjoy less uncertainty with respect to distribution and finance, and hence the possibility of better production planning (particularly for low-budget productions), and investing in scriptwriting. A second and more exclusive group of professionalizing production firms is spearheaded by one of Bollywood's grand old production companies which invested its earnings from one huge 1990s hit in a new strategy. With the chance infusion of capital corresponding with the infusion of professional management skills in the guise of the manager-owner's son, the firm embarked upon a rapid professionalization previously unseen in Bollywood: It set up its own distribution abroad, planned its next productions carefully, using its reputation and social networks in order to use top-of-the-range actors and employing scriptwriters, directors and music directors for several subsequent films. The firm consequently achieved a very high hit rate, and earnings were again reinvested in integrating studio and postproduction facilities. In 2004, the company had the largest turnover yet seen in Bollywood: 112 million USD – more than double of the second-most earning Bollywood firm (which is one of the new, integrated finance and distribution firms backed by corporate capital (Kohli-Khandekar, 2006a)). The hit rate and growth of this one company has inspired a handful of other production companies to embark on similar strategies. Some of these are incumbent production companies attracting big investments from the corporate sector, some are television firms or other entertainment firms seeking to diversify into film production. A common denominator for all these companies is that they are reluctant to distribute films produced by other companies, and hence, their integration hinges upon the growth of their own output. This has turned out to be slow.

Although it is yet early to assess the evolution of Bollywood, it does not seem to encompass the spread of horizontal integration to film production, nor vertical integration of finance, production, distribution and exhibition. Instead of becoming more similar to Hollywood, or to other Indian film clusters, such as those in Hyderabad and Chennai, that are much more integrated, Bollywood seems to move towards an industry model based on *alliances*. The alliance practice is currently spreading along the value chain, allowing Bollywood to reap scale economies in distribution and finance, in combination with the creative and managerial advantages of maintaining small firm sizes in production. It is this emerging model which facilitates the recent surges of performance and exports of Bollywood. The spread of the practices of professionalization and alliances have brought about new modes of finance, better planning, and changed practices of scriptwriting and use of directors and actors, and this brings average production times and costs down. The entry of the integrated organizational form in distribution and finance (and only here) means that Bollywood is able to, at long last, invest considerably more in distribution, marketing, and exhibition at home as well as abroad, tapping into growing demand.

#### 4.2. Social network

The persistence of Bollywood's vertical disintegration, as well as horizontal disintegration in production, can be understood by analyzing the cluster's social network structure. Our analysis shows that informal social relations have been at the heart of Bollywood filmmaking for more than 50 years. Below, we shall focus upon the three categories of social relations that are central to Bollywood filmmaking, and outline how the network formed by these relations influences Bollywood's industry evolution.

The first and central category of social relations is those between *producers and star actors*. The relatively integrated studios that dominated Bollywood before World War II disappeared due to a combination of rising production costs caused by the war, booming land prices in downtown Mumbai, and, most importantly, the entry of a number of independent producers. With Independence and the division of India and Pakistan in 1947, an amount of refugee film producers and entrepreneurs from North India (mainly the film industry in Lahore) arrived in Mumbai and introduced an alternative filmmaking strategy. Newcomers challenged the integrated production companies by staying small, outsourcing creative activities and facilities, and employing shifting freelancing directors and star actors (lured away from studios by high salaries) for each new production. The disintegrated production companies also systematically targeted cross-regional Indian markets rather than only the Mumbai market (Shoesmith, 1987). This strategy gave birth to the *masala* (Hindi for "spice mix") genre, the systematic combination of genre elements such as

romance, drama and comedy along with song-and-dance sequences in a symbol-driven (rather than plot-driven) formula that picked up and revamped traditional theatre. Central to a *masala* was a star actor who was promoted and marketed carefully. After years of refinement and marketing, this formula for mainstream Bollywood films was able to cross regional and social divides and create a huge market across India. In the Bollywood star system, a continuously replenished core group of a dozen male and a few more (and smaller) female star actors still plays a far larger role for a mainstream film's success than in the contemporary Hollywood star system. Since the 1980s, competition from TV further increased the importance of star actors, as films upgraded with lavish sets and so-called "multistarrer" films. In the years following Independence, star actor salaries rose with more than 500% (Barnouw and Krishnaswamy, 1963), and in today's mainstream films, such salaries may account for well over half of the production budget. One notable trait of star actors, even today, is that they are cast and signed through informal social relations, rather than through agents and lawyers, and unlike their Hollywood counterparts, written contracts are rarely used (and, due to the lacking Indian legal system, virtually not enforceable). From the outset of the star system, star actors preferred to work on the basis of personal trust, and even today, personal trust is a crucial supplement to any written agreement. For a producer of mainstream films, it is thus of great value to have strong personal relations to the current stars. The high demand for star actors means that they may turn down offers, opt out of productions at an advanced stage, or underperform with producers they do not know. Today, even with the emergence of new consumer preferences for genre- and script-based films rather than traditional *masala*, casting one or more stars is still the preferred strategy of improving the likelihood of a mainstream film's box office success. It should be noted, though, that even if a necessary strategy, casting stars is not always a sufficient strategy: Like all entertainment market, the market for Bollywood films is uncertain and the hit/flop rate of Bollywood films is remarkably equal to Hollywood films: Only 10–20% of films break even or earn profits (Ganapati, 2002; Pendakur, 2003; Ganti, 2004). The value of good personal relations to star actors would mean much more than the ability to sign them to a production: It would sometimes also mean that production delays and budget overruns could be held at a minimum, as stars in huge demand usually overbook their schedule and give priority to producers with whom they enjoy a good personal relationship.

The second category of social relations is those between *producers and financiers*. Since Bollywood's inception, producers have obtained most film finance either as advance payment from distributors or from private sources, and the production companies struck new finance and distribution deals for each production. In preproduction, the producer would cast a star sufficiently big to convince financiers. Then, the producer would shoot one or two songs or other key sequences, with which he would then approach a range of distributors from different territories in order to obtain finance in the guise of lump sums. As production went ahead and finance ran out, such deals would be renegotiated (on the basis of screening to distributors of new promising footage), gradually handing over more and more rights to distributors, often delaying the production notably, and sometimes causing incompleteness. In this system of finance, good personal relations to distributors were of immense value, and handshake deals, rather than contracts, were the norm. In case of delays and budget overruns that distributors refused to cover, or to avoid presales of all rights to a promising film, production companies would turn to (sometimes illegal) moneylenders, family or associates from other industries with venture capital. In Mumbai, India's industrial and commercial centre, risk-willing private capital – white as well as black – is abundant, and social relations became the preferred mode of accessing it. While the system of advance payment from distributors is now being phased out, the importance of private financiers is still central to Bollywood. Social relations and handshakes continue to be important.

A third category of social relations which is now becoming important for Bollywood film production is relations between *producers and star directors*. Changes in consumer demand mean that films based on novel scripts or direction slowly eat into the mainstream market, and particular powerful directors are slowly becoming valuable. As was the case with star actors, star directors prefer to work on the basis of personal relations.

The use and re-use of the social relations described above has created a social network of personal relations within a small community of key people: The producers who originally created the star system during the 1950s and 1960s and their extended families and close friends, as well as the extended families and close friends of the 1950s and 1960s star actors – all of whom have entered into the film industry as producers, actors, or directors. In this network, the information exchange is intense, and social trust is abundant. Most people know each other, if not through family bonds, then through frequent professional and social meetings, and producers, directors, and actors exchange SMS messages on their cell phones – even to set an important appointment or suggest a deal. The richness of information is so that a producer would know about an actor's or director's diet requirements already before approaching him for a project, and in one of our interviews, an actor claims that in the Bollywood community, any member can reach and set

an appointment with any other via SMS message within 15 min. The efficiency of communication is accompanied by reputation effects and a high level of social trust: Within the network, a handshake is viewed as more valuable than a contract, and if there are disputes, elder and respected members of the community, acting on their own or as board members of the producers' associations, will often mediate and solve them.

It is important to note that Bollywood has no business groups. Lowering transaction costs of film projects and providing access to resources and information among its members, the social network substitutes for such groups. Contrary to business groups that are geographically distributed, but socially discriminating frames for long-term collaboration, the Bollywood network is informal and allows for occasional temporary relations (i.e., film projects), geographically extremely focused on Mumbai, and a dynamic structure that continues to replenish itself. However, while more opened than business groups, Bollywood's social network is not entirely open to all entrants. Even if there are myths of actors or producers who arrived rupee-less and alone to Mumbai and became stars, most entrants to the network are brought in by insiders: The network grows by preferential attachment (Wasserman and Faust, 1994; Watts et al., 2002), as the most powerful members in the network give breaks as e.g. actors or directors to family members, friends, families' friends, and friends' families. Because of preferential attachment, the network has grown with a high degree of path dependence within relatively confined circles. However, even if the producer and actor dynasties of Bollywood are famous, compared to other Indian industries – or other Indian film clusters – Bollywood is not exceptionally family-based. While single firms are often family-run, neither network relations, nor entry to the network, is strictly based on family. A more conspicuous sign of the path dependence of the network's growth is its strong representation by immigrants, many of which are Muslim. Already from Indian independence, Bollywood's social structure and glamour earned the industry a stigma among India's high classes and ruling elite, and this has added to the path dependence in how the social network grows. Apart from very little entry to Bollywood from the high classes, the political elite has underinvested in formal channels of entry to the film industry, such as film schools. The one state-run Indian film school was established as late as 1960 and puts out very few candidates, most of who go to the non-mainstream parts of the Indian film industry. In response, in 2005 Bollywood established its own private film school in Mumbai, boosting recruitment of qualified labor to Bollywood from within its usual sources of entry.

#### 4.3. How the social network influences industry evolution

Even if we, as mentioned in Section 3, cannot account statistically for the structure of the social network, it obviously has path lengths sufficiently short to facilitate the evolutionary mechanism of transmission. As members of the network meet, gossip, and evaluate industry developments and the performance of rival firms, they help in spreading the practice of alliances among many members. Many of the producers in the social network are currently imitating the practices of professionalizing and selling films to integrated distribution and finance firms rather than (or as supplement to) traditional distributors. Some also seek to strike multi-film package deals.

While efficient for transmission of new practices along the value chain, the social network is also so highly clustered that it holds down the spread of new organizational forms. First, it prevents the spread of the integrated organizational form beyond distribution and finance. The nature of the social network makes it very difficult for newcomers in finance and distribution to integrate upstream into production, at any significant scale. The incumbent producers who enjoy a central position in the social network possess a richness of personal informal relations to today's star actors, directors, and financiers, and systematically use this for signing talent and obtaining finance. Some of these producers have such good relations to star actors that it is reputed that the latter may agree to work without any written guarantee or down payment, or sign contracts where their payment is considerably reduced if the film flops. As these producers also manage (and often own) their small-scale independent production companies, a core group of around 25 such companies possess most of the social capital of Bollywood and account for more than half of the mainstream film productions (and far more than half of the box office hits). Quite contrary to what an industry observer from Hollywood might expect, the more expensive and star-packed a Bollywood film, the greater the likelihood that it is produced by a small, specialized, independent production company (the grand old company that is currently upscaling being a unique exception). The corporations that have entered the industry occasionally *distribute* big-budget multistarrer films, but they rarely *produce* them. Their business model seems to be moving towards financing and distributing a good deal of low-budget films and the occasional big-budget film made by independent production companies, and producing a limited number of mid-budget films themselves. This strategy accommodates the fact that while the corporations are able to sign distribution deals with independent producers, they have huge difficulties in producing big-budget films

themselves, as the star actors and directors are reluctant to work with them. This is partly because a poor image of “the corporate way” in the Bollywood social network creates some suspicion towards working with the corporations (of course, incumbent producers in the network have every reason to reinforce such suspicions). Partly, however, the difficulty of the corporations to enter the social network is also due to their procedures. The corporate way of insisting on elaborate contracts tends to crowd out informal relations, and producers employed in the corporations, coming from outside the usual recruitment channels to the social network, do not get many chances of building personal relations to star actors, directors and other Bollywood personalities, as they are shifted between projects and are subject to organizational changes in their corporation (eroding their trustworthiness to members of the social network).

Limiting vertical integration, the social network hence also limits horizontal integration. Horizontal integration is taking place in distribution activities, where scale advantages, rather than informal personal relations, are crucial. But in production activities, where creative processes and relations to key scriptwriters, directors and actors are important, the main evolution is the emergence of new alliances to finance and distribution companies that are eager to source content. Horizontal integration of the incumbent production companies is generally absent or very slow, as these firms experience certain limits to scale of production, particularly related to managing talent (scriptwriters, directors) in-house. As new education offers emerge in India and as the competition among firms for talented directors, scriptwriters and producers grows in Bollywood, the allure of long-term employment in a well-established and up-scaling production company relative to freelance work or self-employment seems to fade. The impact of the social network upon the horizontal integration of Bollywood’s film production is evident: Today, most Bollywood films continue to be produced by specialized companies with an annual output of less than 3 films. Our data shows that all the 30 top earning Bollywood films 2003–2005 were produced by a total of 20 production companies. Even if some of the films were distributed by integrated distribution and finance firms, they were all produced by specialized, independent production companies, whereof only five (25%) were involved in more than one top film, and only one (5%) in more than three. For comparison, the top 30 Hollywood films during the same time period were produced by a total of eleven production companies, all owned by major media corporations, seven (64%) of which were involved in three or more of the top films. Many of the small Bollywood production companies continue to rely on traditional modes of finance and distribution, negotiating new deals for each film with private financiers and a plethora of regional independent distributors. Out of the 30 top earning films 2003–2005, 23 were released this way, and of the total films produced in 2004, it is estimated that 85% were released thus (Rao and Bannerjee, 2006).

#### 4.4. Environmental factors, I: demand changes

It can be seen that while the social network allows for transmission of new practices, it limits the spread of new organizational forms and bars entry into a range of industry roles. Two main reasons that we currently see evolution at all, are external to Bollywood. In the following, we shall take a closer look at how such environmental factors have influenced Bollywood’s evolution.

The reason that new and well-funded corporations have found it attractive to enter film finance and distribution is a significant growth in demand for film products. India’s GDP is rising rapidly (doubling over the last two decades and currently growing 8% annually), and its middle class booms (currently 300+ million people strong and growing at 5% annually). Many of the newcomers to Bollywood have entered in order to reap these demand opportunities through investing in upgrading existing cinemas and constructing multiplexes. Contrary to Hollywood, Bollywood still earns 70% of its revenues from cinema exhibition (CII and KPMG, 2005), and in the period 2001–2005, box office collections rose by 29% (Kheterpal, 2005), and in 2005 by 17% (European Audiovisual Observatory, 2006). As a rapidly growing supplement to cinema, Hindi films have found a new exhibition channel in Indian TV. While national coverage of TV in India in the early 1980s caused an initial drop in demand for Hindi films, after the entry of satellite channels in the 1990s, selling films to Hindi TV channels became major business. It should also be noted that Bollywood has been more enthusiastic – and much quicker – than other of the world’s film industries (especially Hollywood, Currah, 2007) in embracing new technologies for products and platforms. Hence, Bollywood is not only implementing digital cinema distribution on a large scale, the cluster is also in the process of mastering new auxiliary revenue streams supplementing sales of music soundtracks, such as ring tones and movie clips for mobile phones.

Traditionally, exports from Bollywood have accounted for less than 10% of the cluster’s turnover. However, during the last two decades, Bollywood has been the Indian film cluster that has been fastest in tapping into new global business opportunities. Being the only Indian film cluster that produces in Hindi, Bollywood also has a huge potential

audience among non-resident Indians in the US, UK, and Canada, and in countries with a substantial number of people who understand Hindi, such as Pakistan, Nepal, and Sri Lanka. Also using widespread dubbing (and subtitling of its videos), Bollywood films also sell well throughout South Asia, Africa, Russia, East Europe and South America. Distribution of Bollywood films to cinemas abroad has always been difficult, but home video, combined with more efficient distribution ensuring better deals for production companies, has made exports grow. Notably, the Indian Diaspora in North America is too geographically dispersed to fill cinemas, but recent technological advances such as home video and Internet streaming has made it possible for Bollywood to finally reach this huge and profitable export segment.

#### 4.5. Environmental factors, II: policy regulation

A second factor from outside Bollywood itself allowing for the cluster's evolution is policy regulation. For more than half a century, Indian public regulation has been impeding the film industry's performance – a result of India (until 1991) pursuing a manufacturing-based growth strategy with little political sympathy for entertainment industries as well as the stigmatization of Bollywood by the policy elite. The last decade has however brought significant changes to this regulation at national and regional (i.e., state) levels – not in the guise of subsidies, export promotion, or other direct support, but other changes that positively impact performance and modify how the Bollywood's social network influences the cluster's organization. First, there has been a general shift in the policy attitude towards Bollywood. After five decades of entertainment taxes (added to ticket prices) averaging 50% today (some states tax entertainment products by over 150%) and quotas and taxation on inputs, such as raw film stock, Indian states are now, in a bid to boost the film industry, competing to lower taxes and provide incentives for construction of new cinemas and production of films. The national government now also finally responds to the film industry's lobbying, clamping down on piracy (which has, according to some estimates, e.g. CII and KPMG, 2005, deprived the film industry of more than 40% of revenues) and allowing for advantageous FDI schemes in the construction of new cinemas.

The most important policy change, however, allows new types of private investments to enter into Bollywood at an auspicious time when markets are booming. Until recently, Indian entertainment industries, including film, were not liable for public investments through the semi-public *Industrial Development Bank of India (IDBI)*. As private capital was abundant in other entertainment industries, such as TV, this lack of "official" status had the largest adverse effect upon film: Public as well as private banks and other financial institutions would refrain from engaging with film production companies, and India did not develop a professional finance and insurance system for film production. Production companies were, as mentioned above, forced to raise capital through private bank loans, or, in the many cases when banks were unwilling, through friends, family, or private money lenders with high interest rates (as high as 60% annually (Dwyer and Patel, 2002)). The Indian government finally granted the entertainment industries official status in 1998. Investments by the *Industrial Development Bank of India* are now meant to encourage private banks, other financial institutions, and insurance companies to engage with film financing and insurance as in other industries. In a bid to attract foreign funding, the national government has also allowed for 100% FDI in the film industry (IBEF and PWC, 2005). Even with the newly gained official status, institutional capital continues to shy away from film production projects due to their high risk. Bank loans constituted only 7% of film finance in 2004 (Kheterpal 2005), and retained earnings, private loans by family, rich friends or associates, and agreements with distributors were still the preferred modes of finance for more than two-thirds of Bollywood film projects in 2006 (Das Gupta, 2006). Hence, the main beneficiaries of the new status and image of the film industry have been found within distribution, where newcomers have been able to both raise institutional capital and attract corporate investments from other Indian industries. The main way the production companies benefit from the new sources of finance is their alliances to distribution firms.

The regulation changes have had notable impact upon the evolution of Bollywood. First and foremost, new regulation has promoted the entry into the industry of a new breed of film distributors that pull alliances with incumbent production companies, ultimately allowing for more efficient finance and more targeted investments by both producers and distributors in marketing and exports. The spread of the new practice of long-term alliances among production and distribution firms is taking place by virtue of the dense social network in Mumbai, but the igniting spark came from the investments and entry that were propagated by policy regulation. Second, regulation has even had some restructuring effects upon the social network, in the guise of incentives for replacing particular social relations with others. Before the film industry obtained official status, the scarcity of funding forced producers to look towards the organized crime

cartels in Mumbai, peaking during the 1980s and 1990s. In the 1990s, criminal sources financed an estimated 40% of film production (Kripalani and Grover, 2002). Social relations of various sorts between producers and holders of black money were a dubious, albeit necessary trait of the Bollywood social network. Today, even if tax evasion – an Indian national sport – is still widespread among film producers and star actors, it is estimated that below 10% of film finance is illegal (Kripalani and Grover, 2002). Many social relations to the underworld are being replaced by alliances to new, well-funded, and legal distribution firms.

## 5. Discussion and theoretical implications

The data presented above allows us to answer the paper's first research question: Bollywood's recent growth is indeed caused by industry evolution. After a persistently low level of integration since the 1950s, Bollywood now shows signs of horizontal integration within distribution and finance, as a result of new entrants. Production is professionalizing, but remains disintegrated. Instead of vertical integration, alliances are emerging between production companies and new players in distribution and finance. The combination of disintegration in production and integration in distribution and finance has allowed for a continuation of Bollywood's high annual output of films in combination with significantly larger investments in marketing and distribution, boosting earnings and exports.

Bollywood's recent growth and advances on the global marketplace constitutes a challenge to the theoretical assumptions of a "Hollywood hegemony" in film research: That the huge purchase power of US consumers combined with endogenous sunk costs (early investments by Hollywood into marketing and distribution) would render the US film industry with lasting dominance on global film markets (Bakker, 2005; Scott, 2005; Epstein, 2006). It is a case in point that Bollywood has not evolved because Hollywood is now investing in the potentially very lucrative Indian market: Except from the odd co-production, Hollywood's only involvement in Indian film has been investments in distributing their own products, and Bollywood's growth has been without the involvement of any notable FDI. The theoretical implication in relation to the development and international management literatures is that there is indeed scope for the indigenous growth of advanced, highly exporting, consumer industries in emerging economies, and that we should dedicate much more scholarly attention to understanding how such industries emerge in some emerging economies and not in others.

The fact that Bollywood remains vertically disintegrated is another challenge to existing film research. Even if it is still too early to say if Bollywood will eventually undergo a more widespread integration, our study questions the theoretical assumption that the only efficient organization of large-scale film industries encompasses Hollywood-style integration or dominance of film production by distribution companies. The emerging Bollywood model's combination of integrated distribution and finance, disintegrated production, and alliances, may be a viable alternative to the Hollywood model.

Pertaining to the paper's second research question, we investigated various mechanisms of industry evolution. One key finding here was that there has been variation, in the guise of entry of a new, integrated, organizational form, but it has not spread. Instead, there has been transmission of a new practice of alliances along the value chain. For the development and international management literatures, it is an important finding that there has been no entry into Bollywood of the organizational form that is very important in a range of other Indian industries, the business group. The fact that one of the more striking growth phenomena in an emerging economy context has developed without any business groups suggests that future research should advance to also study other social structures, such as social networks. In this respect, it is an important question for future research into emerging economies whether particular social network structures are substitutes for business groups, or whether and when these forms may co-exist.

Concerning social networks, we found that the short path lengths in the geographically focused social network among Mumbai producers, directors, and actors make the network very conducive for industry evolution in the guise of transmission of new practices, but as the network is also highly clustered, it does not accommodate the spread of new organizational forms very well. The high degree of clustering is caused by path dependence in how the network grows: Predominantly, people who are already loosely connected to network participants get pulled into the dense component of the network. This path dependence, and the high degree of clustering and closure it has led to, is something Bollywood film people share with Persians in the International carpet trade and Jews in the international diamond trade (or, for that matter, in 1950s Hollywood): They operate in well-defined social networks, experiencing some degree of social stigmatization, but accessing resources inside the network with low transaction costs. Even if not well connected to high society and consequently receiving little political support, Bollywood has, as Carroll and Hannan (2000) would

put it, occasionally connected to the resources of other populations – not the high circles in Delhi, but to other tightly-knit social networks in the Mumbai money circuit, such as industrialists and the underworld. Our study is hence a notable example of how diverse populations with discrete networks connect and disconnect.

Our analysis substantiates the finding that the social network exerts a conservative influence upon industry structure by illustrating that a recent change of policy regulation has been instrumental for introducing variation in the guise of new organizational forms, and ultimately inspiring new practices, to Bollywood. New financial opportunities propagated by regulation have also helped to (partially) cleanse the Bollywood network from social relations to the Mumbai underworld. Hence, the paper contributes to the social network perspective within evolutionary (and organizational) theory by pointing to the moderating effect of political regulation upon how social networks influence industry evolution, or upon the very structure of networks. We argue that future research combining evolutionary theory, organization theory, and network theory, should aspire to account for both how networks influence a population (industry), as well as, how regulation or other factors in the broader environment of a population may moderate the influence of its networks, as well as these networks themselves.

## 6. Conclusion

Bollywood is not just one of India's most eye-catching growth phenomena, it is also the world's biggest and fastest growing commercial film cluster. On a scale comparable to Hollywood, Bollywood finances, produces, markets, and distributes well over 200 films annually, including big-budget blockbusters, but in the complete absence of *Sonys*, *Walt Disneys*, or anything like major conglomerates. In a Hollywood perspective, most Bollywood firms are "indies" — the notable difference being that while in Hollywood, independent films are rarely distributed broadly, in Bollywood, many such films are mainstream box office successes. This paper represents one of the first economic studies of Bollywood. On the basis of secondary data and novel primary data derived from 58 interviews, it investigated how industry evolution is at the heart of Bollywood's current performance growth. The paper found that a social network among particular Mumbai film producers, directors, and actors, influences the emergence of a Bollywood model that, while much more economically successful than earlier, continues to be very different from Hollywood. The paper also demonstrated how environmental factors – rapid development of demand, as well as changes in government regulation – have been external preconditions for industry evolution.

Hence, the paper adds to not just the international management and development literatures through providing a first analysis of an unusual case of large-scale indigenous growth in an emerging economy context, it also seeks to contribute to the new social network perspective within evolutionary theory by exemplifying that while social networks do structure evolution processes, there are important roles for environmental factors for setting evolution in motion, or modifying the social networks that impede it.

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## References

- Ahlstrom, D., Bruton, G., 2006. Venture capital in emerging economies: networks and institutional change. *Entrepr. Theory Pract.* 30 (2), 299–320 March.
- Aldrich, H., 1999. *Organizations Evolving*. Sage, Thousand Oaks, CA.
- Baker, W., Faulkner, R.R., 1991. Role as resource in the Hollywood film industry. *American J. Sociol.* 97/2, 279–309.
- Bakker, Gerben, 2005. The decline and fall of the European film industry: sunk costs, market size, and market structure, 1890–1927. *Economic History Review*, vol. 58, no 2, pp. 310–351.
- Barabasi, A.L., Albert, R., Jeong, H., Bianconi, G., 2000. Power law distribution of the World Wide Web. *Sci* 287, 2115.

- Bardhan, P.K., 1989. Alternative approaches to the theory of institutions in economic development. In: Bardhan, Pranab (Ed.), *The Economic Theory of Agrarian Institutions*. OUP, New York, pp. 3–17.
- Barnouw, E., Krishnaswamy, S., 1963. *Indian Film*. Oxford University Press, New York.
- Baum, J.A.C., Oliver, C., 1992. Institutional embeddedness and the dynamics of organizational populations. *American Sociological Rev.* 57, 540–559.
- Bhagat, R.S., Kedia, B.L., Harveston, P.D., Triandis, H.C., 2002. Cultural variations in the cross-border transfer of organizational knowledge: an integrative framework. *Acad. Manag. Rev.* 27 (2), 204–221.
- Boisot, M., Child, J., 1996. From fiefs to clans and network capitalism: explaining China's emerging economic order. *Adm. Sci. Q.* 41, 600–628.
- Burt, R.S., 1992. *Structural Holes: The Social Structure of Competition*. Harvard University Press, Cambridge.
- Carroll, G.R., Hannan, M.T., 2000. *The Demography of Corporations and Industries*. Princeton UP, New Jersey.
- Cattani, G., Ferrani, S., Negro, G., Perretti, F., 2006. Integrating ecologies: population dynamics and interorganizational networks in the US motion picture industry, 1912–1970. *Acad. Manag. Best Paper Proc. Atlanta*.
- CBFC (Central Board of Film Certification), 2006. *Collected Statistics*.
- CII (Confederation of Indian Industry), KPMG, 2005. *Indian Entertainment Industry Focus 2010: Dreams to reality*. CII, New Delhi.
- Currah, A., 2007. *Hollywood, the Internet and the World: A Geography of Disruptive Innovation, Industry and Innovation* vol 14 no 4.
- Das, K. (Ed.), 2005. *Indian Industrial Clusters*. Ashgate, Aldershot.
- Das Gupta, S., 2006. *How Bollywood Makes Money*. rediff.com, May 27 2006, [www.rediff.com/money/2006/may/27spec1.htm](http://www.rediff.com/money/2006/may/27spec1.htm).
- Delmestri, G.F., Montanari, Usai, A., 2005. Reputation and strength of ties in predicting commercial success and artistic merit of independents in the Italian feature film industry. *J. Manag. Stud.* 42/5, 975–1002.
- De Vany, A., 2004. *Hollywood Economics: How Extreme Uncertainty Shapes the Film Industry*. Routledge, London.
- Dudrah, R.K., 2006. *Bollywood: Sociology Goes to the Movies*. Sage, New Delhi.
- Dwyer, R., Patel, D., 2002. *Cinema India: The visual Culture of Hindi Film*. Rutgers University Press, New Brunswick.
- Eisenhardt, K.M., 1989. Building theories from case study research. *Acad. Manag. Rev.* 14 (4), 532–550.
- Eliashberg, J., Elberse, A., Leenders, M., 2006. The motion picture industry: critical issues in practice, current research and new research directions. *Market. Sci.* 25 (6), 638–661.
- Epstein, E.J., 2006. *The Big Picture: Money and Power in Hollywood*. Random House, New York.
- Faulkner, R.R., Anderson, A.B., 1987. Short-term projects and emergent careers: evidence from Hollywood. *American J. Sociol.* 92/4, 879–909.
- Flyvbjerg, B., 2004. Five misunderstandings about case-study research. In: Seale, C., Gobo, G., Gubrium, J.F., Silverman, D. (Eds.), *Qualitative Research Practice*. Sage, London, pp. 420–434.
- Ganapati, P., 2002. *Lights, Camera, War!* Rediff.com, October 24, 2002, <http://us.rediff.com/movies/2002/oct/24main.htm>.
- Ganti, T., 2004. *Bollywood: A Guidebook to Popular Hindi Cinema*. Routledge, New York.
- Garga, B.D., 1996. *So Many Cinemas: The Motion Picture in India*. Mumbai: Eminence Designs.
- Gokulsing, K.M., and Dissanayake, W., 2004. *Indian Popular Cinema: A Narrative of Cultural Change*, Revised Edition. Stoke-on-Trent: Trentham Books.
- Granovetter, M., 2005. Business group and social organization. In: Smelser, N., Swedberg, R. (Eds.), *Handbook of Economic Sociology*: 429–450. Princeton University Press, Princeton, NJ.
- Hannan, M.T., Freeman, J.H., 1977. The population ecology of organizations. *American J. Sociol.* 82, 929–964.
- Indian Brand Equity Foundation and PriceWaterhouseCoopers, 2005. *Entertainment and Media*. IBEF, New Delhi.
- Jain, R.D., 1960. *The Economic Aspects of the Film Industry in India*. Atma Ram and sons, Delhi.
- Kabir, N.M., 2001. *Bollywood: The Indian Cinema Story*. Channel 4 Books, London.
- Kapoor, D., 2005. The Indian entertainment industry: an unfolding opportunity. *Media and Entertainment Insights*. PriceWaterhouseCooper, pp. 1–6. May.
- Kaur, R., Sinha, A. (Eds.), 2005. *Bollywood: Popular Indian Cinema Through a Transactional Lens*. Sage, New Delhi.
- Kazmi, N., 1998. *The Dream Merchants of Bollywood*. UBSPD, New Delhi.
- Khanna, T., Palepu, K., 2000. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *J. Finance* 55, 867–892.
- Khanna, T., Yafeh, Y., 2005. Business groups and risk sharing around the world. *J. Bus.* 78, 301–340.
- Kheterpal, S., 2005. *Bollywood: Emerging Business Trends and Growth Drivers*. YesBank, Mumbai.
- Kohli, V., 2003. *The Indian Media Business*. Response Books, New Delhi.
- Kohli-Khandekar, V., 2006a. Indian film giants. *Businessworld*, vol. 25, no. 33, pp. 27–42.
- Kohli-Khandekar, V., 2006b. *The Indian Media Business* second edition. Response Books, New Delhi.
- Kripalani, M., Grover, R., 2002. *Bollywood: Can New Money Create a World-class Film Industry in India?* *Business Week*, Asian Edition, December 2002, [www.businessweek.com/magazine/content/02\\_48/b3810013.htm](http://www.businessweek.com/magazine/content/02_48/b3810013.htm).
- Lal, D., 1998. *Unintended consequences: the impact of factor endowments, culture, and politics on long-run economic performance*. The MIT Press, Cambridge.
- Lorenzen, M., Frederiksen, L., 2005. The management of projects and product experimentation: examples from the music industry. *European Manag. Rev.* 2 (3), 198–211.
- Luo, X., Chung, C.-N., 2005. Keeping it all in the family: the role of particularistic relationships in business group performance during institutional transition. *Adm. Sci. Q.* 50, 404–439.
- Misra, V., 2002. *Bollywood Cinema: Temples of Desire*. New York: Routledge.
- Mytelka, L., and Farinelli, F., 2000. *Local Clusters, Innovation Systems and Sustained Competitiveness*, UNU/INTECH Discussion Papers, ISSN 1564–8370.
- Nadvi, K., Schmitz, H. (Eds.), 1999. *Industrial Clusters in Developing Countries*, Special Issue of *World Development*, vol. 27 no. 9.

- Nandy, A., 1998. *The Secret Policy of our Desires: Innocence, Culpability and Indian Popular Cinema*. Zed Books, London.
- Nelson, R.R., Winter, S.G., 1982. *An Evolutionary Theory of Economic Change*. Harvard University Press, Cambridge, Mass.
- Pendakur, M., 2003. *Indian Popular Cinema: Industry, Ideology, and Consciousness*. Cresskill, NJ: Hampton P.
- Phillips, N., Lawrence, T.B., Hardy, C., 2000. Inter-organizational collaboration and the dynamics of institutional fields. *J. Manag. Stud.* 37 (1), 23–43.
- Powell, W.W., 1990. Neither market nor hierarchy: network forms of organization. In: Cummings, L.L., Staw, B.M. (Eds.), *Research in Organizational Behavior*, vol. 12. CT: JAI Press, Greenwich, pp. 295–336.
- Powell, W.W., White, Douglas, R., Koput, Kenneth, W., Owen-Smith, Jason, 2005. Network dynamics and field evolution: the growth of inter-organizational collaboration in the life sciences. *American J. Sociol.* 110 (4), 1132–1205.
- Prag, Jay., Casavant, J., 1994. An empirical study of the determinants of revenues and marketing expenditures in the motion picture industry. *J. Cult. Econ.* 18/3, 217–235.
- Prasad, M., 1998. *Ideology of the Hindi film: A Historical Construction*. Oxford University Press, New Delhi.
- Rajadhyaksha, A., Willemen, P., 2002. *Encyclopaedia of Indian Cinema (New Revised Edition)*. Oxford University Press, New Delhi.
- Rao, P., Bannerjee, R., 2006. Creating a Value Chain. *Indiatimes*, April 7, 2006, [economictimes.indiatimes.com/articleshow/1480606.cms](http://economictimes.indiatimes.com/articleshow/1480606.cms).
- Ramachandran, T.M. (Ed.), 1985. *Seventy Years of Indian Cinema: 1913–1983*. Cinema India-International, Bombay.
- Rangoonwalla, F., 1975. *75 Years of Indian Cinema*. Indian Book Co, New Delhi.
- Razin, A., Sadka, E., 2002. *Labour, Capital and Finance: International Flows*. Cambridge University Press, New York.
- Schmitz, H. (Ed.), 2003. *Local Enterprises in the Global Economy: Issues of Governance and Upgrading*. Elgar, Cheltenham.
- Scott, Allen J., 2005. *On Hollywood: The Place, the Industry*. Princeton University Press, Princeton, N.J.
- Shoesmith, B., 1987. From monopoly to commodity: the Bombay Studios in the 1930s. In: O'Regan, T., Shoesmith, B. (Eds.), *History on/and/in Film*. History and Film Association of Australia, Perth, pp. 68–75.
- Sorenson, O., Waguespack, D.M., 2006. Social structure and exchange: self-confirming dynamics in Hollywood. *Adm. Sci. Q.* 51.
- Tamuli, M.K., 2006. *Foreign Direct Investment in India: An Analytical Overview*. Akansha Publishers, New Delhi.
- Uzzi, B., Spiro, J., Sept 2005. Collaboration and creativity: the small world problem. *American J. Sociol.* 111, 447–504.
- Valicha, K., 1998. *The Moving Image: A Study of Indian Cinema*. Orient Longman, Bombay.
- Vasudevan, R., 2000. *Making Meaning in Indian Cinema*. Oxford University Press, New Delhi.
- Wasserman, S., Faust, K., 1994. *Social Network Analysis: Methods and Applications*. Cambridge University Press, Cambridge.
- Watts, D.J., Dodds, P.S., Newman, M.E.J., 2002. Identity and search in social networks. *Sci.* 296, 1302–1305.
- Williamson, O.E., 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. The Free Press, New York.
- Williamson, O.E., 2000. The new institutional economics: taking stock, looking ahead. *J. Econ. Lit.* XXXVIII, 595–613.
- Witt, U., 1993. *Evolutionary Economics*. Edvard Elgar, Aldershot.
- Yin, R., 1994. *Case Study Research: Design and Methods*, (2nd ed.). Sage, Thousand Oaks, CA.