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Breakout from Bollywood? Internationalization of Indian Film Industry

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Abstract:

In the context of an emerging economy, the paper analyzes indigenous growth and internationalization. Using novel and original data, the paper studies the Indian film cluster in Mumbai, *Bollywood*. It argues that as the world's biggest commercial film cluster and a conspicuous growth phenomenon in an emerging economy context, Bollywood can be seen as a paradigmatic case for adding to our understanding of the development of film clusters outside the USA, as well as suggesting more general insights into the growth and internationalization of industries in emerging economies. The empirical analysis of the paper points to the importance of home market, government regulation, and industry structure for Bollywood's recent export growth. The paper discusses how the existence of a well-defined and geographically centered social network among producers, directors and other key roles in filmmaking in Mumbai supports the development of a 'Bollywood model' of filmmaking with a industry structure remarkably different from Hollywood's.

Key words: Film industry, India, Bollywood, networks, home market, industry structure, exports, institutional change, emerging economies

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1. Introduction

This paper focuses upon emerging economies as production sites and emergent players on global consumer markets. We pick a very conspicuous, yet extremely under-researched case 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 production (and related media) companies in Mumbai does not signify that is a mere imitation of the US film cluster in Los Angeles. With its enormous global impact upon films, music, dance, and other art forms, Bollywood has now developed a strong own brand. While stylistically, the dances and lip-synced songs, the symbolic and emotional drama, and the wandering storyline contained in a typical 3-hour Bollywood film may be alien to audiences used to Hollywood products, rather than being a "Third World" art cinema (Tyrell, 1999), Bollywood is a hugely commercial industry with an estimated annual number of ticket sold globally of 3,6 billion (compared to Hollywood's 2,6 billion (Kripalani and Grover, 2002)).

Bollywood is an excellent case for studying the growth and internationalization of an indigenous industry in an emerging economy context. Entertainment is now, after ICT, India's fastest growing sector, and the Bollywood cluster currently grows by 16% annually. After a century of mainly serving the home market, Bollywood is now — with a 60% export growth the last four years — collecting still more revenues abroad and is well on its way to becoming integrated in the global economy. The paper asks the overall research question *What explains the recent export growth of Bollywood?* Presenting novel primary empirical data on Bollywood, the paper investigates the role of 1) home market developments; 2) industry structure; and 3) public regulation, thus explaining the cluster's recent growth and its advances on the global marketplace. The paper adds not only to existing theory on the film industry by accounting for a large-scale, commercial filmmaking model completely different from Hollywood's, it also adds to a possible research agenda related to the regulational,

industrial, and social network structures behind growth and internationalization of indigenous industries in emerging economies.

The paper is structured thus. The second section of the paper outlines its theoretical foundations and develops three empirical research questions (pertaining to home market, industry structure, and public regulation) on these foundations. Section 3 describes the method used for the Bollywood case study, as well as its sources and data collection. The fourth section presents the case study, addressing the three research questions in turn. This section is followed by a section that answers the research questions and discusses Bollywood's future development on the basis of social network theory. Section 6 is a brief conclusion of the paper.

2. Theoretical foundation and research questions

Bollywood is an example of a growing and internationalizing entertainment industry indigenous to an emerging economy, and there is little existing theoretical foundation for understanding such a phenomenon. 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). Hence, the theoretical setting for our study of Bollywood needs to be eclectic. Below, we shall describe the chosen theoretical foundations, as well as the research questions we develop on those foundations.

2.1. The role of the home market

There is a rich literature on the importance of the home market for film exports. The basic claim of this literature is that a large home market is beneficial to any film industry, because of the cultural difference between home and export markets — as export always means cultural handicap, it is easier to be big and export to small

markets than being small and export to big markets (Hoskins and Mirus, 1988; Vogel, 1998; Elberse and Eliashberg, 2003). This also means that film industries with large home markets can easier impose their culture upon other countries, and consolidate an cultural advantage related to language and style preferences, and the bigger the cultural differences between different export markets, the more advantageous the bigger country (Papandrea, 1998). Doh (2001) has empirically shown the advantage of English language films and the propensity of Hollywood to export to European markets. There are no studies of the extent to which Bollywood has, given its huge home market, created cultural advantage on e.g. Asian and African markets, and how this may have influenced exports.

From the existing research, we may expect the recent growth of Bollywood exports to be positively influenced by home market developments. For example, Lee and Waterman (2006) show that the growth of US dominance on world markets in the period 1950-2003 is correlated to the growing US home market relative to the home markets of other big film producing nations, such as Japan, Germany, Italy, France and the UK, in that period. We outline the paper's first research question thus:

Research question 1. What is the role of the home market for Bollywood's recent export growth?

2.2. The role of industry structure

Research points out that whether a film industry can take advantage of its home market size on export markets depends to a large extent upon industry structure. On one hand, large home markets facilitates horizontal integration and scale economies in production, meaning that film production companies in such countries may derive export advantages due to superior budgeting, planning, and product quality (Wildman 1995; Wildman and Siwek, 1988). Hoskins et al (1997), on the other hand, suggest that Hollywood's vertical integration of finance, production, distribution, and exhibition was the key driver of the power of US dominance on world film markets.

In the film industry, there is also recent focus upon the role of industry structures that are neither market nor hierarchy (integration): Social networks (Powell, 1990; Wasserman and Faust, 1994; Philips et al, 2000; Brass et al., 2004; Watts et al., 2002;

Powell et al, 2005). The presence of informal social networks that may solve problems of transaction costs (Williamson, 1975; 2000) and allow for other economic benefits in the film industry has been documented for e.g. Hollywood (Sorenson and Waguespack, 2006) and Italy (Delmestri et al, 2005). In an emerging economy context, there is increasing focus upon how industries are structured by business groups (e.g. Boisot and Child, 1996; Khanna and Palepu, 2000; Luo and Chung, 2005). Business groups represent social networks rather than contractual vertical or horizontal integration, entry to such groups is restricted and often based on kinship, and group members collaborate with low transaction costs, due to reputation and social trust effects. There is ample evidence for such groups in manufacturing, trade and agriculture in emerging countries, including India (Lal, 1998; Bardhan, 1989; Khanna and Palepu, 2000; Ahlstron and Bruton, 2006), and for how such groups facilitate cross-border knowledge transfer (Bhagat et al., 2002).

There is currently no research on the role of horizontal integration in production, or vertical integration of finance, production, distribution and exhibition, for Bollywood's film exports, or on the presence of business groups or other types of social networks in Indian film industry. Hence, the paper's second research question is:

Research Question 2. What is the role of industry integration and social networks for Bollywood's recent export growth?

2.3. The role of public regulation

A range of the world's film clusters enjoy state subsidies, not just for production, but also for export activities. In the EU, there is governmental export support at EU level, and even the large film clusters, those in France, the UK, Italy and Germany, enjoy national export promotion (de Turegano, 2006). In Asia, Hong Kong is also beginning to attract government support for both production and exports. Even if the world's most exporting film cluster, Hollywood, operates without government subsidies, its export success has been positively influenced by government regulation. Segrave (1997) points to the role since WWII of the US government's strategic trade in a range of different industries. The general aim of such strategic trade is creating

beneficial conditions for exports of US products in industries where such exports would boost domestic scale economies (Busch, 1999). As mentioned above, film is exactly such an industry, and Hollywood exports have benefited notably from the efforts of the US State Department, the Department of Commerce, and various US embassies in paving the way for US film exports. The post-WWII Marshall Plan for Europe linked aid to European countries to opening of their markets for US film exports (Scott, 2005). Examples of how the US government later followed up on this strategic trade policy is the diplomatic efforts that forced open the French film market to Hollywood exports (Ulff-Møller, 2001) and the 1993 trade disputes between US and the EU over entertainment products (Scott, 2005).

The observation that export growth of other film clusters has been positively influenced by government regulation leads to the paper's last research question:

Research Question 3. What is the role of public regulation for Bollywood's recent export growth?

3. Method

In the following, we shall explain the merits of a single case study, as well as the design and sources of our study of the cluster of film making in Mumbai, India: Bollywood.

3.1. Research strategy

As sketched out in section 2, the existing theoretical basis for understanding indigenous growth and internationalization in the context of emerging economies is poor. The theories outlined in the section were either developed for other phenomena in the emerging economy setting (e.g. FDI and manufacturing clusters), or for the film cluster phenomenon in a different setting (Hollywood or Western Europe). As recommended by Eisenhardt (1989), the case study research strategy is warranted

when we set out not to test existing theory, but, on the contrary, approach a problem in order to inspire development of, or supplements to, theoretical ideas (Yin, 1994). The case study method also has merit if we want to understand the mechanics or processes behind change, rather than merely accounting for the change or for the correlation of change with other phenomena (a purpose that would render a quantitative method, such as a survey of historical data, useful).

We have the choice between performing multiple, replicated case studies (Eisenhardt, 1989; Yin, 1994), or to conduct a single, paradigmatic case study. A paradigmatic case is not representative of the entire population (when we speak of countries, clusters, or other unique cases in small and very diverse populations, achieving representativity would be difficult). It is not probabilistically selected either. In stead, 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 growth of film industries outside the USA, and hence adding to a whole new avenue of research within entertainment and film economics. 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.

In order to study the film cluster in Mumbai, we used a dual empirical design. First, in order to understand change, we undertook a historical analysis of Bollywood companies, industry structure, institutions, networks, and regulation, from the early 1900 to the present day. Second, in order to understand the present dynamics of Bollywood better, we carried out a series of multiple case studies ("nested" in the overall Bollywood case) of the last three year's top-earning Bollywood film projects.

3.2. Data sources and collection

An abundance of studies have been carried out on other of the world's big film industries (e.g. Blair, 2001; Storper, 1989; Storper and Christopherson, 1987; Scott,

2005), but virtually no research has yet been published on Bollywood as a cluster. The bulk of the literature on Bollywood lies within cultural studies, anthropology or sociology and often focuses upon film texts and their cultural impact upon viewers in India or abroad (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 ongoing analyses of the Indian film industry (by the Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII), or the Indian business magazines (such as BusinessToday, BusinessWorld, Indiatimes, India Today, or rediff.com)) typically address single issues such as exhibition or finance rather than tying them together in an overall analysis that also encompasses demand, industry structure, and institutional factors. 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) do not analyze the film cluster in Mumbai as such (Ganti, 2004, being a exception).

Consequently, we need to complement existing archival data with original and novel data for our analysis of Bollywood. We obtained the latter through 50 interviews carried out 2005-2007 in Mumbai, all semi-structured with duration between 1 and 3 hours, and recorded and transcribed. Below, we shall explain in detail how this was done.

3.2.1. Historical analysis

A basic limitation for a historical analysis of Bollywood is that statistics for the Indian film industry is even less satisfactory than for (the notoriously difficult) film industries in other countries. Neither Central Statistical Organization nor other central statistical bureaus provide useful data on Bollywood's industry structure or employment. Film data is also scarce. The Central Board of Film Certification

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¹ For illustration, while searches in the Social Science Citation Index (May 2006) yield 4,128 hits for "Hollywood", 598 for "American film" and 103 for "California" and "film", they amount to 61 for "Bollywood", 50 for "Indian film" and 19 for "Mumbai" (or "Bombay") and "film". Of the 61 hits for "Bollywood", 59 are cultural or anthropological publications and the remaining 2 are comments rather than articles or books.

publishes the number of certified Hindi films annually, but with no data on project participants, budget, or performance. Production figures provided by production companies are only provided for some films, not collected systematically, and both budget and collection figures are known to be imprecise estimates or deliberately skewed. Hence, we based our historical analysis on interviews with key informants from within the Mumbai film industry (producers, managers, studio owners, and representatives from industry organizations) and its supporting industries (such as finance and advertising) as well as talent (directors, actors, editors), plus data provided by Indian media and the occasional consultancy reports undertaken by Indian industry organizations with consultancy agencies. Our interpretations of earlier periods in Bollywood's history was triangulated with secondary sources: Barnouw and Krisnaswami (1980); Dwyer and Patel (2002); Pendakur (1996; 2003); Kohli (2003; 2006b); and Ganti (2004). The analysis yielded insights into the roles of demand, government regulation, institutions, social networks, and Mumbai's urbanization for the evolution of dominant types of production and coordination companies, as well as (to the extent data allowed) for project tasks and coordination modes.

3.2.2. Analysis of dynamics

In order to investigate the dynamics behind the present organization of Bollywood as well as understanding factors facilitating and impeding its current change, we chose to "nest" multiple case studies within the overall Bollywood case study (Eisenhardt, 1989). Functioning as primary data inputs to the Bollywood case study are 30 case studies of film projects. Given the high number of companies involved in each project and the general high exit and entry rate of companies in Bollywood, studying such projects may tell us something about the dynamics of the cluster that we would miss if we studied only companies.

The nested case studies were designed as follows. 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, 1984): Those film projects that, given their success, not only have the highest cultural impact upon consumers, but are

also likely to represent strategies that are most economically viable and causing the greatest degree of social learning (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) from box office collections in the year of release (as listed on www.ibosnetwork.com and www.imdb.com) for the top 35 box office grossing films (all territories) for each year). This yielded a sample of 30 film projects, the task division of which we first analyzed using the films themselves online resources (www.ibosnetwork.com, www.imdb.com, www.bollyvista.com, www.planetbollywood.com, as well as various webzines). Then, through using multiple personal channels as well as cold calls for setting up meetings, we managed to undertake interviews with producers (who were often also managerowners) in 14 production companies, covering 23 of the case films. The interviews had replicated design, designed to increase their generalizability or their ability to suggesting alternative interpretations (Eisenhardt, 1989; Yin, 1994). For different films, we asked the same questions regarding division of tasks (spanning from finance over production to distribution) and the mechanisms (contracts, personal informal relations, etc.) employed to coordinate different tasks among project participants. We also checked for case-specific influences, asking to the factors in the participating production company's history as well as the external environment of the project that influenced task division and coordination, and whether the integration or coordination strategies of the involved production company had recently changed or were deemed likely to do so.

The multiple case studies yielded a remarkably coherent picture of certain dominant types of task division and mechanisms of coordinating film projects, as well as the factors causing production companies to apply different strategies. From the 30 cases, we were able (with some precaution, and triangulating with the results from our historical analysis) 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 dynamics and future direction of Bollywood as a whole.

In the following section, we shall present the results of the Bollywood case study.

4. Empirical analysis

With 1041 films in 2005 (CBFC, 2006), India is the world's largest film producer (for comparison, USA released 535 films in 2005 (European Audiovisual Observatory, 2006))². And like the major US film cluster in Los Angeles, Hollywood, the Indian film cluster in Mumbai, Bollywood, operates on a fully commercial basis, with no state subsidies, a mix of big-budget and low-budget films, substantial marketing efforts and a relentless pursuit of blockbusters on a consumer market with large uncertainty (De Vany, 2004). 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 "flagpole" (i.e. top-budget) Hollywood films now collect more than 200 million USD each)(MPA, 2006; European Audiovisual Observatory, 2006).

Traditionally, exports from Bollywood have accounted for less than 10% of the industry'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 (for example, the Indian Diaspora in the UK and USA is too geographically dispersed to fill cinemas), but home video, combined with more efficient distribution ensuring better deals for production companies, has made

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² Note that to denote output, due to data availability, we use the number of *released* films for USA (the number of produced films is considerably higher), and the number of *certified* films for India (which is lower than the number of produced films, but is only slightly higher than the number of releases).

exports grow 30-50% annually during the last five years to its present 16% of total revenues, and a further exports growth of over 20% is expected until 2010 (CII and KPMG, 2005).

We shall now investigate the importance of Bollywood's home market, industry structure, and public regulation, for the growing exports.

4.1. The role of Bollywood's home market (Research Question 1)

Bollywood's status as a low earning industry is changing. First and foremost, still earning 70% of its revenues from cinema exhibition (CII and KPMG, 2005), Bollywood has taken advantage of the growth in national demand caused by India's rapidly rising GDP (doubled over the last two decades and currently growing 8% annually) and a booming middle class (currently 300+ million people strong and growing at 5% annually), through the release of a more diverse range of films in combination with investments into upgrading existing cinemas and constructing multiplexes. In the period 2001-2005, box office collections rose by 29% (Kheterpal, 2005), and in 2005, by 17% (European Audiovisual Observatory, 2006). Second, as a rapidly growing supplement to cinema distribution, Hindi films produced by Bollywood 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 (such as Zee TV, a national Hindi channel), selling films to Hindi TV channels became major business. Finally, it should 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 toys, computer games, and ring tones and movie clips for mobile phones.

Due to this ability of Bollywood to tap into new markets, Bollywood is now one of India's central growth industries and in the process of becoming a future global giant. Producing 16% of Indian films in 2004, it accounts for more than 40% of the Indian

film industry's revenues (CII and KPMG, 2005). No matter the calculation method, Bollywood's recent growth has been impressive, and the industry is now acknowledged as one of India's top growth clusters (ICT is still overall India's fastest growing industry). The revenues of the Indian film industry have grown 360% in the period 1998-2005, and 58% in the period 2001-2005. This figure includes all revenues, including advertising and music rights (Kohli-Khandekar, 2006b). CII and KPMG (2006) estimate 2006-2007 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 (for example, in January 2007, in collaboration with the city of Toronto, a flagpole Hindi production premiered here rather than in India).

Our analysis of the developments of Bollywood's home market supports theoretical expectations that exports are backed up by a growing sales and revenues at home. However, how did Bollywood use the growing home market as platform for increasing exports? Below, we shall analyze the cluster's industry structure in order to find out.

4.2. The role of industry structure (Research Question 2)

In this section, we shall first analyze the industry structure in terms of horizontal and vertical integration in finance, production, and distribution. The patterns of change we find here can only be understood by analyzing Bollywood's social network structures, and we next present an analysis of their emergence as well as their impact upon industry integration.

4.2.1. Industry integration

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 here end the structural similarities 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, Buena Vista, 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 means of finance 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 transformation of this industry structure is now taking place, and we shall outline it below.

Horizontal, but no vertical, integration in distribution and finance. Downstream in the value chain, there has been moves towards integration, and this has influenced export positively. A handful of firms now focus upon achieving economies of scale in distribution and finance, but also seek to integrate vertically into production. 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 a 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 Adlabs, a key Indian film processing company (printing most of Bollywood's releases). This firm has attracted huge investments from India's biggest telecom corporation, Reliance, and is moving into exhibition, distribution (particularly international), and finance of films, with 7 releases in 2005. Percept Picture Company was created in a joint venture with the Hindi TV channel and film distributor Sahara

One, in order to ensure the latter a stable input of films and film-related content, and now finances and distributes films at a still bigger scale. It released 10 films under its banner in 2005. Finally, *UTV*, a television production company and one of the biggest domestic film distributors, has also started to finance and release films, with 3 films released in 2005. 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 their regional Indian territory.

However, the ambitions of these distribution and finance firms to also vertically integrate have had less success so far. The attempts of these firms to produce films inhouse suffer from a lack of vertical synergies -- between the "humdrum" activities of distribution, finance and marketing and creative processes of scripting and production.³ For example, in addition to logistics problems of managing productions, these firms experience problems with hiring talent. Sahara One did not succeed to integrate film production in its joint venture with *Percept Picture Company*, and has now exited the venture, focusing upon film distribution and finance. Even during its joint venture with Percept Picture Company, Sahara One managed to produce only half of its releases in 2005 in-house. Hence, Sahara One as well as the other distribution and finance firms still rely to a wide extent on buying films produced elsewhere and subsequently distribution and marketing them, and the emergence of these 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 specialized production companies. For example, all the top 30 earning films 2003-2005 were produced by such companies.

Professionalization, but little integration, in production. There are very conspicuous signs of professionalization among the specialized production companies mentioned above. Even with the absence of widespread horizontal integration, this development has a positive impact upon exports. Currently, a range of production

³ That there are few vertical ("scope") economies of integrating creative processes (of scripting and production) with "humdrum" processes (of distribution, marketing, and finance) is a general trait for many entertainment industries (Caves, 2000; Lorenzen and Frederiksen, 2005). This is the reason that even if Hollywood media conglomerates have integrated film production through ownership, they leave creative processes of production to small production subsidiaries rather than attempting production inhouse.

companies are undertaking a modest up-scaling of their annual outputs. This allows for some scale economies in production planning (particularly for low-budget productions), but first and foremost for better finance and collection: A higher annual output allows for selling packaged rights to several films to distributors at home and particularly abroad on favorable conditions. This business model has also attracted big capital from other industries, as one of India's largest conglomerates, Aditya Birla Group, has established Applause Entertainment, a big-budget film production company, and television production company Nimbus Entertainment (backed by capital from 3i Group) is now beginning to produce feature films.⁴ Apart from such horizontal integration, a handful firms also seek to integrate downstream in the film value chain, establishing own distribution channels, upgrading marketing (and even integrating the publishing of music soundtracks). Without comparison, Yash Raj Films is the most successful of these firms. One of the industry's grand old production companies, Yash Raj Films had a huge hit, particularly on the export markets, in the early 1990s. As this infusion of capital corresponded 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 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. After ten years of this strategy and up-scaling to 7 annual productions, Yash Raj Films now has the largest turnover yet seen in Bollywood (112 millions USD in 2004 -- more than double that of Percept Picture Company, three times that of UTV, and five times that of Adlabs (Kohli-Khandekar, 2006)). This has allowed the company to also integrate studio and postproduction facilities, plan to move to TV production, and lease excess studio capacity to other production companies. A few other production companies now try to embark on the same strategy of vertical integration, for example the artistically

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⁴ These well-funded newcomers to Bollywood have proved able to pull of another new feat in the industry: That of attracting FDI. Earlier, the only foreign investments witnessed by Bollywood were in distribution (typically, Hollywood media conglomerates investing in distributing their own products) or, more recently, exhibition (multiplexes for the wealthy middle-class audience). But recently, Hollywood has moved intro distribution of Hindi films, and are now taking a radical next step in the guise Bollywood-Hollywood co-productions, e.g. between *UTV* and *News Corp*; and *Applause* and *Sony* (attempts of smaller production companies, such as *Factory*, of undertaking such international co-productions, have been less successful). It should be noted, however, that FDI to Bollywood is still negligible.

ambitious *Mukta Arts* and the television content producer *Pritesh Nandy Communications* which has moved into film production and distribution.

However, as all these production companies are reluctant to distribute films produced by other companies, their vertical integration hinges upon the growth of their own output. This has turned out to be slow, because the firms experience certain limits to scale of production, particularly related to managing talent (scriptwriters, directors) in-house.⁵ 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. Due to these limits to horizontal integration, most Bollywood films continue to be produced by production companies with a modest annual output (typically less than 3 films), and no attempts of vertical integration. Table 1 below 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, Table 2 shows that 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, and seven (64%) involved in three or more top films.

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⁵ It is common to many entertainment industries that the scale economies of integrating creative processes (of scripting and production) are very modest compared to those of integrating "humdrum" processes (of distribution, marketing, and finance)(Caves, 2000; Lorenzen and Frederiksen, 2005).

Table 1. Production of top 30 films in India 2003-2005

Producer	No. of films
Applause Entertainment	1
B.R. Films	1
Balaji Telefilms	1
Vishesh Films (aka Bhatt Productions)	1
Dharma Productions	2
Excel Entertainment	1
Film Kraft	1
Fish Eye Network (aka Shreya Creations)	1
Lighthouse Entertainment	1
Maruti International	1
Nadiadwala Grandsons	1
MAD Films (Orion Pictures)	1
R.S. Entertainment	1
Red Chillies Entertainment (aka Dreamz	2
Unlimited)	
S.K. Films Enterprises	1
Shree Krishna International	1
Factory (aka Ram Gopal Varma Productions;	3
Dream Merchants; K Sera Sera)	
Venus Films (aka Venus Records and Tapes)	3
Vinod Chopra Productions	1
Yash Raj Films	5
Total production companies: 20	Total films: 30

Table 2: Production of top 30 films in the USA 2003-2005

Producer	No. of films
20th Century-Fox Film	4
Buena Vista Pictures	4
Columbia Pictures	3
DreamWorks Distribution	3
Miramax Films	1
New Line Cinema	3
Newmarket Films	1
Paramount Pictures	1
Universal Pictures	3
Warner Bros. Pictures	6
Warner Home Video	1
Total production companies: 11	Total films: 30

Many of the small 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 included in figure 1 above, 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). However, some small-scale production firms now take advantage of the emergence of new players in distribution and finance (e.g. *Adlabs*, *Percept Picture Company* and *UTV*), and sign deals of supplying them with films. Some 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 financers and distributors. However, other, such as *Vishesh Films* and *Factory*, in stead 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 horizontally as well as vertically disintegrated, but enjoy less uncertainty with respect to distribution and finance. This has allowed them to invest in professionalizing with respect to e.g. planning and scriptwriting.

Although it is yet early to assess the developments of Bollywood's industry structure conclusively, it does not seem to shift towards horizontal integration of production, nor vertical integration of finance, production, distribution and exhibition. Instead of adhering to the theory textbook, Bollywood seems to move towards an industry model based on *alliances* – taking advantage of 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. 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. Integration in distribution and finance 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.

The persistence of vertical disintegration, as well as horizontal disintegration in production, can only be understood by analyzing the social structure of Bollywood, i.e., its social networks. This will be undertaken below.

4.2.2. Social networks

The disintegrated industry structure is economically efficient only because it rests upon a social network of producers, star actors, directors, financers and other key roles in film production. Managers in Bollywood have a very widespread preference for social and informal, rather than contractual, relations. This preference is likely to have part of its offspring in Indian national institutions, i.e. "[t]he three pillars of the Indian social system [...] the relatively autarkic village communities, the caste system, and the joint family" (Lal, 1998: 28). Such institutions influence all aspects of Indian society and spill over to the business sphere. As argued by Taeube and Lorenzen (2007), this influences any film industry located in India: Business relations among different roles in film projects (scriptwriters, actors, producers, directors, and so on) are, ceteris paribus, likely to be influenced by family relations and other types of strong ties in India than in film industries located in countries with other national institutional fields, such as Hollywood. Business relations may hence to a relative high extent rely upon trust than upon contracts.

However, the film cluster in Mumbai is considerably more disintegrated and network-based than other Indian film clusters, such as those in Hyderabad and Chennai. Consequently, we shall not analyze Bollywood as a typical Indian industry, not even a typical Indian film industry, but undertake an analysis of Bollywood's social relations and networks as a unique, Mumbai-focused, phenomenon. Our analysis shows that informal social relations have been at the heart of Bollywood filmmaking business model for more than 50 years, and below, we shall outline these social relations, as well as the overall social network resulting from them.

Social Relations 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 (eroding the scale economies of integrated production companies with huge payrolls), booming land prices in downtown Mumbai where most of them were located, and, most importantly, the entry of a number of independent producers. With Independence and the division of India and Pakistan in 1947, a vast stream of refugees poured into North Indian cities, and an amount of film producers and entrepreneurs from the North (mainly the film industry in Lahore) arrived to Mumbai and introduced an alternative filmmaking strategy here. 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 more 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 songand-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 (the popularity of whom would also occasionally also draw upon religious sentiments of the audiences). Masala was so formulaic that Barnouw and Krishnaswamy (1980) describe 1950s films as "A star, six songs, three dances". After years of refinement and marketing, this formula for mainstream Bollywood films became 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. From 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 Skrishnaswamy, 1980), 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 though 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 state, or underperform with producers they don't 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. However, even

if a necessary strategy, casting stars is not always a sufficient strategy. Like all entertainment market, the market for Bollywood films is uncertain: It is difficult for Bollywood producers to predict which exact *masala* of stars, songs, and dances will be to the Indian audience's taste. Even a big star is not always guarantee for box office success, 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). Hence, until recently, the central role of star actors for many film productions was not their audience appeal, but their appeal to film financiers.

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. With the *masala* genre and the huge demand for a core group of star actors, stars would overbook their dates, often working on a dozen films and several (supposedly 8-hour) shifts a day. This caused them to prioritize productions with producers with whom they enjoyed a good personal relationship. For those producers who did not maintain such relations with stars, occasional no-shows of stars caused delays of productions (a mainstream film that would typically take 70-100 shooting shifts could, due to no-show of stars, take up thrice as many (Pendakur, 2003)). As new dates with the same stars, as well as studio timings, were always tightly booked, a production that ran off schedule typically got increasingly delayed (for half or even full years).⁶

Social Relations in Finance. 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 for 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

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⁶ During the last decade, overbooking and no-shows of stars has declined considerably, due to new norms set by young and artistically ambitious actors.

incompletion. 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 networks became the preferred mode of accessing it (a star actor would occasionally receive a house or a car as remuneration if the film was co-financed by a builder or car manufacturer (Mission Mumbai, 2006a)). While the system of advance payment from distributors is now being phased out, as mentioned, the importance of private financiers is still central to Bollywood. Social relations and handshakes continue to be important.⁷

Social Relations between Producers and Star Directors. A new category of personal relations is currently becoming important: Relations to star directors. As mentioned, ongoing demand changes mean that films based on novel scripts or direction slowly eat into the mainstream market, and particular powerful directors are becoming valuable. As was the case with star actors, star directors prefer to work on the basis of personal relations, even if it remains to be seen if a producer's personal relations to key directors will become valuable to the same extent as for star actors.

The use and re-use of the social relations described above has created a particularly dense network of personal relations among 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

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⁷ In the 1980s, the skyrocketing budgets (a top film in the 1980s would cost 400,000-700,000 USD, compared to 100,000 in the 1970s)(Pendakur, 2003) necessitated a slight revamping of the finance model. The constant renegotiations with distributors were already on their way out, and upfront minimum guarantees were now alternated with commission payment. More importantly, from the mid 1980s, a notable new source of finance was the sales of rights to film soundtracks on cassette (later, on CD). Film soundtracks are the all-dominant Indian pop music genre, and like casting a star would secure a film some upfront finance from distributors, signing a good music director and playback singers would secure up to a third of the production budget through sales of soundtrack rights to music companies. Like stars were often signed before scripts were written, soundtracks would be recorded first and song "picturizations" (song-and-dance sequences) shot first, for both finance and marketing reasons. While music continues to be of huge importance for marketing of a film today, as a mode of finance it waned in the 1990s with the emergence of music piracy and declining music sales, but is surging again with Indian record companies experiencing a boom in legal downloads to mobile phones or PC. Product placements has also become a source of film finance, but has not reached the same scale as music.

of the 1950s and 1960s star actors — all of whom have entered into the film industry as producers, actors, or (to a less extent) directors. In this core 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 appointments 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 minutes.8 The efficiency of communication is accompanied by reputation effects and a high level of social trust: Within the core community, 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 (such as Indian Motion Pictures Producers Association or Film Producers and Directors Guild, national but both centered in Mumbai), will often mediate and solve them.

The Bollywood network is not a business group. Rather than a frame for long-term collaboration, it is an informal network allowing for occasional temporary relations (i.e., film projects). Furthermore, rather than being a geographically distributed, but socially discriminating social structure, as is often the case for business groups (Boisot and Child, 1996; Luo and Chung, 2005), the Bollywood network is geographically extremely focused on Mumbai, but socially loosely defined and dynamic. While India is generally a country of family-run businesses, and while the producer and actor dynasties (the Kapoors, the Chopras, and so on) of Bollywood are famous, entry to Bollywood's central social network is not strictly based on kinship or any other defining feature. Rather, the network grows by preferential attachment (Wasserman and Faust, 1994; Watts et al., 2002), i.e. it continues to replenish itself by bringing not only family members, but also friends, families' friends, and friends' families, into the industry, through giving them breaks as e.g. actors or directors.

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⁸ Outsiders to the core Bollywood community – such as the press and producers who are out of the mainstream or newcomers – will have to approach producers or star actors through their secretaries.

4.2.3. The impact of the Bollywood social network upon industry integration

We can understand the nature of the changes of Bollywood's industry structure by virtue of the social network in Bollywood. Horizontal integration and corporatization 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, we see a consistency of small-scale production companies.

The producers who enjoy a central position in the 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 central producers also manage (and often own) their own 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 specialized independent production company. As mentioned, most of these are also small (*Yash Raj Films* being the exception).

The corporations that have entered the industry, such as *Adlabs*, *Percept Picture Company*, and *UTV*, 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 core community creates some suspicion towards working with the corporations (of course, the incumbent members of the community have every reason to enforce such suspicions). Partly, however, the difficulty of the corporations to enter

the central Bollywood 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 are new to Bollywood and 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 the corporation (for example, recent developments in *Percept Picture Company*'s mother organization, *Percept Holdings*, have caused disruptions in its activities and eroded its producers' trustworthiness in the Bollywood community).

Our analysis of Bollywood's industry structure demonstrated that particular patterns of integration, moderated by the social structure (albeit not business groups) of Bollywood, facilitate recent export growth. This development has been organic and market-driven. Below, we analyze whether public regulation has played any role for the export growth.

4.3. The role of public regulation (Research Question 3)

Our analysis shows that there has been no noteworthy public regulation aiming at facilitating exports from Bollywood. Quite the contrary, Indian public regulation has been impeding the film industry's growth as well as exports for more than half a century. The last decade has however brought significant changes of this regulation at national and regional (i.e., state) levels— not in the guise of export promotion, but other changes that positively impact performance and export, and we shall discuss them in the following.

4.3.1. 'Malevolent' regulative neglect

There has been a range of national government committees on the film industry, as early as 1927, another notable upon Indian independence in 1947, and the latest of a further many established July 2006. Even if reports from such committees have consistently pointed out relevant policy issues, such as finance and training, the Indian government has largely neglected the growth potential of the film industry until very recently. In the period 1947-1991, India largely pursued a manufacturing-

based growth strategy with little political sympathy for entertainment industries. This entailed that some policies were actively working against the film industry. It was taxed on production inputs, such as raw film stock (suffering from recurrent quotas and heavy import duties) and on products: The film industry, like other Indian entertainment industries, suffered from a crumbling entertainment tax (added to ticket prices). This tax rose to an Indian average of 33% after Independence (Barnouw and Krishnaswamy, 1980), and averages 50% today (some states tax entertainment products by over 150%). The lack of political sympathy for the film industry also meant that neither national nor state governments invested notably in education or other infrastructures for the film industry. India still only boasts one public film school, *The Film and Television Institute of India* (established more than 10 years after an abundance of such schools were set up across India for classical art forms). ¹⁰

A final, and crucial, aspect of government neglect is that until 1998, 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)).

4.3.2. Recent changes of regulation

During the last decade, Indian policymakers at both national and state levels have discovered the vast economic potential of the film industry. This has resulted in

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⁹ It should be pointed out that censorship of films, established during colonial rule and continued by the Indian government, still influences the content of Indian films and somewhat hampers experimentation. Contrary to films, television content is not censored. This obvious mismatch gives rise to heated debate of whether censorship of film should be abandoned.

¹⁰ As a result of the recent boom of Bollywood, industrialists are now setting up their own facilities, to compensate for lack of public education. One new high-level private film school, *Whistling Woods International*, is already in operation in Mumbai.

several regulation changes. First, the national government is now actively promoting the growth of the home market for films, along several dimensions. As a general response to pressure from the entertainment industry, it has begun to clamp 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). Apart from public campaigns and conferences, the government has installed regional anti-piracy cells to hunt down and legally pursue offenders (IBEF and PWC, 2005). The national government has also, in a controversial move in 2001, put pressure on states to lower entertainment tax to a maximum of 60%, in a bid to promote film sales. Many states have responded enthusiastically to this initiative, lowering entertainment tax well below the maximum, and some states in South India now seek to boost their film industries trough tax reductions and exemptions, plus more targeted policies such as film awards and lenient regulation for constructing new multiplex cinemas. This is in line with national tax incentives provided for construction of multiplexes, and as a result of these national and state-level policies, the number of multiplexes is expected to double in India before 2010, adding hugely to a new, mainly urban film audience. Maharasthra, the state in which Mumbai and Bollywood are located, like many others provide a five-year tax exemption for new multiplex cinemas, but currently has one of India's highest entertainment taxes, 45% (reduced from 55% after a long cinema strike in 2004). As Bollywood collects much of its revenues outside this state, this is of minor importance.

The second and most important shift in public regulation regards finance, and is currently influencing exports indirectly through its effects on industry structure. The Indian government finally granted the film industry (along with the other entertainment industries) official status from 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). Furthermore, there is discussion about establishing semi-public film funds (as supplement to the incumbent public *National Film Development Corporation*, which, with its very limited funds, has supported Indian art films and documentaries since 1975). Policymakers and observers expected the official status of the film industry to

revolutionize the finance of film production (Aiyar and Chopra, 1998; Kohli, 2003; Kohli-Khandekar, 2006). The shift in regulation has brought about a positive development, but of another kind than expected: It is distribution of films that attracts institutional capital as well as corporate investments, while production firms mostly enjoy new modes of finance by virtue of their alliances to distribution firms. Let us analyze this effect in a little more detail.

In the film industry in general, institutional capital shies away from single film projects due to their high risk, focusing in stead on production companies, the success of which can be assessed across several films and which also offer collaterals (Vogel, 1998). After the Indian film industry was granted official industry status, it has been no exception to this rule. Banks remain very reluctant to provide loans to film projects (even the Industrial Development Bank of India is, at best, very conservative). 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). Public equity in terms of IPOs continues to play a very limited role (several companies have tried in vain), but this mode of finance, along with the few bank loans that are granted, benefits only the largest and most reputed production companies. Paradoxically, the top-tier of production companies (Yashraj Films, Mukta Arts, and a handful others) that are able to attract bank loans and other modes of institutional finance are the companies that need capital the least. These companies are so reputed that their films easily attract up-front finance, including from the many traditional distributors across India and abroad, and Yashraj Films has retained so much earnings that it prefers to fund even its most lavish productions itself.

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. As mentioned, many of these firms, such as *Adlabs*, *Sahara One* and *UTV*, have invested in both distribution and production of own films, but unable to upscale their own film production, they find themselves financing and distributing films produced by others. These others are typically those specialized production companies that have difficulties attracting institutional finance. Through their alliances with the new

horizontally integrated distribution companies, the small production companies thus now gain access to new finance. One general effect of these new channels for film finance is to pull it into the legal sphere. 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). 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).

To sum up, Indian public regulation has positively impacted performance and exports in the film industry. This has not been through subsidies or other direct support. Rather, regulation has allowed new types of private investments to flow into Bollywood, at a time when markets are booming, thus facilitating alliances between production companies and a new breed of distributors. This, rather than public incentives or support for export activities, has resulted in more efficient finance and more targeted investments by both producers and distributors in marketing and exports.

5. Discussion

In our empirical analysis, we addressed three research questions in order to explain the recent export growth of Bollywood, and we can now answer them.

Research Question 1. There has been significant growth of Bollywood's home market, driven by India's economic growth as well as the emergence of multiple new platforms for revenues in the film industry. Bollywood has reacted quickly in tapping these growth opportunities, and on the basis of increased earnings placed investments in also reaching export markets.

Research Question 2. Bollywood has only been able to take advantage of the opportunities created by the home market and reach out to the export market due to ongoing changes of the cluster's industry structure. Integration has been mainly

within distribution and finance — production is professionalizing, but still disintegrated. There has been no widespread vertical integration — instead, alliances emerge between production companies and new players in distribution and finance. This industry structure is supported by the social structure of Bollywood, primarily a social network among producers, directors, and actors. The combination of disintegration in production and integration in distribution and finance has allowed for a continuation of Bollywood's high output in combination with significantly larger investments in marketing and exports.

Research Question 3. Government regulation played no direct role for Bollywood's recent export growth. However, relaxing restraining policies and allowing for institutional capital and private investments from other Indian industries to spill into film distribution was necessary for the developments of Bollywood's industry structure that are now propelling exports.

The paper dedicated particular attention to the problem of industry structure in terms of integration and social networks. The empirical analysis did not found social networks in terms of the business groups that are often pointed to in other literature on industry structure in emerging economies. Instead, it identified a more open and dynamic, and very geographically focused, social network in Mumbai. This Bollywood network plays a central role for the functioning of the industry, including the recent developments of industry structure. The meeting of this incumbent social network with the new sources of finance and new corporations entering into Bollywood creates an emerging 'Bollywood model' of filmmaking. This model's combination of integration in distribution and finance, and disintegration in production - without a Hollywood-style vertical integration or dominance of the former over the latter -- may be a viable alternative to the Hollywood model for the increasingly internationalized film cluster of Bollywood. Such a partly integrated and alliance-based structure may, if it succeeds, accommodate a combination of creativity in production and scale in distribution and marketing, from which Hollywood, with its increasing focus upon few, big-budget ("flagpole") productions seems to be moving away. However, if the partly integrated and alliance-based Bollywood model prevails, whether it will indeed succeed as a viable alternative to the Hollywood model depends upon whether it can further develop creativity in production, continuing to supply the integrated distributors with commercially successful films for the new and increasingly demanding consumer markets in India as well as abroad.

The delicacy of the problem creativity vs. industry structure can be illustrated with terminology from social network theory (e.g., Barabasi et al., 2000; Burt, 1992; Wasserman and Faust, 1994; Watts et al., 2002). 11 Although no statistical actornetwork analysis can yet be carried out to support them, we can make some preliminary observations about the Bollywood network.¹² Due to the small number of agents and the high density of social relations in the network, it is likely to have a short average path length (the average number of "degrees" between any two agents in the network) and a high degree of clustering (density of its interconnectedness), compared to other film networks that are more open and merit-based (e.g. Hollywood). These traits are the foundations for efficient communication and coordination within the Bollywood community, compensating for the disintegrated structure of production through holding transaction costs (Williamson 1975; 2000) down through reputation and social trust effects, plus social regulation and mediation through particular, long-standing and central producers and star actors. However, this efficiency of coordination often comes with a cost: Short path lengths and high clustering also means that networks experience closure, blocking for new network relations, new people, and new ideas (Granovetter, 2005; Uzzi and Spiro, 2005). These observations, derived from social network theory, correspond well with concerns of many Bollywood industrialists that the established network of producers is poor in accommodating newcomer producers and directors, as well as of inviting new scripts. This presently leads to a poverty of scripts, an over-reliance upon the masala formula, and frequent property rights infringements through copying of script ideas from foreign films. If creativity should be maintained and boosted in Bollywood film production, better scriptwriting and new ideas should be much better integrated in the existing system. Rather than looking only to the level of training of scriptwriters, or to options for better enforcing intellectual law, it may make sense to

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¹¹ Social network analysis is already used in the study if the film industry, e.g. in the USA (Baker and Faulkner, 1991; Faulkner and Anderson, 1987; Sorenson and Waguespack, forthcoming) and Italy (Delmestri et al., 2005), but these analyses do not focus upon institutional and organizational relationships and changes of industry structures.

¹² A time series of data on the participants to Bollywood film productions would render possible such a statistical analysis, revealing e.g. path lengths and cluster coefficients of the network, but no complete such data currently exists. The authors are in the process of assembling this data.

first look at the structure and dynamics of the social network in the central Bollywood community.

6. Conclusion

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*, *Universals*, 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. On the basis of secondary data and novel primary data derived from 50 interviews, this paper investigated the background for Bollywood's recent growth of revenues as well as exports, pointing to the role of the home market boom and the Indian government's newfound enthusiasm for entertainment industries, but most of all, how Bollywood has taken advantage of these new opportunities through changes of its industry structure. The paper dedicated particular attention to explaining how a social network underlying film projects shapes the changing industry structure, possibly creating a Bollywood model that, while much more economically successful than earlier, continues to be very different from Hollywood.

Bollywood is, with a rapidly rising annual growth rate of now 16%, not just one of India's most eye-catching growth phenomena. In terms of output, it is also the world's biggest commercial film cluster, and, by any measures, the fastest growing. Hence, the paper treats Bollywood as a paradigmatic case for suggesting insights to the development of film clusters outside the USA, supplementing a literature on film and entertainment economics that has been dominated by a 'Hollywood hegemony'. More generally, the case also suggests insights into the growth and internationalization of industries in emerging economies. A purely indigenous industry, Bollywood has demonstrated that emerging economies may not just attract FDI to clusters such as Bangalore, they may create own, high-growth and internationalizing, clusters. In explaining the growth of such clusters, the case of Bollywood suggested aspects of

both home market, government regulation, and industry structure — not the least, social network structures. Hence, the paper's case study-based method, and focus on social networks underlying geographically clustered development, supplements existing theory on national or global business groups, in adding to an emerging research agenda pertaining to growth and institutional change in emerging economies.

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