Chapter 8: India

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Introduction

Piracy entered public consciousness in India in the context of globalization in the 1980s. The rapid spread of video culture, the image of India as an emerging software giant, and the measurement of comparative advantage between nations in terms of the knowledge economy pushed questions about the control of knowledge and creativity—about "intellectual property"—into the foreground of economic policy debates. The consolidation of Indian media industries with global ambitions in film, music, and television gave the protection of copyright, especially, a new perceived urgency. Large-scale piracy—at the time still primarily confined to audio cassettes and books sold on the street—began to be seen as a threat not just to specific businesses but to larger economic models and national ambitions. The "problem" of intellectual property (IP) protection in India—in terms of both the laws on the books and enforcement practices on the streets—took shape through this conversation between lawyers, judges, government ministers, and media lobbyists.

The high-level policy dialogue has produced several important revisions to Indian copyright law, including amendments to the Copyright Act in 1994 and 1999 to address the growth of cassette and optical disc piracy, respectively. A new round of proposals, reflecting a more recent array of battles over the control of cultural goods, began to emerge in 2006 and will probably be voted on in early 2011.

Since the 1990s, piracy in India has been shaped by a now familiar set of global transformations in the production, circulation, and regulation of media and culture. These range from macro-level changes, including new international IP obligations and India's integration into global media markets, to extremely local developments, such as the adoption of cheap DVD players, burners, and computers in poor urban neighborhoods. In this respect, India belongs to the wider story of technological, cultural, and policy change recounted throughout this report. And yet two related factors make the Indian case profoundly different.

First, unlike nearly every other middle- and low-income country, India's film and music markets are dominated by domestic firms, which compete fiercely on price and services. The gap between high-priced international media goods and very low-priced pirated goods is filled, in India, by Indian companies. The resulting turmoil around distribution and pricing resembles the current upheavals in the US and European markets, where the rollout of low-cost digital media services is throwing older business models into crisis—and a difficult

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process of reinvention. But such innovation remains rare in developing-country media markets dominated by multinational companies, where small markets structured around high prices remain the norm.

The dynamism of Indian media markets, we should be clear, does not provide a model for fighting piracy—indeed India presents unique barriers to enforcement on a number of levels. But it does offer a powerful counterpoint to the dilemma facing most developing countries: the chronic weakness of legal media markets, trapped between high prices and widespread piracy. And it provides a unique answer to one of the central questions that emerges from this report: not whether piracy can be eliminated or even significantly diminished, but whether the accompanying legal markets will be structured around high-cost or low-cost competitors.

The second factor that distinguishes India is its decentralization of cultural production and governance. Although Bollywood is often used as shorthand for Indian film in general, it technically only describes the portion of the industry centered around the Hindi studios based in Mumbai (formerly Bombay). In practice, Bollywood is only one of several important regional and local language cinemas, including distinct Tamil, Kannada, and Malayalam production. Television follows similar patterns of regional production, grounded in media policies that date back to Nehru's modernization campaigns of the 1950s. These regional media are enormously popular. Indian film, television, and music production dominate the domestic market and have confined Hollywood and other transnational media companies to very marginal roles. Hollywood accounts for around 8% of the Indian box office—reversing the percentage found in many other middle- and low-income countries. International music accounts for just 6% of the market (Kohi-Kandekar 2010).

Patterns of corporate ownership reinforce this strongly regional organization of markets. Despite considerable efforts in the past decade to implement modern corporate ownership structures, the Indian

entertainment industries retain a high degree of informality and are often organized around family units. Such structures grow out of and can convey advantages in local markets, but to date they have provided a relatively weak interface to the global media economy, and to its global rights-holder organizations in particular.[1]

This decentralization has been a source of perennial frustration for industry lobby groups such as the Motion Picture Association of America (MPAA) and the Business Software Alliance (BSA), which have long sought—and generally failed to find or establish—unified Indian rights-holder groups or authorities with whom to work. When international enforcement organizations want to talk to Indian rights holders, they deal with a plethora of regional producers focused mostly on local markets regulated by state (rather than national) laws. Multinational industry groups in India have as a result seen their role as producing a discourse on piracy and enforcement for the local players as much as for themselves, with the goal of creating a stronger context for their own long-term operations and lobbying. On these terms, the multinationals have been modestly successful in localizing anti-piracy discourse within individual Indian state governments and in enlisting local cinema, music, and software industry associations in those efforts. Many of these local groups have, in turn, adopted the anti-piracy rhetoric and practices of the multinationals, and several have independently sponsored enforcement campaigns in the Indian media.

Policy advocacy and enforcement efforts confront similar challenges. Enforcement, in India, is organized at the state level, not by the national government.[2]

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1   See Rajadhyaksha's (2009) account of the progressive corporatization and globalization of the Hindi film industry in the 1990s.

2   The constitution of India separates the powers of the national state into three categories or "lists": those belonging to the central government, those belonging

Acronyms and Abbreviations

ACTA	Anti-Counterfeiting Trade Agreement
BSA	Business Software Alliance
DRM	digital rights management
ESA	Entertainment Software Association
FICCI	Federation of Indian Chambers of Commerce and Industry
FPBAI	Federation of Publishers and Booksellers Association of India
GDP	gross domestic product
IDC	International Data Corporation
IFPI	International Federation of the Phonographic Industry
IIPA	International Intellectual Property Alliance
IMI	Indian Music Industry
IP	intellectual property
IPRS	Indian Performing Right Society
ISP	Internet service provider
IT	information technology
MPAA	Motion Picture Association of America
MPDA	Motion Picture Distributors Association
NASS-COM	National Association of Software and Services Companies
P2P	peer-to-peer
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UPDF	United Producers and Distributors Forum
USIBC	U.S.-India Business Council
USTR	Office of the United States Trade Representative
VCD	video compact disc
WCT	WIPO Copyright Treaty
WIPO	World Intellectual Property Organization
WPPT	WIPO Performance and Phonograms Treaty
WTO	World Trade Organization

Although India's legal regime and Western-style court system make it relatively hospitable to imported legal arguments and practices, the state-based organization of police, law, and courts means that enforcement efforts quickly become enmeshed in complex local political contexts, where industry actors have different degrees of leverage in mobilizing the police and pushing cases through the overburdened Indian courts. India's cumbersome criminal judicial procedures, in particular, are a regular theme of International Intellectual Property Alliance (IIPA) reports on India and form the basis of demands for new "fast-track" IP courts that can process more than the current trickle of infringement cases. Industry successes—notably in expanding the use of organized-crime statutes to prosecute film piracy—have all come at the state level, with the support of powerful local industry stakeholders.

Although foreign lobbies have become more active at the state level, they have also tried continually to make the central Indian government a more effective agent for enforcement, with stronger control over domestic media markets and media flows. Major touchstones of this effort have included stronger border surveillance measures and stronger national coordination of India's highly decentralized state police forces. More recent strategies include the push for stronger enforcement provisions in the pending revision of the Copyright Act. The difficulty of this project is another recurrent feature of the IIPA's India reports. In 2009, the IIPA argued that "what is desperately needed in India, and particularly for the Indian copyright industries, is a national anti-piracy strategy at the central government level, with the ability to link in the State governments . . . in a meaningful, enforceable way" (IIPA 2009b). The lack of traction on these issues has contributed to India's more or less permanent place on the USTR watch lists.

Indian enforcement is generally rated a failure by the IIPA and its member groups—although the IIPA's accounts seem to reflect at least as much frustration at the lack of responsiveness of the Indian government as with the prevalence of piracy itself, which is high but fairly typical of developing countries. Reported rates of piracy have remained relatively stable over the past several years—66% in 2008 for software, 55% for recorded music, 89% in the last Entertainment Software Association (ESA) survey of game piracy (released in 2007), and 29% in the last MPAA survey of film piracy (released in 2005). Significantly higher numbers circulate among some of the local industry groups, including estimates of 90% piracy in the DVD market and 99% in the digital music market.[3] As usual, the research underlying these claims is not made public and so cannot be evaluated.

Despite IIPA complaints, the overall pattern of enforcement in India and changes in the organization of piracy show close parallels with other countries. Middle-tier retailers are increasingly exiting the pirate market—pushed by a combination of police harassment in major

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to the states, and those belonging to both—the concurrent list. Law and order is a state subject. Thus, enforcement initiatives that rely on the police are organized at the state level rather than through any central agency.

3   Sanjeev Varma, head of corporate communications for Moser Baer, interview, 2009. The 99% figure is an IFPI figure cited by the IIPA (2010).

marketplaces, such as Palika Bazaar in Delhi and Lamington Road in Mumbai, and by the fall in pirate disc prices, which has dramatically reduced profit margins. Both factors contribute to the growing "deformalization" of the pirated optical disc trade and to the emergence of more mobile, lower-cost, enforcement-resistant street vending practices.

Parallels in enforcement practices are also striking. Domestic producers have been very successful at mobilizing police in the service of specific enforcement campaigns, most frequently to protect the release windows of anticipated hit films. Targeted, large-scale police actions in Mumbai (for Hindi releases), Chennai (for Tamil releases), and Bangalore (for Kannada releases) have become a relatively common part of film industry release strategies and create a very uneven enforcement terrain for the broader community of movie producers. International films, in contrast, circulate through a wider array of pirate distribution channels and have no such local chokepoints, making them less suitable targets of concentrated police effort.

The balance of this chapter explores these intersections between media markets, piracy, and enforcement in India, with a focus on three broad issues:

- First, the organization of the informal media economy in India, from street vending to transnational networks for cheap hardware and pirate disc production. These networks are part of what has been a predominantly Asian geography of piracy over the past two decades, encompassing China, Malaysia, Pakistan, and the destination countries of the South Asian diaspora. This geography is now losing its coherence as once-dominant practices of transnational cassette and disc smuggling give way to growing local production and Internet distribution.

- Second, the rapid growth and changing structure of the Indian film industry, whose fortunes dominate debates about piracy and enforcement in India. Two factors stand out in this analysis: the ongoing reorganization of theatrical exhibition around the multiplex, marked by rising prices and an increasingly locked-down distribution channel; and rampant competition in the secondary markets for DVDs, soundtracks, video-on-demand releases, and other similar media, marked by rapidly declining prices and increasingly direct competition with the pirate market.

- Third, the evolution of enforcement activities in India, shaped by the regionalism of Indian media markets and the decentralization of political authorities but also by emerging cooperation between international, national, and local organizations. Increasingly, such cooperation extends across the full spectrum of enforcement activities, from street-level raids and investigations, to the training of police and judges, to the cultivation of a wider discourse on intellectual property and piracy in the popular media.

The Circuits of Piracy

In India, as elsewhere, most accounts of media piracy are built around the moral and economic claims of rights holders and are intended as justifications of those claims. These accounts tend to focus on the illegality and criminality of acts of piracy. They project a sense of loss and danger onto such acts, often by implicating piracy in a range of Indian social crises, from unemployment to organized crime. Such efforts to shape perceptions about piracy have been central to the organization of enforcement efforts but, in our view, are largely disconnected from the actual practices of media piracy. By raising the level of drama, they rarely capture the ordinariness and ubiquity of piracy in the contemporary Indian media landscape.

This ordinariness is rooted, first and foremost, in the central role the informal sector plays in cultural innovation in India, especially in the context of the digital revolution of the past decade. In India, as in other middle- and low-income countries, digital culture has become a mass experience primarily through the informal sector. Cheap Chinese hardware imports, grey-market recycled goods, and pirated content have been fundamental, for better and for worse, to this growth and to the resulting expansion of media access. They have also been central to the remarkable democratization of media production as the costs of production and distribution decline. In this context, pirate and grey-market practices have been vectors not only of "consumption" in a narrow sense but also of cultural participation, education, and innovation for a wide range of Indian publics.

Generally, these changes rise to the attention of the Indian media only in the context of the piracy debates, where they are usually stigmatized. There has been very little work on the nature of these new-media networks and what they mean for the social and economic development of India—or for our broader understanding of globalization. This chapter—and the longer trajectory of work of which this report is a part—is an attempt to document these transformations in the experience of media and urban life in India.

Most explorations of this subject in Indian journalism and scholarship circle around two poles of the Indian imagination: the interventions of the state, exemplified by the modernization plans of the 1960s and 1970s, and more recently, the dynamism of the market—a perspective that has become familiar with the emergence of India as a major player in information technology (IT) in the past two decades. In practice, however, India counts few simple transitions from rural society to fast-paced, market-driven modernity. The experience of modernity, for most Indians, comes not through the arrival of the new but through the recycled technologies and cheap copies that follow. It comes secondhand, as technologies circulate through communities, regions, and classes long after their original utility is past.

By locating piracy within histories of non-elite media practices, we have tried to avoid definitions of piracy as theft or crime and focus instead on how pirate practices weave into existing social relations while at the same time transforming them. Consistently, this has meant focusing on groups excluded from the technical education common in the Indian middle and upper classes, yet who have managed to climb the value chain in the information economy.

Nehru Place

Nehru Place, in Delhi, hosts Asia's largest secondhand computer market, India's largest garment-export center, and a large pirated software market. This is far from its original purpose. In the 1962 master plan for Delhi, Nehru Place was slated to be the largest of fifteen district centers that would redefine urban life in the city. It was the epitome of the modernizing imagination at work in Delhi in the 1960s, and in India more generally.

H. P. Singh was one of the earliest garment exporters to move to Nehru Place. He now owns one of the largest warehouse-and-retail stores in the complex, and he feels deeply betrayed by the failure of that modernizing vision: "When I saw the plans of Nehru Place, I was promised the boulevards of London and Paris, the district centers of Europe. Little did I know that this is the shape it would take."

Today, Nehru Place is a prime example of the fluid boundary between formality and informality in the Indian economy. It is also a bustling example of commercial rejuvenation associated primarily with the establishment of the "secondhand hardware" market in the area, which sells refurbished computers, software, and a variety of support services. The computer hardware shops first made their presence felt in the early 1980s when local companies and government departments were beginning to adopt computers in large numbers. They continue today as part of the large Indian grey market for computers and software.

The majority of the goods in the secondhand hardware market are discarded computers shipped from Southeast Asia, which are disassembled and then reassembled for local reuse. Sachin, a hardware seller, described the basis of the practice: "In most countries abroad the life of a computer is considered to be anything between a year and a year and a half. Upgrading is the key to technology there. Over here, people do not sell their computers. They look at them like their TVs, passing them on to others when they are through with them."

The market operates as a distributed network of shops that communicate with each other and trade parts and services. Most of the shops are connected through an intercom, referred to as the *chhoti* line (or small line), the existence of which is illegal since it bypasses the official telephone networks. When specific goods are needed, calls are made to the vendors who may have them. When this fails, the request is often passed to others, ensuring that most demands can eventually be met. One implication is that there are no centralized warehouses within the complex. Another is that most transactions are in cash, in order to facilitate the trade in parts and services across the network.

Pirated software is also widely sold at Nehru Place and often comes pre-installed on secondhand machines. Overlooking the software section of the market is Microsoft's Delhi headquarters, which stands in the middle of the main courtyard at Nehru Place. Like all the other businesses at Nehru Place, the Microsoft site was originally intended for other purposes. On the original map, it is identified as a cinema hall.

Many of these social trajectories begin in call centers, photocopying centers, cyber cafes, or the computer service and repair industry. Many are marked by the aspiration to escape the constraints imposed by a lack of formal education. An understanding of these worlds of social mobility and aspiration has been key to our understanding of piracy and new-media networks (Sundaram 2001, 1996; Liang 2003).

Indian urban experience teaches us that the question of legality is often the least interesting place from which to begin such an inquiry. Strict lines between the legal and the illegal are often irrelevant to the construction of Indian media practices, especially in the context of the large informal sector. More often, it is better to ask how people navigate the urban media environment—how they access or make the media they want in relation to the range of available resources and constraints, including legal constraints.

Our interest is piracy is therefore not primarily about its illegality—indeed the construction of that boundary in the law and on the street has been enormously complicated in India. Instead, we are interested in its ordinariness—a question we have approached by analyzing the social worlds in which piracy emerges, the forms of circulation and consumption in which it is implicated, and the fears and forms of social control that it generates.

It is impossible to understand these practices without understanding the conditions of informality that shape access to goods, services, housing, political authority, and most other features of life in urban India and in other cities of the Global South. Most such cities are built on—and through—informal networks of housing and infrastructure, only partially imagined by municipal planning and only partially integrated into the networks of business, services, and governmental authority that face outward to the global economy.

These conditions of informality have been widely tolerated by the Indian state as an unavoidable aspect of urban growth. But attitudes have shifted in the past decade as the integration of the Indian economy into the global economy has increased pressures on land use in most cities. Assaults on zones of informality have become far more common, with the courts playing a central role in determining the survival of slums and squatter settlements in many Indian cities. Inevitably, this process results more in the displacement of informality than in its elimination. As old zones of informality are destroyed, the poor and marginal Indians who inhabited them move elsewhere. The resulting disruptions of the urban landscape also create new temporary zones, where informal trade and marginal livelihoods reemerge.

We make this digression through urban redevelopment because piracy cannot be divorced from the circuits in which it takes place. A nuanced account of piracy in India begins with the "many piracies" that cut across the daily lives of Indians. Three of these circuits have proved central to our inquiry: the traditional and still ubiquitous world of street vending, the production and distribution networks that organize the optical disc trade, and the more recent emergence of peer-to-peer (P2P) networks and other channels of digital distribution.

Piracy on the Streets

Arguably, the greatest threat to the informal street economy is not the long arm of the law but the unpredictable nature of the weather. It is a common sight in Bangalore to see hundreds of street vendors sent scattering for cover by sudden, heavy monsoon rain. Police raids, in general, produce much the same effect and often have the same outcome, with street vendors resuming their places once the raid is over.

As optical disc piracy became commonplace in the 1990s, markets and street spaces emerged as semi-permanent points of sale. Places like National Market and SP Road have achieved an almost iconic status as the pirate centers of Bangalore, home to wholesalers of an assortment of counterfeit and pirated products: DVDs and DVD players, Chinese-made mobile phones and PDAs, MP3 players and jukeboxes, fake Ray-Bans, and gaming consoles. Even VHS players can still be found, servicing the legacy collections of video cassettes built up in the 1990s and early 2000s.

Vendors know their customer base and vary their goods accordingly. On a cart outside the Ayyapan Temple on Millers Road (a destination spot for Tamil residents of Bangalore), Tamil films make up the bulk of vendor stock, followed by Hindi movies. English-language films sit in a single pile, mostly undisturbed by customers. On MG Road, a major office corridor, pirates cater to young professionals looking for after-work entertainment. Here, stock tends toward an even mix of Hindi, English-language, and regional Indian cinema. When construction work for the Bangalore Metro began in the posh neighborhood around 100 Feet Road, the road was transformed into a downmarket street bazaar. Vendors set up outside the big-brand shops and sold discs to corporate executives returning home from the high-tech corridors around the city. In this part of town, Hollywood rules the informal box office. While the mode of sale remains similar across locations, the sellers are mobile and quick to adapt to changes in the city and in their clientele.

Street pirates also offer different types of goods, reflecting the changing availability of higher- or lower-quality copies of new films and the perceived market for supplementary materials such as liner notes. At the high end of the market are the high-definition releases of new films, generally compressed from Blu-ray masters down to 720p MP4 files or similar formats capable of being burned onto a DVD. These are still a rarity in most street markets but are increasingly common in neighborhoods frequented by HDTV-owning corporate employees, such as those living around 100 Foot Road. At the low end are compilation discs of Hollywood and Bollywood films, usually with three to five films per disc, but sometimes with up to ten or more. The higher the number of films, the lower the quality of reproduction. Single vendors generally stock products across these categories. A copy of *The Untouchables* purchased during our visits, for example, was a duplicate of the official DVD release, while a DVD with three new Hindi films contained barely watchable "camcordered" prints. Over several weeks, successively better copies of the Hindi films will become available as improved

camcorder releases are paired with improved audio tracks. Within a couple months, vendors will be selling bit-perfect copies of the DVD release.

As in most of the countries documented in this report, enforcement campaigns against organized retail piracy have intensified over the last five to six years. In states like Tamil Nadu and Karnataka, local governments have extended the Goondas Act—traditionally used to curtail activities like bootlegging and extortion—to cover video piracy. The Goondas Act has been a lightning rod for criticism due to its high penalties, which include prison terms of up to two years, fines of up to US$2000, and the possibility of pre-trial detention without bail for a period of up to a year.

The extension of the Goondas Act to cover video piracy was passed at the behest of local film industry representatives and produced a typically parochial arrangement in which the measure was applied only to local film. In Burma Bazaar in Chennai—arguably the largest pirate market in India—most DVD retail kiosks post notices that they respect the copyrights of the Tamil film industry and do not stock or sell Tamil films. Pirated copies of the latest films from Hollywood and Bollywood, in contrast, are available in large quantities, in plain sight. Such arrangements are common in India and reflect the intense localism of many aspects of cultural identity, trade, and governance. Pirates in the southern state of Karnataka do not stock Kanadda-language films. Enforcement in Andra Pradesh targets only local Telegu film. The local politics of enforcement are often the only politics of enforcement.

Major markets for pirated goods, such as National Market in Bangalore and Palika Bazaar in Delhi, have nonetheless come under growing pressure from police. Although local police presence in such markets is usually mediated by a variety of informal agreements with vendors and market operators designed to minimize the incidence of serious crime, the last five to six years have seen a significant rise in the frequency of anti-piracy raids to a level that has forced many pirate vendors out of the relatively exposed market settings. The most obvious result of this pressure has been the further decentralization and deformalization of pirate sales. In Delhi, for instance, the concentration of pirate vendors in the major markets has given way to a much more local organization of pirate distribution, often intermingled with street vending of vegetables, fruit, and other goods.

In Bangalore, interviews with vendors, wholesalers, and police generally pointed to Chennai, a city on the southeast coast of India, as the main distribution hub for Hollywood, Bollywood, and Tamil films. Chennai has long been a center of smuggling and other informal market activity in India. When imported luxury goods such as perfumes and electronic goods were subject to high tariffs, before the liberalization of the Indian economy in the 1990s, Chennai was the electronics mecca of southern India. Chennai markets like Burma Bazaar were often the only places where popular imported consumer goods could be procured. When tariffs were removed, undercutting the profitability of many types of smuggled goods, vendors in Burma Bazaar shifted to selling pirated VCDs (video compact discs) and later DVDs. Burma Bazaar remains one of the most highly contested spaces in the Indian informal economy, with

Blue and Silver Maal

Pirated discs are commonly called maal in India—a colloquial term meaning "goods" but usually used in reference to illegitimatte or pirated goods. There are two kinds of *maal* in circulation: blue and silver. The average blue *maal* is a low-quality VCD—generally a locally produced copy of a Bollywood film. These cost anywhere between Rs.40 and Rs.50 ($0.80–$1.00) in Mumbai. Imports are generally higher-quality silver *maal*—discs copied from DVD masters. Silver *maal* are available for both Bollywood and international films and can command a premium price of up to Rs.100 ($2), especially when they replicate the cover treatments of licensed discs.

Although the street prices for both categories of discs have dropped, the price used by police in estimating the values of seizures has risen, feeding skepticism about police reporting on the size of pirate markets. Prior to 2006, the cost of each VCD/DVD was pegged by police at Rs.100 ($2)—the high end of street prices. Today, when *maal* are seized by the police, the cost of each is estimated at Rs.300 ($6)—the high end of retail prices for most local film. This shift from street prices to retail prices in estimating the value of pirated goods is consistent with how rights-holder groups like to calculate damages in court but, as we have argued, no longer consistent with how they calculate broader losses (see chapter 1). In practice, the shift inflates the scale of both piracy and enforcement operations, which, in a system that rewards the public display of enforcement, is almost certainly the point.

regular raids disrupting the flow of pirated goods but with little evidence of lasting effects or a diminution in the overall trade.

Despite industry attempts to link such markets to larger networks of organized crime, examination at the local level reveals the small-scale nature of much of the business. Pirated goods are brought into Bangalore from other cities, such as Mysore and Hosur, in small cartons carried in personal vehicles or on tourist buses. These are delivered to the wholesale markets, which in turn distribute to the retailers. There are many intermediaries, and at every step, the margins in the trade have become very thin. Prices for pirate media have fallen dramatically in the past four to five years, putting significant pressure on all players in the commodity chain.

As recently as 2004, DVDs typically sold for over $2. Today, distributors generally buy films at wholesale for around $0.70 and sell to street vendors at $0.80 per copy. The vendors, in turn, sell the disc for around $1 on the street or in the pirate bazaars. There is still a great deal of variation in price as well, reflecting factors such as the proximity to upscale neighborhoods or the distance from highly competitive wholesale markets like Burma Bazaar. At Burma Bazaar, DVD prices at retail can be as low as $0.40.

With such thin margins, volume sales are critical. According to our interviews, a wholesaler in National Market in Bangalore sells on average a thousand discs per day. Outside National Market, there are other small shops and street-side vendors spread across the city that purchase

from wholesalers and sell with a markup of Rs.10 to Rs.15 ($0.20 to $0.30). The average price of a copy of an English-language or Bollywood film at Brigade Road or Indira Nagar, both hot spots for Bangalore's commercial activity, is roughly $1 per disc. Here, the vendors sell between fifty and a hundred discs per day, generally making a profit of $10–$20.

Nearly all informants agreed that the pirated disc market had become much less lucrative in recent years. Most blamed a confluence of factors, from the recession to the changing release practices of the studios, which have narrowed the window between theatrical and DVD release and thereby diminished the period in which the pirates have a monopoly on distribution. All, however, saw the Internet as the primary threat, as improvements in bandwidth undercut the two traditional advantages of the street vendor: faster availability and lower prices.

Piracy and Time

The notion of access to media, developed throughout this report, usually centers on questions of cost and availability. But another crucial factor is the relationship to time. Global licensing regimes for film, especially, attempt to maintain well-ordered flows of commodities across time and space. "Windowing" is the industry term for the control of circulation over time. A modern Hollywood or Bollywood production has many release windows, beginning with the long, anticipatory advertising campaign, which primes the public for the initial theatrical release. The theatrical release window is the critical period for revenues. In India, with local products in intense competition for screens, this period can be very brief.

Recurrently in our work, we find that timing is as important as price in shaping both licit and illicit media markets. The temporal nature of distribution is tied not just to an economic logic but also to what we call an economy of anticipation. The buildup to the latest film; the release of trailers, posters, and soundtracks; the premiere—all are part of this economy of anticipation. Within it, however, the share of waiting is very unevenly distributed. The wait grows longer as you move from the northern hemisphere toward the Global South, and from metropolises to small towns and villages. The trend toward simultaneous global release—now common for many large Hollywood productions—is an effort to minimize the pirates' opportunities to exploit these gaps. But even this trend is operative only in major cities. In the provinces, people wait.

In these contexts, the newness of the films, the quality of their reproduction, and the quality of the cinematic experience come to stand for temporal and cultural differences—differences between the North and the South, between the town and the city, and between global modernity and those who are "not quite modern." In films such as *Main Madhuri Dixit Banna Chahti Hoon!* (2003) and *Haasil* (2003) or Pankaj Kumar's documentary *Kumar Talkies* (1999), we get a glimpse of this waiting-room world of cinema. In a delightful scene in *Main Madhuri Dixit*, the protagonist goes to watch the Hindi film *Devdas*, but after a few reels the film stops and the audience has to wait for the arrival of the other reels from the neighboring village. Members of the audience complain that the last time, they had to wait for over two hours after the delivery bike carrying the other reels broke down.

The big city is the place where these fractures can be repaired, where films are shown in their entirety, and where audiences do not have to confront their geographical and cultural marginality every time they attend the cinema. The social life of piracy occurs at this intersection of anticipation—now often measured in days or weeks—and aspiration to belong to the modern, to inhabit the space of global time represented by and through the movies, where things are not perpetually breaking down or delayed (Vasudevan 2003; M. Prasad 1993; Bagchi 2006).

Waiting for the latest Hollywood or Bollywood release, in this context, becomes an apt metaphor for the experience of those placed differently within the circuit of space and time. Brian Larkin and Ravi Sundaram, both students of the "pirate modern," argue that in contrast to the dizzying, real-time global integration of the information era, the great majority of people in the Global South experience time not through the trope of speed but through the experience of interruptions and breakdowns. Breakdowns create a temporal experience that has less to do with speed and more to do with the process of waiting.

From waiting for e-mail messages to open, machines to be fixed, or electricity to be restored, the experience of technology outside the high-tech centers is subject to a constant cycle of breakdown and repair. In most countries, the promise of technological prosthesis—of enhanced memory, enhanced perception, enhanced communication—is thwarted by the everyday experience of technological failure. Each repair enforces another waiting period. The experience of slowness, moreover, comes as a consequence of speed-producing technologies, so that speed and acceleration, deceleration and stasis are relative, continually shifting states. In most countries, consequently, technological modernity is predicated not on the smooth functioning of new technology but on its imperfect adaptation or indigenization. Digital piracy in developing countries is an example of this wider process, built on the cheap, repurposed infrastructures of the information economy (Sundaram 2001; Larkin 2004).

An interesting instance of this adaptation in film technology is the history of the video compact disc. Sony and Philips introduced the VCD in 1993 as a format for recording video on compact discs. It was cheap, convenient, and initially seemed to signal an emerging standard. At the time of the introduction of the new format, however, development of the technologically superior DVD was already underway. From the beginning, Philips was aware of the impending arrival of the DVD and its threat to the VCD. Anticipating a bleak future for the new format, Philips and Sony abandoned plans to launch the VCD in Western markets and opted instead to launch it in China, where its technological inferiority would not be as rapidly challenged (Wang 2003; Hu 2008). Because Philips and Sony had a tight grip on the production of discs and players, the film industry believed that VCDs would help fight widespread video cassette piracy. Instead, the introduction of the VCD triggered a boom in the Chinese production of cheap disc technologies.

Asian markets enthusiastically adopted the VCD and—shortly thereafter—VCD piracy as a means of bypassing global distribution networks for Hollywood and Bollywood film. Sharp Chinese quotas on the number of Hollywood films that could be released domestically in a

given year gave a huge boost to the practice. Pirated VCDs became the only means of watching many of the latest Hollywood titles, few of which ever saw theatrical release.

Within a short period of time, the VCD became the primary movie format in large parts of the developing world. It was also a short-lived format that inaugurated a process of rapid diffusion and turnover of new, cheap, digital consumer goods. By 1998, VCD adoption was already widespread in China, with roughly sixteen VCD players per hundred households. By 2000, the number had more than doubled, significantly outpacing cell-phone adoption. But the shift to VCD-compatible DVD players was already underway. In 1999, VCD player sales in China peaked at twenty-two million. By 2000, annual DVD player sales had jumped from one million to three million, on their way to a 2006 peak of nineteen million (Linden 2004; Digital TV News 2008).

VCD technology spread rapidly from East Asia to other parts of Asia. Within a few years of their introduction, VCDs had replaced video cassettes as the standard video format in the region and had become vastly more prolific than the VHS format ever was. In India, the price of VCRs never fell below $200. VCD players, in contrast, had plummeted to as little as $20 by the middle of the decade. As with other obsolete technologies, the VCD infrastructure remains important outside the major Indian cities; the total number of DVD players surpassed VCD players only in 2008 (Kohi-Khandekar 2010).

The VCD also spread rapidly to other world regions. In Nigeria, home to the second-largest film industry in the world in terms of numbers of films produced (more than 1,200 in 2008), most films are available only on VCD and DVD. The Andean countries were also flooded with cheap players in the early 2000s, and VCDs remain prolific in Andean pirate markets—a topic explored in our Bolivia chapter. But most Western markets never saw the VCD, and the format remains a marker of the technological periphery.

The Transnational Trade

Well-developed networks trafficking in pirated Indian films emerged in the 1980s, in the early days of the video cassette era. In a pattern that would be repeated over the next three decades, illicit networks took advantage of market opportunities created by the major producers. In this case, the Bombay studios decided to ban video releases of new films for fear of cannibalizing theatrical exhibition. This did little to stop video retail and exhibition in India, but it did ensure that the growing sector remained entirely illicit (Sundaram 2009). Additionally, because Bollywood's international distribution networks were poor, the pirate networks provided the primary means of circulating new Bollywood films to international audiences. The United Kingdom, Pakistan, and Dubai—the last of these the offshore hub of much legal and illegal Indian business in the period—became the main nodes in this international distribution network.

Other Indian media and IT businesses grew out of similar transnational networks in the 1980s. Indian grey-market suppliers for computers and electronic components traveled back

The T-Series Story

In the late 1970s, Gulshan and Gopal Arora owned a fruit-juice shop in Delhi, but their real interests were in music and electronics. In 1979, the two brothers opened a small studio where they began to record Gharwali, Punjabi, Bhopjpuri, and other Indian regional music. Borrowing money, they visited Japan, Hong Kong, and Korea to learn more about the recording industry and cassette production technologies. On their return to India, they set up a factory to produce magnetic tape and audio cassettes and eventually built a large manufacturing plant where they offered duplication services to smaller regional-cassette producers. By the late 1980s, their company, T-Series, was the market leader in cassette production in India and had begun to diversify into manufacturing videotapes, televisions, washing machines, and detergents, and later VCD and MP3 players.

T-Series was a profoundly disruptive force in the Indian music market, in large part because it was a tremendously successful pirate. The company built its catalog through a variety of quasi-legal and illegal practices, notably by abusing a provision in the fair-use clause of the Indian Copyright Act, which allowed for version recording. On this basis, T-Series released thousands of cover versions of classic film songs. It also engaged in more straightforward copyright infringement in the form of pirate releases of popular hits, and it often illegally obtained film scores before the release of the film to ensure that its recordings were the first to hit the market. Many other accusations were leveled against T-Series, including the wholesaling of inferior magnetic tape to competitors in an effort to discredit their brands.

On the plus side, T-Series changed the rules of distribution in ways that permanently transformed the music industry and music-buying public in India. Breaking with the narrow existing channel of retail outlets, T-Series moved aggressively to distribute cassettes in neighborhood shops, grocery stores, paan waalahs (wrapped betel-nut stands), and tea shops—making the cassette a ubiquitous product in Indian commercial life.

It also expanded the music-consuming public by focusing on genres and languages that had been ignored by the dominant Indian record labels and distributors, notably HMV. HMV had viewed recording in languages other than Hindi as unprofitable due to the small scale of the respective markets. T-Series proved that it was possible to expand these markets with stronger distribution and lower price points. By providing duplication services to smaller labels, it also assisted in the revival of other, small-market music traditions.

These innovations were inseparable from the company's assault on the price structure of recorded music in India. In a market dominated by two government-licensed companies—HMV and EMI—audio cassettes were priced between $3.60 and $4.60. T-Series reduced the price of cassettes to $2.50, fueling the first mass market in recorded Indian music.

Branding T-Series a pirate doesn't quite do justice to the larger revolution in the music business of which they were a part or to its close relationship with the informal market. In an interview with the media scholar Peter Manuel, a T-Series employee commented on the forces that the company both capitalized on and unleashed:

"What the people say about our activities in the early years—it is mostly true. But I tell you that back then, the big Ghazal singers would come to us and ask us to market pirate versions of their own cassettes, for their own publicity, since HMV wasn't really able to keep up with the demand." Even major players like HMV dealt with pirates. When HMV found that it could not meet the demand for one of its biggest hits, *Maine Pyar* *Kiya*, it reportedly entered into an agreement with pirate cassette producers to raise their price on the album from Rs.11 to Rs.13 and pay HMV half a rupee for every unit sold. HMV, in return, promised not to sue them or raid their businesses. Other producers also colluded with pirates in order to minimize their costs, taxes, and royalty payments to artists (Manuel 1993).

and forth to Taiwan and Southeast Asia to source components and raw materials for emerging domestic producers. Financing for these trips was often provided through local bazaar networks or through the diasporic networks of the merchant castes. Major Indian media companies like T-Series had their origins in such trips.

These networks also provided key support for the rapid adoption of subsequent technologies, such as compact discs, especially as low-cost Chinese hardware and Malaysian discs began to flow into India in the late 1990s. By then, economic liberalization and growth in India and China had greatly increased the volume and sophistication of transnational trade in the region. The relatively simple informal sector of the 1980s had become a complex ecology of organizations that ran from local street vendors to factories throughout Asia. Because profit margins depended on efforts to accelerate the production and delivery of goods, these networks grew and innovated very rapidly.

Street-level pirate vendors and wholesale markets were strongly embedded in these wider metropolitan, regional, and transnational networks. In our interviews, large facilities in Pakistan, Malaysia, China, and Hong Kong were still identified by vendors and intermediaries as primary sites of production, with DVDs entering India through a variety of regional supply routes. Malaysian imports, for example, were said to follow two regional distribution circuits on their way to wholesale and retail markets in Mumbai—one passing through the cities of Dhaka (Bangladesh) and Kolkata (India), and the other passing through the city of Chennai (India).

Many of these routes are anchored in long-standing, transnational ethnic and kinship networks. The link between Chennai and Kuala Lumpur, for example, is marked by the presence of a large (Indian) Tamil population living in Malaysia. Pakistani pirates, in turn, build on and service the large South Asian diaspora in the Anglophone world, hungry for Indian music and film. Often, traffic within such networks goes both ways. Diasporic Tamilians in Malaysia eagerly await the latest Tamil films, while Tamilians living in Chennai await the latest Hollywood releases, copied in Malaysian factories.

The entertainment industry is aware of these regional circuits but has tended to view them primarily through the lens of global hits. According to the IIPA, for example, the May 19,

1999, release of *The Phantom Menace* set in motion a sort of regional domino effect in which pirated VCD copies of the film were available on May 24th in Singapore; on the 25th in Hong Kong, Taiwan, and Macao; on the 26th in Thailand; on the 27th in Indonesia and Australia; on the 28th in Korea; and on the 31st in Pakistan. After Pakistan, the VCD was available on June 2nd in India.

This complex itinerary is emblematic of the highly structured pirate media flows of the late 1990s and early 2000s, in which the diffusion of physical discs from a central source—here, Malaysian factories—shaped the pace and geography of the pirate release. India's appearance at the end of the chain very likely signals a different production path, passing through masters delivered to Pakistani factories and copies smuggled across the border into India. Today, such an account would look very different. The geographical trajectory for any current blockbuster film is now radically compressed, with camcordered or better copies globally available via the Internet on or before the initial release date and street distribution following shortly after. Factory-produced copies do continue to appear in this context, but inevitably later and typically as premium products.

Our interviews in 2009 found evidence that these networks still play a role in the South Asian arena, but it is also clear that the pirate ecosystem is changing rapidly, driven by cheap copying technologies that diminish the advantages of industrial-scale production and further decentralize distribution. The Internet is a crucial factor in this context but not the only one: local factories and cheap consumer burners, storage, and other consumer infrastructure play major roles. When Ernst & Young investigated the origins of pirate discs in India in 2008, it estimated that 40% came from local disc manufacturers, 50% from informal cottage production, and only 10% from transnational networks (USIBC/Ernst & Young 2008). By all accounts, these shifts have vastly expanded the flow of pirated goods within India and Asia more generally, even as they displace the complex organizational networks that, until very recently, structured them.

Inevitably, this displacement is less of a factor in the hard-goods trades—especially electronics—where the Asian geography of the grey market remains highly visible and unchallenged. This geography is signaled to consumers in a variety of ways, most directly in the packaging and other signs marking the origin of the goods. In India, it also announces itself in the names of the street markets. Visitors stepping out of National Market in Bangalore can look across to Bangkok Plaza and, a few meters away, to Bangalore's own Burma Bazaar. Across from Burma Bazaar is New Hong Kong Bazaar. All specialize in non-legal media commodities, from counterfeit phones to DVDs and software. All are part of the grey-market-media world of modern India.

Internet and P2P

Optical disc piracy was an easy fit within the wider informal economy in India and quickly became a ubiquitous presence in the bazaars and street markets. Optical discs were one more variety of the cheap copy, paralleling the trade in other recycled, resold, and counterfeit goods. The spatial organization of pirated disc sales was continuous with these other goods, as were the strategies for policing it.

Until very recently, file sharing and P2P networks were incidental to this structure of piracy. Internet connectivity in India was low, and the limited broadband infrastructure was of poor quality, with low speeds and frequent disruptions. Indian officials, like officials throughout the Global South, took a wait-and-see approach to copyright issues in this environment, watching how piracy and enforcement efforts played out in more technologically advanced countries of the West or in parts of Southeast Asia. In the last two to three years, this has begun to change.

Broadband Deployment

In 2004, the Department of Telecommunications announced a national Broadband Policy for India, with a target of 115% annual growth and 20 million users by the end of 2010. Actual numbers will fall short of the target, hindered by the challenges of rural and semirural buildout of services and, in the past two years, by the global financial crisis. Nonetheless, growth has been prodigious, averaging around 65% per year. Broadband subscriptions jumped from 1.35 million in 2006 to 6.27 million in 2009 (ISPAI 2009).

Overall broadband penetration, in a country of 1.1 billion, is still very low—notably in comparison with China, which reached 103 million subscribers in 2009 (or roughly 8% of the population) (Zhao and Ruan 2009). Personal computer adoption in India is also low at 30 per 1,000 people—roughly a quarter that of China (Anandan 2009).[4] These rates, however, disguise the concentration of connectivity in the major Indian cities, where business adoption has outpaced consumer use and become the norm in most commercial contexts.

The Growth of P2P in India

The broadband push by the government notwithstanding, the continued scarcity and poor quality of consumer broadband connections, even in the major urban centers, mean that P2P use remains a relatively marginal practice from the perspective of the wider Indian copy culture. Slow connections—India defines broadband as anything over 256 kbps—and widespread use of bandwidth caps has hindered P2P use among early broadband adopters.

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4   Not all technical infrastructure is so underdeveloped, however. In June 2010, the Indian government reported that there were 635 million cell phones in India, representing an adoption rate of almost 56% in the total population (TRAI 2010).

The most common model for home connections is still a \$10/month plan capped at 1GB of data. Unlimited bandwidth plans have become available in the past two years, though still at prices prohibitive to everyone but the commercial elite.

Nonetheless, in a country the size of India, that commercial elite still numbers in the tens of millions, and even very low adoption rates can generate large numbers of new users. Indian P2P use is, by most accounts, growing rapidly. Industry groups like the MPDA (Motion Picture Distributors Association—the local Indian affiliate of the MPAA) as well as several major BitTorrent sites that post their traffic sources routinely list India among the top countries for P2P activity. The MPDA recently claimed that India is the fourth-largest contributor to global P2P traffic (Ernesto 2008; Borpujari 2009).[5]

Major international P2P services, for their part, traffic widely in Indian media, especially Bollywood films. The popularity of international sites is complemented by a significant India-focused P2P scene, also primarily using the BitTorrent protocol. The progenitor of these sites is DesiTorrents.com, launched in January 2004 (and currently registered in the United States). Most other Indian BitTorrent sites emerged out of the DesiTorrents community, including the popular DCTorrent and BwTorrents. Unlike the top international sites, most of these Indian sites have registration fees—generally on the order of \$10.

Indian torrent sites, like many other sites below the top-tier torrent trackers, tend to specialize in local and non-English-language media. The more successful sites have large communities that actively seed new content. Site communities compete to post the newest releases quickly, and many of the most active groups watermark their copies. Although there are, in principle, norms favoring the exclusivity of watermarked material, these rarely constrain the user communities, and high-quality files move very quickly from one to another. The rapid release of Bollywood films is a top priority in these communities: camcordered versions generally appear within a day or two of theatrical release. These are quickly superseded by higher-quality or remastered versions, especially when digitally reproduced audio tracks become available (Sharky 2009).

The globalization of Bollywood and the large Indian diaspora ensure that Indian tracker sites have substantial international followings. DesiTorrents receives 77.7% of its traffic from India (based on our scrape of the site in April–August 2009). Pakistan and Bangladesh account for 4.5% of visitors, with the balance of traffic coming from countries with large Indian populations, including the United States, the United Kingdom, Canada, Qatar, and Australia. DCTorrent, in comparison, draws 65.4% of its traffic from India; with 15% from Pakistan, Bangladesh, and Sri Lanka; and the balance from the United States, the United Kingdom, and other migration hubs.[6]

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5   These reports show enough consistency to be taken seriously but are difficult to reconcile with India's objectively small number of broadband connections. We would expect this category to grow rapidly but are unable to account in this study for the apparent current discrepancies.

6   Alexa.com, accessed August 14, 2009.

CONTENT

Although the piracy of Bollywood movies gets the most attention in India, our data crawls of second-tier sites indicate that the most popular category of shared content is local television programming—in some cases by a wide margin. TV content is a particular specialty of DCTorrent, though it dominates even the movie-heavy DesiTorrents rankings. Soap operas, recent cricket matches, stage shows, and news programs figure prominently in these listings (see tables 8.1 and 8.2). Although our data does not permit tracking the downloads of particular content by geographical location, we see two likely factors behind these preferences: the growth of bandwidth-rich Indian communities abroad who seek news and televised programming from home; and the underdevelopment in India of digital video recorders and streaming-video services for high-income consumers, which makes P2P a logical tool for more basic consumer practices like time-shifting and repeat viewing.

The availability of pirated versions before or within the initial cinematic release window is widely assumed to impact the profitability of films. In 2009, the poor showing of the Oscar-winning *Slumdog Millionaire*—a Fox Searchlight film about children in the Indian slums—became a touchstone in this debate. While the film grossed over $100 million internationally and was a major critical success, it netted only $648,500 in the Indian box office. Because five months passed between the US release and the Indian theatrical release, pirates had an exceptionally long monopoly on distribution during which they alone benefitted from the considerable media attention surrounding the film. As a Delhi-based distributor, Joginder Mahajan, noted: "By the time it came to India . . . the majority of people had seen the English movie" (IANS 2009b). In March and April of that year, two to three months after the film appeared on Indian screens, our data crawls showed the film still circulating widely on DCTorrent and DesiTorrents, with multiple DVD and high-definition versions available.

Table 8.1 DCTorrent: Most Popular Content Categories, March 2009

Uploaded Content	Number of Files	Popular Shows/Types
Movies	117	
Music	240	Original soundtracks, Remix/Pop/Asian fusion, Classics/Ghazals, Pakistani/Afghani music, Punjabi/Bhangra music
Sports	4836	Punjabi/Urdu/Pakistani stage shows
Television Shows	4836	News content, daily soaps, weekly shows, music and dance programs

Source: Authors.

Table 8.2 DesiTorrents: Most Popular Content Categories, March 2009

Uploaded Content	Number of Files	Popular Shows/Types
Bollywood Movies	380	
Music	656	Regional music (Kannada, Punjabi, Bengali, Malayalam, etc.), world music
Regional Cinema	370	Gujarati, Punjabi, Malayalam, Kannada, Bengali, etc.
Television Shows	1224	News content, daily soaps, weekly shows, music and dance programs

Source: Authors.

Industry assertions that piracy undercut the domestic release are plausible in this context, but also illustrative of the difficulty of drawing any specific conclusions about losses—either for individual films or the market overall. The basic factors shaping the film market in India are the remarkable 450% growth in revenues between 2000 and 2008 (before tumbling 15% in 2009 in the context of the economic crisis and a protracted conflict between producers and exhibitors) and the intensely hit-driven nature of that growth: roughly 90% of Indian films lose money (S. Prasad 2008). Although it is likely that piracy impacts sales at the margin, and conceivably more so in the case of *Slumdog Millionaire*, where the studio release strategy and press attention guaranteed widespread piracy, the specific impact of piracy is very difficult to isolate and inevitably turns on counterfactuals. *Slumdog Millionaire* performed poorly for an Indian blockbuster but reasonably well in relation to the independent films it arguably most closely resembles. International media attention guaranteed it a very high profile in India during the runup to its release, but much of the local media attention was negative, concerned with the role of Indian stereotypes and the derogatory title.

Our data crawls suggest that in India, as elsewhere, the most downloaded films are nearly always the biggest hits—but any causal attribution here is almost certainly imprecise. The *Slumdog* case suggests, following Balazs and Lakatos (2010), that the wider culture of anticipation surrounding a film, rather than the post facto box office performance, may be the better indicator of the takeup of films in pirate networks—and a better explanation for the cases in which studio and pirate release strategies fall dramatically out of synch.[7] Neither, however, provides much leverage on understanding monetary losses.

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7   Balazs and Lakatos use the number of screens on which a movie appears as a (admittedly imperfect) proxy for this culture of anticipation.

An arguably more typical case is *Ghajini*, a Bollywood remake of a 2005 Tamil film that was itself loosely inspired by the 2000 American film *Memento*. *Ghajini* was the biggest Bollywood hit in 2008 and, according to our interviews with pirates in Bangalore, also the most sought-after film in the informal market, where it was available almost immediately after its release. *Ghajini* nonetheless earned some Rs.2 billion ($42 million) in its first two weeks in theatres and went on to become the third-highest-grossing Bollywood film of all time. When we conducted our data crawl in March and April 2009, it was still being heavily downloaded on DesiTorrents. The publicity surrounding the complicated origins of the film also led to a boomlet in pirate sales of the original *Memento*, which had never been released in India. One of our pirate vendor sources reported sales of over a hundred copies per day of *Memento* during the first month of *Ghajini's* release.[8]

INTERNET AND DIGITAL MEDIA POLICY

The lack of a strong empirical case for specific damages has not prevented aggressive action against online infringement. Legal action against P2P sites in the United States and Europe has become a major front in the anti-piracy wars, and courts in most countries have established precedents for liability (see chapter 1 for a broader discussion). These legal templates have, in turn, been exported to other copyright battlegrounds, where suits against locally hosted sites are becoming common.

India is well behind this curve. No suits against Indian P2P sites have been filed. DesiTorrents, DCTorrent, and several other sites serving primarily Indian content are hosted outside India, conferring some protection from the relatively disorganized international enforcement efforts of Indian rights holders.[9]

In part, this inaction relates to uncertainty regarding the liability of intermediaries for copyright infringement. Domestically, the Indian IT Act confers immunity on ISPs (Internet service providers) and other online services if they are able to prove that they have followed relatively common—if also notoriously underspecified—standards of due diligence to prevent infringement. This relatively broad safe harbor is complicated, however, by the priority accorded the Copyright Act, which does allow for intermediary liability in cases when the party has "reasonable ground for believing" (Section 51) that infringement is occurring or "knowingly infringes or abets the infringement" (Section 63). At present, there is considerable disagreement on the interpretation of these provisions, and the issue will have to await resolution in the courts.

Unlike in the United States, intermediary liability has not been developed further into a doctrine of "contributory infringement," leaving file sharing sites in the same category as

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8   March 26 interview with pirates on M.G. Road.

9   As this report was going to print, press reports described the first alleged BitTorrent-related arrests in India, involving four men in Hyderabad accused of uploading Bollywood films to BitTorrent networks (Ernesto 2010). The men also sold pirated DVDs.

other search and service providers who may host or link to infringing content. Among the major rights holders, T-Series has been the most aggressive in challenging these limits on liability in court, initially through a 2007 injunction against YouTube for infringing its music copyrights, and more recently with requests for injunctions against MySpace. Because both services host user content, these cases represent an effort to expand liability from the current ex post system, in which a service like YouTube must comply with rights-holder requests to take down infringing files, to an ex ante system of liability for any infringing content posted to the site. If the latter scenario prevails, "due diligence" will increasingly require services to make use of filters to pre-screen infringing content—however imperfectly. Also distinct from US and much international law, Indian law does not provide for "counter-notification" in the event of a takedown, leaving no remedy if the request is unwarranted or frivolous.

Unlike YouTube and MySpace, P2P services do not host content. They are simply indexes or search engines for files hosted on—and shared directly between—users' machines. T-Series' recent suit against Guruji.com, a popular Indian search engine with a dedicated music-search feature, will test the scope of search engine immunity when simply linking to infringing files. A win against Guruji.com would significantly diminish the practical meaning of immunity under the IT Act and likely open the door to additional suits against BitTorrent and other P2P sites.

In the sixteen years since the passage of the TRIPS agreement, India has been wary of international efforts to extend IP protection beyond its obligations under TRIPS. Much of this caution arises from India's role as a manufacturer and exporter of generic pharmaceuticals—a position that has kept it in the cross hairs of the major pharmaceutical companies and, consequently, of the USTR. But this wariness also reflects a broad-based, long-term, public sector commitment to increasing access to knowledge goods, going back to debates over educational provisions in the Berne Convention in the 1960s. Although Indian law contains strict civil and criminal provisions for copyright infringement, it also contains (and successive governments have acted to preserve) what are among the most expansive public-interest exceptions and limitations to copyright in the world.[10]

Among post-TRIPS copyright initiatives, India has joined neither the WIPO Copyright Treaty (WCT) nor the WIPO Performances and Phonograms Treaty (WPPT). Notably, it has preserved rights to reverse-engineer or circumvent technological protection measures (such as digital rights management, or DRM) on copyrighted goods—an important condition for the exercise of fair use (in India, "fair dealing") in the digital era that is sharply restricted by the WCT. This became a point of contention in recent plans to reform the Indian Copyright Act. The music industry, in particular, advocated for "anti-circumvention" provisions along the lines of the US Digital Millennium Copyright Act, which goes beyond the WIPO treaty in

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10   Consumers International (2010) rates the Indian Copyright Act as one of the most balanced in the
        world, with broad scope for private, educational, and critical use and broad online rights. For a sum-
        mary, see the India country report at http://a2knetwork.org/reports/india.

important respects.[11]

The anti-circumvention debate set the copyright industries in opposition to groups who routinely reverse-engineer or modify technological protections, including the free-software community and organizations for the visually disabled. The resulting compromise language in the bill makes the intention to infringe the necessary threshold for liability. This is a particularly important point in a digital economy largely built on practices of recycling and reuse, where the criminalization of circumvention could apply to a very wide array of activities. The copyright industries are opposed to this weaker standard, and the IIPA has characterized the provision somewhat extravagantly as "almost completely eviscerating any protection" (IIPA 2010).

Stronger anti-circumvention and narrower safe-harbor provisions remain controversial among Indian lawmakers. Similarly charged debates have taken place around the exceptions available for educational use, where public interest groups are seeking to expand and formalize rights to access educational materials (Liang 2010). Despite growing international pressure on India to meet the stricter WIPO standards (and, beyond those, US/IIPA standards), the Indian government appears prepared to fight for national discretion on these issues, informed by development needs. Notably, the Indian government has been among the most vocal in expressing concerns about the emerging Anti-Counterfeiting Trade Agreement (ACTA)—a US-led effort to strengthen international enforcement standards, to which India is not a negotiating party. As of late 2010, India has signaled a clear anti-ACTA position and a willingness to take its concerns to the WTO (World Trade Organization), where questions about the eventual jurisdiction and implementation of ACTA are sure to be raised.

The (Re)organization of Indian Film Markets

Movies are basic to public life in India. Over three billion tickets were sold in India in 2009, representing roughly half the global total. A city like Bangalore sees a minimum of six to seven new releases every Friday, including the latest Hollywood, Bollywood, Kannada, Tamil, and Malayalam films. Cinema halls draw huge crowds, with most films selling out on weekends. Films turn over very quickly: flops are typically identified within the first week and pulled from theatres within two weeks of their release. The most popular films rarely stay in theatres for more than two months.

This frenzied pace is in large part a function of the extreme competition in the Indian film market, which during most of the past decade pushed over 1,000 domestically produced feature films per year, plus the major Hollywood hits, into rivalry for some 10,000 screens. (US studios, in contrast, produce 500–600 films per year for 40,000 screens.) Despite massive growth in revenues in the past decade (see figure 8.1), only 10% of films turn a profit under

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11   Notably in expanding protection to technical protection measures that deny access to works, not
        merely the ability to copy them. Unlike the major international music labels, which have collectively
        abandoned DRM for digital music sales, Indian music companies like T-Series continue to use it to
        restrict the copying and playback of files in the nascent digital download market.

Figure 8.1 Indian Box Office Revenue (in billions of US dollars)
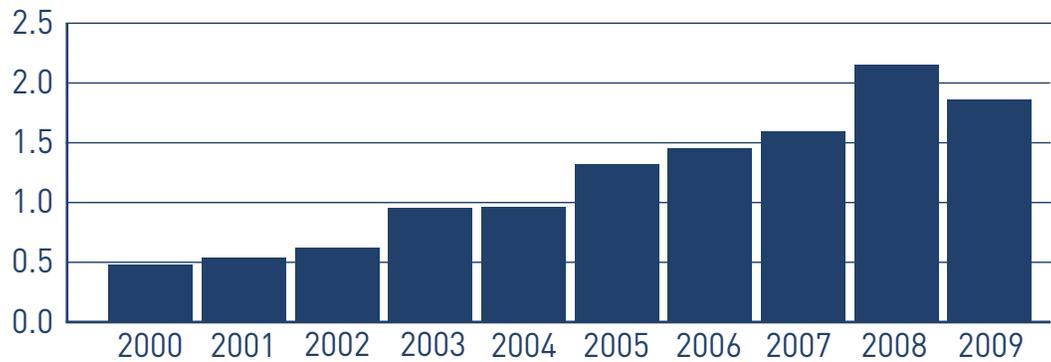
Source: Authors based on data from Kohi-Khandekar (2010) and FICCI/KPMG (2010).

Figure 8.2 Indian Domestic Film Production (number of films)

Source: Authors based on European Audiovisual Observatory (2001–10) data.

Figure 8.3 Per Capita Film Admissions in India

Source: Authors based on European Audiovisual Observatory (2001–10) data.

such conditions. This has not deterred production, which set records every year through 2008 (see figure 8.2). But for the many who lose money it has fueled the belief that piracy, not competition, is the main obstacle to profitability in the Indian film business.[12] Industry resentment of the large, uncontrolled pirate DVD market is a predictable and highly visible outcome.

The domestic Indian film industry was built by catering to a mass market—first the urban middle class, and then wider populations reached through cheaper circuits of exhibition of the kind described earlier in this chapter. Per capita film admissions have hovered around three per year since the late 1990s (see figure 8.3)—nearly triple the rate of Mexico and Russia and six times that of South Africa and Brazil in a country with a fraction of those countries' per capita GDP (gross domestic product). Prior to the introduction of multiplexes and the progressive integration of the Indian cinema into global distribution networks in the late 1990s, the average cost of a movie ticket was around $0.20 (European Audiovisual Observatory 2010).[13] As core urban areas grew richer, urban redevelopment brought the conversion of many older properties into shopping arcades—often anchored by a cinema on the top two floors. The new multiplexes mixed Hollywood and domestic films and introduced a significant rise in ticket prices. As Hollywood globalized, so too did Indian film markets.

Market Segmentation

Among developing countries, India is nearly unique in having domestic industries in control of all aspects of the major media markets, from music and film production to distribution and exhibition. Domestic cinema accounts for some 92% of the market (Kohi-Khandekar 2010)—roughly inverting the ratio of domestic to foreign market share found in Brazil, Mexico, South Africa, and many other countries. Because of this commitment to domestic markets, Indian companies have a long and often fierce history of competition for domestic consumers. Because of the wide variation in incomes and infrastructure across India, they also practice extensive price discrimination in order to reach those audiences.

Geography plays an important role in this distribution of prices and access, as the developed theatrical exhibition markets in Delhi, Mumbai, and Bangalore give way to the less sophisticated theatres and halls (and the still-less-sophisticated home-video infrastructure and pirate distribution) of India's innumerable towns and villages. Where DVDs and occasional high-definition formats dominate the pirate markets of the major cities, residents of smaller

12   2009 was a comparatively bad year for Indian cinema, with a drop-off in revenues as the economic crisis continued and in the number of films released as a result of a two-month-long conflict between producers and multiplex owners. Most media analysts (PricewaterhouseCoopers 2010; FICCI/KPMG 2010) anticipate a return to rapid growth in the next years.

13   Given the elaborate price discrimination practiced in the Indian market (detailed later in this chapter) and the lack of information about how the Observatory arrived at this number, we cite it with reservations. We are aware of no other estimates.

towns have a strong continuing investment in VCDs. This complexity allows overlapping markets in which the same goods sell at different prices. The pirate market is not separate from this segmentation but, in effect, represents its largest and lowest tier.

In the cinema market, two broad developments have reshaped this landscape in recent years: (1) the shift from single-screen theatres to multiplexes, with a corresponding rise in ticket prices and change in the composition of the movie audience; and (2) rampant competition in the rest of the distribution chain, leading to the collapse of windowing practices around cable and home video, a move toward much lower-cost models for video rentals and sales, and a variety of other price and service innovations. This second trajectory has many parallels with the emergence of lower-cost distribution models for film, TV, and recorded music in the United States and Europe and in our view has much the same root cause: the presence in the market of strong companies that have to compete for domestic audiences.

Cinema Halls

The shift from single-screen theatres to multiplexes has important material and social dimensions. Like many other countries, India has seen dramatic changes in film exhibition in the last decade, as multiplexes begin to supplant the traditional single-screen theatres in the major cities. In the late 1990s, there was only one multiplex in India; by 2008 there were over 100, with some 850 screens (European Audiovisual Observatory 2010). Although multiplexes still represent a very small portion of the total screens in India, they have had a disproportionate effect on the cinema market, affecting the distribution of revenues, the composition of the audience, the spatial organization of cinema, assumptions about the formulas for viable films, and—ultimately—the market for pirated goods, which has become more firmly entrenched as the primary form of access among the poor.

Multiplexes in India are concentrated in the major cities, where their growth has largely mapped the rise in urban real estate prices. They are generally built as the anchor institutions for new shopping malls. Unlike the old movie theatres, which were usually run by families who owned the property on which they were built, the new theatres are much more commonly the products of corporate real estate development, requiring heavy initial investment and a correspondingly high rate of return. These pressures have dramatically pushed up the prices of tickets. Today, the cheapest tickets in the multiplexes run Rs.120 ($2.60), with premium tickets for the best seats in the best theatres on the weekends reaching Rs.500 ($11) (see table 8.4).

This price differential is dividing the Indian market, separating the poorer audiences who frequent the older single-screen theatres from those who can afford multiplex prices. As the middle class grows more affluent and real estate prices rise further, pressure on the single-screen theatres has increased. In most major Indian cities, single-screen theatres are in slow decline—either shutting down or converting to multi-screen formats. Prices in all cinemas have

risen, driving a gentrification of the movie audience and pushing poorer Indians into greater reliance on the pirate market for the viewing of new releases. The social diversity characteristic of the older theatre-going audiences is one casualty of this shift. The big single-screen theatres were home to the unusual Indian spectacle of elites and poor brought together in the same venue. The expensive, highly policed spaces of the new shopping malls are much less amenable to this type of social interaction.

Today, low-income groups throng the remaining single-screen cinemas, where ticket prices typically remain under $1. Most of these theatres screen Bollywood productions or other regional films. The multiplexes, in contrast, cater to high-income audiences interested primarily in the most globalized of the Bollywood films and in international releases—including the recent trend of re-releasing Academy Award winners after the Oscars. The practice of releasing Hollywood films in single-screen theatres has largely ceased. Always a very small player in India, Hollywood has successfully repositioned itself at the high end of the movie market.

Figure 8.4 Number of Screens in India
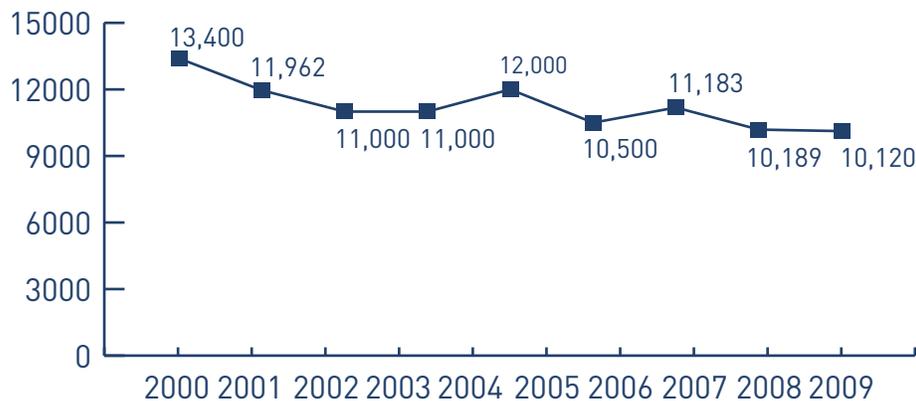
Source: Authors based on Kohi-Khandekar (2010) and European Audiovisual Observatory (2001–10) data.

High multiplex prices have generated many anxious commentaries about the transformation of movies into a more elite art form,[14] but they have also proved attractive to producers who see opportunities for films to become profitable with smaller audiences. The model has, in any event, produced a remarkable boom in revenues. The Indian market grew from $470 million in 2000 to $2.15 billion in 2008.[15] Nearly all this growth is due to higher prices, especially at the multiplexes, which control less than 10% of the screens but take in 25%–40% of the revenue. Neither the cinema-going public nor the overall size of the exhibition market, in contrast, has

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14   Among others, by director Mukesh Bhatt (IANS 2009c).

15   Before dropping to $1.86 billion in 2009, as a result of a two-month shutdown of the multiplexes dur-
      ing a dispute with producers.

grown in the period: the total number of screens has actually declined over the past decade (see figure 8.4), and the number of tickets sold has remained roughly stable, hovering between 3 and 3.5 billion (until the recent downturn). Total exhibition capacity has consequently shrunk. Most of the older single-screen theatres could accommodate 800 to 1000 people; the new multiplexes are generally designed for audiences of 150 to 300.

Table 8.3 Price Discrimination at the Movies, 2009

Cinema	Type	Screens	Language	Weekday Morning Price	Normal Weekday Price	Weekend Price
PVR Classic	Multiplex Standard	18	English, Hindi, Kannada, Tamil, Telegu	Rs.60	Rs.120	Rs.200
PVR Europa	Multiplex Premium	6	English, Hindi, Kannada	—	Rs.170	Rs.300
PVR Gold	Multiplex Exclusive	6	English, Hindi	—	—	Rs.500
REX CINEMA	Single-screen	1	Hindi	Balcony – Rs.60 Rear Stall – Rs.50	Balcony – Rs.100 Rear Stall – Rs.80	Balcony – Rs.170 Rear Stall – Rs.130
FAME LIDO	Multiplex	12	English, Hindi, Kannada, Tamil, Telegu	Rs.100	Rs.140	Rs.200
FUN CINEMAS	Multiplex	10	English, Hindi, Kannada, Tamil, Telegu	—	Gold – Rs.190, Premium – Rs.170	Gold – Rs.250 Premium – Rs.200

Source: Authors.

Windowing

In India, the pressure of the initial release window is intense. Films must produce big first-week sales or face rapid closure—often after only two weeks. The biggest Bollywood hit of 2008–9, *Ghajini*, collected nearly half its $43 million global total in its first two weeks of domestic release, launching it on a long domestic (and later international) run. The competition for screens and the speed of turnover mean that pre-release advertising plays an inordinately important role in this process. In practice, there is almost no opportunity for a sleeper or word-of-mouth hit.

Once a film enters theatres, the producers and distributors scramble to manage the subsequent exhibition windows. The first opportunities are the less valuable theatrical markets

Direct Download to Theatre

The infrastructure for real-time, encrypted satellite downloads of movies to theatres began to be deployed in India five to six years ago. Currently, there are about three thousand digital screens in India, out of a total of roughly ten thousand (PricewaterhouseCoopers 2010).

The new distribution technologies were intended to put an end to the creation of high-quality pirate copies within theatres, either copied directly from the reel or by filming the screen during off-hours. Real-time, single-use distribution also means that films can be watermarked to enable relatively precise tracking of pirated copies back to their source. In 2008, a pirated DVD of the film *Tashan* (2008) was traced back to an April 25th showing at a single-screen theatre in Bilimora, a small town in Gujarat (UFO Moviez 2008). The theatre was raided and a camcorder-recording racket was broken up.

As they become more widespread, such technologies will raise new barriers around the theatrical exhibition window—though if the past is any indicator, relatively low ones that will not impact the longer-term pirate availability of the film. For most of the Bollywood studios, however, creating such short-term obstacles is the only realistic goal of enforcement.

The Melting Block of Ice

The control of release windows is widely viewed as critical to the business model for commercial film. Chander Lall, the MPAA's lead lawyer in India, describes films as a "block of ice" melting in the producers' hands.[1] Unless producers and distributors can make their money quickly, through a planned release program, they run the risk that it will turn to water without covering their costs. The initial theatrical release plays the central role in these strategies. But the time gap between each subsequent window is also important. At each stage, the producers reach out to new audiences with one hand, and with the other try to prevent the film from being distributed through unauthorized channels or media. High rates of piracy undermine this control and, consequently, are often blamed for the high rates of failure of feature films.

There are, however, dissident accounts of why so many films fail. Because the film market is highly competitive and because the reception of films is highly subjective, predictors of success are notoriously weak. The prominent Mumbai filmmaker Anurag Kashyap[2] notes that the basis for the initial investment in a film is almost always the assembled star power, which is viewed as the chief predictor of success. Distributors and exhibitors, in turn, accept films based on perceptions of the buzz surrounding the film, including the initial advertising campaigns. The role of the audience, in contrast, is largely confined to its initial reaction to these campaigns, measured in first-week ticket sales. Success can, in principle, be built by audiences over

i   Interviewed in 2009.
ii   Interviewed in 2009.

time through word of mouth, but only if the film overcomes the opening box office hurdle and is granted an extended exhibition window. By making initial visibility the main commodity, the market reinforces the reliance on star vehicles, sequels, copycat strategies, and massive advertising to push films past the hundreds of other films competing for the same small range of outlets. Production costs have risen accordingly, creating a higher investment floor for success but no greater probability of it.

Oye Lucky! Lucky Oye! (2008) was one of the first films to break with the traditional windowing schedule. Like many Bollywood films, the initial advertising campaign was built around the release of the film soundtrack and promotional music video. Rights to the soundtrack were owned by T-Series, which made it available for download for $2.52 (or $0.33 per song).

The film's theatrical release suffered from very bad timing, however. *Oye Lucky! Lucky Oye!* appeared in theatres on November 27, a day after a wave of terrorist attacks on downtown Mumbai hotels. Widespread fear of crowded places following the attacks kept many Indians away from the theatres. Though the film was a critical success, it lost money in this environment. *Oye Lucky! Lucky Oye!* stayed in the cinemas for the next four weeks and made about $1 million. It earned an additional $400,000 in subsequent worldwide release.[3]

In an effort to recoup its investment, UTV Motion Pictures released the film on two major direct-to-home platforms on December 18, less than a month after its theatrical release. The home-video distribution rights were sold to Moser Baer Entertainment Ltd., a subsidiary of the world's second-largest optical disc manufacturing company, which released VCDs and DVDs in the first week of January 2009 at a price of $2.17 per DVD and $0.88 per VCD—directly competing with the pirate market. This pattern has since been repeated for many loss-making films.

i   Box Office Mojo, http://www.boxoffice-mojo.com/movies/?id=oyeluckyluckyoye.htm, accessed March 4, 2009.

in the provinces, which must generally wait for the arrival of prints closed out of the major markets. Subsequent distribution on DVD and on cable and satellite TV networks enables further segmentation and expansion of the audience. Control of these secondary delivery and distribution channels allows producers to spread the considerable risks of production (Liang 2008). Although hit status in the theatres ensures a much more advantageous deal in these secondary channels, even flops have the opportunity to recoup costs.

These segmentation strategies begin in the theatres themselves, which practice elaborate forms of price discrimination. Ticket prices for the same movie can range from $1.30 to $11, depending on the choice of the theatre, the timing of the show, the location of the seat, and other peripheral services the cinema may offer, such as dinner. The date of release of the eventual VCD and DVD is determined by the popularity of the film in theatres and resulting calculations about the profitability of longer theatrical runs and the value of residual advertising effects. Cable, satellite TV, and pay-per-view windows are also based on these calculations.[16]

16   The smooth functioning of this sequence depends in part on the administrative machinery for issuing the various licenses for each type of use and for collecting royalties (Wang 2003).

Price and Competition in the Optical Disc Market

The growth of the Indian movie market is mostly the story of rising prices—and of the successful creation of a premium product in the multiplexes that can justify those price increases. The corresponding home-media sector, in contrast, has evolved very differently and become a site of tremendous competition on price and services. In the past three to four years, major Indian media companies such as Reliance Big Entertainment, T-Series, and Moser Baer Home Video have launched price wars that have transformed large parts of the Indian media ecosystem, from price points, to distribution, to licensing practices for movies and music.

Figure 8.6 India's Home-Video Market (in millions of US dollars)
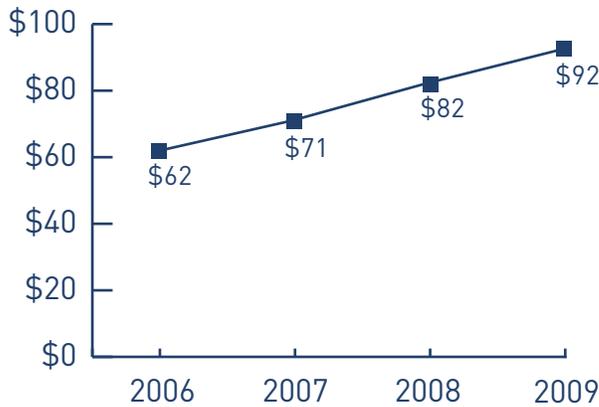
Source: FICCI/KPMG 2010.

Unlike the $2 billion theatrical market in India, the market for licit DVD and VCDs remains miniscule—some $92 million in 2009 (figure 8.6). Traditionally, the Indian home-video market was of low interest to film producers. The window between theatrical release and home-video release was typically over three months. DVD prices for domestic film were high, ranging between $5 and $7. This was a recipe for pirate control of the market—up to 90% of it according to estimates by Moser Baer (interview, 2009).

Until recently, the retail distribution channel for discs was very weak. Discs were sold through local video and audio shops, specialty chain stores such as Planet M, bookstores such as the Crossword chain, and shopping mall chains such as Reliance Time Out. The location of stores generally determined the content on sale. Upmarket retail stores sold English-language, Hindi, and regional Indian content, whereas small shops typically had only the most popular Hindi and local content. The rise of Moser Baer and Reliance Big Entertainment in the home-video market since 2007, however, has triggered a small revolution in price and accessibility, including expansion to a much wider range of retail outlets.

The Moser Baer business model will be a familiar one to readers of this report: release the film to DVD as cheaply, quickly, and widely as possible. Moser Baer's emulation of the pirate market was deliberate, as was the intention of competing with it to establish a viable Indian home-video market. Over the past three years, Moser Baer estimates its share of the total DVD market at 10%, built on competitive pricing, aggressive marketing, and pleas to customers to "Kill Piracy."[17]

Moser Baer's price war began with a major play for distribution rights. In 2005 and 2006, Moser Baer acquired home-video distribution rights to over 10,000 films with low potential for re-release in the high-priced DVD market. Nearly all were Indian; most came from small distributors. Over three years, the company has released 60% of these films on VCD and DVD at a starting price of Rs.40 ($0.85) for VCDs and Rs.99 ($2.12) for DVDs. After favorable responses from consumers, the company began collaborating with producers on new releases. In 2009, in a deal worth Rs.250 million ($5.5 million), Moser Baer acquired home-video release rights to the catalog of film production company UTV, including films in production through mid-2009 (Mitra 2008).

The other disruptive firm in the Indian home-video market is Reliance Big Entertainment, part of the $80 billion Reliance ADA group, the largest conglomerate in India. Reliance Big Entertainment has been a major player on several sides of cinema market growth in India, including film production, the development of multiplexes, and now the low-priced home-video market. In 2008, Reliance shook up home-video rental with a new service called BigFlix. At a base price of $6.50/month, BigFlix offered an unlimited number of movies from a collection of over 15,000 films. The BigFlix online portal recently extended this service to the Internet, allowing direct download to computers and a wide variety of free content.

Like Moser Baer's pricing in the DVD sales channel, BigFlix inaugurated a price war in the home-video rental sector and is progressively driving local video parlors out of business. Reliance's Big TV direct-to-home service has had a similar impact on that video market and currently offers over two hundred channels at an entry price of $32.50/month. Tata Sky and Dish TV, the two other major direct-to-home providers, have responded by lowering their entry-level prices in turn—in some circumstances down to zero.

These price wars occur almost entirely within the domestic media sector. Neither the "big four" record labels (EMI, Sony Music Entertainment, the Universal Music Group, and Warner Music Group) nor the Hollywood studios have opted to play this game. The cheapest Hollywood films in our DVD-price survey cost Rs.399 ($8.50)—normally for an older title at a discounted price. New releases and popular films are sold at Rs.500 ($11) and upward.[18] Major Hollywood hits make up nearly the entirety of the selection of foreign films, when these are available. Even now, small-market films in English and other world cinema offerings are

17   Interview with Sanjeev Varma, head of corporate communications, Moser Baer, June 20, 2009.

18   There is also some legacy demand for VCDs, sold at marginally cheaper prices, and for Blu-ray discs in high-end specialty stores, which command a sharp price premium of Rs.1,299 ($28) or more per disc.

seldom released in the legal market. Pirate distribution, via either P2P sites or some of the specialized vendors working in the larger markets, often represents the only way to view such films in India.

The practical impact of these price differences is illustrated by the comparative purchasing power method used throughout this report, which translates the price of legal goods and their pirated equivalents into relative prices that reflect how expensive the item would be for Americans, if priced at an equivalent percentage of US per capita GDP. The results are predictably stark. GDP per capita in India is about 1/46 that of the United States.

Unlike the theatrical market, the legal DVD market follows relatively uniform pricing practices, segmented into categories of goods (for example, between Hollywood, Bollywood, and low-cost Moser Baer discs) but with little price discrimination among the same goods, at the same time. Pirate disc prices are a different story altogether and show wide variations in observed prices. These reflect a variety of factors, including geography, perceived demand, and the degree of bundling of films or albums on single discs. The spectrum of DVD pricing, for example, runs from wholesale markets, like Burma Bazaar in Chennai, where high-quality DVDs can be had for $0.40, to prices upward of $2 in the more organized, tourist-friendly markets of Delhi and Bangalore. It includes a large subcategory of film compilations, especially of Bollywood productions, which enjoy considerable popularity among consumers and are available at a much lower per-film price. Our price data for licit DVDs is based on spot checks of Minimum Retail Price (MRP) stickers on licit DVDs available in Bangalore stores. Prices for pirated films are listed at around $1—a typical price for single-feature, high-quality DVDs.

The comparison of licit and illicit DVD prices (table 8.5) suggests the pricing dynamic at work in Indian home video. The 2008 Hollywood blockbuster *The Dark Knight* is sold at the more-or-less uniform international price of $14–$15—uniform because of the control that the Hollywood studios exercise over the global licensing and distribution of their products. *A Beautiful Mind* is an older Hollywood hit available, like other older films, at a discounted price. In both cases, the price represents a hugely disproportionate share of local income compared to price/income ratios in the United States or Europe. At an equivalent share of US GPD per capita, a *Dark Knight* DVD would cost $663; *A Beautiful Mind*, $421.

Table 8.4 Licit and Illicit DVD Prices in India, 2009

	Legal Price ($)	CPP Price	Pirate Price	Pirate CPP Price
The Dark Knight (2008)	14.25	663	1	46.5
A Beautiful Mind (2001)	9.10	421	1	46.5
Ghajini (2008)	8.50	395	1	46.5
Flashbacks of a Fool (2008)	6.42	298	1	46.5
Oye Lucky! Lucky Oye! (2008)	2	93	1	46.5
Jaane Tu . . . Ya Jaane Na (2008)	3.8	176	1	46.5

Source: Authors.

In contrast, distributors of Bollywood films have sharply reduced prices of their products over the years. New players like Moser Baer have negotiated rights to popular Indian films on terms that permit much lower pricing—as low as Rs.40 ($0.85 cents) for VCDs and Rs.99 ($2.12) for DVDs. Some blockbuster films have been kept out of the price war, such as *Ghajini*, which costs Rs.199 ($4.24) on VCD and Rs.399 ($8.50) on DVD. But most traditional home-video distribution companies, such as Shemaroo and Eagle, have been forced to reduce their prices to stay competitive. In 2008, T-Series dropped the average price of its VCD releases of new films to Rs.38 in a bid to compete.

As a result, the difference in cost between a pirated and an original copy of a Bollywood film is far less than for a Hollywood title—often a factor of two rather than ten or more. This difference has proved small enough to produce dramatic increases in legal DVD sales. Sales of over a million discs for major releases have become relatively common. The Moser Baer DVD of the hit *Jab We Met* sold over six million discs when it was released on home video, five weeks after it hit theatres in 2008.

The Moser Baer impact on the home-video market has been dramatic and illustrates a basic, recurring dynamic in this report: high-priced media leads to widespread piracy, and widespread piracy—when in the presence of competitive legal businesses—catalyzes lower-priced, mass-market, legal alternatives. In India, these cheap legal alternatives are the new incumbents. Since the beginning of the price war in 2007, home-video revenues have grown rapidly—albeit from a very low baseline.

Distributors have also moved into the market segments pioneered by pirate producers and vendors. The pirate practice of offering three to four films bundled on one DVD has been widely copied in the formal market, as have the genre and theme-based collections (for example, World War II films) that proved their popularity in pirate markets. The slow emergence of a formal market for foreign non-English-language films is another example. For years, cinephiles turned to the pirate markets for their supply of international films. Prominent non-English-language directors such as Wong Kar-Wai and Pedro Almodovar were rarely screened in India and never released on DVD. Here again, Moser Baer (in collaboration with Palador Pictures, which holds the Indian rights to a wide range of classic international films) has moved in to fill the obvious gap and now sells world cinema to the "premium DVD market" at Rs.399 ($8.50). Somewhat amusingly, Palador head Gautam Shiknis describes the deal as "the beginning of a World Cinema movement in India" (Indiantelevision.com 2007).

For obvious reasons, many industry incumbents are ambivalent about being forced to play (or having entered, forced to stay) in a much more competitive, lower-margin market. In 2007, industry groups proposed an "Optical Disc Law" designed to regulate the manufacture and sale of discs. The Ministry of Information and Broadcasting rejected the idea, with Ministry Secretary Asha Swarup describing piracy as a sign of the work still to be done in democratizing access in the legal markets: "The best way to tackle piracy is to manage the supply side, by releasing the films on digital platforms: simultaneous releases on Theatres, Discs and Internet is a solution. If there is enough availability of DVDs in national and international markets on time, then people would not be going to these sites" (Pahwa 2008).

The Market for Piracy Studies

Prior to 2004, research on piracy came mostly from US industry groups working in India. Their efforts contributed to the annual IIPA reports on India, which informed the USTR's Special 301 reports, which in turn routinely targeted India for special criticism regarding its pharmaceutical policies, copyright protection for film and books, and a spectrum of real and alleged deficiencies in the Indian legal regime.

As efforts to build local corporate and government support for enforcement ramped up early in the decade, the market for piracy studies also began to grow and diversify. An assortment of consulting firms, including PricewaterhouseCoopers, KPMG, Ernst & Young, and the International Data Corporation (IDC), entered the picture to explain piracy to Indian and multinational stakeholders and to provide more compelling evidentiary support for industry lobbying and enforcement campaigns. Media consulting, in the booming Indian media market, also frequently meant IP consulting, leading to an echo chamber in which piracy findings were repeated and reinforced from one report to the next. All the major Indian industry groups now commission work, including the IMI (Indian Music Industry) and the IPRS (Indian Performing Right Society) for music, NASSCOM (National Association of

Software and Services Companies) for software, and the FPBAI (Federation of Publishers and Booksellers Association of India) for books.

In 2007, Ernst & Young won a contract to produce piracy studies for the U.S.-India Business Council (USIBC), a liaison group based at the intensely pro-enforcement US Chamber of Commerce in Washington, DC. Ernst & Young's first study, *The Effects of Counterfeiting and Piracy on India's Entertainment Industry* (2008), was released during USIBC lobbying for the Optical Disc Law and was widely cited as evidence of why that legislation was needed. Despite this close connection to lobbying, the study provides one of the more comprehensive examinations of the pirate marketplace for film, TV, music, and entertainment software (but not business software) available in recent years. To its credit, it also offers the most extensive methodological appendix of any industry study we have examined in our overall project, and it avoids some of the gimmicks used to inflate industry-loss numbers into wider claims of economic losses (such as the application of economic multipliers).

Less to its credit, the report relies on other, not so transparent industry reports for some of its estimates (notably MPAA work on pirate markets in 2004–5) and repeatedly uses the retail value of goods (or its equivalent) as the basis for calculating losses. The latter assumption, in particular, ignores the price/income imbalances that create pirate markets in the first place and puts the report out of step with the industry's belated acknowledgement that substitution rates—that is, the probability that a pirated disc substitutes for a legal purchase—are generally far less than one. Such effects are now a relatively common part of the US and European discourse on piracy, but they are largely absent from the conversation in developing countries, where price/income ratios dictate very low rates of substitution and consequently much lower-than-retail estimates of actual losses.

Using these methods, the report found that the Indian media industries lost $4 billion and 820,000 jobs to piracy in 2007—over half of that in alleged losses to broadcasters from piracy by cable networks. Losses to the film industry were said to approach $1 billion. These numbers were extensively quoted in the media, and it is relatively easy to see the report as part of the longer-term effort to foster a national, rather than regional, rationale for enforcement efforts.

Other recent studies generally follow this line, making promises of increased employment, foreign investment, and tax revenues if piracy can be reduced. The basis for these claims can be somewhat fluid from year to year. In 2003, the Business Software Alliance argued that a 10% reduction in piracy would produce 50,000 new jobs and added investment of $2.1 billion in the Indian economy. By 2005, the BSA's claimed piracy losses had climbed 50%, and the estimated benefits had more than doubled: now a 10% reduction in piracy would add no fewer than 115,847 new jobs, $5.9 billion to the economy, and $386 million in tax revenues. By 2008, claimed losses had further quadrupled from their 2005 level, but the economic benefits had shrunk: now, a 10% reduction in piracy would now add only 44,000 jobs, lead to $3.1 billion in added investment, and increase tax revenues by $208 million (BSA/IDC 2008). No explanation for this variation is given, and the underlying method is only cursorily described. Competition

between industrial powers in the region—chiefly India, China, and Russia—provides a still newer angle for the studies. Accordingly, in 2008, "A 10 point reduction in piracy could make China's IT workforce the largest in the world, surpassing the United States, and make Russia a bigger IT market than India" (BSA/IDC 2008).

Chapter 1 of this report casts ample doubt on the methodologies underlying such claims, and we will not revisit these points in detail here. But the USIBC/Ernst & Young and BSA/IDC reports do repeat the framing errors common to such analyses. Sums "lost" to domestic vendors are almost never lost to the larger economy but are simply spent on other things. Losses to foreign companies are, prima facie, gains to the domestic economy, putting multibillion-dollar loss claims in a very different light. Such countervailing factors may or may not outweigh the corresponding domestic losses to specific industries—such analysis becomes very complex. But it is disingenuous to ignore them in order to bolster a case for stronger domestic enforcement.

The Judicial Enforcement of Copyright

The courts have been a constant battleground in industry efforts to strengthen Indian copyright enforcement. The most immediate problem is the dysfunction of the Indian court system. Massive backlogs of both civil and criminal cases mean that new infringement suits or criminal prosecutions can take years to reach their conclusions.[19] Such cases often require investments far in excess of any eventual fine, compensation for the injured party, or possible dissuasive effect on pirates, making the prosecution and defense of suits financially burdensome for all involved. The MPAA reported having over 1,900 pending cases in 2009; the IMI over 8,000 in 2008 (IIPA 2010, 2009b).

But the problems for enforcement go beyond slow judicial process. Judges, for their part, have been very reluctant to rule for plaintiffs in infringement cases. The IIPA reports that, between 1992 and 2007, there were only sixteen convictions under the piracy provision of the Indian Copyright Act, and only six since 2000—all for film piracy. Recent reports suggest slightly more success in pushing cases through to conviction: the IMI reported sixty convictions for piracy in 2008 and roughly double that number under milder statutes governing the uses of certificates of authenticity. These conviction numbers come in a context of some three thousand raids attributed to the IMI and the MPAA alone in 2008 (IIPA 2009a).

From the industry perspective, judicial attitudes and the prevailing interpretation of copyright law have been major contributors to this broader enforcement failure. Industry representatives routinely talk about the need to "sensitize" judges to the claims of rights holders. Industry groups, accordingly, have made pedagogical intervention with the judiciary a high priority, typically in the form of training workshops led by IP lawyers from major Delhi firms. These promote the "culture of intellectual property," to use WIPO language,

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19   There is an estimated backlog of 31 million cases pending in Indian courts. A high-court judge recently estimated that it will take 320 years to clear the backlog (PTI 2010).

anchored in belief in the social harms caused by copyright infringement and—for judges and prosecutors—in the promotion of rights-holder-friendly legal strategies for expediting cases and ramping up penalties. Our interviews with members of the judiciary found relatively widespread resentment of this pedagogical model.[20] Certainly it has not produced significant change in the rate of convictions.

The difficulties of obtaining convictions mostly relate to the complexity of due process, which introduces a variety of possible delays and points of failure. Criminal charges normally involve the police, begin at the lowest levels of the judiciary, and impose a significant burden of proof on the prosecutor. The complainant, for his or her part, must be present on each hearing date—a requirement that raises the overall cost and inconvenience of pursuing a case. Defendants—also sensitive to these costs—often do not appear.[21]

In any given proceeding, several agencies must coordinate to bring a case to trial. The rules are cumbersome and slow, but they exist, in part, because the police are widely considered to be one of the most corrupt institutions in India, often working in tandem with the "criminal elements" they are supposed to police. In our interviews in street markets, such low-level corruption was taken for granted. Informants described a variety of forms of complicity between pirate vendors and local police, including police tip-offs to raids and corresponding gratuities or payoffs by vendors. In pirate markets, the sight of police officers buying pirated CDs and DVDs is not uncommon.

Raids against vendors and retail operators are controversial among the judiciary and the police. All see their effects in clogging the courts, and few view them as efficient strategies for reducing piracy. A partial exception to this rule are the efforts to protect release windows for high-profile films. Major releases now routinely involve the mobilization of courts and police in short, intense anti-piracy campaigns targeting illegal street markets and high-value points of distribution, such as cable-network operators that show pirated films. Where pirate distribution is still meaningfully organized around particular localities, such as Mumbai for Bollywood productions or the regional centers of Tamil and Kannada film, street enforcement campaigns have shown some limited capacity to suppress the availability of pirated copies in the key theatrical markets. These are, invariably, short-term efforts, with little impact on subsequent availability. But in the Indian movie market, the short term matters.

Given these difficulties, enforcement in India has begun to rely more on civil remedies. Civil complaints are generally simpler, faster, and in practice less focused on playing out the dispute in court. On the basis of such complaints, courts routinely issue injunctions against infringing parties and can also appoint judicial officers ex parte to conduct raids and seize

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20   Based on conversations with high court judges at judicial trainings on copyright enforcement conduct-
        ed between 2006 and 2008, including at the National Judicial Academy in Bhopal in 2008.

21   Microsoft was recently fined by the Delhi High Court for bringing cases in Delhi for alleged damages
        in other states—effectively requiring the defendant to travel. The court called this "harassment" of the
        defendants and an abuse of Microsoft's "money power" (IANS 2009a).

Fan Club Enforcers

Movie star fan clubs are important units of political organization in India, particularly in the south, where film culture and politics routinely mix. For stars entering politics, the clubs play important roles in traversing caste and class lines and often provide the infrastructure for political campaigns. Such clubs are typically supported directly by the stars themselves and engage in various visible "social work" efforts, such as blood drives and the adoption of local orphans.

In recent years, the clubs have also become involved in policing video piracy. In 2007, the main fan club of Rajnikant, a major Tamil star, instructed its branches to set up anti-piracy squads to surveil audiences and theatre staff during the release window of Rajnikant's film *Sivaji* (2007). There have also been instances where members of fan clubs attacked video pirates and forced them to close up shop. Commenting on such vigilantism, Rajnikant himself noted: "It is not correct to ask the fans to bash these people. This will create a law and order problem" (SouthDreamz 2010).

Although fan club surveillance is not a very effective form of enforcement, it is highly visible and provides the only grass-roots manifestation of the wider corporate culture of enforcement. None of the fan club efforts, however, have moved beyond the protection of the work of particular stars.

goods—including private actors drawn from the ranks of the enforcement organizations themselves.

Such injunctions are of limited use against street piracy, where the informal organization of the trade makes raids and seizures relatively ineffective as a general strategy. But they have been widely used against more organized pirate retail and, in particular, against operators of local cable networks, who routinely show pirated versions of films during the initial release period.[22] In such cases, after obtaining an injunction order, the complainant typically accompanies the police to the premises and seizes equipment. Raids of this type are geared less toward the collection of evidence for lengthy court proceedings than toward what we describe in chapter 1 as the confiscation regime, in which the primary goal is to destroy or impound pirate stock and infrastructure in an effort to disrupt the business.[23]

Because of the greater traction of such civil enforcement measures, industry lawyers have pushed to dramatically expand injunction powers in the past several years. A wide array of legal strategies developed in other areas of law have been imported into the copyright infringement arena, including ex parte injunctions granted without hearing the other party, John Doe orders issued against anonymous offenders, and Anton Pillar orders that expand search and seizure authority. Collectively, these measures have made injunctions much more powerful tools to

22   Ernst & Young estimates that the percentage of pirated content (that is, content for which no rights were cleared) on legal Indian cable networks is 60% (USIBC/Ernst & Young 2008).

23   Some of the prominent uses of such injunctions include the 2003 case filed against cable operators by Mira Nair for her film *Kama Sutra* (Mirabai Films Pvt. Ltd. v. Siti Cable Network And Ors). See also the 2007 case Time Warner Entertainment Company, L.P. v. RPG Netcom And Ors.

bring to bear against the informal economy and are now routinely invoked by plaintiffs. They remain controversial in the judiciary, however, and are not consistently granted.

Many of the copyright lawyers we interviewed expressed ambivalence about the practice of enforcement. The IIPA and USTR focus on the criminal enforcement of copyright in India, in particular, was greeted with considerable skepticism. As one put it, it is "pointless to go around killing bees with a hammer."

Such views do not reflect indifference to infringement. Many of the same copyright lawyers also complained that the police do not take copyright cases seriously. We see ample evidence for this view. Indian police have comparatively strong legal powers to combat piracy, including suo motu (ex officio) authority, which allows them to make arrests for copyright infringement without a prior complaint. But such arrests rarely happen outside the context of specific enforcement campaigns, such as the recent large-scale police sweeps in Tamil Nadu.

Police attitudes toward IP are thus another front in the effort to strengthen enforcement practices in India. Like interventions with the judiciary, these efforts have a strong pedagogical dimension and in some respects have become simply one more facet of the wider campaign waged by civil society groups to shape police culture. One of the lawyers we interviewed serves as a lecturer at the Police Training College in Delhi, where he conducts sessions on software and film piracy for police inspectors. He described the importance of "sensitizing" police officers to the harms of media piracy—a word elsewhere used mostly by human rights and gender rights groups to describe their concerns with law enforcement.

Despite concerns about the general disinterest of the police in these matters, relationships between industry and police remain critical to the practice of raid-based enforcement. A thriving private marketplace for expertise in this area has emerged in recent years, yielding a complex web of professional and social links between public and private enforcement efforts. The agencies hired to investigate infringement or assist in raids are usually headed by former police officers or retired police officials. Expertise with pirate networks is part of the job description. The ability to call in favors with former colleagues is another—and a critical one in the context of the thousands of raids per year initiated by industry groups.

There are other, practical difficulties associated with police action on copyright, including continued poor police understanding of copyright law, especially regarding the different standards of proof of ownership that apply in infringement complaints. Consistent with international law, copyright in India is automatic and does not require registration. Yet police often follow the norms of tangible property crime in requiring evidence of ownership, for fear of becoming involved in false complaints lodged for the purposes of harassment.

By most accounts, police and judicial education efforts have had, at best, modest success. Overall rates of conviction remain vanishingly low. Most courts remain reluctant to expand the use of ex parte procedures, in which the accused need not be present at a hearing or—at the limit—at their criminal trial. And police have generally resisted adopting copyright enforcement as part of their core mission, despite revisions to Indian law (including *suo moto*

Organized Crime and Piracy

Anti-piracy campaigns around the world now routinely feature claims about the links between piracy, organized crime, and terrorism. In India, the role of the criminal gang D-Company is often used as proof of both assertions. The most recent examination of D-Company's role comes from an MPAA-funded RAND Corporation report on criminal and terrorist linkages to movie piracy, published in 2009. According to RAND, D-Company controls all aspects of the Indian film industry and pirate marketplace: "Since the 1980s, [D-Company's founders] have been able to vertically integrate D-Company throughout the Indian film and pirate industry, forging a clear pirate monopoly over competitors and launching a racket to control the master copies of pirated Bollywood and Hollywood films" (Treverton et al. 2009). Upon its release, the RAND report was cited extensively in the Indian media, and its claims about D-Company were quickly integrated into MPAA and Indian film industry anti-piracy campaigns.

Much of the attention focuses on Dawood Ibrahim, D-Company's founder and Mumbai's leading mafia chief during the 1980s. Ibrahim allegedly sponsored the 1993 bombing attacks in Mumbai that left over 250 people dead (as a reprisal for Hindu-led violence against Muslims in the previous year). Under police pressure, he departed India for Dubai and later for Pakistan. Ibrahim now operates from Karachi, where he reportedly manages narcotics-smuggling operations across large parts of South Asia, Africa, and Southeast Asia. There are widespread allegations of connections to Pakistani intelligence and to Al Qaeda, the latter of which

has earned him a place on the US terrorist watch list.

Ibrahim's role in film piracy is usually attributed to his alleged acquisition of Sadaf Video, a major Karachi-based DVD producer and distributor that grew to prominence by circumventing the Pakistani ban on Indian films. Until 2008, when the ban was finally rescinded,[1] pirated copies manufactured by Sadaf were the primary form of access in Pakistan to wildly popular Bollywood movies. Large VCD and DVD factories in and around Karachi met most of this demand. Sadaf's merchandise was then often smuggled back into India and shipped to other regional markets for sale (such as South Africa—see chapter 3).

Reliable information on the activities of these criminal networks is scarce, but our work in Mumbai and Karachi suggests that the RAND account is an exaggeration: D-Company controls long-standing regional smuggling routes between Dubai, Karachi, and Mumbai. But we see no evidence that this supply chain plays a major role in contemporary Indian piracy, or that it extends to other parts of India. We see no evidence of a D-Company monopoly on the pirate market, even in Mumbai. Quite the contrary, the Mumbai market for pirated DVDs appears highly contested among a range of local suppliers—and increasingly so as falling production costs and prices have opened the door to smaller-scale production. Ernst & Young, in its study of Indian piracy, estimated the presence of foreign-produced DVDs from all

i   The ban was lifted in stages. The release of selected Indian films was allowed in 2006. The ban was completely rescinded in 2008, mostly as a measure to stimulate Pakistani multiplex development.

sources at 10% of the Indian market in 2008, with the remainder split between local factories and cottage production (USIBC/Ernst & Young 2008).[2] D-Company's film piracy activities also suffered from a US-instigated crackdown in Pakistan in 2005, which allegedly broke up the major Karachi factory networks.

Furthermore, we see no evidence of the wider control of the Mumbai film industry by D-Company or other mafia actors described by the RAND report. Mafia financing undoubtedly played a role in film production in the 1980s and early 1990s—the Ibrahim era—though by no means the dominant role asserted in the RAND report. These

connections were highlighted by the arrest (and later acquittal) of film financier Bharat Shah in 2001, who was charged with running an extortion racket on behalf of Mumbai gangsters and with using slush money to finance his own productions. Rumors of mafia financing of particular films have circulated in the past two decades, but none have been confirmed. Nor have mafia links been demonstrated in regard to any of the large regional film industries, such as the Tamil and Telegu industries. The film financing problems described by RAND as a point of entry for mafia money have dissipated in the past decade as the Indian film industry has grown and diversified. Today, financing comes from a continuum of Indian and foreign sources, including Hollywood studios. Although connections to the Mumbai underworld almost certainly exist, we see no evidence that they are systematic, much less dominant.

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ii   This fact did not stop Ernst & Young from describing the "strong organized crime nexus backing the piracy industry," without further comment, as a major challenge to law enforcement.

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authority) that expressly encourage them to do so. Few of the police we spoke with viewed media piracy as a high priority in a country where law enforcement and the court systems are hugely overburdened by more serious crimes.

However, in a system of police and courts as decentralized as India's, some institutions have proved easier to sensitize to the enforcement agenda than others. The most visible example is the Delhi High Court, which sees a high percentage of IP cases due to the concentration of large IP law firms in the city.

Since the early 2000s, the Delhi High Court has been a reliably activist court on behalf of rights-holder claims and enforcement powers. It has consistently expanded the scope of injunctions and established, for the first time, punitive damages as a regular outcome of trademark and copyright infringement suits. It has played an important role in defining evidentiary standards used in infringement cases and notably legitimized industry claims about the damages associated with infringement. And it has set precedent in making decisions ex parte—without the presence of the accused.

One of the more important cases in this respect was the *Microsoft Corporation v. Yogesh Popat and Another* suit, initiated in 2003, in which a computer store owner in Delhi was accused of loading two hundred computers with pirated copies of Office 2000 and twenty computers with Visual Studio 6.0. The Popat case combined a number of legal innovations. It was conducted

Copyright Act Reform

The Copyright Act is currently being amended in India and, predictably, has become a football for the diverse, contending interests in the growing Indian media sector. Stronger enforcement measures and penalties for infringement have figured repeatedly in this conversation—initially in the context of a push for stronger criminal penalties. But since 2006, the enforcement wish list has been progressively sidelined, with a probable compromise position on anti-circumvention measures representing the only clear step beyond existing provisions. Other likely measures are much more specific to the Indian context. The music industry has lobbied strongly for the dilution of the version recording provision in the current Copyright Act, which was widely used by music companies to issue unauthorized covers of popular songs. These "pirates" have gone on to become the incumbent labels and are now seeking to close the loophole.

Struggles within the film industry also feature prominently in the current draft legislation. The government, for instance, has sought to introduce provisions that would allow writers greater control over the rights to their works. The film producers have rallied strongly against this provision, reluctant to see any changes that strengthen the bargaining power of writers and lyricists. A final bill will likely be voted on in Parliament in early 2011.

entirely ex parte—Popat never appeared in court—and it set precedent for a particularly difficult issue in Indian (and other national) law: how plaintiffs establish the losses associated with infringement.

Traditionally, the assessment of damages is made with reference to the accounts and sales figures of the defendant. The defendant typically has to "render accounts" to the court to determine the profits derived from the infringement. Such measures are often problematic when dealing with informal businesses, however, because these may not keep accounts (or, in this case, appear in court to respond to a request for such accounts).

In the Popat case, consequently, the court accepted Microsoft's representations of its "estimated loss of business," which it described as equivalent to the retail value of the pirated goods (some $140,000). The court then calculated Microsoft's forgone net profit on the pirated sales. It deducted a "dealer's profit" of $5,200 and then applied Microsoft's corporate profit rate for that year—32%. The court arrived at a sum of $46,500 in damages—the highest damages in an IP case through 2005.

Because India is a common law country, such decisions by a high court set powerful precedents. The Popat decision created a basis for valuing software losses at retail price, rather than at the much lower price at which the goods would have been sold in the pirate market or—for that matter—through the volume licensing deals that make up 80% of Microsoft's profits. As

we have discussed at length in chapter 1, retail price offers a convenient but erroneous account of damages and is no longer used by any of the major industry groups in their research on piracy (the last, the BSA, abandoned the retail price calculation of losses in 2010). In practice, the major software companies price-discriminate throughout the market, making the pirated street price a much more accurate reflection of foregone sales.

The Popat decision also set precedent for relying only on plaintiff affidavits—a step that allowed the court to adjudicate the case with what Microsoft and other industry observers praised as unusual speed. Both precedents have been subsequently invoked in other piracy cases, such as *Microsoft v. Kamal Wahi* (2004), which broke Popat's damages record, and *Indian Performing Right Society Ltd. v. Debashis Patnaik And Ors* (2007), a performance-rights case in which losses were also determined and awarded ex parte, solely on the basis of plaintiff claims.[24]

Enforcement Networks

Coordinated enforcement in the Indian film and music sector has proved difficult over the years, with regional markets, intense competition, and local politics taking precedence over periodic efforts to build broad-based industry coalitions. Even narrower groups of actors, such as the Bollywood studios based around Mumbai, have found it hard to work together.

One of the obstacles was—and is—the market structure of the audiovisual sector. When the Bollywood studios rejected video distribution in the 1980s, they did so to protect the theatrical market. They viewed the VCR not as a potential new revenue stream but as an uncontrollable distribution channel that would lead to the proliferation of small-scale, informal exhibition (which, in fact, it did despite the ban). Such defensive actions commanded general agreement among the major players because they cost nothing. A corresponding commitment to enforcement, in contrast, was harder to reach. The cost of policing the vast Indian informal economy was too high to undertake as a private venture and too marginal a problem to attract serious public support—even in the south, where film culture plays a large role in local politics. The decentralization of Indian policing and the array of other development challenges vying for public attention raised additional barriers to any concerted public effort, local or national.

In a movie business without a strong investment in home video, consequently, the perceived benefits of comprehensive enforcement rarely outweighed the real private costs. Through the

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24   There is some evidence that the Indian judiciary has begun to push back against the use of ex parte injunctions in infringement cases. Because of the basic justice concerns involved in ex parte action, such injunctions traditionally require a high burden of proof, including evidence of irreparable loss and damages caused to the plaintiff. Indian courts have rarely allowed such claims without affording a hearing to the other party, even in cases of harassment or threats of violence. In the early 2000s, the Delhi High Court routinely went beyond this tradition in granting ex parte injunctions in infringement cases. Other high courts, including the Chennai High Court, have since passed orders narrowing their use—in particular specifying that ex parte orders in infringement suits be granted only after effective judicial scrutiny of oral and documentary evidence (*FDC Limited v. Sanjeev Khandelwal*).

early 2000s, enforcement remained a relatively small-scale, private practice, carried out by the major studios, through the courts, on behalf of individual films during their release windows. Enforcement in the much smaller music business was similarly undersubscribed, in part due to the struggle between domestic music companies in the 1980s and 1990s, which left T-Series in possession of 60% of the market and a reputation as an unscrupulous piratical firm in its own right.

The rise of modern Indian media corporations with global ambitions, such as Yash Raj Films, T-Series, and Moser Baer, began to alter this landscape in the late 1990s. Pressure for greater public investment in enforcement began to grow, as did pressure for stronger coordination among industry actors. Bollywood studios were generally at the center of these efforts because their domestic and international reach was greater than that of other regional cinema. A national framework for enforcement would logically begin with the Bollywood studios, and those studios would be its primary beneficiaries.

Much of the actual impetus for coordination, however, has come instead from international rights-holder groups. Two organizations have taken the lead in pursuing a cohesive national enforcement agenda in India: the MPDA (the local branch of the MPAA) in film and the IMI (the Indian affiliate of the IFPI—International Federation of the Phonographic Industry) in music. These two groups have emerged as the organizational centers of wider networks of Indian and international rights holders in the country and have led several successive efforts to ramp up enforcement activity, with the most recent beginning in 2009.

Because of the prominence of the Bollywood studios among rights holders, the key industry groups are headquartered in Mumbai. IMI and studio interests generally align because the music market is dominated by film soundtracks and accordingly, at the business level, by recording and distribution deals between studios and labels. The software industry is a significant outlier from this organizational network, both geographically and organizationally. The major domestic software organization, NASSCOM, is headquartered in Delhi to facilitate lobbying of the national government and global trade bodies. The Business Software Alliance maintains a very low profile in India, preferring to work through NASSCOM or through bilateral forums like the US Chamber of Commerce–based U.S.-India Business Council.

Another important player in this landscape is the FICCI (the Federation of Indian Chambers of Commerce and Industry), the main body of Indian industry. The FICCI has aggressively promoted media industries in the past decade in an effort to replicate the success of India's IT sector. It is primarily a convening and lobbying organization and has been a strong advocate of moving the predominantly informal organization of Indian media companies toward corporate models and global norms. Its biggest event is the annual media-business conference FICCI FRAMES, attended by Indian and global media companies. Piracy and enforcement discussions have played a growing role at FICCI FRAMES, and the event has become an important locus for promoting new enforcement coalitions. The FICCI also organized a major anti-piracy conclave in January 2009, which brought together Bollywood studios, record labels, and industry activist groups like the MPAA.

The Motion Picture Distributors Association

In most countries, the local branch or equivalent of the MPAA is, for all intents and purposes, the film lobby. The MPAA represents the globalized Hollywood studios, and those studios generally dominate the local box office and distribution channel. This is not the case in India, however, where US-based studios account for only 8% of the roughly $2 billion annual box office take (Kohi-Khandekar 2010).

The local branch of the MPAA in India is called the Motion Picture Distributors Association. The MPDA is a very small player in terms of the market power it represents but an increasingly active player in the enforcement business. Although the MPDA officially opened in Mumbai only in 2009, MPAA presence in India dates back to 1994, when it engaged the high-profile Delhi law firm Chander Lall & Sethi to represent its Asia-Pacific wing. Chander Lall & Sethi still does most of the public lobbying for new enforcement legislation and continues to work with enforcement teams in Mumbai.

Rajiv Dalal, the MPDA's managing director, described the studio enforcement strategy in India in this way:

> The MPA [Motion Picture Association—the international arm of the MPAA] is taking a multipronged approach, since one of the main problems of previous attempts made by producers in India was that they were fragmented and their efforts inconsistent, lasting only for the first ten days of the theatrical release of the film. What the MPA has been doing since February [2009] is to have consistent raids and not just wait for a theatrical release. This was a collaborative effort between the Indian studios and the MPA. What the MPA was also doing separately was working with the exhibitors, trying to get at the source of the generation of pirated material. There is a need to create awareness amongst the exhibitors about camcorder recording and to lobby for anti-camcorder-recording legislation with the government, along with optical disc regulation legislation. The MPA is also trying to work with ISPs to stop Internet piracy while waiting for new amendments to the copyright and IT laws in the country.[25]

Coordination among these groups has been a challenge due to not only the strong regionalism of the Indian market but also the sharply divided corporate interests within the sector (and the history of sometimes intense competition between them). This is particularly true of pricing in different distribution channels. Indian companies have been unable to maintain the de facto cartel behavior that shapes media prices in markets controlled by the multinationals. There is no enforcement organization that unifies even the Mumbai-based groups, much less the range of regional producers and state and local political authorities. Although there have been

25   Interview with Rajiv Dalal, May 2009.

several prior efforts by the MPAA and other groups to create such a coordinating body, the last major effort broke down "as it was too expensive for the Film and TV Producers Guild of India to collaborate with the MPA."[26] The guild was reluctant, in particular, to commit money to a US-style enforcement effort, preferring the usual tactics of high public rhetoric against piracy and a film-to-film approach in the courts, funded by the individual producers.

Because India is one of the fastest growing theatrical markets, the MPAA has treated India as a project for the long term. Notably, it has continued to militate for stronger coalitions and coordination among Indian stakeholders, in both the public and private sectors. The current effort, dating to 2009, was occasioned by what the media called "the producer-multiplex standoff," which pitted the United Producers and Distributors Forum (UPDF), representing a range of mostly Mumbai-based film producers and distributors, against the Multiplex Association of India in a dispute over revenue sharing. The dispute shut down film exhibition in the multiplexes for over two months between April and June of that year—an unprecedented event in India that cost the industry an estimated $70 million. In the end, the multiplex owners were more exposed to these costs than the producers and were the first to crack. The eventual negotiations were mediated by Reliance Big Entertainment, due to its role in both production and exhibition.

Although piracy was not a subject of dispute during the conflict, it did present a welcome common enemy in what most stakeholders perceived as fragile times for the industry. At MPDA urging, the final agreement between the producers and multiplex owners involved not just revised revenue-sharing but also a substantial new commitment to collective anti-piracy efforts.

The new anti-piracy group was hailed as the "first ever Hollywood-Bollywood" coalition against film piracy in India.[27] All the biggest film, music, and home-video players were represented, including Moser Baer, Studio 18, Eros International, UTV, Reliance Big Entertainment, Yash Raj Films, the UPDF, and the IMI (the notable exception was T-Series). The social services wing of the Mumbai police, which is responsible for local anti-piracy efforts, was also involved from the start.

In the short term, the formation of the new coalition prompted new enforcement action on several levels. Most visible was a new round of raids against DVD/VCD shops in Mumbai in mid-July 2009, which put many of the more established DVD pirates under pressure. Our work was unable to determine whether these efforts had any lasting effects: the less formal networks of street vendors never disappeared from their locations near train stations and bus stops. In our interviews in June and July 2009, vendors showed considerable relief at the conclusion of the dispute, since the halt in new Bollywood releases also cut off their supply of new material.

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26   Interview with Supran Sen, the secretary general of the Film and Television Producers Guild of India, January 23, 2009.

27   Interview with Girish Wankhede, corporate communications manager at Cinemax, Mumbai, August 3, 2009.

Yash Raj Films: The Global Enforcers

Although enforcement within India gets the lion's share of attention from the industry and government authorities, Bollywood also has growing global markets and distribution channels and, consequently, a growing interest in global enforcement. Yash Raj Films, the largest and most influential Bollywood production house, is by most accounts also the leader in this relatively new phase in the globalization of Indian media. Yash Raj's international efforts are directed primarily at piracy in high-income markets—especially among the large Indian expatriate communities in the United States and the United Kingdom. Yash Raj has initiated a number of US civil suits and worked with UK enforcement agencies. The high cost of fighting piracy in the US courts limits these efforts, however: the cost of a civil suit for infringement starts at around $75,000, including the costs of registering the complaint, hiring lawyers and investigators, and building evidence.[1] For complex cases, the bills scale quickly upward.

Outside the United States and the United Kingdom, Bollywood continues to have little or no effective local representation—and certainly no coordinated representation of the kind US studios have cultivated over the years through the MPAA. Because copyright enforcement around the world is structured around partnerships between law enforcement and industry groups—both for legal reasons, such as the need for a complainant in most civil and criminal actions, and for less obvious issues of influence and cost sharing—the lack of global Bollywood anti-piracy networks means that its rights go largely unenforced, even where enforcement efforts are otherwise extensive (see the South Africa chapter in this report).

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i   Interview with Aswin Punathambekar, assistant professor, Department of Communication Studies at the University of Michigan, Ann Arbor.

As of mid-2010, the Hollywood-Bollywood coalition had scored one major legislative success: the addition of audio and video piracy to the list of offenses prosecutable under the Maharashtra state organized-crime statute, the Maharashtra Prevention of Dangerous Activities (confusingly, also known as the MPDA) Act. Similar to the Goondas Act in Tamil Nadu, the MPDA Act allows detention without bail for anyone with a prior arrest for video piracy. Not surprisingly, MPDA director Rajiv Dalal welcomed the act, drawing the connection between media piracy and organized crime:

> We applaud the passage of this deterrent legislation that places piracy offenses under the Maharashtra state organized crime statute. Over the past several months, the release of the RAND report on "Film Piracy, Organized Crime, and Terrorism" has established strong links between film piracy and organized crime/terrorist funding in India. This legislation is indeed timely, and will significantly curb piracy and funding

to organized criminal and terrorist syndicates in one of the most important global film markets." (Business of Cinema 2009)

Although the national anti-piracy strategy envisioned by the IIPA and the MPAA has not met with much success, the MPAA has shown that state-level co-optation of the law and the police, built around regional stakeholders, is a viable option. A state-by-state expansion of the enforcement trends seen in Maharashtra, Tamil Nadu, and Karnataka is clearly possible.

The Indian Music Industry

With a reported $606 million in revenues in 2007, the Indian music market is significantly smaller than the $2 billion film market (Kohi-Khandekar 2010).[28] But the two are closely linked: roughly 70% of album sales are Indian movie soundtracks. International repertoire, in contrast, makes up only 6% of the market,[29] with the result that only a handful of international albums see domestic release.

Like the film industry, the music industry has had difficulty speaking with a united voice on piracy issues and coordinating enforcement efforts beyond the local level. The major industry group is the IMI, the Indian Music Industry. The IMI represents the four major international labels, but also, and more importantly, a uniquely powerful collection of locally owned labels that control the domestic music market (and, in some cases, the wider regional marketplace). Tips Music, Saregama (formerly HMV), Yash Raj, and Venus are among the most prominent among them. Collectively, the domestic labels control approximately 82% of the marketplace—reversing the usual pattern of domination by the international majors. The IMI is also becoming the preferred enforcement organization for video-game piracy and counts Sony's video-game division among its members.

The major gap in the IMI roster is T-Series—the biggest music company in India, in control of over 60% of the market. Relations between T-Series and the other companies are poor because of the company's history as a pirate producer in the 1980s—a period in which it effectively broke the monopoly pricing of then-dominant record companies like HMV. T-Series is still a very aggressive player in the business and, independently of the other labels, also an aggressive enforcer of its own copyrights. It maintains independent lobbying and anti-piracy operations and has been a pioneer, especially, in suing online companies like YouTube and MySpace for infringement. Reportedly, it maintains an anti-piracy unit that employs some two hundred people in "raid teams" (Bailay 2009).

Until the recent efforts by the MPAA, the IMI was the most active sponsor of raids against street pirates and unlicensed performances. Led by former police officer Julio Ribero, the organization claims to have filed 3,500 suits in 2008 (IIPA 2009b).

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28   The IFPI puts the wholesale, or "trade value," of recorded music in the Indian market in 2008 at $140 million (IFPI 2009).

29   IMI, "Size of the Music Industry in India," http://www.indianmi.org/national.htm.

In the past decade, the media market Palika Bazaar in Delhi has been a frequent destination for IMI raid teams. This "shopping mall" is a massive market for unbranded goods and in the last ten years has become famous for film, music, and software piracy. The Delhi office of the IMI has made repeated efforts to raid the bazaar but has faced organized opposition from shop operators: raiding parties have been sometimes literally beaten out of the marketplace, even when accompanied by police. Raids in force, in turn, are hard to keep secret. Vendors have become adept at identifying IMI teams entering the market and have developed contingency plans to ensure that illegal goods are gone by the time raiding teams arrive.

As in other countries, the frequency of raids is often used as a metric for enforcement efforts in India, but the overall impact of such enforcement is unclear. It seems likely to us that the raids have simply punctuated or briefly accelerated the longer-term deformalization of optical disc piracy, without significantly affecting the overall supply. Shifts in the technologies of music consumption, for example, have made the raid increasingly irrelevant. The adoption of MP3 players is part of this story, but even more so the explosion in cell-phone use—the most ubiquitous digital consumer good in India, with over six hundred million users. Increasingly, pirated music is sourced not only from CDs and the Internet but also from the array of cell-phone vendors specializing in off brands and custom "mobile chips," pre-stocked with MP3s. Legal mobile-music sales, including ringtones, have grown dramatically and now represent almost 50% of all music sales (Kohi-Khandekar 2010:173–76). This shift is on IMI's research and policy agenda and figures in recent IIPA reports. What it isn't, clearly, is a recipe for effective enforcement. As the IIPA plausibly proposed in its 2010 India report: "The piracy rate for music in the online space is estimated at 99%."

This shift is readily visible on the streets of Delhi. Jack's is a popular hangout for Western-music lovers, where customers can ask for any international album and have a pirated copy available in a week. In 2009, Jack's stopped stocking CDs, moving entirely to digital distribution on cell phones, thumb drives, and other digital devices. The pirated CD is now a relative rarity on the streets, giving way to products with higher markups. Consumers buying MP3s in National Market in Bangalore generally buy in bulk. Discs that sell for Rs.50 ($1.06) often contain ten to twelve albums of the latest film releases or other popular compilations. For those with broadband connections, music is, of course, easily available through file sharing and file locker sites, facilitated by specialized search engines like Gujuri.com.

Consistent with the wider shift in digital music practices, we also note the strong trend toward the acquisition of single tracks rather than albums—a shift that to date has greatly advantaged the pirate market, with its more sophisticated digital distribution and bulk prices. Distributors have responded by lowering the prices of Bollywood albums, especially new releases, in an effort to pull customers back to the CD format. Online sales portals established by T-Series and others have also emerged in the past two years to capitalize on the shift to singles, with songs running Rs.12–Rs.15 ($0.30–$0.35). These are still hobbled by digital rights management technologies, however, and have not yet made a dent in the marketplace.

Software Piracy

As in other countries, the retail prices of business software such as Microsoft Office and Windows Vista are pegged to wider international prices, leading to predictably high levels of software piracy by consumers and businesses; widespread "pre-installation" piracy in the large computer grey market, where vendors sell machines assembled from low-cost components; and volume licensing programs wherever software companies can identify—and effectively manage—an institutional market. Given the difficulty of measuring the grey market, estimates of software piracy in India should be viewed with more caution than usual. According to the BSA, software piracy is slowly declining in India, falling to 65% in 2009 from 74% in 2004 (BSA/IDC 2010). Game piracy—including console-game piracy facilitated by the modding of machines in the grey market—is typically estimated at around 90% of the market (IIPA 2009b; USIBC/Ernst & Young 2008), reflecting prices pegged to international levels and the complete absence of price discrimination.

In our view, the Indian experience is consistent with the market development strategy outlined in chapter 1 of this report, in which the major software vendors (1) tolerate high levels of piracy in order to capture market share and lock out open-source competitors and then (2) progressively enforce licenses against the largest public institutions and organizations. Recent licensing deals with state governments in Karnataka and Maharashtra exemplify this second phase of operations, as do volume licensing deals with Hewlett-Packard and other locally-active equipment vendors, which ensure that new machines come pre-loaded with copies of Windows to discourage both pirate and open-source alternatives.

As elsewhere, the licensing deals are a gamble: they push public institutions into the legal software market but also increase the risk of large-scale adoption of open-source software as institutions think about their long-term software strategies. School-based open-source adoption programs, in particular, are widespread in India, with a large-scale pilot program in the state of Kerala providing the template for more recent adoption efforts in Karnataka, Gujarat, Assam, and West Bengal.

And as elsewhere, these dynamics operate entirely outside the retail market. Consumers and small businesses rarely benefit from institutional licensing, and few can pay Western prices. From their perspective, the market remains bifurcated between high-cost legal options and the very low-cost pirate market. Open-source platforms such as Linux remain very marginal competitors in consumer and small business markets especially.[30] As one respondent noted: free software in India means Microsoft Windows.

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30   A 2010 survey by Springboard Research put the share of Windows Server in the small-to-medium business market in India at 91.8% of the installed base—compared to 94.7% in Asia overall (Withers 2010). Estimates of Linux desktop penetration are notoriously poor but were pegged by the World Wide Web Consortium at around 1.3% of the global installed base as recently as 2007 (Paul 2007).

Piracy Free

In 2004, Microsoft sponsored an anti-piracy workshop at the prestigious National Law School in Bangalore to "sensitize" members of the judiciary to issues of software piracy. At the end of the workshop, company representatives offered to declare the law school a "piracy-free zone." A subsequent software audit, however, revealed that only a handful of faculty members used licensed software. The company responded by offering a bulk license to the university at a discounted rate. The discounted price, however, still nearly equaled the annual budget of the library and was rejected by the university. After the university signaled that it would switch to open-source software, the company issued it a free blanket license—and "piracy-free" status.

Microsoft has played a very public role in pushing on both the volume licensing and enforcement fronts, moving aggressively to offer lower-cost solutions at the school and government level and expanding raids on small businesses and grey-market vendors operating on the edge of the formal economy. *Microsoft Corporation v. Yogesh Popat* was a minor example of this ramp up in activity in the early 2000s. Domestic stakeholders, in contrast, have become significantly less active on enforcement in recent years—notably India's powerful software association, NASSCOM. In its early days under the late Dawang Mehta (who served as chairman from 1990 to 2001), NASSCOM adopted an aggressive anti-piracy stance, featuring highly publicized raids against vendors. In recent years, NASSCOM has shifted its focus to trade and IT industry business lobbying, including perennial issues such as export quotas and H-1B visas to the United States. Anti-piracy has all but disappeared from the association's discourse and activities. This has made software enforcement an almost entirely foreign-led enterprise in India.

The Conditions of New Media Art in India

This chapter has privileged three broad perspectives on the media economy in India: (1) the consumer experience of media access in India through the multitude of legal, grey, and illegal distribution channels that mark daily life; (2) the market and business practices that shape India's uniquely domestic, broad-based, and competitive media sector; and (3) the practices of enforcement and enforcement advocacy that maintain the shifting boundary between the two. But as we described at the beginning of this chapter, the digital media revolution in India is not only a story about expanded opportunities for consumption, or corporate strategies for securing the distribution channel. It is also a story about the vast democratization of media production. Filmmaking, in particular, is no longer an elite industry practice, but an increasingly popular art form that circulates outside the traditional industry channels. Pirate and grey-market practices have been essential to participation and education in these contexts, both for artists and audiences.

The studios routinely mobilize star actors and directors on behalf of anti-piracy campaigns, continuing the long-standing and, perhaps most important, cheap strategy of moral exhortation against piracy. Major stars like Rajnikant have taken prominent anti-piracy stands and provide the most visible face of enforcement efforts. But our interviews reveal considerably more complexity in artists' views. Emerging artists, especially, express ambivalence about copyright—balancing the desire to control the commercialization of their work against the necessity of pirate access to the tools of modern media production. Distinct from their personal choices, most artists are also aware that the music and film industries indirectly depend on infringement within the feeder system for new talent. Low-cost access to tools and widespread copying and appropriation are, in many respects, the conditions of artistic renewal in a high-tech media culture—and especially in one marked by the economic disparities, cultural diversity, and energy of India.

These are not marginal experiences. Most independent media artists in India begin their careers in some close relationship to copyright infringement. The basic facts of low incomes and high prices make it impossible to avoid this pattern. Anurag Kashyap, one of the leading screenwriters and directors in Bollywood, points out that although many other Bollywood filmmakers consider piracy to be a threat to the industry, his filmic education was inseparable from piracy—from watching movies in makeshift theatres, on battered VCRs playing pirated cassettes. This was cinematic culture in the small town of Tanda in Faizabad, available at two rupees per ticket. His literary education, he notes further, was based on cheap pirated reproductions of Dostoevsky, Tolstoy, Chekhov, and other Russian classics. This experience led him to condone piracy in the context of a broader condemnation of the culture of "cheap remakes" that dominates Bollywood (Kashyap 2005).

By necessity, and often in the absence of wider norms, artists chart their own ethical paths through these media landscapes. Kashyap Murali, a Bangalore-based DJ and video artist, is typical in drawing a range of complicated distinctions between contexts and types of piracy. In our interviews, he acknowledged pirating film but never music, which he insists on buying in the original to support the artists and because he values the accompanying materials. Although he professes a strong preference for legal software, the professional software packages required for his work cost $2,000 and upward—a prohibitive investment, even for many successful Indian artists. Software piracy, in Murali's world, is simply a condition of artistic production. Music piracy, in contrast, is an ethical matter.

Archana Prasad is a director of music videos. When she began her career as a music-video jockey, her work was composed almost entirely of infringing clips of other artists' work. The appropriation and reuse of copyrighted work was commonplace among her peers and embedded within a wider set of norms governing the sharing of work within the VJ community. Nonetheless, she is sensitive to the issues of originality and derivative work and sets a personal limit of thirty seconds on the use of other artists' clips. Over time, she has been able to create a substantial body of her own footage and no longer relies as heavily on other sources. She

knows that this personally identifiable work will, in turn, contribute to the broader culture of reuse in the Delhi VJ scene and that this, too, is a form of professionalization and marketing. As Prasad observes, the best way to sell concert tickets is to make sure one's music is widely available: "People will come and pay, if they can afford it. It makes sense for musicians to push out their work so that people can hear it. It makes sense for starting bands to promote their own music online."

Conclusion

The price wars between Indian media companies illustrate a familiar dynamic among incumbents and new entrants in media markets. The new entrant is often a pirate, or characterized as such, until the market incorporates the new business innovation and the upstart becomes an incumbent in its own right—and often a ferocious defender of its own IP interests. Piracy, in this context, is as much a matter of political and market power as it is of legality. Similar dynamics hold sway at the individual level, as artists make their way from largely informal economies of cultural production into the formal, increasingly corporatized environments of Bollywood and the other regional industries.

The real significance of India to the larger account developed in this report is that these pathways exist at all. In other middle- and low-income countries, media markets are far more bifurcated between tiny, high-priced legal markets, dominated by multinational companies, and vast, low-priced pirate markets. India, in contrast, has a hugely differentiated marketplace in which legal competitors exist at all levels and can capitalize on and integrate aspects of the informal sector. Perhaps most important, the Indian model predates emergence of the ubiquitous Internet culture that is driving the cost and access revolution in high-income countries.

It would, in all likelihood, be naive to view this as an exportable model—or even a stable one. The roots of Indian media autonomy go back many decades and are grounded in the intense regionalism of Indian culture, which erected barriers to foreign entry. Of the other major film-producing countries, only Nigeria has made a similar transition, built on similar conditions of cheap production, informality, and long-term, state-supported cultural independence. The scale of this achievement is modest from a social welfare perspective but remarkable from a cultural one. Average cinema attendance in the US hovers around 4–5 movies per year. In India, possessing 1/46 the US GDP per capita, the average is around 3. Mexico—the largest film market in Latin America by a wide margin—averages 1.5, with eight times the per capita GDP of India. The majority of low- and middle-income countries hover between .5 and 1.

Figure 8.7 Movie Admissions Per Capita Per Year
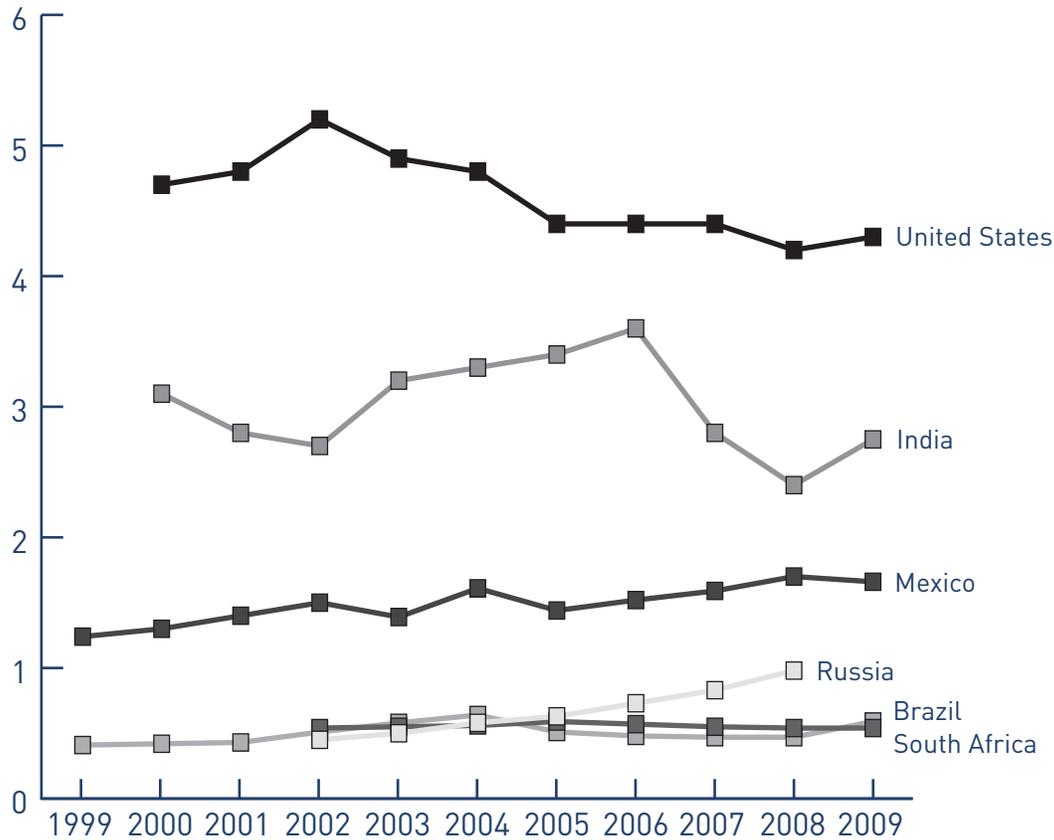
Source: Authors based on European Audiovisual Observatory (2001–10) data.

The other side of this story is the changing enforcement environment, as Indian companies adopt modern corporate models of organization, develop global-market ambitions, and—above all—adopt the enforcement rhetoric and practices of the multinational groups. To date, these groups have been frustrated by the dizzying complexity of India's regional markets, state laws, and squabbling media sectors and by a copyright debate focused on national autonomy and local issues rather than alignment with the global enforcement agenda. We do not see much prospect that this will change in the short term. But industry lobbying is persistent, and domestic corporate interests are likely to further align with international ones. The recent Bollywood-Hollywood partnership exemplifies this alignment, and though it will do little to diminish piracy, it does represent another step in the creation of a wider enforcement culture in India, capable of pressing state and, eventually, national government for stronger measures and more public investment.

About the Study

The India study was conducted by a research team based at Sarai, a media research program at the Centre for the Study of Developing Societies in Delhi, and at the Alternative Law Forum, a legal research and practice center in Bangalore. Project and research leadership was provided, respectively, by Ravi Sundaram at Sarai and Lawrence Liang at the ALF. Several other researchers contributed to the study, including in particular Siddharth Chaddha on the pirate markets in Bangalore, Prashant Iyengar on media and research discourse on piracy, and Nupur Jain on the film industry and enforcement in Mumbai. Most of the primary information came from field interviews conducted in late 2008 and 2009 with media pirates, members of the film industry, police, lawyers, and members of anti-piracy organizations. More broadly, the study draws on nearly a decade of Sarai and ALF investigations of piracy, enforcement, and emerging media cultures in India.

The project also benefited from other valuable assistance, including that of Bodó Balázs and Dmitri Pigorev, who collected data on the Indian torrent trackers, Tripta Chandola at the CSDS in Delhi, and Joe Karaganis, who was a relentless source of feedback, improvements, and editorial support. The chapter was improved through generous feedback from readers, including Shamnad Basheer.

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