

## IMAX: EXPANSION IN BRIC ECONOMIES<sup>1</sup> (REVISED)

*Dwarka Chakravarty wrote this case under the supervision of Professor Paul W. Beamish solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.*

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In September 2013, Richard Gelfond, chief executive officer of IMAX Corporation (IMAX), declared that the route to becoming a billion-dollar company lay in growth markets outside of North America.<sup>2</sup> This was no “blue sky envisioning,” but a pragmatic view grounded in facts. These included competition from U.S. exhibitors offering an “IMAX-like” experience, and a flat five year box office trend in North America versus double digit growth in Asia Pacific and Latin America. In 2013, for the first time in four decades, IMAX aggregate revenue from 56 countries outside of the United States and Canada (\$151 million,<sup>3</sup> 10 per cent growth from 2012) exceeded North American revenues (\$137 million, 6.5 per cent decline from 2012).

Since 2000, emerging markets, led by Brazil, Russia, India and China (the BRIC nations) had fuelled global gross domestic product (GDP) growth. China was foremost on IMAX’s radar, with screens growing from one in 2001 to 221 in 2014, making it the second largest IMAX market after the United States (see Exhibit 1). IMAX had far fewer screens in other BRIC countries with 11 in Brazil, 36 in Russia, and eight in India. How should IMAX allocate its future expansion by country in the BRIC economies?

### A BRIEF HISTORY OF IMAX

Headquartered in Mississauga, Canada, IMAX (an abbreviation of Image Maximum) became synonymous with large-screen, high-quality cinematic experiences. IMAX was conceived during EXPO 1967 in Montreal, Canada, when a small group of Canadian filmmakers developed a method to show a film across multiple screens, using a single powerful projector. The resulting IMAX system revolutionized cinema by projecting movies on a large curved screen, creating an immersive experience. Initial movies were nature documentaries, e.g., *Grand Canyon*—funded by the National Science Foundation and the National Film Board of Canada. These were shot on IMAX cameras, with films 10 times larger than the regular 35mm, and shown on huge museum screens 20+ metres tall and 30+ metres wide, using special high-intensity projectors. The system was proprietary, capital-intensive, and hard to scale. In the 1990s, IMAX began licensing its technology. Commercial theatres had to pay \$2 million for equipment, and spend \$3 million to build a screen. The capital cost and difficulty in filming IMAX movies were big barriers to theatre and Hollywood adoption. Burdened by a \$200 million debt, IMAX was fighting for survival.<sup>4</sup>

## The Breakthrough

In 2001, an IMAX scientist developed a procedure to convert existing 35mm movies into the IMAX format—a patented process called Digital Re-mastering (DMR). The first re-mastered movie was *Apollo 13* in 2002, which took 16 weeks to convert. With experience, the conversion time was reduced to two to three weeks at a cost of only \$20,000 to \$50,000. Digital movie formats further lowered the cost. Prior to DMR, the only Hollywood films made using IMAX were Disney animations, such as *Fantasia* and *Beauty and the Beast*. The development of DMR was critical since projecting a 35mm film onto an IMAX screen would produce a grainy picture. DMR removed the grain, while preserving image quality. Now, instead of persuading movie studios to film using its cameras, IMAX could convert a movie to its format.

## The Business Model

By 2006, IMAX was able to create a near IMAX experience in existing theatres—the new IMAX Digital Theatre, at a fraction of the cost (\$150,000). The 70mm projector was replaced with two smaller ones projecting over each other, providing increased resolution relative to standard digital projectors. IMAX also improved the sound system from a regular cinema set up. Importantly, the screen was not altered, but merely moved about 10 meters closer to the audience, giving a perception of increased width and height.

Most contracts with exhibitors were revenue-sharing agreements. IMAX would install the digital theatre for free and receive about a third of the box office receipts for IMAX films shown on that screen. Exhibitors and studios typically handed over 20 and 12.5 per cent of the ticket price respectively, excluding taxes. As part of the agreement, IMAX provided advice on theatre design, supervised installation, trained personnel, and performed ongoing maintenance. These agreements were usually non-cancellable for an initial term of 10 to 13 years, after which they could be renewed for one or more terms of 5 to 10 years. Apart from revenue sharing, IMAX also licensed its technology through leases and sales.

## The Hollywood Surge

Early IMAX DMR conversions, such as *Apollo 13* and *The Matrix* sequels, were considered successful, but the 2004 computer-animated film *The Polar Express* in IMAX 3D was a game changer. It made cinematic history as the world's first full-length IMAX 3D Hollywood feature, shattering box office records worldwide and becoming the highest grossing DMR release at \$60 million on 100 screens. Numerous other Hollywood movies were DMRed and ran successfully on IMAX screens, including the Harry Potter films, *Superman Returns*, *Batman Begins* and *Night at the Museum*.

Since 2002, more than 200 Hollywood films had been digitally re-mastered to IMAX. Of these, about 190 were converted post 2006, once IMAX began retrofitting existing screens. Two notable exceptions to the mass of DMR productions were *The Dark Knight* (2011) and *Mission: Impossible – Ghost Protocol* (2011), both partially filmed using IMAX cameras. Hollywood traction helped IMAX reduce its debt; and, since 2010, it remained debt-free, cash-positive, and profitable (see Exhibits 2 and 3). James Cameron's *Avatar*, released in 2009, grossed \$250 million on IMAX screens and represented a financial turning point. From 2008 to 2010, IMAX's stock price increased by over 500 per cent (see Exhibit 4).

However, despite Hollywood now actively pursuing IMAX, the company was very selective in the films that it converted to the IMAX format or shot using its cameras. It turned down about five movies for every one it made. It carefully picked blockbuster action-adventure movies that, when rendered in IMAX and projected onto its screens, would provide a truly enriched viewing experience. To further maintain its

premium, speciality brand, and ensure adequate profitability per screen, IMAX limited screen numbers and concentrations to ensure reasonable distance between theatres. It was not just the visual enhancements which made filmmakers demand that their movies be shown in IMAX; it was also quality control. From Toronto, IMAX continuously monitored all its locations in 58 countries to ensure volume levels were set correctly, projector bulbs weren't in danger of burning out and images remained pristine.<sup>5</sup>

## **INNOVATION<sup>6</sup>**

Despite significant proprietary expertise in projection, sound, and imaging technologies, IMAX did not rest on its laurels. As of December 31, 2013, it held 99 patents in the United States, more than twice it held six years ago. Corresponding patents were held or had been filed in many other countries, and additional 35 patents were pending. In 2012 and 2013, IMAX significantly increased its level of research and development (R&D) with a focus on developing its next-generation laser projection system. In 2013, IMAX's R&D spend was more than 5 per cent of revenue, with one in six employees (90/541) working on R&D. Other key areas of research activity included improving projector reliability, enhancing 2-D and 3-D image quality, manufacturing digital film cameras, and designing premium home theatre systems.

## **THE MOVIE INDUSTRY<sup>7</sup>**

In 2013, more than 7,000 movies were released worldwide, led by India at 1,274. Over 65 per cent of frequent moviegoers were aged 18 to 59. Global box office revenues increased to nearly \$36 billion in 2013, a 4 per cent increase over 2012. North America generated the most revenue at \$11 billion, growing by 1 per cent over the previous year, followed by China with \$3.6 billion and 27 per cent growth. The other BRIC nations also featured among the top 10 international movie markets, with India at \$1.5 billion in revenue; Russia, \$1.4 billion and Brazil, \$0.9 billion. The U.S. producer Warner Bros. Entertainment Inc. was the highest grossing movie studio with \$1.8 billion in revenue. With more than 7,000 screens worldwide, Regal Entertainment Group, a U.S. company, was the world's largest movie exhibitor.

### **Partnerships with Movie Studios and Exhibitors**

IMAX had partnerships with several movie studios to develop IMAX movie versions. These arrangements could be one-off deals for a particular movie, or a broader agreement comprising a number of movies. For instance, in November 2008, IMAX and Disney agreed on a five-picture deal starting with the 2009 release of Disney's *The Jonas Brothers*, followed by the fall 2009 3-D release of Disney's *A Christmas Carol* and *Alice in Wonderland* in spring 2010. Partnerships with studios also extended beyond Hollywood. In June 2009, IMAX and Huayi Bros. Media Corporation Ltd., China's largest privately owned media group, entered a partnership to release up to three mainstream Chinese films to capitalize on the growing size and scope of IMAX in China. Similarly, in March 2013, IMAX announced a partnership with Yash Raj Films Pvt. Ltd. in India to develop and release three movies in IMAX theatres globally.

IMAX put in place numerous licensing and joint venture agreements with exhibitors in an attempt to build new IMAX theatres or retrofit existing ones. For instance, in December 2007, it entered into a joint venture agreement with AMC Entertainment to install 100 screens equipped with IMAX's digital projection technology at AMC U.S. locations. In March 2011, IMAX announced its largest international agreement—a 75 theatre deal in China with Wanda Cinema, Asia's largest cinema operator.

## Competition from Exhibitors

In 2014, while 72 premium large format (PLF) brands competed with IMAX, only a few were real threats.<sup>8</sup> Since 2009, North America's five major theatre companies had either retrofitted their theatres or built new ones with oversized screens, adding several dollars to the ticket price. Hence, IMAX faced competition from the very exhibitors it relied on for business. Exhibitor PLF screens were opening at a rapid pace and by December 2014, for every two IMAX screens in North America, there were three such screens. Competing screens usually stretched from floor to ceiling in theatres with enhanced sound and extra-cushy seats, offering what some moviegoers felt was the best viewing experience for Hollywood blockbusters. Exhibitors varied in how aggressively they pursued the PLF strategy. Some stopped adding new IMAX contracts. Others placed their screens near IMAX theatres. Some built new locations that offered both IMAX and their own big-screens under the same roof.

In November 2013, of the \$161.1 million grossed during the opening weekend of *The Hunger Games: Catching Fire*, about \$9.6 million was collected from U.S. exhibitor PLF screens—only about \$3 million less than what IMAX U.S. locations generated. Studios and exhibitors stood to gain millions of dollars by cutting out IMAX. According to Chris Aronson,<sup>9</sup> president of U.S. distribution at 21st Century Fox Inc., “The distribution and exhibition dynamic is much simpler when there are only two parties involved.”

The competition had its roots in the film industry's move to digital distribution. When studios started delivering films digitally rather than in bulky canisters, it became easier to build theatres with sound and lighting for large-format viewing. “There was enough off-the-shelf technology that, if you knew how to put it together, you could create your own PLF experience,” said Timothy Warner,<sup>10</sup> chief executive at Cinemark. IMAX retorted that exhibitors were trying to replicate its signature experience without delivering the goods. “It's like putting a Mercedes on a Ford body and saying you have a Mercedes,” said Gelfond.<sup>11</sup> A key concern for IMAX was if such exhibitors would renew their IMAX contracts in 2017.

The competition from exhibitors was not limited to North America (see Exhibit 5). In October 2013, Russia's Karo Cinema announced a tie-up with RealD to roll out 10 PLF screens. A year later, China Film Giant Screen (CFGs), a subsidiary of China Film Co. Ltd. entered into a partnership with Deluxe Digital Cinema for subtitling and converting Hollywood films to its PLF format.

## FOREIGN SHORES

In 2013, growth markets outside of North America were important to the sustained success of IMAX. In the past few years, domestic ticket sales were flat to down, as more consumers opted to watch movies on home entertainment systems and mobile devices. Internationally though, IMAX movies were becoming increasingly popular, especially in emerging markets. In the United States, the average price of a movie ticket was \$8 to \$10, but an IMAX ticket ranged from \$13 to \$15. Nowhere was the popularity as strong and as price inelastic as in emerging markets. According to Gelfond,<sup>12</sup> an IMAX ticket could cost four times as much as a regular ticket in India, and at least one theatre in Russia charged \$80 a ticket and “does very well.” He forecasted international ticket receipts to account for 60 per cent of the company's total in the next few years and said “the expanding theatre network around the world, will be a major driver of growth.”

The combination of DMR conversions and lower capital cost of retrofitting existing theatres also helped IMAX expand globally. Being debt-free and cash-positive provided IMAX with both investment and licensing options in foreign markets. In most countries, IMAX preferred revenue-sharing agreements, in which it paid for part of the cost of building screens in return for a share of box office revenue. In 2013, IMAX entered into revenue-sharing agreements for 126 screens and licensing agreements for five screens.

## THE BRIC COUNTRIES

In 2001, Jim O'Neill, chief economist at Goldman Sachs, coined the acronym BRIC, which stands for Brazil, Russia, China, and India. He noted that the BRIC countries symbolized a shift in economic power from the developed G7 economies. From 2003 to 2013, the combined GDP growth of the BRIC nations exceeded by over four times the combined growth of the G7 (Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States). O'Neill estimated that by 2030, the BRIC countries would overtake the G7 in terms of GDP. The key drivers of such economic growth were large urban populations, a high proportion of young people, and increased consumption by a fast-rising middle and upper class (see Exhibits 1, 6, and 11). The rise of the middle classes in BRIC countries, with their willingness and ability to spend, had transformed consumer markets.<sup>13</sup> During a television interview in 2013, Gelfond discussed how this rising middle class, was tipping the scales toward international markets for IMAX.<sup>14</sup> Rapid consumption growth in BRIC nations was prevalent in tier-1 megacities, as well as in several mid-size cities (see Exhibit 7).

### Brazil

In 2013, Brazil was South America's most populous and influential country, home to more than 200 million people, of which 87 per cent resided in urban areas. Following three centuries of Portuguese colonization, and a fourth century of being ruled by its own monarchs and dictators, Brazil became a democracy in 1985. Exploiting vast agricultural and mineral resources and a large labour pool, it grew steadily over the past three decades to become the world's seventh largest economy. Brazil had also made great strides in reducing social and economic inequality. In 2013, close to 80 per cent of its households were middle class (\$15,000 to \$30,000 annual income) or upper middle class (\$30,000 to \$45,000). Nevertheless, wide gaps remained between the rich and the poor. Upper middle class and more affluent households were expected to comprise over 35 per cent of the population by 2020.<sup>15</sup>

Brazil was the only Portuguese-speaking nation in the Americas, giving it a distinct culture from the Spanish-speaking countries. As Portuguese was the official language, it was the only language used for all business and administrative purposes. English, which was often studied in school, was the principal second language among educated Brazilians. Christianity was the dominant faith in Brazil.

Movies released in Brazil generated nearly \$1 billion at the box office in 2013, a growth of 14 per cent over 2012, making Brazil the world's 11th largest movie market. Hollywood movies accounted for nearly 83 per cent of revenue. The market for Brazilian movies grew rapidly, with 2013 revenues increasing by more than 80 per cent over 2012. One hundred new cinema screens were added in 2013, increasing the total to more than 2,650 screens. IMAX tied up with UCI (a joint venture between Universal and Paramount), the largest exhibitor in Brazil, and the partnership operated five IMAX theatres in 2013.

### Russia

In 2013, Russia, home to more than 143 million people, was a developed, high-income country, with an urban population of 72 per cent. Vast oil and gas resources, helped Russia overcome a late 20th-century economic collapse to become the world's ninth largest economy, and reassert itself as a world power. Economic strength and massive public support, also allowed Vladimir Putin, Russia's dominant political figure since 2000, to enhance state control over political institutions and the media. Approximately 35 per cent of Russia's households were middle class, and some 40 per cent comprised upper middle and more affluent classes. While Russia's population was expected to decline to 140 million by 2020, the middle, upper middle and more affluent households were expected to increase to about 86 per cent.<sup>16</sup>

Russia was a multicultural and multi-ethnic society, with dozens of languages. Russian, the official language, was widely spoken and used for all business and administration. English was the most common second language, but fewer than 10 per cent spoke it fluently. Christianity was Russia's dominant faith.

In 2013, movies released in Russia generated \$1.4 billion at the box office, a 13 per cent growth over 2012, making it the world's 7th largest movie market. Hollywood movies accounted for nearly 83 per cent of revenue. Local movie revenues grew more slowly, increasing by 5 per cent over 2012. In June 2014, Russia's minister for culture Vladimir Medinsky spoke in favour of protectionism, hinting at introducing quotas for local films.<sup>17</sup> In September 2014, two top Russian directors argued<sup>18</sup> for restrictions on Hollywood movies. Yuri Kara called for a ban until sanctions imposed against Russia for annexing Crimea from Ukraine were lifted. Stanislav Govorukhin, who had been Putin's election campaign chief, said, "I believe that it would be good to limit the presence of Hollywood movies on Russian screens."

In October 2013, the World War II epic, *Stalingrad* became the first Russian language IMAX film. It was digitally re-mastered into IMAX 3D and released in Russia, China and several countries in Central and Eastern Europe. The movie was a huge commercial success and became Russia's top grossing local-language film. In the first six months of 2013, 177 new cinema screens were added in Russia, increasing the total to more than 3,200. IMAX had partnerships with Cinema Park and Karo Film, Russia's two largest movie exhibitors, and with several other local exhibitors—Mori Cinema, Kronverk Cinema and Formula Kino. Commenting on the Russian market, in July 2010, Richard Gelfond<sup>19</sup> said, "You have a growing middle class and wealthy class that's seeking premium entertainment." During an interview in July 2012, Andrew Cripps, IMAX President for Europe and Middle East Asia, said,<sup>20</sup> "Russia has been a tremendous market; they embrace technology and the box office has been incredibly strong."

## India

In 2013, India was the world's largest democracy, and the second most populous country (at 1.26 billion). From the late 1980s, India initiated reforms that opened up its economy, and encouraged foreign direct investment. Since then, India emerged as a fast-growing and powerful economy, to become the 10th largest in the world. However, India faced huge socio-economic problems. Nearly half of its population was poor and lacked a reasonable level of literacy. Hinduism was the major faith, and Hindi the most widely spoken language, although with its many languages, cultures and religions, India was extremely diverse. In 2013, 17 per cent of Indian households belonged to middle, upper middle and affluent classes. These classes were expected to increase to 33 per cent of all households by 2020.<sup>21</sup> By the same year, it was estimated that 40 per cent of Indians would reside in urban areas. Despite gaining independence from Britain in 1947, English remained the language of instruction in most urban schools, and the language of business and administration. India was therefore home to a rapidly expanding urban, English-educated workforce, making it an attractive destination for international business outsourcing.

With \$1.5 billion in 2013 box office revenues, India was the world's fifth largest movie market, growing at 11 per cent annually. However, Hollywood's share of India's box office was a mere 10 per cent. Despite producing over 1,000 movies every year, India only had 1,200 multiplex screens—fewer than one per million people. In contrast, the United States had 120 multiplex screens per million. India added over 150 multiplex screens in 2013, but while single-screen cinemas had dwindled from about 13,000 to 10,000 in the past five years, they were still pervasive. Movies in Hindi and many regional languages, collectively known as Bollywood films, dominated the market and were most often shown in small, single-screen cinemas with tickets costing \$2 to \$3. According to Gelfond, this made it difficult to sell IMAX, a totally different entertainment proposition that cost four times as much or more. In February

2013, commenting on the low penetration of IMAX screens in India, Gelfond said,<sup>22</sup> “It’s harder to change people’s habits.”

December 2013 marked the release of *Dhoom 3*, the first Bollywood movie to be digitally re-mastered by IMAX. Following its success, another Bollywood action thriller, *Bang Bang*, was converted for IMAX and released in October 2014. In India, IMAX had partnerships with Cinapolis, the world’s fourth largest exhibitor, and with local exhibitors PVR Films and Sathyam Films.

## China

In 2013, China with 1.35 billion people, was the world’s most populous country and its fastest-growing economy. In the late 1970s, China’s leader, Deng Xiaoping, commenced a process of widespread economic reform. Despite being a communist country, China underwent what has been described as a second industrial revolution. In 2011, fuelled by manufacturing growth, and domestic consumption, China became the world’s second-largest economy. In recent decades, many rural dwellers in search of employment moved to the country’s eastern cities, which were undergoing a construction boom. In 2013, for the first time, city dwellers outnumbered the rural population. It was estimated that, by 2020, China’s population would be 60 per cent urban, with middle and higher classes comprising 700 million people.<sup>23</sup>

China’s box offices pulled in \$3.6 billion in 2013, a 27 per cent jump from 2012. Hollywood movies enjoyed a one-third market share, and Hollywood box office revenues in China grew by nearly 60 per cent. In February 2013, Gelfond said,<sup>24</sup> “Establishing IMAX in China was aided by the Chinese people’s enormous appetite for affordable luxury.” He added, “The Chinese have fallen in love with Hollywood movies.” China had more than 12,000 multiplex screens, with 10 new screens being added each day. Most of China’s 200 IMAX screens were operated by the theatre chain Wanda Cinema, which was China’s biggest exhibitor in terms of box office revenue, with more than 15 per cent share of the Chinese market.

The Chinese movie *Aftershock* was the first big non-Hollywood commercial IMAX film. Released in 2010, *Aftershock* was a huge hit, grossing more than \$100 million in China. Following its success, additional Chinese IMAX movies were made. In 2014, the digitally re-mastered *Monkey King* became the biggest grossing Chinese film ever, with more than \$167 million in global box office receipts. Optimism on China’s movie industry growth was, however, tempered by the risk of government interference and protectionism. In June 2014, China Film Bureau chief Zhang Hongsen,<sup>25</sup> claimed the country’s film business was at war with Hollywood, and needed to dramatically up its game to survive when the annual quota for foreign film imports (currently limited to 34) was raised in four years’ time. The powerful government regulator urged theatre owners to reduce screen time for Hollywood movies.

## RELATIVE MARKET EMPHASIS

At the Toronto Film Festival in September 2013, Gelfond said,<sup>26</sup> “We’ve identified 1,700 target markets to put IMAX theaters into in the world, and about 500 of them are in North America.” In the next 14 months, IMAX added 150 new screens worldwide, but only about 25 of them in North America. Hence, as of December 2014, 1,550 screens remained from Gelfond’s stated target. With an estimated investment of \$350,000<sup>27</sup> per screen, each one represented a significant commitment. Allocating these by country would convey relative priorities to IMAX and its stakeholders, and enable purposeful implementation. Of the remaining screens, was 475 the right number for North America? If 400 were earmarked for the BRIC economies, how should they be distributed by country? The BRIC nations offered ample business opportunities, but also presented economic, political, and cultural challenges (see Exhibits 8, 9, and 10). What were the country-specific risks for IMAX, and how could they be mitigated?

**EXHIBIT 1: IMAX WORLDWIDE: SCREENS, BOX OFFICE, DEMOGRAPHICS, AND URBANIZATION**

#	Country	Existing Screens (2014)	2013 Box Office (\$ million)	Hollywood Box Office Share	Middle and Upper Class population % Increase (2013–2020)	Urban population % Increase (2013–2020)
1	ARGENTINA	1	400	76%	32.1	0.4
2	AUSTRALIA	5	1100	95%	3.5	1.6
3	AUSTRIA	5	160	90%	3.5	4.1
4	AZERBAIJAN	2			53.1	6.7
5	BRAZIL	11	900	83%	56.4	2.7
6	BULGARIA	2	25	85%	8.3	4.3
7	CANADA	46	1000	98%	3.5	2.4
8	CHILE	1	130	95%	57.2	1.9
9	CHINA	221	3600	50%	65.8	17.1
10	COLOMBIA	2	230	65%	80	3.5
11	COSTA RICA	1			51.7	7.4
12	CROATIA	1	20	98%	9	7.5
13	CZECH REPUBLIC	1	70	65%	3.5	3.1
14	DENMARK	1	190	60%	3.5	1.1
15	DOMINICAN REPUBLIC	1			96.8	6.7
16	ECUADOR	2	65	95%	71.4	5.5
17	EGYPT	1	120	20%	115.3	13
18	ESTONIA	1	15	95%	3.5	3.1
19	FRANCE	13	1600	54%	3.5	3.3
20	GERMANY	5	1300	64%	3.5	4.2
21	GUATEMALA	2			65.7	11.2
22	HONG KONG	5	210	78%	3.5	0
23	HUNGARY	1	60	91%	12.8	5.7
24	INDIA	8	1500	10%	105.6	17.6
25	INDONESIA	4	195	80%	56.5	14.1
26	ISRAEL	1	115	50%	3.5	0.7
27	ITALY	2	800	53%	3.5	4.5
28	JAPAN	23	2400	39%	3.5	5.2
29	JORDAN	1			24.3	6.4
30	KAZAKHSTAN	2	65	45%	10.5	7.2
31	KENYA	1				24.3
32	KUWAIT	2				0.2
33	MALAYSIA	4	200	82%	29.9	6.7
34	MEXICO	20	900	90%	33.5	3.2
35	MOROCCO	1		44%		14.1
36	NETHERLANDS	6	300	80%	3.5	3.4
37	NEW ZEALAND	1	175	97%	3.5	1.6
38	PHILIPPINES	8	175	80%	55.9	7.8
39	POLAND	5	200	66%	9.3	7.2
40	PORTUGAL	2	85	47%	3.5	8.8
41	QATAR	2			42.1	0.6
42	ROMANIA	1	45	90%	8.3	7.8
43	RUSSIA	36	1400	83%	16.9	2
44	SAUDI ARABIA	1				1.6
45	SINGAPORE	3	170	90%	3.5	0
46	SOUTH AFRICA	3	90	68%	41.3	7.8
47	SOUTH KOREA	15	1400	46%	4.6	2.7
48	SPAIN	3	700	65%	3.5	2.9
49	SWEDEN	1	200	60%	3.5	-0.9
50	SWITZERLAND	2	200	60%	3.5	6.5
51	TAIWAN	9	300	75%	3.5	3.5
52	THAILAND	5	150	60%	26	17.4
53	TRINIDAD AND TOBAGO	1				
54	TURKEY	4	300	42%	17	5.8
55	UKRAINE	5				5.2
56	UNITED ARAB	1				1.6
57	UNITED KINGDOM	35	1700	60%	3.5	1.2
58	UNITED STATES	385	9900	100%	3.5	2.9

Note: All source data accessed December 26, 2014. Missing data is shaded in grey. For 13 countries, 2013 Box Office is estimated from the average two-year growth rate. For 22 developed nations, a 3.5 per cent European poverty reduction estimate (European Commission, <http://ec.europa.eu/eurostat>) is used to proxy Middle and Upper Class increase (2013-20).

Sources: for existing screens: IMAX Corporate website, [www.imax.com/theatres](http://www.imax.com/theatres); for 2013 box office: Motion Picture Association of America Inc., European Audiovisual Observatory, UNESCO Institute of Statistics; for Hollywood box office share: The Hollywood Reporter website, [www.hollywoodreporter.com/movies](http://www.hollywoodreporter.com/movies); for middle and upper-class population increase: Asian Development Bank, World Bank, OECD, Ernst and Young; for urban population increase: City Mayors Statistics, "Urban population growth between 1950 and 2030," [www.citymayors.com/statistics/urban-population-intro.html](http://www.citymayors.com/statistics/urban-population-intro.html).

**EXHIBIT 2: IMAX CORPORATION BALANCE SHEETS, 2010–2013 (IN THOUSANDS OF \$)**

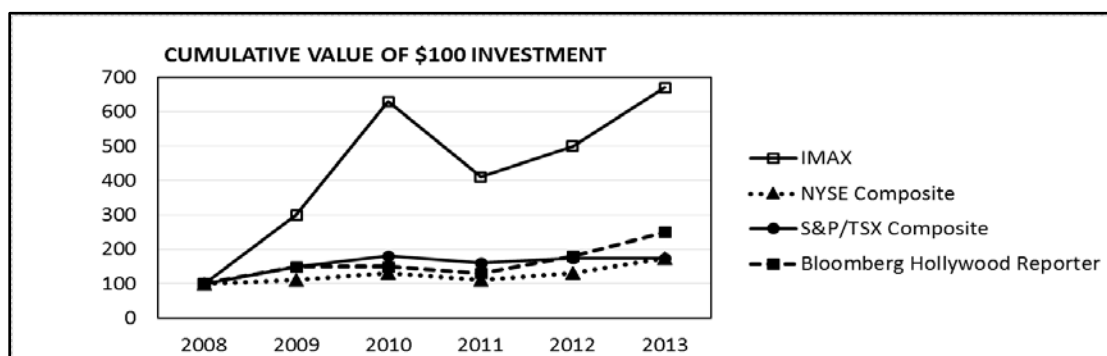
Period Ending	2013-12-31	2012-12-31	2011-12-31	2010-12-31
<b>Current Assets</b>				
Cash and Cash Equivalents	29,546	21,336	18,138	30,390
Net Receivables	180,184	136,200	133,373	113,171
Inventory	9,825	15,794	19,747	15,275
Other Current Assets	10,678	7,570	5,514	5,281
<b>Total Current Assets</b>	<b>230,233</b>	<b>180,900</b>	<b>176,772</b>	<b>164,117</b>
<b>Long-Term Assets</b>				
Fixed Assets	132,847	113,610	101,253	74,035
Goodwill	39,027	39,027	39,027	39,027
Intangible Assets	27,745	27,911	24,913	2,437
Other Assets	27,034	23,963	14,238	12,350
Deferred Assets Charges	24,259	36,461	51,046	57,122
<b>Total Assets</b>	<b>481,145</b>	<b>421,872</b>	<b>407,249</b>	<b>349,088</b>
<b>Current Liabilities</b>				
Accounts Payable	84,628	83,839	87,840	99,378
Short-Term Debt/Current Portion of Long-	0	11,000	55,083	17,500
Other Current Liabilities	76,932	73,954	74,458	73,752
<b>Total Current Liabilities</b>	<b>161,560</b>	<b>168,793</b>	<b>217,381</b>	<b>190,630</b>
<b>Total Liabilities</b>	<b>161,560</b>	<b>168,793</b>	<b>217,381</b>	<b>190,630</b>
<b>Stockholders' Equity</b>				
Common Stocks	327,313	313,744	303,395	292,977
Retained Earnings	43,051	87,166	128,503	141,209
Other Equity	35,323	26,501	14,976	6,690
<b>Total Equity</b>	<b>319,585</b>	<b>253,079</b>	<b>189,868</b>	<b>158,458</b>
<b>Total Liabilities and Equity</b>	<b>481,145</b>	<b>421,872</b>	<b>407,249</b>	<b>349,088</b>

Source: NASDAQ, "IMAX Company Financials," accessed December 21, 2014, [www.nasdaq.com/symbol/imax/financials?query=balance-sheet](http://www.nasdaq.com/symbol/imax/financials?query=balance-sheet).

**EXHIBIT 3: IMAX CORPORATION INCOME STATEMENTS, 2010–2013 (IN THOUSANDS OF \$)**

Period Ending	2013-12-31	2012-12-31	2011-12-31	2010-12-31
Total Revenue	287,937	282,755	235,098	248,614
Cost of Revenue	123,334	129,510	121,033	110,962
Gross Profit	164,603	153,245	114,065	137,652
<b>Operating Expenses</b>				
Research and Development	14,771	11,411	7,829	6,249
Sales, General and Administrative	82,669	81,560	75,212	78,757
Non-Recurring Items	445	674	1,590	1,488
Other Operating Items	1,618	706	465	513
<b>Operating Income</b>	<b>65,100</b>	<b>58,894</b>	<b>28,969</b>	<b>50,645</b>
Additional Income/Expense Items	55	85	57	399
Earnings Before Interest and Tax	65,155	58,979	29,026	51,044
Interest Expense	1,345	689	1,827	1,885
Earnings Before Tax	63,810	58,290	27,199	49,159
Income Tax	16,629	15,079	9,293	(52,574) <sup>28</sup>
Minority Interest	0	0	0	0
Equity Earnings/Loss Unconsolidated	2,757	1,362	1,791	493
Net Income-Cont. Operations	44,424	41,849	16,115	101,240
<b>Net Income</b>	<b>44,115</b>	<b>41,337</b>	<b>15,260</b>	<b>101,240</b>
Net Income Applicable to Common	44,115	41,337	15,260	101,240

Source: NASDAQ, "IMAX Company Financials," accessed December 21, 2014, [www.nasdaq.com/symbol/imax/financials?query=income-statement](http://www.nasdaq.com/symbol/imax/financials?query=income-statement).

**EXHIBIT 4: IMAX CORPORATION STOCK PERFORMANCE, 2008–2013**

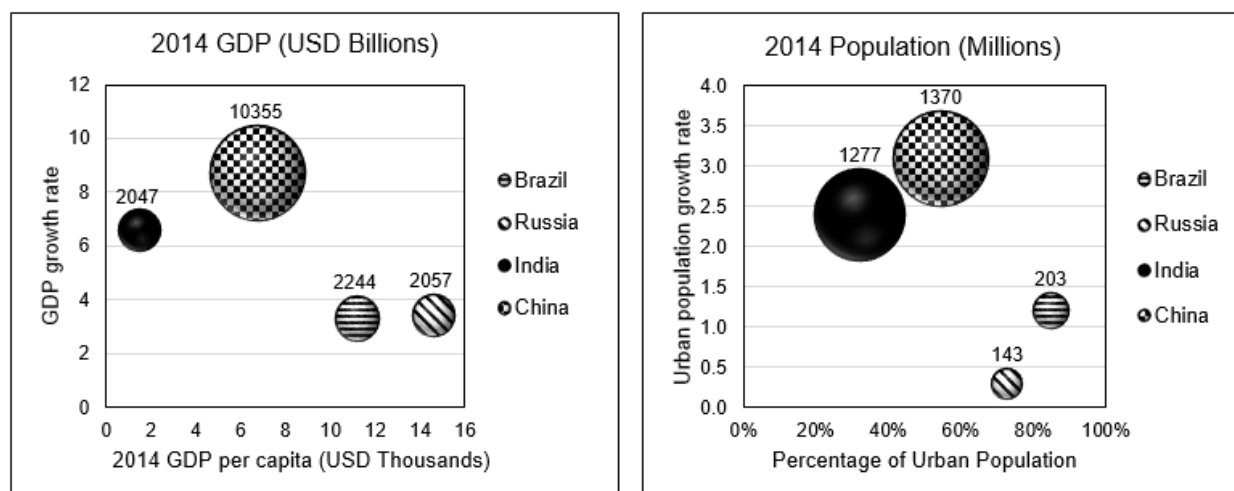
Note: The graph compares the total cumulative shareholder return for \$100 invested (assumes that all dividends were reinvested) in common shares of the Company against the cumulative total return of each of the following stock indices—NYSE Composite, S&P/TSX Composite and Bloomberg Hollywood Reporter on December 31, 2008 to December 31, 2013.

Source: IMAX Corporation Annual Report, 2013.

**EXHIBIT 5: EXHIBITOR-BRANDED PREMIUM LARGE FORMAT SCREENS, BY REGION**

Region	PLF	
North America	686	49%
Asia Pacific	378	27%
Central and South	224	16%
Western Europe	70	5%
Eastern Europe	28	2%
Africa and Middle East	14	1%

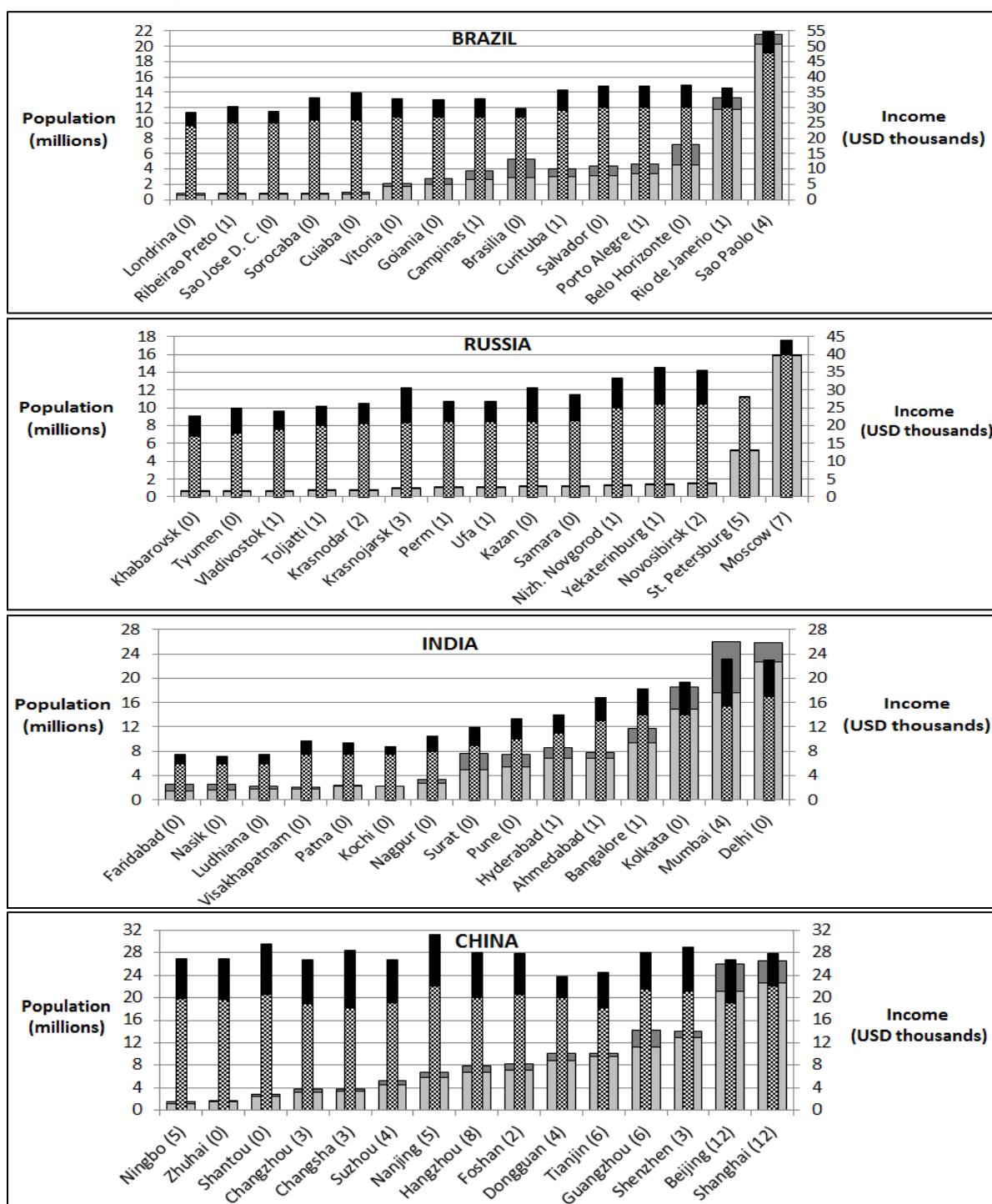
Source: Patrick von Sychowski, "IHS: 72 PLF Brands Compete with IMAX," accessed December 26, 2014, <http://celluloidjunkie.com/2014/10/31/ihs-72-plf-brands-compete-imax-two-threat/>.

**EXHIBIT 6: ECONOMIC COMPARISON OF THE BRIC ECONOMIES**

Source: Adapted from Guillaume Corpart, "Assessing the Relative Merits of the BRICS and MIST Economies as Investment Destinations," Americas Market Intelligence, accessed December 21, 2014, [http://americasmi.com/en\\_US/expertise/articles-trends/page/assessing-the-relative-merits-of-the-brics-and-mist-economies-as-investment-destinations](http://americasmi.com/en_US/expertise/articles-trends/page/assessing-the-relative-merits-of-the-brics-and-mist-economies-as-investment-destinations).

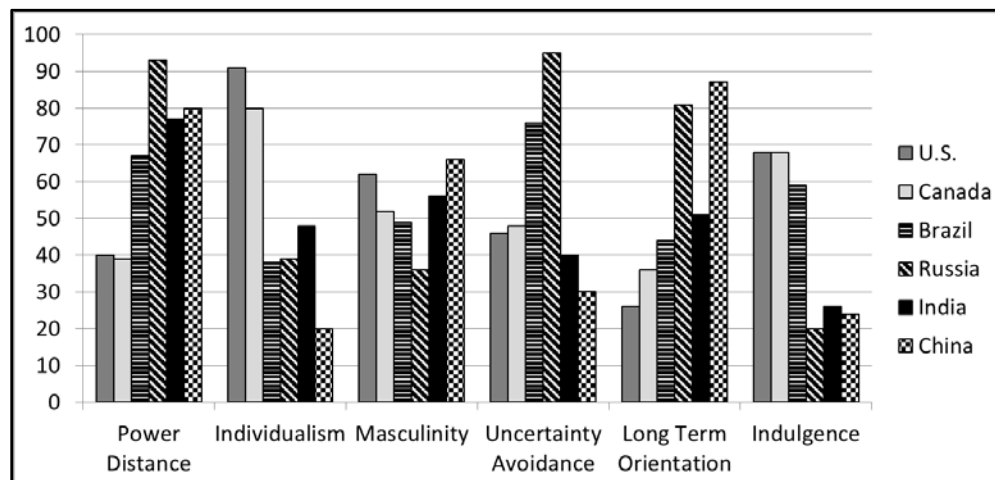
**EXHIBIT 7: POPULATION AND AVERAGE HOUSEHOLD INCOME FOR 15 MOST AFFLUENT CITIES**

Legend: ■ 2013 population ■ 2020 population increase (projected) ▨ 2013 household income ■ 2020 household income increase (projected)



Note: Numbers in parentheses denote number of IMAX screens as of December 21, 2014.

Source: Ugne Saltenyte, "Do Business Opportunities Exist Outside the Largest Cities in BRIC Countries?" accessed December 21, 2014, <http://blog.euromonitor.com/2014/04/do-business-opportunities-exist-outside-the-largest-cities-in-bric-countries.html>.

**EXHIBIT 8: COUNTRY CULTURE COMPARISON OF BRIC COUNTRIES**

Note: Power Distance (PD) reflects the degree to which hierarchy and unequal distributions of power are accepted. A high PD score implies acceptance of large status differences between superiors and subordinates. Managers tend to be autocratic and paternalistic, while employees tend to do as told.

Individualism (IND) reflects the degree to which personal independence is valued over group membership. A society scoring high on IND values personal goals, initiative, autonomy and privacy. In contrast, a society that scores low values group goals over individual preferences and gives importance to harmony and consensus in decision making.

Masculinity (MAS) reflects the degree to which tough and assertive behaviour is encouraged. Conversely, femininity encourages tender and nurturing behaviour.

Uncertainty Avoidance (UA) reflects the degree of comfort with ambiguous situations and the extent to which efforts have been made to avoid these situations. Managers in high UA cultures tend to depend extensively on systematic rules and regulations. Extensive efforts are made to plan for the future.

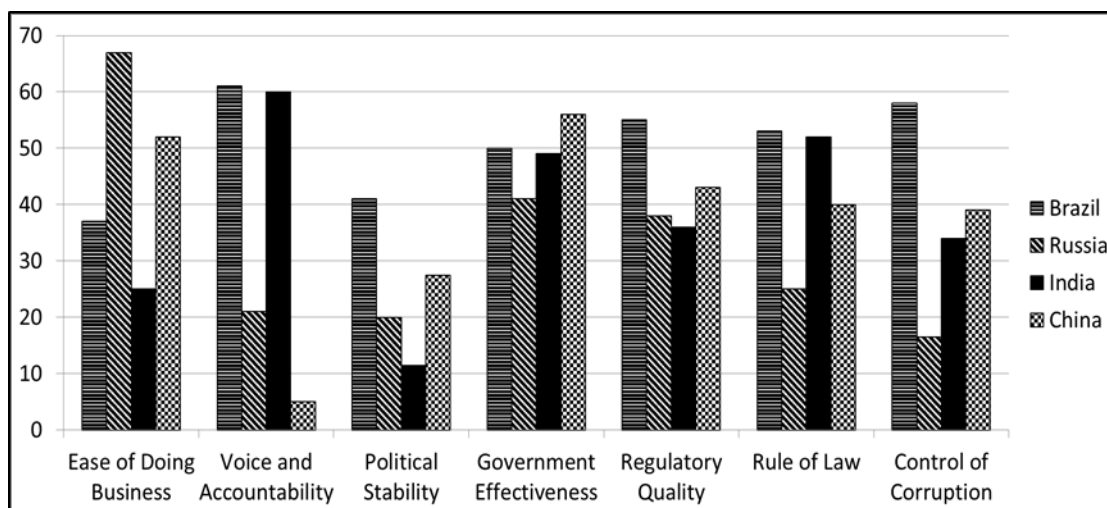
Long Term Orientation (LTO) reflects the degree to which short-term pain is accepted for long-term gain. Societies with LTO are less likely to seek out immediate gratification and more likely to plan for and invest in the future.

Source: Geert Hofstede, Gert Jan Hofstede, Michael Minkov, Cultures and Organizations: Software of the Mind. Revised and Expanded 3rd Edition. New York: McGraw-Hill USA, 2010.

**EXHIBIT 9: RISKS IN THE BRIC ECONOMIES**

BRAZIL	RUSSIA	INDIA	CHINA
High dependence on commodity exports.	High dependence on oil and gas exports.	Current account deficit (foreign investment)	High debt levels threatening financial
Current account deficit (foreign investment)	Shrinking and ageing population.	Demographic dividend may become liability.	Ageing population and shrinking workforce.
Social pressures impeding structural	Endemic corruption at all societal levels.	Messy democracy stalling structural	Entrenched state enterprises and powerful
High taxes, red tape, and poor infrastructure.	Crumbling infrastructure eroding	Weak infrastructure crippling manufacturing.	Rising workforce wages burdening economy.

Sources: Adapted from Al Fin, "BRICs: Can the Tail Wag the Dog?" accessed December 21, 2014, <http://alfin2100.blogspot.ca/2012/06/brics-can-tail-wag-dog.html>; Michael Schuman, "The BRICs have hit a wall" accessed February 16, 2014, <http://business.time.com/2014/01/10/brics-in-trouble/>; Erich Follath and Martin Hesse "Troubled Times: Developing Economies hit a BRICS Wall", accessed February 16, 2014, [www.spiegel.de/international/world/economy-slows-in-brics-countries-as-worries-mount-a-951453.html](http://www.spiegel.de/international/world/economy-slows-in-brics-countries-as-worries-mount-a-951453.html).

**EXHIBIT 10: BRIC COUNTRIES' GOVERNANCE INDICATORS (PERCENTILES)**

Note: Ease of Doing Business—capturing the conduciveness of the regulatory environment to business operation.

Voice and Accountability—capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association and a free media.

Political Stability and Absence of Violence/Terrorism—capturing perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.

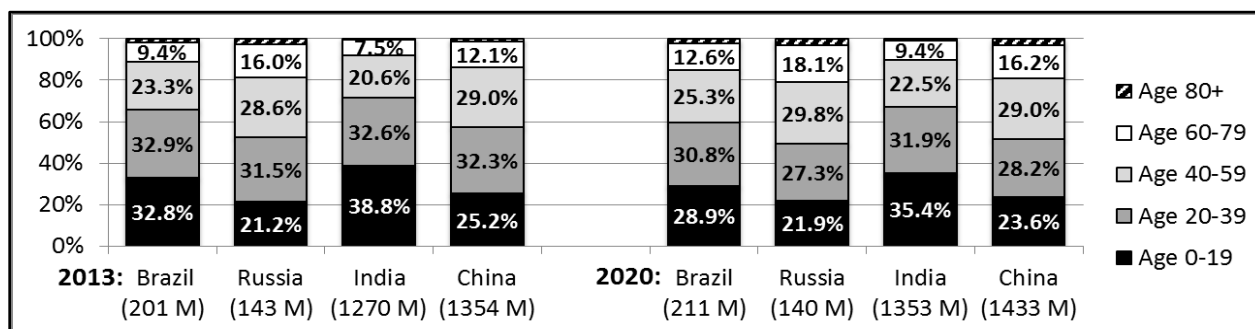
Government Effectiveness—capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation and the credibility of the government's commitment to such policies.

Regulatory Quality—capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

Rule of Law—capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence.

Control of Corruption—capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Source: The World Bank, "Data," accessed October 19, 2014, <http://data.worldbank.org/indicator/>.

**EXHIBIT 11: BRIC POPULATION AGE DISTRIBUTION 2013 AND 2020 (PROJECTED)**

Source: Martin De Wulf, "Population Pyramids of the World from 1950 to 2100," accessed December 20, 2014 <http://populationpyramid.net/>.

## ENDNOTES

<sup>1</sup> This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of IMAX Corporation or any of its employees.

<sup>2</sup> Eric Lam, "IMAX CEO Sees \$1 Billion Box Office on China," accessed December 20, 2014, [www.bloomberg.com/news/2013-09-12/imax-ceo-sees-1-billion-box-office-on-china.html](http://www.bloomberg.com/news/2013-09-12/imax-ceo-sees-1-billion-box-office-on-china.html).

<sup>3</sup> All currency amounts are shown in U.S. dollars unless otherwise noted.

<sup>4</sup> Richard Gelfond, "The CEO of IMAX on How It Became a Hollywood Powerhouse," *Harvard Business Review*, July–August 2013, pp. 36–39.

<sup>5</sup> Brent Lang, "With 'Interstellar,' IMAX Takes Aim at the Bigger Picture," accessed December 24, 2014, <http://variety.com/2014/film/features/with-interstellar-imax-hits-hollywoods-bigtime-1201341443/>.

<sup>6</sup> IMAX Corporation, Annual Reports, 2013 and 2007.

<sup>7</sup> Motion Picture Association of America Inc., Theatrical Market Statistics, 2013.

<sup>8</sup> Patrick von Sychowski, "IHS: 72 PLF Brands Compete with IMAX," accessed December 26, 2014, <http://celluloidjunkie.com/2014/10/31/ihs-72-plf-brands-compete-imax-two-threat/>.

<sup>9</sup> Erich Schwartzel, "Movie-Theater Chains Take on IMAX," accessed October 17, 2014, [www.wsj.com/articles/SB10001424052702304202204579254453051597642](http://www.wsj.com/articles/SB10001424052702304202204579254453051597642).

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Lam, op. cit.

<sup>13</sup> Sarah Bounphrey and Eileen Bevis, "Reaching the Emerging Middle Classes beyond BRIC," Euromonitor International, November 12, 2013, accessed December 26, 2015, <http://blog.euromonitor.com/2013/11/white-paper-reaching-the-emerging-middle-classes-beyond-bric.html>.

<sup>14</sup> Etan Vlessing, "IMAX's International Expansion at Tipping Point," accessed December 21, 2014, [www.hollywoodreporter.com/news/imaxs-international-expansion-at-tipping-414859](http://www.hollywoodreporter.com/news/imaxs-international-expansion-at-tipping-414859).

<sup>15</sup> Boston Consulting Group Perspectives, "Redefining Brazil's Emerging Middle Class," accessed December 21, 2014, [www.bcgperspectives.com/content/articles/center\\_consumer\\_customer\\_insight\\_globalization\\_redefining\\_brazils\\_emerging\\_middle\\_class/?chapter=5](http://www.bcgperspectives.com/content/articles/center_consumer_customer_insight_globalization_redefining_brazils_emerging_middle_class/?chapter=5).

<sup>16</sup> Nielsen Newswire, "A Rising Middle Class Will Fuel Growth in Russia," accessed December 21, 2014, [www.nielsen.com/us/en/insights/news/2013/a-rising-middle-class-will-fuel-growth-in-russia.html](http://www.nielsen.com/us/en/insights/news/2013/a-rising-middle-class-will-fuel-growth-in-russia.html).

<sup>17</sup> Hollie McKay, "Russian Film Industry and Hollywood Uneasy with One Another," accessed November 7, 2014, [www.foxnews.com/entertainment/2014/10/14/russian-film-industry-and-hollywood-uneasy-with-one-another/](http://www.foxnews.com/entertainment/2014/10/14/russian-film-industry-and-hollywood-uneasy-with-one-another/).

<sup>18</sup> Ibid.

<sup>19</sup> "IMAX to Open 10 More Theaters in Russia," *The Moscow Times*, accessed December 21, 2014, [www.themoscowtimes.com/business/article/imax-to-open-10-more-theaters-in-russia/411257.html](http://www.themoscowtimes.com/business/article/imax-to-open-10-more-theaters-in-russia/411257.html).

<sup>20</sup> Wendy Mitchell, "Andrew Cripps and Richard Gelfond, IMAX," accessed December 21, 2014, [www.screendaily.com/andrew-cripps-and-richard-gelfond-imax/5043387.article](http://www.screendaily.com/andrew-cripps-and-richard-gelfond-imax/5043387.article).

<sup>21</sup> Asian Development Bank, Key Indicators for Asia and the Pacific 2010: The Rise of Asia's Middle Class, 2010, accessed December 26, 2014, <http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1095&context=intl>.

<sup>22</sup> Jorn Madslien, "IMAX Sets Its Sight on Bollywood and India's Audiences," accessed December 20, 2014, [www.bbc.com/news/business-21322164](http://www.bbc.com/news/business-21322164).

<sup>23</sup> Asian Development Bank, op. cit.

<sup>24</sup> Madslien, op. cit.

<sup>25</sup> Clifford Coonan, "China Film Bureau Boss Urges Local Industry to Prepare for War With Hollywood," accessed October 19, 2014, [www.hollywoodreporter.com/news/china-film-bureau-boss-urges-715332](http://www.hollywoodreporter.com/news/china-film-bureau-boss-urges-715332).

<sup>26</sup> Lam, op. cit.

<sup>27</sup> This estimated investment is based on a capital investment of \$23 million for developing 65 theatres under joint revenue-sharing agreements in 2013 (from IMAX Corporation Annual Report 2013).

<sup>28</sup> This amount includes an income tax benefit of \$55 million related to a decrease in the valuation allowance for deferred tax assets and other tax adjustments (from IMAX Corporation Annual Report, 2010).