

INDIAN MULTIPLEX SECTOR

IT'S SHOW TIME!



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Indian Film Exhibition Sector

5 October 2016

Oligopolistic Business In Its Infancy; GST To Lift Margins And RoIC

We initiate coverage on Indian film exhibition sector (multiplexes) with a positive view and market capitalisation-weighted return expectation of 21% till September 2017. We believe PVR and Inox Leisure (the two largest players) can deliver in the next 10 years at least 5%-10% volume/footfall growth (new screen-driven, attracting both single-screen and new generation customers) with rise in realisation of 4%-5%. This will result in revenue CAGR of 10%-15% with PAT growing a tad faster. Structurally, we expect increase in relevant customer households which can afford this type of entertainment (currently at 8%-11% of total, in our view) will drive demand. Same store/screen sales growth (SSG), in our view, will be realisation-led at 4%-6%. Over FY16-FY19E, we expect PVR and Inox (in aggregate) revenue/EBITDA/PAT CAGR of 18%/25%/29%. There will be a margin kicker provided by implementation of Goods and Services Tax or GST in FY18 (we assume 22% neutral rate). This industry, a highly taxed one, will benefit if GST rate is in the 18%-22% band. GST would have raised RoIC by ~300-350bps at 22% rate had it been implemented in FY16, ceteris paribus. What excites us is that, in its infancy itself, it is an oligopoly (top four players control ~70% of screens) and will remain so as entry barriers are quite formidable and there are no substitutes. This industry structure will deliver steady revenue growth, improving margins and RoICs over a long period of time. While the recent run-up (PVR/Inox up 51%/15%, respectively, in 12 months) factors in some positives, we believe these players deserve premium valuations, considering longevity of earnings compounding and good RoICs, especially post GST implementation. We believe expensive M&A activity in the past five years and consequent weak return ratios are a small price to pay for achieving consolidation in a nascent industry. Over the long run, as organic growth predominates, benefits of a better industry structure will far outweigh price paid. We believe the stranglehold over retail real estate (and slow pace of its expansion) to be key driver of positive industry dynamics. This leads to steady increase in capacity, steady pricing power and high occupancy rate. With little in terms of worthwhile acquisition targets left, modest organic expansion and good cash flow generation, we see the industry as a good dividend payer in the long run. We have assigned Buy rating to PVR/Inox with target prices up 17%/31%, respectively, from CMP till September 2017. The right valuation metric should be EV/EBITDA (depreciation/amortisation and interest expenses constitute ~45%-50% of FY18 EBITDA). We have applied EV/EBITDA multiples of 12.5x/11x for PVR/Inox respectively on their Sept 2018 EBITDA. Implied P/E multiples are 30x/23x on their September 2018E EPS, respectively.

Theatre + QSR + media + controlled real estate supply + GST=solid wealth creation opportunity: Besides controlled capacity increase, the gradual change in the mix in favour of F&B and advertising revenues which are high gross margin streams (75% and 95%, respectively) will help RoIC.

Single-property economics very attractive: A single-property financial model throws us SSG of 4%-6%, steady improvement in margins and RoICs. GST implementation provides a significant boost. This is after annual maintenance and large refurbishment capex. We dispel the 'capex intensity' myth of the sector.

Worst could be over on real incomes, good phase likely starting: The industry has done well despite urban real incomes not really growing much as CPI has been high. With inflation under control, there should be more in the hands of the urban consumer to spend on discretionary items.

GST will transform economics: Film exhibition industry has been a highly taxed one (pan India average entertainment tax is ~23%-27% of net ticket price) leading to depressed margins and return ratios. GST (even at 22% neutral rate) will elevate EBITDA margin by 200bps-400bps and improve return ratios. Set-off on taxes paid on input services is a big positive (about 320bps-430bps). Even if the GST rates themselves do not provide upside, the set off could be the savior. However a GST rate above 22% could eat into this.

Industry in its infancy but has turned oligopolistic: Indian multiplex industry is in its infancy with only ~2,100 screens in the entire country, representing just ~1.6 screens/mn people (although on relevant customer base, the number is higher at 14-21). Including 6,000 single screens, the number will be ~7.

Piracy and resistance to F&B price hikes: We conducted a survey to understand consumer behaviour/perception about multiplexes. Consumers (almost one-third) across all income groups seem to be consuming pirated content. An overwhelming 90% across income groups felt that food was overpriced.

Risks: Slowdown in GDP and slow real income growth present structural risks. Any technology change that impacts consumption of film content in this form and an increase in piracy could be harmful for revenues and earnings growth. Inadequate supply of retail real estate and lack of quality content remain cyclical risks. Pass-through of all of GST benefits to consumers also remains a risk.

View: Positive
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Company	Rating	Market cap		CMP (Rs)	Target Price	Up/Down (%)	EPS (Rs)			P/E (x)			RoIC (%)		
		R\$bn	US\$m				FY17E	FY18E	FY19E	FY17E	FY18E	FY19E	FY17E	FY18E	FY19E
PVR	Buy	57.9	864	1,235	1,446	17%	23.3	40.9	54.8	52.9	30.2	22.5	16.1	19.4	22.8
Inox Leisure	Buy	24.9	371	270	354	31%	6.7	13.2	17.8	40.3	20.4	15.2	13.0	19.5	22.4

 Source: Company, Nirmal Bang Institutional Equities Research; Priced on 3rd October closing prices

Please refer to the disclaimer towards the end of the document.

Table of Content

Industry economics attractive despite poor history.....	05
Standalone property economics very attractive- GST will enhance it.....	08
Industry is not as capital intensive as is made out by the street.....	14
GST will be a big driver of margins and RoIC.....	14
Oligopolistic consumer business.....	16
Indian multiplex industry is in its infancy.....	19
Multiplex industry's structural drivers are aligned.....	28
Diversified content will improve occupancy rate.....	30
Five Forces analysis of Indian exhibition sector.....	33
Financials – sharp improvement with GST likely.....	34
Valuation.....	42
Risks to our investment thesis.....	49

Companies

PVR.....	51
Inox Leisure	53

Annexure

Profile of players.....	56
Consumer survey.....	65
Overview of Indian film industry	71
Chinese film exhibition industry.....	73
Media report on food served at PVR's Director's Cut.....	77
Bollywood and Hollywood movie slate.....	79

Industry economics attractive despite poor history

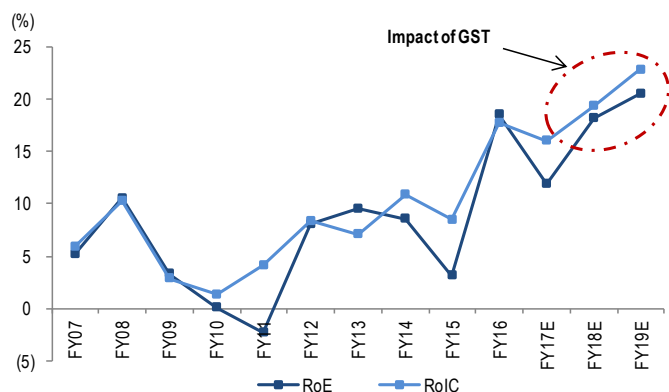
Historical return ratios have been poor for various reasons...

Return ratios of both PVR and Inox Leisure have been poor over the past decade (Exhibit 1 and 2) and it is only in FY16 that these have started looking up. These were poor because of: (1) High capex connected with strong organic growth on a small base. (2) High EV/screen paid for M&A transactions and a large number of screens being acquired in this fashion on a small base. (3) Investment in various non-exhibition businesses which have poor economics. (4) Revenue mix skewed towards box office rather than high-margin food & beverage and advertisement revenues. (5) Lower pricing of tickets, F&B and advertising. (6) High taxation and lack of set-off on taxes on inputs. (7) Low growth in real urban income.

...but they are set to improve dramatically

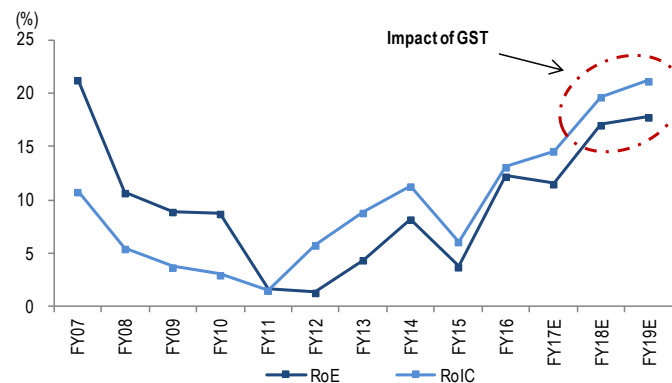
We believe that many of these drivers of poor return ratios are taking a turn for the better. (1) **Organic screen growth from here on is likely to be moderate (8%-12% annually), constrained by lack of retail real estate - see Exhibits 5 and 6.** (2) **We believe worthwhile M&A opportunities have run out, at least for large players like PVR and Inox Leisure, and so the risk of a large return-dilutive transaction is low.** (3) **There is going to be defocus on non- exhibition business from here on by PVR, which has been the biggest culprit in this area. We already see that capital employed in non-exhibition business has fallen to 10% of the total capital employed against a peak of 25% - Exhibit 7** (4) **Revenue mix is becoming margin-richer by the day as the share of F&B and advertising revenues rise in the total mix – Exhibit 8.** (5) **Pricing is improving steadily – Exhibit 9.** (6) **GST implementation will lower tax on box office revenues and also help set off taxes on inputs.** (7) **Better real urban income growth because of lower inflation, in our view, could lead to potential surprises on footfall growth – see Exhibit 10. The industry has done well despite a very hostile macro environment and we believe it will benefit when the macro takes a turn for the better.**

Exhibit 1: Return ratios of PVR



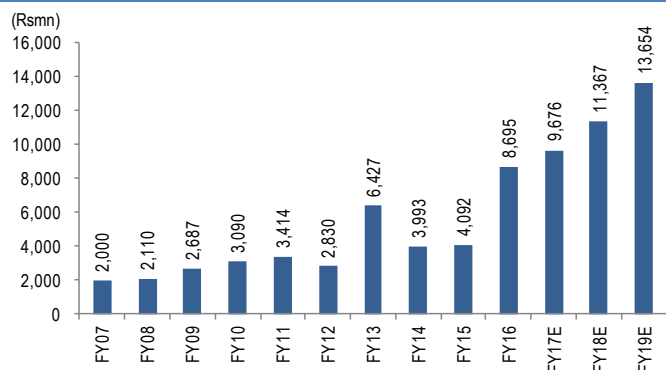
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 2: Return ratios of Inox



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 3: Networth of PVR – Infusions in FY13 and FY16



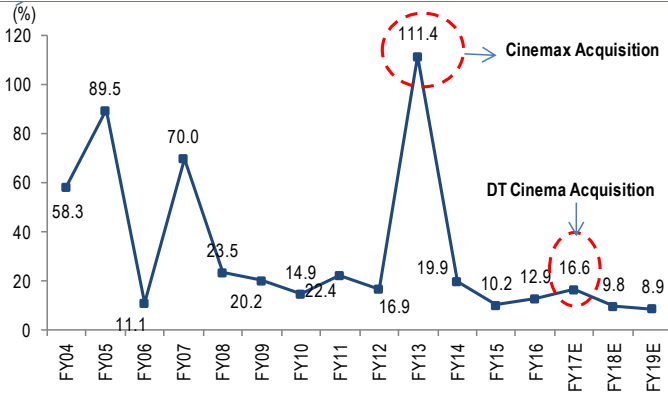
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 4: Equity Raised by PVR

Year	Amount Raised	At Stock Price of	Raised From
2015	Rs3.5bn	Rs700	Multiples Private Equity
2012	Rs0.576bn	Rs200	L capital
2012	Rs1.53bn	Rs245	Multiples Private Equity

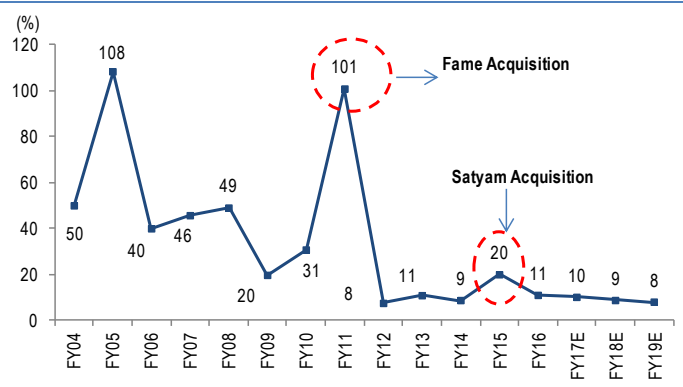
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 5: Screen growth as percentage over the base PVR



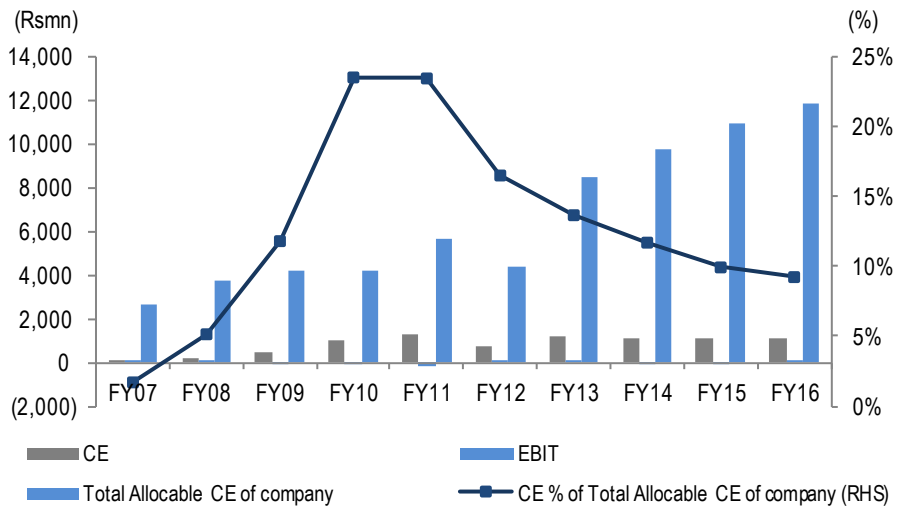
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 6: Screen growth as percentage over the base Inox



Source: Company, Nirmal Bang Institutional Equities Research

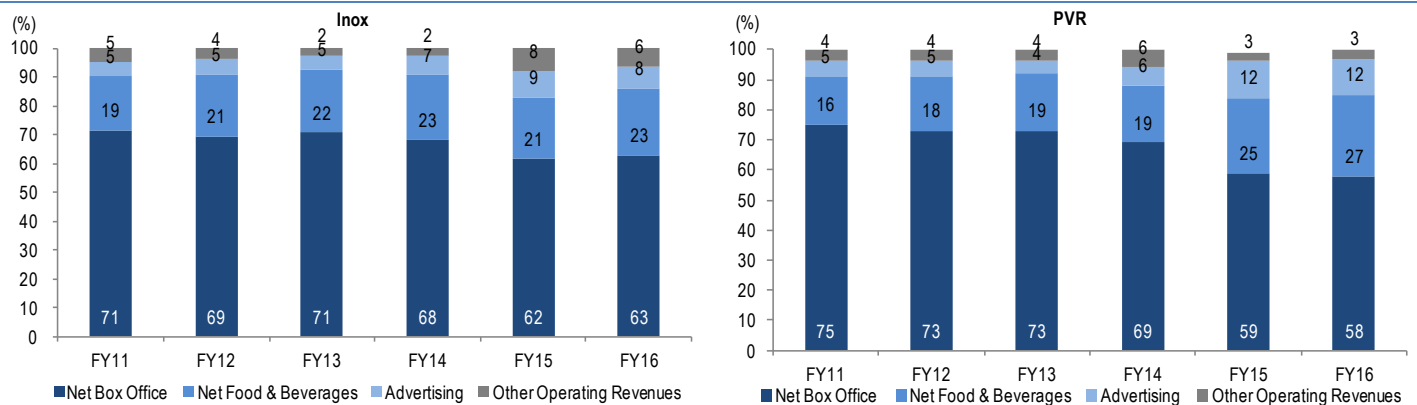
Exhibit 7: Capital employed in non-film exhibition business and EBIT earned by PVR



Note: CE stands for Capital Employed

Source: Companies, Nirmal Bang Institutional Equities Research

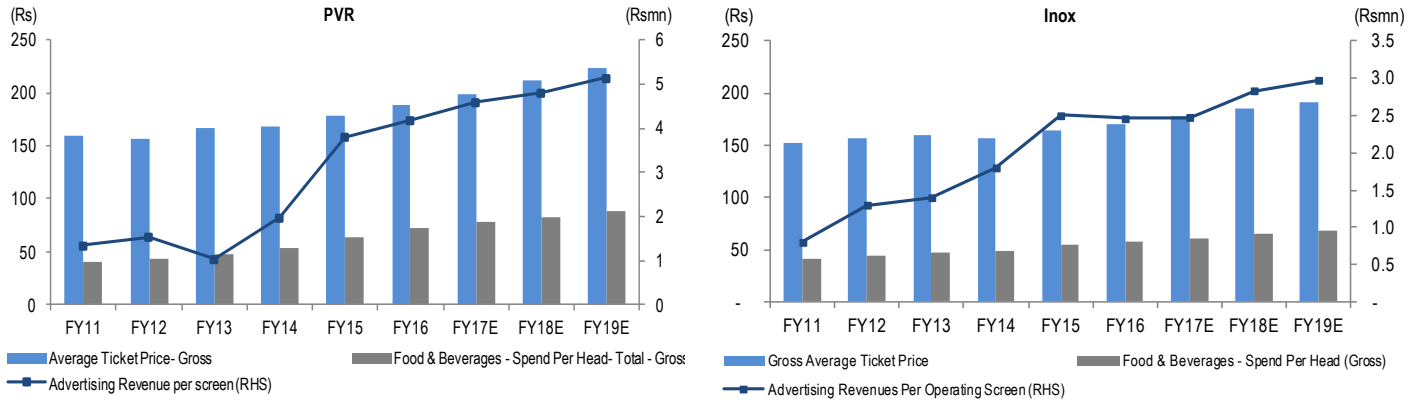
Exhibit 8: Revenue mix skewed towards box office-numbers but has become margin richer over the years



Source: Companies, Nirmal Bang Institutional Equities Research

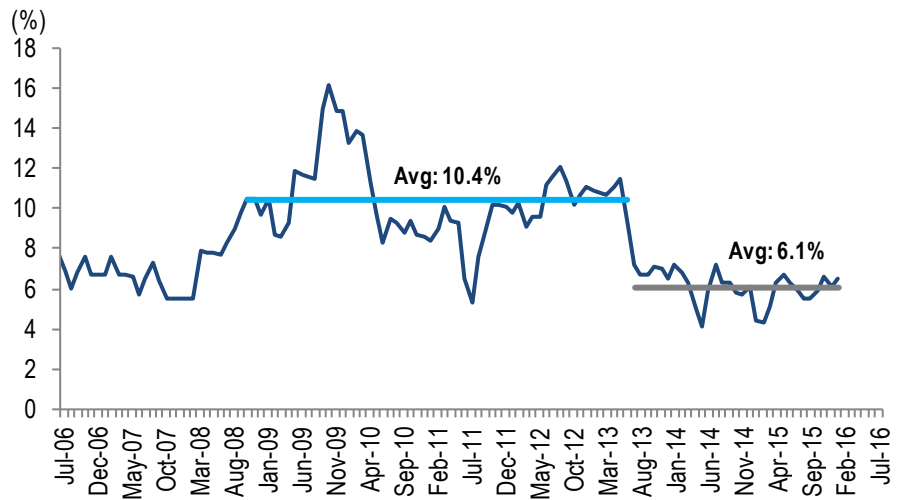
Note: PVR's numbers are based on standalone revenues

Exhibit 9: Improvement in pricing of tickets, F&B and advertising space/screen over the past several years



Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 10: Consumer Price Inflation over the last 10 years in India. It is settling lower



Source: Bloomberg, Nirmal Bang Institutional Equities Research

Standalone property economics very attractive- GST will enhance it

The economics of a single property in Indian multiplex industry (illustrated in Exhibits 11 to 13) shows the business is financially attractive as long as the capital invested per screen is not outrageously large. We have done one such study for a five-screen multiplex (increasingly the new properties have more than five screens) based on assumptions that are linked to the market currently. A list of assumptions is in Exhibit 11 below. The revenue mix and assumptions of the property are closer to PVR's metrics than that of Inox Leisure's. We have given examples of pre-GST and post-GST economics. GST will improve margins and RoIC (pre-tax EBIT/average capital employed excluding cash and cash equivalents) significantly even if one were to assume 22% as the revenue neutral rate.

Exhibit 11: A list of assumptions

Property	1
Screens	5
Capex/screen (INR mn)	25
Working Capital	-12% of sales
Security Deposit	3 months rent
Debt/Total capital Employed	50%
Seats/screen	237
Area per Seat (sq.ft) Built up	35.0
No of shows	5.3
Gross ATP (INR)	185
Gross F&B SPH (INR)	72
Advertising Rev/Screen	Rs4mn per screen
Ticket price CAGR (%) - for Year 2- Year 10	4.0%
F&B spend CAGR (%) - for Year 2- Year 10	6.0%
Advertising Revenue per screen CAGR (%) for year 2 - year 10	7.0%
Occupancy	24% in Year, 28% in Year 2, and 30% thereafter
Entertainment Tax	27% on Net Ticket Price
Distributors share	42% of Net Box office
COGS Net F&B	25.0%
Rent	Rs55./ Sq Ft+ service tax and growing at 4% pa
Depreciation	9% on Gross Block
Maintenance Capex	3% of total revenue in a year
Refurbishment Capex	40% of original capex in the 7th year

Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 12: Single property financial statements and ratios (pre GST)

(in Rs mn)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenues										
Ticketing revenue	80	97	109	113	117	122	127	132	137	143
F&B revenue	37	45	51	55	58	61	65	69	73	77
Advertising revenue	10	20	21	23	25	26	28	30	32	34
VAS Income	3	4	4	4	5	5	6	6	7	8
Total revenue	130	166	185	195	205	215	226	237	249	262
Expenses										
Film Hire (Distributor Share)	34	41	45	47	49	51	53	55	57	60
COGS on F&B	9	11	13	14	14	15	16	17	18	19
Lease Rental	31	33	34	35	37	38	40	41	43	45
Employee cost	12	13	14	15	17	18	19	21	23	24
Electricity Cost	14	13	13	13	13	13	13	13	13	13
Common Area Maintenance	10	11	12	13	13	14	15	16	18	19
Other Expenses	22	23	24	26	27	29	30	32	34	36
Total Expenses	132	145	155	163	170	178	187	196	206	216
EBITDA	(2.1)	22	30	32	34	36	39	41	44	47
Depreciation	11	11	12	12	13	13	16	18	19	20
EBIT	(13)	10	18	20	21	23	23	23	25	27
Other income	0	1	1	2	2	3	2	1	2	3
Interest Expense	7	6	5	3	2	1	0	-	-	-
PBT	(20)	5	14	16	19	22	23	23	25	27
Taxes (@34%)	(7)	2	5	6	6	7	8	8	8	9
PAT	(13)	3	9	11	13	14	15	15	16	18
<i>Dividend payout</i>	-	-	-	1	3	6	9	15	16	18
Balance Sheet										
Equity	54	57	66	76	86	94	100	100	100	100
Debt	57	47	37	27	17	7	-	-	-	-
Total Capital Employed'	111	104	103	103	103	101	100	100	100	100
Gross Block	125	127	133	139	145	151	201	209	216	224
Net Block	114	105	99	92	86	79	113	102	90	78
Security Deposit	7	7	7	7	7	7	7	7	7	7
Working Capital (-12% of sales)	(16)	(20)	(22)	(23)	(25)	(26)	(27)	(28)	(30)	(31)
Cash	6	12	19	27	35	41	8	20	33	47
Total Assets	111	104	103	103	103	101	100	100	100	100
Capital Employed ex cash	105	92	83	76	68	60	93	80	67	54
Profitability Ratios (%)										
<i>RoCE</i>	(11)	10	18	19	21	23	23	23	25	27
<i>RoE</i>	(22)	6	15	15	16	16	15	15	16	18
<i>RoIC (Pre Tax)</i>	(11)	10	21	25	30	36	30	26	34	44.6
Growth (%)										
<i>Revenue</i>	-	28	11	5	5	5	5	5	5	5
<i>EBITDA</i>	-	(,1134)	39	7	7	7	6	6	6	6
<i>PAT</i>	-	LP	198	19	16	15	3	1	9	8
Margins (%)										
<i>EBITDA</i>	(1.6)	13.0	16.2	16.5	16.7	17.0	17.2	17.4	17.6	17.8
<i>EBIT</i>	(10)	6	10	10	10	11	10	10	10	10
<i>PAT</i>	(10)	2	5	6	6	7	7	6	7	7
<i>Dividend payout ratio (%)</i>	-	-	-	10	20	40	60	100	100	100

Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 13: Single property economics with GST at 22%

(in Rs mn)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenues										
Ticketing revenue	84	102	113	118	123	127	133	138	143	149
F&B revenue	32	39	44	47	50	53	56	59	63	67
Advertising revenue	10	20	21	23	25	26	28	30	32	34
VAS Income	3	4	4	4	5	5	6	6	7	8
Total revenue	128	164	183	192	202	212	222	234	245	258
Expenses										
Film Hire (Distributor Share)	35	43	47	49	51	53	55	58	60	62
COGS on F&B	8	10	11	12	12	13	14	15	16	17
Lease Rental	27	28	30	31	32	33	35	36	37	39
Employee cost	12	13	14	15	17	18	19	21	23	24
Electricity Cost	12	13	13	13	13	13	13	13	13	13
Common Area Maintenance	9	10	10	11	12	13	13	14	15	16
Other Expenses	19	20	21	22	24	25	27	28	30	31
Total Expenses	123	137	147	154	161	168	176	185	194	203
EBITDA	6	28	36	39	41	43	46	49	52	55
Depreciation	11	11	12	12	13	13	16	18	19	20
EBIT	(5)	16	25	26	28	30	30	30	33	35
Other income	0	0	0	1	2	4	4	3	4	5
Interest Expense	6	4	2	0	-	-	-	-	-	-
PBT	(12)	12	23	26	28	30	30	30	33	35
Taxes (@34%)	(4)	4	8	9	10	10	10	10	11	12
PAT	(8)	8	15	17	19	20	20	20	22	23
DIVIDEND PAY OUT	-	-	-	1.7	3.7	8.0	20.0	20.1	21.6	23.1
Balance Sheet										
Equity	59	68	83	98	113	125	125	125	125	125
Debt	47	27	7	-	-	-	-	-	-	-
Total Capital Employed'	106	95	90	98	113	125	125	125	125	125
Gross Block	125	127	133	139	145	151	201	208	216	223
Net Block	114	105	99	92	85	78	113	101	90	78
Security Deposit	7	7	7	7	7	7	7	7	7	7
Working Capital (-12% of sales)	(15)	(20)	(22)	(23)	(24)	(25)	(27)	(28)	(29)	(31)
Cash	1	2	6	22	45	65	32	45	58	71
Total Assets	106	95	90	98	113	125	125	125	125	125
Capital Employed ex cash	105	92	84	76	68	60	93	80	67	54
Profitability Ratios (%)										
RoCE	(4)	16	27	28	27	25	24	24	26	28
RoE	(12)	13	20	19	18	17	16	16	17	19
RoIC (Pre Tax)	(4)	17	28	33	39	47	40	35	44	58
Growth (%)										
Revenue	-	28	11	5	5	5	5	5	5	5
EBITDA	-	373	31	6	6	6	6	6	6	6
PAT	-	LP	83	14	9	7	0	1	7	7
Margins (%)										
EBITDA	4.6	16.9	19.8	20.1	20.3	20.5	20.7	20.9	21.1	21.2
EBIT	(4.2)	10.0	13.4	13.7	14.0	14.2	13.6	13.0	13.3	13.6
PAT	(5.9)	5.0	8.2	8.9	9.2	9.4	9.0	8.6	8.8	9.0
Dividend Payout ratio (%)	-	-	-	10	20	40	100	100	100	100

Source: Companies, Nirmal Bang Institutional Equities Research

Capex per screen is a key variable

Among the critical drivers of good economics in this business is capex/screen. As long as the number remains reasonable (Rs20mn-Rs30mn per screen, on an average) we believe RoICs post three years of stabilisation will definitely beat cost of capital and the numbers will keep improving as the years pass by, driven by mild improvement in margins (revenue mix and operating leverage-driven) and more importantly a decline in invested capital per screen. This is despite investing in maintenance capex every year and a substantial refurbishment capex in the 6-8th year at 40% of original capex.

What we see is a business which has the capacity to throw up significant amount of cash once it acquires maturity. We see few risks (beyond content) to this cash flow because of high entry barriers and oligopolistic industry structure, which we believe, will lead to steady pricing power.

As long as the growth is organic and is at a comfortable pace, we believe internal accruals of a company should largely fund expansion. However, faster organic growth or a large M&A transaction potentially requires higher capex and capital infusion.

Revenue mix impacts margins

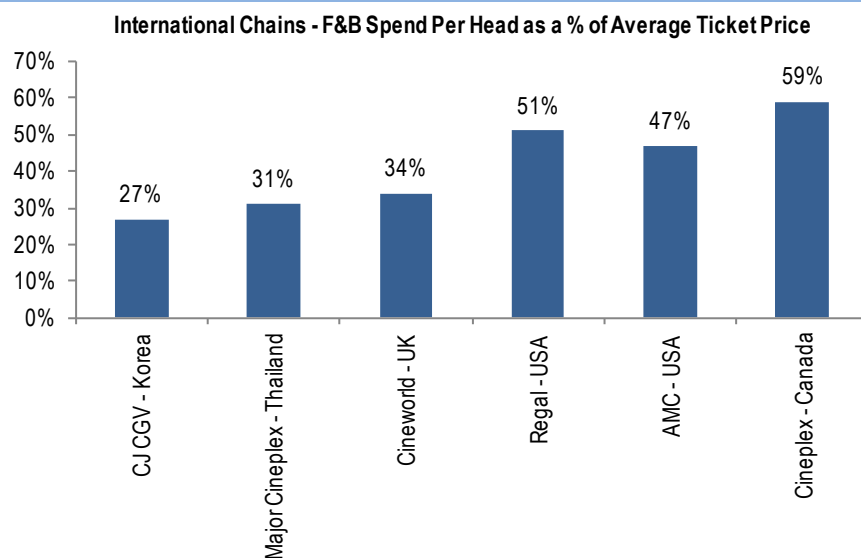
While box office revenues continue to dominate, the share has been moving down over the years with both F&B and advertisement revenues taking a larger share of the mix. This helps increase asset turns and also in improving gross margin. F&B and advertisement generate gross margin of ~75% and ~95%, respectively, against ~55% of box office. There is scope to gradually move up to a richer revenue mix in the coming years which will continue to drive margin expansion. To cite an instance, F&B sales have been as high as 50% of average ticket price in other parts of the world (see Exhibit 14).

Exhibit 14: How revenue mix and maturity of screens affects margins and return ratios

(%)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Ticketing revenue	62	59	59	58	57	57	56	56	55	54
F&B revenue	28	27	28	28	28	29	29	29	29	30
Advertising revenue	8	12	12	12	12	12	12	13	13	13
Other Operating Revenue	2	2	2	2	2	2	3	3	3	3
EBITDA Margin	(1.6)	13.0	16.2	16.5	16.7	17.0	17.2	17.4	17.6	17.8
ROIC (Pre Tax)	(11)	10	21	25	30	36	30	26	34	45

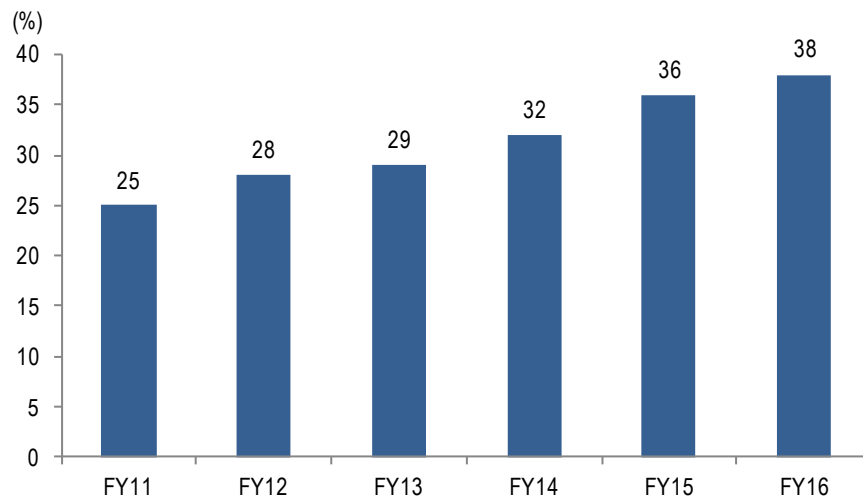
Source: Nirmal Bang Institutional Equities Research

Exhibit 15: SPH versus ATP for various international players



Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 16: F&B spend per head as percentage of ATP for PVR



Source: PVR, Nirmal Bang Institutional Equities Research

Occupancy rate is key driver of margins

Occupancy rate is key variable driving revenue, margins, earnings and return ratios. In our proforma model, we have assumed, for instance, that the property occupancy rate will not be more than 30% through its life. Over FY11-FY16, PVR's average occupancy rate was 33.6% and Inox Leisure's was at 27%. The reason behind taking a lower occupancy rate is in order to be realistic about what the industry could do with the slow pace of real urban income growth one sees in the Indian context which will not lead to a steep jump in propensity to watch films. Therefore, even if we assume a modest 10% CAGR in multiplex screens, it is quite possible that there is going to be some cannibalisation of footfalls from older screens. We have also taken into consideration that over the next 10 years there is likely to be some impact of OTT (over the top) content on the film exhibition sector. Should the occupancy rate stay at 35% level, we expect RoIC to rocket to 84% by year 10. Every one percentage point improvement in occupancy results in 130bps improvement in EBITDA margin.

Exhibit 17: Sensitivity of EBITDA margin and RoIC to occupancy rate

(%)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Base Case Scenario										
Occupancy	24	28	30	30	30	30	30	30	30	30
EBITDA margin	(1.6)	13.0	16.2	16.5	16.7	17.0	17.2	17.4	17.6	17.8
Pre Tax ROIC	(11.2)	10.4	20.9	24.9	29.8	36.1	30.1	26.5	33.8	44.6
Increase in occupancy by 1 percent point										
Occupancy	24	28	30	31	31	31	31	31	31	31
EBITDA margin	(1.6)	13.0	16.2	17.8	18.0	18.3	18.5	18.7	18.9	19.1
Pre Tax ROIC	(11.2)	10.4	20.9	29.4	35.1	42.4	35.5	31.5	39.9	52.3
Increase in occupancy by 5 percent point										
Occupancy	24	28	30	35	35	35	35	35	35	35
EBITDA margin	(1.6)	13.0	16.2	22.4	22.6	22.8	23.0	23.2	23.3	23.5
RoIC (Pre Tax)	(11.2)	10.4	20.9	47.9	57.3	68.0	57.7	51.8	64.7	83.6

Source: Companies, Nirmal Bang Institutional Equities Research

Pricing has been steadily moving up across most revenue categories

The oligopolistic industry structure (monopolistic in some micro markets) has led to a situation where players have been able to take steady increase in prices across various revenue categories. Exhibit 9 indicates the price increases that have been taken by PVR and Inox Leisure in each of their key revenue categories – tickets, F&B spending per head and advertisement revenue/screen – over the years. In the latter two, there is an element not just of pricing but also of better customer conversion and higher use of both on-screen and off-screen inventory. These price hikes have not only helped offset the steady increase in input costs, but also helped margins. We have not made any aggressive assumptions on ATP or SPH growth in our financial projections.

Against 3.3%/12.5% CAGR in ATP (gross)/SPH (gross) over FY11-FY16 for PVR, for instance, we are assuming a CAGR of 6%/7.3% over FY16-FY19E. The gross ATP growth might look at tad aggressive but the FY14-FY16 CAGR has been 5.8%. We think ATP growth would benefit from real income growth. In fact, part of 7% SPH growth that we have assumed stems from a higher conversion of patrons into F&B buyers (currently the number is a third, based on industry commentary).

Some costs are semi-variable leading to operating leverage

The share of exhibitor from net box office revenues (post entertainment tax) and direct costs connected with F&B are completely variable. Most of the other costs – employee costs, rent, electricity, security, housekeeping, etc - are semi-variable in nature and greater the occupancy and better the revenue mix, there can be improvement in margins. Obviously, when we load corporate office costs and the fact that companies are perpetually in a state of expansion, margins and RoIC decrease at the corporate level.

Maturity of the portfolio is a critical factor driving margins and RoIC. Data in our models suggest that by end of FY17E, about 80% of both PVR and Inox screens would have been more than 2 years old.

The other element one needs to consider is the fact that there are screens that have Entertainment tax exemption (partial and full) because of incentives provided by various state governments. These constitute 17% and 13% of the total screens as of 1QFY17 for PVR and Inox respectively. The exemptions will likely run out over a period exceeding 2 years. This could put some pressure on margins. But by then we expect the revenue mix to be lot richer and the benefits of GST to kick in which should counter the impact of this situation.

Rent is a critical component of the cost structure – we expect moderate growth here

With location being a very critical ingredient of success to this business model, lease rentals in malls (where almost all of these screens are located) would be decisive to business economics. Currently PVR (which follows a completely leased model) pays about 17-18% of its total revenue as rent. The long term lease rental agreements signed (10-25 years) typically have an escalation clause involving increase in rents by 12%-15% every three years (4%-5% annual increase approximately). When renewal comes up we believe there could be reset of the rentals to market rates. We do not see renewals as a big threat to the cost structure of the companies. It has been the rare case that an exhibitor has been replaced. The theaters in malls tend to be anchor tenants and magnets for consumers and tend to get a large discount over the prevailing rentals to keep them viable. Most mall operators tend to stick to the same film exhibitors if the experience has been good and the rental bids are competitive. Inox's rental cost is 13.5%-14% of its revenue. This difference in rental costs between PVR and Inox is because the latter owns six properties. Also it is reflective of the fact that Inox does not have the most premium locations geographically or even with in cities where it is present (see Exhibit 74 and 75).

Exhibit 18: How RoCEs move based on maturity of the portfolio and on corporate overheads

PVR in FY16 (%)	Property Level	Corporate Level
	RoCE	RoCE
Properties > 2 years	31.2	24.0
Properties < 2 years	10.8	8.2
Operational properties -total	27.4	21.1
Total	23.7	18.3

Source: PVR, Nirmal Bang Institutional Equities Research

Industry is not as capital intensive as is made out by the street

A good number of investors on the street believe that this business is capital intensive and that exhibitors will have to keep pumping in money into a business that will not deliver a return that will beat cost of capital. Optically the return ratios have been poor because of various reasons that we alluded to in the earlier part of the report. As we indicated in the study of single property economics, this is an attractive business. Even if some of the variables like rent or other costs escalate at a slightly faster pace than what we have assumed, we believe the business still makes sense. May be RoICs in the 10th year may not be in the 40s but if the property can deliver 20%-25% it would have still done its job.

While the industry is fixed-asset intensive in the initial phase as the screens take time to stabilise in terms of revenue and margins, as years pass by the capital employed in the business keeps going down despite maintenance and refurbishment capex. Besides, this business has a negative working capital cycle which throws up significant amount of cash. Payments by customers (except for advertising revenues we guess) are made in cash and payments to vendors can be with a lag, leading to negative working capital. A study of the working capital situation and the fixed asset turnover of both PVR and Inox Leisure is given in Exhibit 19. We expect this situation to continue going forward as well. We are keeping security deposits made to mall operators outside of working capital as these are very long-term payments and almost akin to capex. The leases with mall operators can run for a period of 9-25 years, depending on the player and the mall operator.

Exhibit 19: Fixed Asset Turnover and Working capital situation - PVR

	FY11	FY12	FY13	FY14	FY15	FY16	FY17E	FY18E	FY19E
Fixed Asset Turnover (x)	1.0	1.0	0.8	1.0	1.2	1.4	1.3	1.3	1.4
Working Capital as %age of sales	(5)	(13)	(22)	(22)	(14)	(12)	(12)	(12)	(12)

Fixed Asset Turnover and Working capital situation - Inox

	FY11	FY12	FY13	FY14	FY15	FY16	FY17E	FY18E	FY19E
Fixed Asset Turnover (x)	0.8	1.2	1.2	1.0	1.1	1.3	1.4	1.3	1.4
Working Capital as % age of sales	27	(11)	(21)	(18)	(14)	(11)	(12)	(12)	(12)

Source: Company, Nirmal Bang Institutional Equities Research

Single property economics suggests very high fixed asset turnover ratios in future years leading to high ROIC

Exhibit 20 indicates the steady increase in fixed asset turnover of a single screen. While the net fixed capital invested in the screen decreases as accumulated depreciation rises, EBIT per screen keeps improving leading to very high RoICs. This is situation obviously is aided by cash generated from negative working capital.

Exhibit 20: Single properties have high fixed asset turnover ratios over time

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Fixed Asset Turnover (x)	1.1	1.6	1.9	2.1	2.4	2.7	2.0	2.3	2.7	3.3
Revenue Per screen (Rsmn)	26	33	37	38	40	42	44	47	49	52
EBITDA per screen (Rsmn)	1	6	7	8	8	9	9	10	10	11
EBIT per screen (Rsmn)	(1)	3	5	5	6	6	6	6	7	7

Source: Company, Nirmal Bang Institutional Equities Research

GST will be a big driver of margins and RoIC

One of the near-term earnings catalysts is implementation of GST. This will positively impact margins by as much as 200bps-400bps depending on the revenue neutral rate (18%-22% range is widely discussed). Even if we take 22% as the neutral rate (we have assumed that in the base case for FY18) earnings can rise by 34% for PVR - based on FY16 numbers - from pre-GST level. At the box office revenue level, what this does is to increase net revenues that flow to exhibitor as the current average entertainment tax rate (on pan India basis) is ~24%-27%. Of course, the exhibitor's share also goes up. Net net, it benefits the company. However, on F&B this could lead to lower net revenue flow as the current VAT on F&B is 8%-10% and it will rise to 22%. A big benefit that the companies will have under the GST regime is the set-off of tax payments on services like lease rentals, security, housekeeping, etc. This could be to the tune of 320bps-430bps. As the revenue neutral keeps rising, in our analysis we believe the net negative impact from ticketing and F&B can eat into the set-off of tax payments leading to lower benefits than expected. At 26% GST rate for instance, companies have no benefits whatsoever as the loss on F&B margin begins to hurt even the tax credits.

Exhibit 21: Impact of GST on earnings example based on FY16 numbers of PVR

PVR (in INR mn)	FY16	At 18%	At 20%	At 22%	At 26%
		Post GST	Post GST	Post GST	Post GST
		FY16	FY16	FY16	FY16
On Box Office Gross Margin					
Gross Ticket Sales	12,832	12,832	12,832	12,832	12,832
Entertainment Tax on Net Ticket Price - 26.5% in FY16 actual	2,688	1,797	2,015	2,220	2,618
Net Box office	10,144	11,036	10,818	10,612	10,214
Exhibition Cost (Distributor share) - 42.7%	4,328	4,712	4,619	4,531	4,362
Gross Margin post distributor share	5,816	6,323	6,198	6,081	5,853
On F&B Gross Margin					
Gross F&B Revenue	5,040	5,040	5,040	5,040	5,040
VAT	373	840	932	1,023	1,210
Net F&B Revenue	4,667	4,200	4,108	4,017	3,831
F& B cost	1,162	1,162	1,162	1,162	1,162
Gross Margin on F&B	3,505	3,039	2,946	2,856	2,669
Gross Margin (%)	75	72	72	71	70
Total Gross Margin on Tickets and F&B	9,322	9,362	9,145	8,936	8,522
Expenses (including Service taxes that cannot be set off)	7,111	-	-	-	-
Expenses before Service taxes	6,315	6,315	6,315	6,315	6,315
Service Tax that can be set off	796	-	-	-	-
Gross Margin With Tax Credits	9,322	10,158	9,940	9,732	9,318
Net Sales					
Net Box office	10,144	11,036	10,818	10,612	10,214
Net F&B Revenue	4,667	4,200	4,108	4,017	3,831
Advertising Revenue	2,066	2,066	2,066	2,066	2,066
Other Revenue	520	520	520	520	520
Total Net Sales	17,397	17,822	17,511	17,215	16,631
Growth (%)					
Exhibition Cost (Distributor Share)	4,328	4,712	4,619	4,531	4,362
Food & Beverages Cost	1,162	1,162	1,162	1,162	1,162
Employee Benefits Expense	1,686	1,686	1,686	1,686	1,686
Other expenses	7,111	6,315	6,315	6,315	6,315
Total Expenses	14,286	13,874	13,781	13,694	13,524
EBITDA	3,111	3,947	3,730	3,522	3,107
Growth (%)					
% of sales	17.9	22.1	21.3	20.5	18.7
Depreciation & Amortization	1,086	1,086	1,086	1,086	1,086
EBIT	2,025	2,862	2,644	2,436	2,022
% of sales	12.3	16.1	15.1	14.1	12.2
Other income (net)	262	262	262	262	262
Interest	833	833	833	833	833
Exceptional Item	62	62	62	62	62
PBT	1,392	2,290	2,073	1,865	1,450
PBT margin (%)	8.0	12.9	11.8	10.8	8.7
Tax	250	412	373	336	261
Effective tax rate (%)	18	18	18	18	18
Net profit	1,142	1,878	1,700	1,529	1,189
Growth on FY16 actual PAT (%)	-	64	49	34	4
Growth on FY16 actual EBITDA (%)	-	27	20	13	0
Average invested Capital	12,263	12,263	12,263	12,263	12,263
RoIC (%)	16.5	23.3	21.6	19.9	16.5

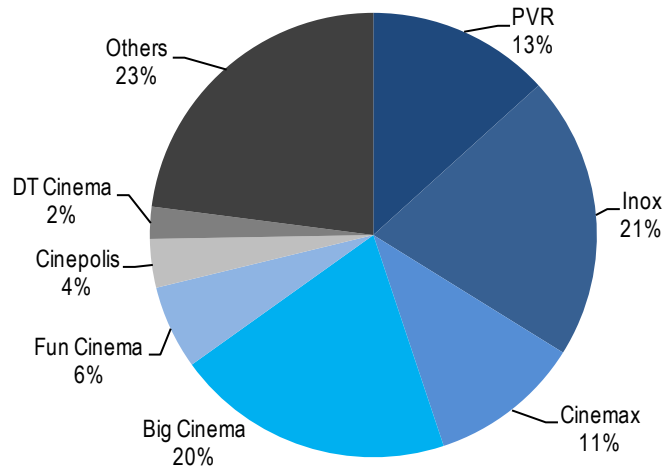
Source: Company, Nirmal Bang Institutional Equities Research

Oligopolistic consumer business

Consolidation has happened...

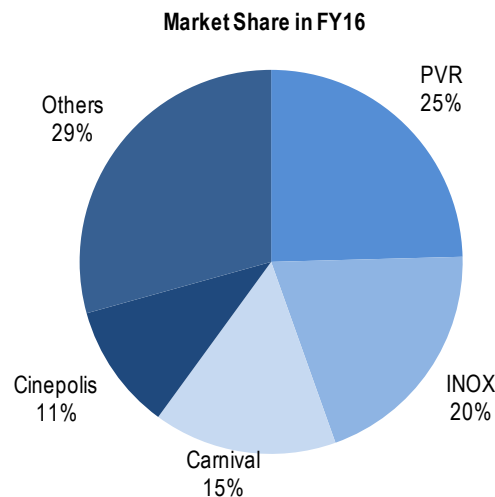
From a fairly fragmented multiplex industry just 4 years ago (see Exhibit 22), a series of M&A transactions (Exhibit 24) and some solid organic growth has led to Top 4 players having 70% share of multiplex screens in India. Prospects of further market share gain through organic growth exists (though further M&A is not completely ruled out) as the Top 4 seem to have a stranglehold over the mall space that is coming up in the country. Within the Top 4, PVR and Inox Leisure are best placed to increase their market share further, both organically and inorganically, and seem to have entered a kind of virtuous cycle with internal cash flow and network effect coming into play.

Exhibit 22: Fragmented Multiplex industry in FY12 – in terms of screens



Source: Media, Companies, Nirmal Bang Institutional Equities Research

Exhibit 23: A more consolidated industry in FY16



Source: Media, Companies, Nirmal Bang Institutional Equities Research

...as diversified players have quit the industry

Some of the early players in the industry got in largely because it was a related diversification to their real estate business – Kanakia, DLF and HDIL which owned Cinemax, DT Cinema and Broadway Cinema respectively. Others entered because they were in the media business – Reliance Media Works (which owned Big Cinema), the Network 18 group (which owned Star Gaze Entertainment) and Zee group (which owned Fun Cinemas) being key examples. PVR has been a film exhibition player to start with and had set up the first multiplex in the country. Inox group is a diversified group with interests in industrial gases, chemicals, refrigerants and alternative energy.

Expensive M&A skews the returns picture

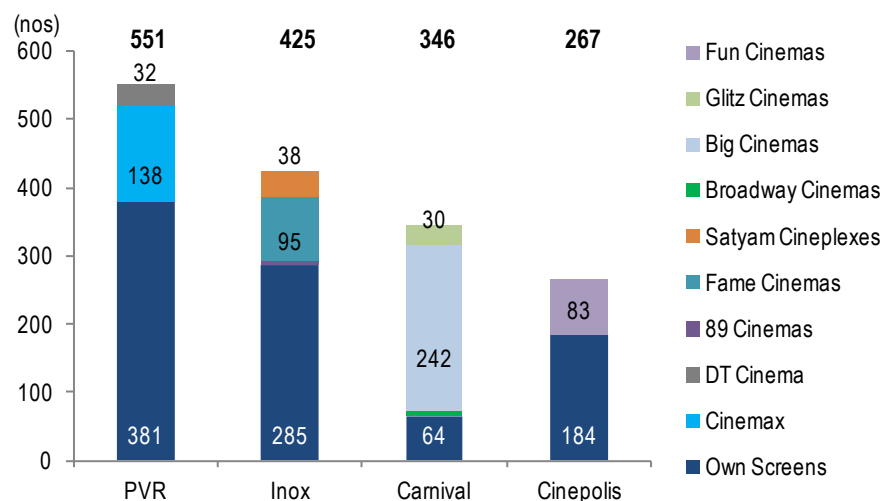
If we plug in Rs60m per screen in the single-property model (with broadly the same business parameters in terms of ATP, SPH, revenue mix and occupancy rate) the return ratios move lower significantly. It is this that certain companies have faced as a problem over the past five to six years when the industry went through a consolidation phase. Of the ~1500 screens that Top 4 players have currently, about 40% have been purchased over the past 6 years. See some of the M&A transactions done in the last few years and also the addition of screens by each player in Exhibit 24 and 25.

Exhibit 24: M&A transactions done in the past decade and valuation of these transactions

Acquirer	Target	Year	Target Screens	Target EV (Rsmn)	EV/Screen (Rsmn)	Comments
PVR	DT Cinemas	2016	32	4,330	1,350	The acquisition was previously attempted in 2009
Carnival Films	Stargaze	2015	30	900	30	-
Carnival Films	Big Cinemas	2014	242	7,100	29	Country's largest multiplex deal
Cinepolis	Fun Cinemas	2014	83	4,800	58	-
Inox	Satyam	2014	38	2,400	63	Inox's attempt to improve presence in Northern India - a weak spot for it
Carnival Films	HDIL	2014	10	1,100	110	-
PVR	Cinemax	2012	138	5,700	41	Game Changer, PVR becomes the largest player in number of screens, relegating Inox to second spot
Inox	Fame	2010	95	2,415	25	-

Source: Media, Companies, Nirmal Bang Institutional Equities Research

Exhibit 25: Organic and Inorganic addition of screens by various players



Source: Media, Companies, Nirmal Bang Institutional Equities Research

Industry consolidation is largely done: Cinepolis is an unknown

With most worthwhile properties already acquired, we believe the consolidation from here on will be slow. The only risk to this assumption is a possible exit from India of Cinepolis (a Mexican multinational in the film exhibition business, see profile in the Annexure) which we believe could throw in the towel after having been unsuccessful in scaling up, despite being in India for more than eight years. Unless Cinepolis is willing to take a big bet on India and buys one of the Indian companies (PVR/Inox Leisure) we believe it will be relegated to being an also ran. Currently, it has ~267 screens (see Exhibit 25). These properties are mostly quality ones and could fetch rich multiples. Any acquisition by either PVR or Inox Leisure of Cinepolis's screens may lead to short-term dilution of return ratios of the acquirer, although it will be positive from a five-plus year stand point for the industry, especially if GST kicks in. The other strategy that Cinepolis could adopt is to be extremely patient by putting up cineplexes in Tier-2 and Tier-3 cities and wait for these cities to grow bigger over a period of time. There are other players in the market (most of which are regional ones), but we understand from our discussions with industry that these may not be attractive candidates because of their poor locations within the cities where they operate and do not have EBITDA margin that they claim to have if all costs are loaded and thus valuations demanded are stretched.

Consolidation benefits will see this phase through; GST will also ease the pain

With consolidation happening in the infancy of the industry, we believe benefits in terms of steady pricing power in all aspects of the business will far outweigh the price that has been paid by companies. As organic growth picks up (and opportunities for consolidation wane), the adverse effects of such large pay-outs will diminish over time and the benefits of better pricing power will show through. Over time, organic growth of screens will far outweigh the acquired screens. The implementation of GST, in our view, will also lower the pain that companies have been going through as they increase margins by 200bps-400bps.

Location is a key success factor -the top two have cornered all worthwhile space

With location (and its quality) being a very critical component to success of the multiplex business, we believe that PVR and Inox Leisure have a stranglehold on most key retail real estate properties in the country. Various industry studies indicate that an average Indian in metro cities does not want to travel more than 5-7km to enjoy this form of entertainment.

Wanda Cinema is a possible new entrant- could strengthen industry structure

We believe the talk of Wanda Cinema (a very large player from China with ~6,000 screens under its belt currently in China and ~16,500 globally, see Annexure for a profile on the company) entering India should not disturb the current position. An organic entry into India looks unlikely as getting locations will be difficult and it might land up being in a worse shape than Cinepolis. An entry by buying out an existing player does exist- and we believe it will make sense only if it acquires PVR or Inox Leisure. Buying Cinepolis only will not help its cause and we believe Carnival is more of a Tier-2 player in the market (though it could be an additional candidate). Wanda's entry into the market will not change the industry's oligopolistic structure. Once it comes (possibly at steep valuation multiples) we do not think it will get into mindless competition by hiking lease rentals or undercutting on ATP and SPH. In fact, an acquisition of either PVR or Inox Leisure at current market prices or higher is actually going to be good for fundamentals of the industry in the long run as Wanda will keep ATP and SPH high to recover its investments.

Oligopoly has helped retain modest pricing power

Oligopoly (and in many micro-markets a monopoly) gives pricing power. The limited and slowly expanding middle class (8%-11% of households, according to some estimates, expanding slower than anybody's liking) is the prime consumer of this form of entertainment and cannot pay beyond a certain ticket price or afford certain F&B spending per head. However, within this limit we believe players like PVR and Inox Leisure can push the envelope and go for modest price hikes and not be too bothered about losing share to competition. We believe this pricing power helps deliver steady revenue and earnings growth as well as a good RoIC over multiple years. It is visibility in earnings compounding that this oligopolistic situation brings should lead to better valuation multiples for listed players.

It is monopolistic in certain micro markets

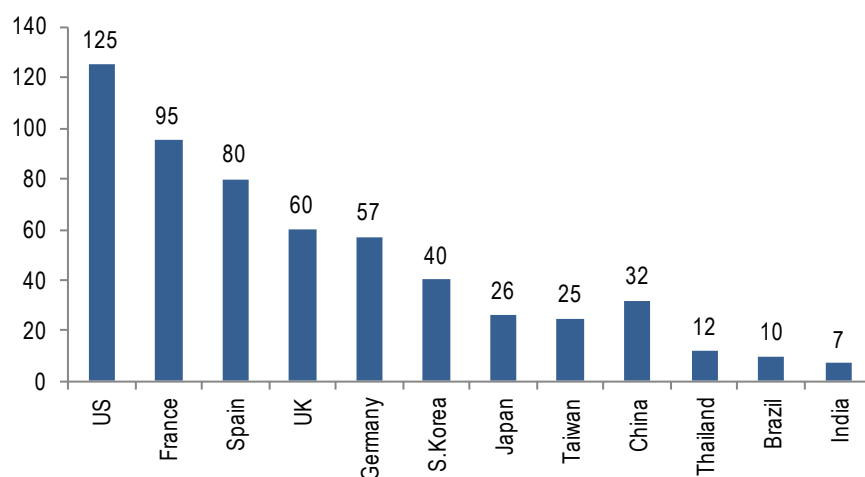
As this business is connected with location, there are geographical micro markets where because of absence of mall space (following high real estate prices) there tends to be a monopolistic situation – In Mumbai, one such is Nariman Point area (which favours Inox Leisure) and the other is Lower Parel area (which favours PVR). Ticket prices at properties in these locations compared to neighboring regions are many notches higher. Admittedly, they will compensate for the likely higher rentals and capex put into those screens.

Indian multiplex industry is in its infancy

India is under-screened despite producing the most number of movies in a year

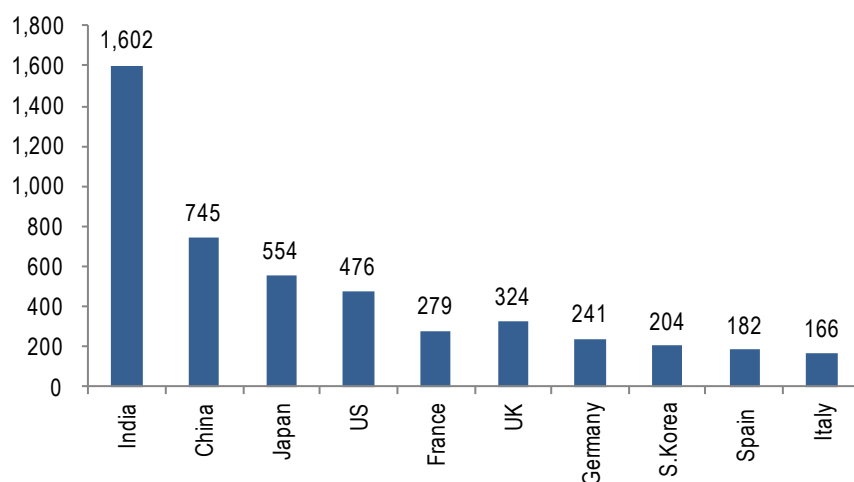
The extent of underinvestment in Indian film exhibition space can be seen in Exhibit 26. India has only seven screens (both single and multiplex screens put together) per million of population and this despite producing the most number of movies in a year (Exhibit 27). If one were to look at just the multiplex screens, the number is ~1.6. This is in comparison to 30-35 for China and 125 for the US. The industry is therefore in its infancy. Compared to ~40,000 screens in the US and a likely ~38,000-40,000 screens in China by end of 2016 (most of which have been set up in recent years and have been fitted with the latest exhibition technology and are multiplexes), we believe there is significant head room for growth in Indian multiplex industry. This growth could potentially last for a couple of decades. If multiplex screens go from ~2,100 at the end of 2015 to 20,000 in 20 years, it results in a CAGR of ~12% which is what we believe the sector can deliver (we will explain why we cannot replicate the explosive growth of Chinese film exhibition business in a different section of the report) with its slow pace of urbanisation and reasonable growth in disposable income.

Exhibit 26: India has one of the lowest number of screens per million population



Source: Inox Leisure - Investor Presentation

Exhibit 27: India releases the highest number of movies in a year



Source: Inox Leisure - Investor Presentation

Multiplex screens for the relevant consuming population is quite high

We believe the population that can afford this kind of entertainment is not possibly more than 100m-150mn at the maximum in India. This number is based on Exhibits 31, 42, 43. Our calculations (Exhibit 28) show that on an average the number of visits to the multiplexes in a year by the relevant population is 2 – 3. There are two ways for the industry to grow, by getting more of the relevant population to watch movies (by expanding distribution and tapping into the relevant population in remote cities and making compelling content).

The other is a more long term growth driver which is expansion of the relevant population itself – which will happen as India grows and more importantly grows by keeping inflation under control. The visits per capita are exaggerated by the artificial expansion of relevant population through dynamic pricing of tickets. Prices in non-peak slots and in non premium locations are sometimes at 80% discount to the peak prices (see Exhibit 29). This helps in attracting customers from other income brackets.

Exhibit 28: The per capita visits to a multiplex by the relevant population is about 2-3 per year

Number of Screens	2,100	2,100
Relevant Population (mn)	100	150
Number of Screens per mn of relevant Population	21	14
Footfalls in PVR including the DT Cinema numbers (mn) (25% of screen share)	75	-
Total Footfalls in multiplexes per year (mn)	300	-
Range of the number of visits made by the relevant population	2-3 times in a year	

Source: Nirmal Bang Institutional Equities Research

Exhibit 29: Prices of tickets in peak and non peak slots on a Sunday in Mumbai's key multiplexes

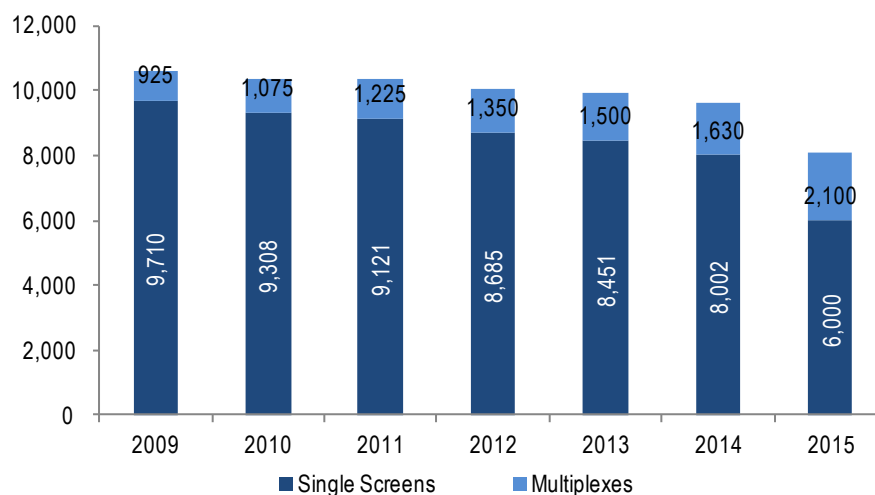
MS Dhoni - The Untold Story							
Ticket Prices (In Rs) - Sunday, 2nd October 2016							
PVR: Market City, Kurla							
Premiere:-	9:00 AM	12:00 PM	3:45PM				
Star	140	220	350				
Premier	150	230	370				
Gold	11:30 AM	3:15 PM					
	400	700					
PVR: Phoenix, Lower Parel							
	11:00 AM	2:45 PM	10:15 PM				
Star	170	220	270				
Premier	170	270	420				
Recliners	350	400	600				
Cinepolis: Viviana Malls, Thane							
	8:45 AM	10:40 AM	2:40 PM	4:45 PM	6:40 PM	8:45 PM	10:40 PM
Normal	150	160	230	220	260	240	260
Premium	190	200	270	260	300	280	300
Executive	170	180	250	240	280	260	280
INOX: R City, Ghatkopar							
	11:15 AM	3:00 PM					
Premium	180	370					
Platinum	170	350					
Gold	160	330					
BIG Cinemas: IMAX, Wadala							
	9:45 AM	11:15 AM	5:15 PM				
Platinum	140	200	300				
Gold	120	180	260				
Premium	160	220	350				

Source: Bookmyshow.com, Nirmal Bang Institutional Equities Research

Single-screen properties on the decline and multiplexes are gaining share from them

The number of screens in India has shrunk from 12,000 (in 2005 based on media reports) to about 8,000 currently. This is because the number of single-screens is contracting significantly while multiplexes are growing. We believe this has to do with economics. We believe the single-screen property owner is probably finding it difficult to justify remaining invested in the business because the opportunity costs have risen quite dramatically with the boom in both residential and office property prices in the past 10 years. Single-screen properties struggle with lower occupancy rate, making the business unviable. Malls, on the other hand, find it good to have multiplexes as anchor tenants to attract footfalls. Obviously, that comes with a price with the multiplex player being able to get concessional lease rentals (mostly at 50% discount to market rates) and very favourable lock-in terms.

Exhibit 30: Total number of screens contract while multiplex market share is on the rise



Source: Inox Leisure - Investor Presentation

Why are we conservative with 5%-10% volume/footfall growth?

While screen numbers can possibly grow at 12%, we believe footfall growth numbers are not going to rise in line. We believe there is bound to be a bit of cannibalisation as more screens come up. There are going to be equal number of new screens coming up in Tier-1 cities compared to Tier-2 and Tier-3 cities as the top two players want to keep the mix broadly the same. End of the day greater propensity to consume this form of entertainment at a higher price point exists largely in big cities. The catchment areas will become smaller as consumer behaviour dictates that within a certain price point and a certain cinematic viewing experience, travel time to the venue is of prime importance. Even our consumer survey (see Exhibit 100 in Annexure) points to that. Our consumer survey also indicates that most participants believe that this form of entertainment is not exactly very cheap. Thus, one of the constraints on growth will be the growth in the number of households with the kind of income necessary to become consumers of this service. Structurally, we believe this is going to be the biggest constraint on growth. Therefore, one has to be a patient investor in this business because income levels of the larger section of the population have to improve.

Why does India have so few multiplex screens?

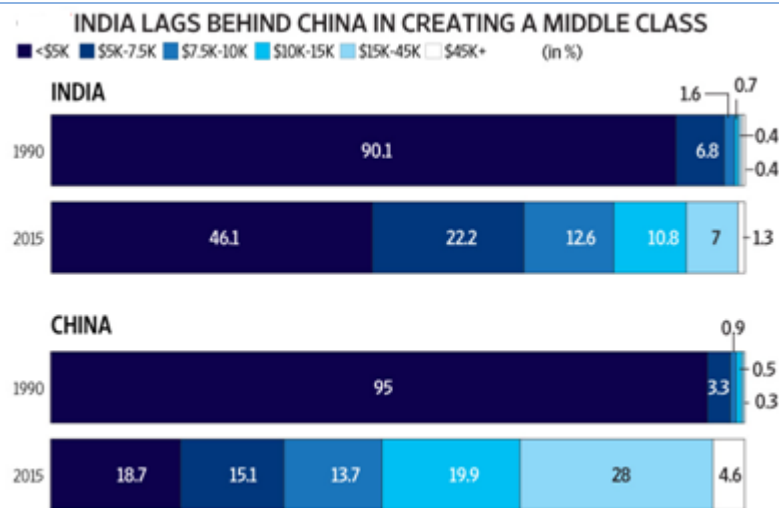
China has seen screen numbers and box office revenues explode from ~6,000 to ~32,000 and from US\$1.5bn to US\$6.8bn, respectively, over 2010 to 2015 (see Exhibit 110) driven by higher level of urbanisation (55% versus 34% of India) and a significantly larger number of higher income households. This is because of pent-up demand. The exhibition sector was late to catch up because of historical/political reasons. Indian film exhibition sector was not artificially constrained. For a brief study of Chinese film exhibition industry, please look at the Annexure. We do not expect India to follow the Chinese example. Low level of urbanisation, a very low number of households who can afford multiplex ticket prices, poor single-screen economics (which still constitutes about 75% of total screens in India), slow pace of mall development, cap on ticket prices in the relatively prosperous southern Indian states, etc have been constraining factors. We expect many of these problems to sort themselves out over the long run, but lead to moderate volume growth in the interim.

Middle to higher income household number is still fairly low:

Based on income data we believe the number of households with income greater than are 100m-150m in number (8%-11% of households). This is despite strong GDP growth in the past few decades. This is probably because we are coming off a small base from a GDP perspective. Only sustained real GDP growth in excess of 8% for a fairly long period of time could push up more households into this bracket in the foreseeable future. Keeping urban inflation low is critical. If urban households have their earnings sucked up in high food and real estate prices, then purchase of discretionary services will be constrained.

In comparison with China (this comparison is inevitable for the size of both populations and aspirations of the people), the performance of India in lifting household income beyond a certain threshold has been quite poor (see Exhibit 31). In 1990, the distribution of households between India and China was quite similar. However, over a 25-year time frame there has been a sea change in China. It is this dramatic increase in middle to high income households in China combined with rapid urbanisation (likely the two go hand in hand) is what led to explosive growth in box office revenues (and screens) in China (see Exhibits 31 and 32)

Exhibit 31: China has created a large middle class in the past 25 years, while India lags



Source: Joydeep Bhattacharya & Shyam Unnikrishnan. Bain & Company India, Livemint.com

Low level and slow pace of urbanisation

Only 34% of India’s population lives in urban areas where as this number is 55% in case of China (2015, World Bank statistics). Exhibit 32 also indicates that the pace of urbanisation, while being positive, will not pick up significantly unless there is a significant increase in GDP growth and that is driven by services and manufacturing.

A multiplex’s business economics works best when it is in a catchment area with a large population having good purchasing power. Market surveys done by industry players indicate that most consumers do not want to travel more than 5-7km to go to a multiplex, given the state of infrastructure development in urban areas in India. Multiplexes have to be located in malls and mall economics works only in urban areas with a certain amount of spending power. Urbanisation in India has been happening at a glacial pace (see Exhibit 32). In 1960, 18% of India’s population was living in urban areas where it is about 34% currently (2015, Source: World Bank). China, which had a number lower than that of India – 16% - in 1969, currently has 55% of it in urban areas. Based on studies conducted by CEIC, at the current pace, India will touch 50% of urbanisation only by 2050 – a painfully slow rate of growth.

Exhibit 32: Urbanisation in India has been painfully slow

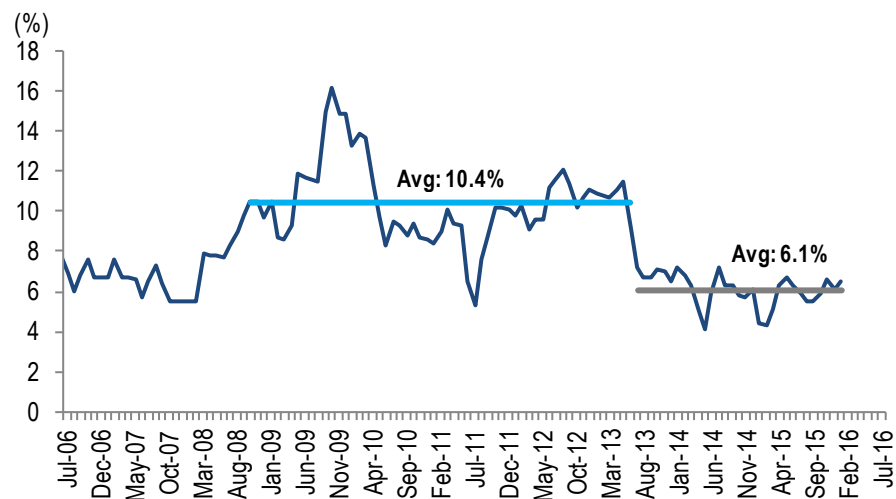


Source: CEIC, UN Population Division, The Economist

Urban real income has not really grown much because of high inflation

A study of urban inflation trends in the past 10 years (see Exhibit 33) indicates that urban consumers have been hit badly by high inflation in 2009-2013. This means that real disposable income in the hands of urban households may have been constricted despite reasonable nominal growth in salary levels (likely ~10%). Despite this constrained environment, the multiplex sector has been able to expand, achieve high occupancy level (relative to other countries) and has been able to take reasonable hikes in average ticket prices and F&B spending per head. But the very modest increase in Gross ATP in the FY11-FY16 period by just 3.3% for PVR indicates possible down trading by consumers who are watching movies in the same multiplexes at a cheaper time slot.

Exhibit 33: Urban inflation has been high for a long time and has moved down to tolerable levels only in the last couple of years

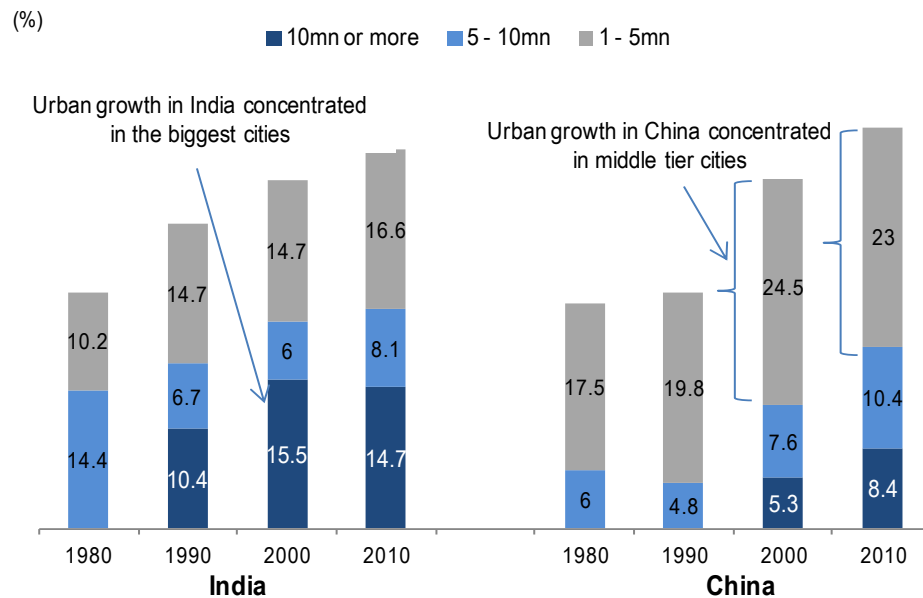


Source: Bloomberg, Nirmal Bang Institutional Equities Research

Urbanisation is not as well spread out as in China

Another problem with India's urbanisation is that it is not as well spread out as in China (see Exhibit 34). There have been fewer cities created as a larger part of the urban population has been concentrated in the mega cities (with population greater than 10mn each). Urban growth has been much more balanced in China with more cities being created. We believe the latter helps in keeping real estate prices down, leading to better real disposable income in the hands of urban consumers, lower lease rentals for tenants and higher footfalls. Such a situation would have been a better one for the development of the multiplex sector in India

Exhibit 34: Urbanisation in India is concentrated in mega cities (%age of population)



Source: United Nations

Mall development had slowed down but is poised for a pick-up

Most multiplexes are housed in malls where they are anchor tenants occupying 10%-30% of the mall area (a multiplex would occupy a larger part of a smaller mall). Thus, expansion of mall area nationally is very critical to development of the multiplex industry. In 2005, India had about 50 malls, which rose to 250 by 2010 and 542 in 2014. Based on real estate consultant JLL, India would have ~720 malls by the end of 2016. An economy of the size of China (~5x based on nominal GDP, 2015 numbers) has ~4,000 malls based on media reports. Modern retail in India is at nascent stage and represents only about 8% of retail. Also, modern retail is largely split equally between high streets and malls (see Exhibit 35).

Mall development has been hit badly because of the rough patch that Indian economy has been going through over the past three to four years and lack of meaningful real disposable income growth – due to high inflation (see Exhibit 33). The nascent industry has also been hit by the online shopping boom that took off as Flipkart, Snapdeal, Amazon, etc ate into market shares of apparel, footwear and other retailers through heavy discounts. Lack of footfalls into stores affected viability of malls. We believe this is a cyclical phenomenon and with the current low base of income and likely moderate income growth, mall space development will pick up. Based on media articles we believe this situation has already taken a turn for the better.

The industry screen addition will most likely fall short

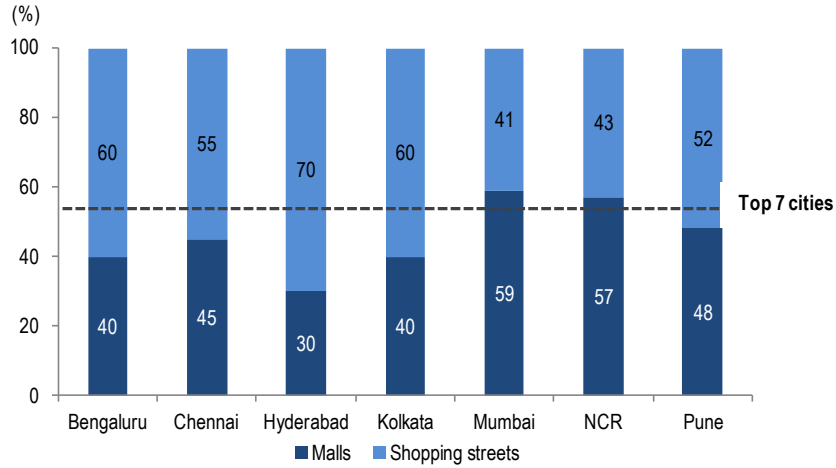
Based on pronouncements of large players in the industry, 200-225 multiplex screens are likely to be added every year for the next three years in aggregate. Assuming @8,500 sq ft per screen, about 1.7m-1.9m sq ft area is required for the industry to grow. This implies an increase in overall mall area of 8.5m-9.5m sq ft each year for the next three years (assuming that an average multiplex occupies 20% of a mall). We believe this kind of mall space addition is not on the cards. Most likely, players like PVR and Inox Leisure which are planning addition of 100-120 screens in aggregate every year, may be able to accomplish their goal whereas the others may fall short.

Mall development expected to turn around

After a protracted slump in mall development over the past four years (2011-15), real estate consultant JLL believes that interest is coming back with 7.9mn sqft of new mall space being added in 2016, almost double of that in 2015. Retail sentiment is better as discounts from online retail players have reduced and footfalls are back at the malls. Also, 100% FDI in single brand retailing has led to a good amount of interest from foreign brands in setting up shop in India. Some of the local sourcing norms, which were irritants for single-brand retailers, have also been relaxed (the time period for increasing local sourcing to 30% has been increased from five years to eight years). Most foreign brands who come in would like to be located in malls, in our view rather on fashion high streets.

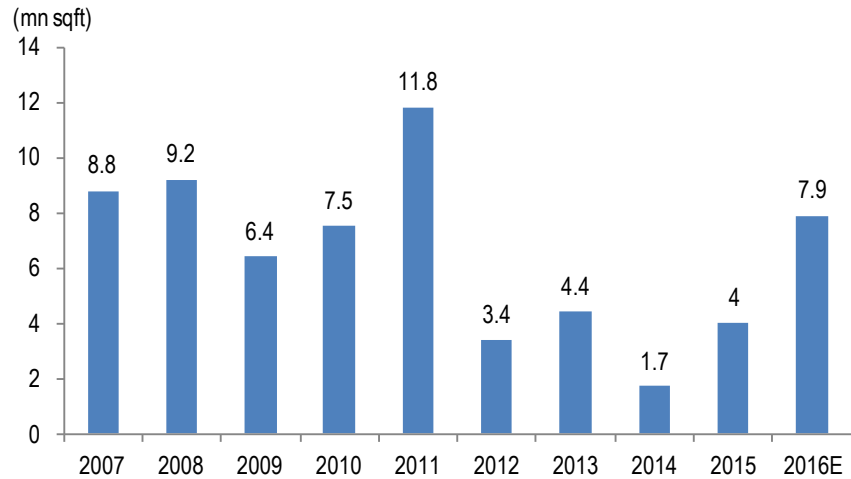
A study of Top 7 cities done by Knight Frank Research indicates that in aggregate about 4.3m sqft is required to house retail expansion from 2014-19. This will be inadequate for expansion of screens that is currently being envisaged by key players in the multiplex sector. However, one point to be borne in mind is that a sizable percentage of screens (possibly about 40%-50%) is expected to come outside of Top 7 cities. A look at Exhibit 38 indicates that currently entertainment occupies only about 8% of modern retail real estate. If we assume most of this pertains to the area devoted to multiplexes, this means that about 16% of the mall area is currently devoted in malls to multiplexes.

Exhibit 35: Split of modern retail space into malls and shopping streets



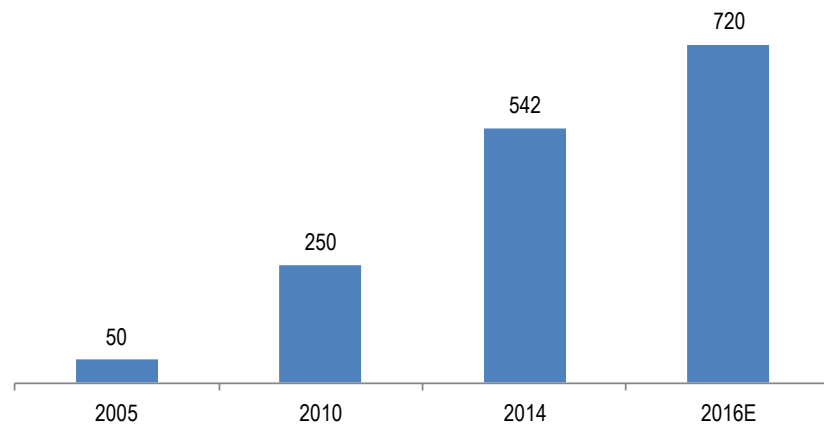
Source: Knight Frank Research

Exhibit 36: Amount of new mall space released in the market



Source: Cushman and Wakefield, JLL, Nirmal Bang Institutional Equities Research

Exhibit 37: Number of operational malls



Source: Media reports, JLL, Nirmal Bang Institutional Equities Research

Exhibit 38: Product category split of occupied modern retail space in top seven cities

Department stores	14
Apparel	22
Food & beverages	13
Entertainment	8
Home & lifestyle	9
Hyper/Supermarkets	8
Electronics	6
Watches & jewellery	6
Personal care	6
Footwear	3
Sportswear	2
Books, gifts & music	2
Accessories	1

Source: Frank Knight Research

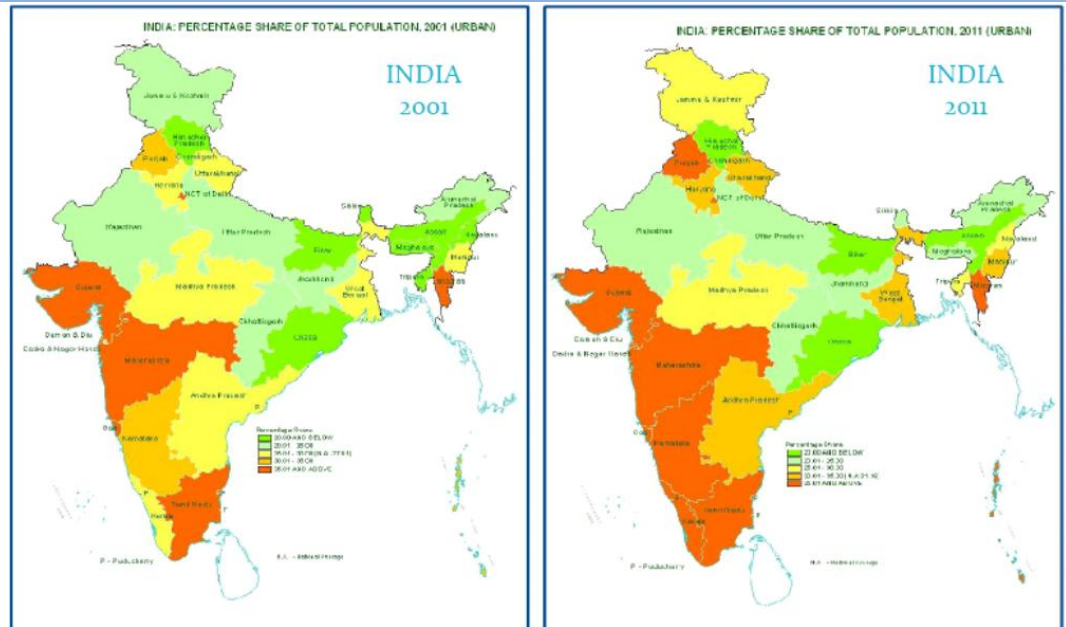
Film exhibition still dominated by single screens-poor economics leads to no investments

Prior to the development of multiplex industry, single screens dominated Indian film exhibition market and in terms of screens still continues to do so. Industry data indicates that at its peak, single screens number was ~12,000. Following the closure and possibly alternate use of expensive real estate, the latest number is ~6,000. Unit economics for single screens, in our view, has been poor, deterring further investments.

About 50% of single screens in India are in South India

A look at the urbanisation chart of India and the rising prosperity of South India because of IT services industry, inward remittances and higher services sector employment, we believe this region can be better monetised by larger expansion of multiplex screens. South India has lower multiplex screens (~23% of screens in aggregate of both PVR and Inox Leisure) than both the north and the west as single screens dominate. The single screen phenomenon persists also because of the fact that these screens are owned by players within the film industry – film actors and actresses and also by politicians. Licencing delays, cap on ticket pricing, etc are reasons that work against setting up multiplexes. May be these hurdles are created by incumbents.

Exhibit 39: Urbanisation of India between 2001 and 2011 - Faster in South India



Source: Census 2011, Nirmal Bang Institutional Equities Research

Exhibit 40: Difference between single screen and multiplex property

Parameter	Typical single screen property	Typical multiplex property
Capacity	700-1,000 seats.	4/5 screens with ~200-250 seats each.
Number of shows	Five shows.	20-25 shows in a day. Gives more choice to the customer from a time slot perspective.
Audience catered to	More of single males.	Families, couples and singles as the ambience is 'family friendly'.
Diversity of content	Could screen one movie in a slot. At the most, there could a different film played in a different time slot.	With four or five different movies of different genres, languages, etc there is more for the customer.
Location	Standalone in any part of the city or town.	Superior location. Typically in a shopping mall in a city.
Occupancy	Entirely dependent on content.	Is higher as content across screens tends to be different. Most times a mix of Bollywood, Hollywood and regional content. Hence, caters to a wider audience. Helps improve occupancy.
Facilities	Upkeep of the auditorium is generally poor with follow-through capex missing. Many single screen theatres do not have air-conditioning facility. Parking is generally a problem. Lack of investment in new exhibition technology. Generally do not appear on online booking sites. Restricted F&B choice.	Auditoria ambience has a premium feel. Seats are better, wider with more leg space. Latest exhibition technology, including, 3D/4DX/Dolby Audio is used. Regular maintenance capex done to maintain the premium feel. Parking is never an issue as the property is generally located in a mall. About 30-35% of the tickets come from online booking. Increasing variety in F&B.
Revenue streams	Typically box office-dominated. Very little F&B, advertising and other income in the mix.	~40-45% of revenues come from high gross margin businesses like F&B and advertising. This improves RoIC significantly.
Business economics	Lower occupancy, lower ATP as well as SPH and limited advertisement revenues lead to poor economics.	Better occupancy, higher ATP and higher SPH combined with higher advertisement revenues per screen leads to better margins and RoIC.
Geographic location	50% of them are located in South India.	Many are located in western and northern regions. Southern region comes third and eastern region is the most poorly populated with multiplexes.
Numbers	Down from a peak of 12,000 screens to 6,000 currently. On an average, 300-400 are closing down annually.	Currently at 2,100 screens and adding about 200-250 screens a year.

Source: Nirmal Bang Institutional Equities Research

Multiplex industry’s structural drivers are aligned

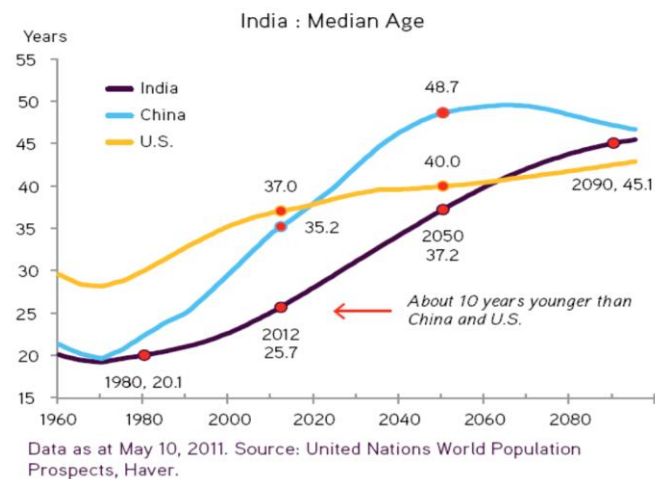
We believe the multiplex industry has a lot going for it in the Indian context. India currently has probably the youngest demographics for a country of its size. This is the demography that is typically hungry for the kind of services being provided by multiplexes. While the relevant population that can afford these services is very small currently, it presents a very big opportunity for growth in the long run as incomes rise. Content, which is the key magnet to get consumers to theatres, is getting better and more diversified. From dependence on Bollywood content, the supply has now swelled to movies from Hollywood – both in English and dubbed regional language versions - and also blockbuster regional movies.

India has young demographics – ideal for consumption of films

The consumers of filmed entertainment in India (and globally too) are typically from the younger age profile (15-50 years). Most movie plots worldwide are written for a demography which is sub-50 years. And more so in the Indian context where the median age is ~26. About 10mn-15mn people enter the work force every year. As more of the population enters the working age group, we expect incomes to go up, thereby improving the discretionary spending capability of individuals and households. It also leads to greater footfalls and higher price per ticket and also higher spending per head on F&B.

Exhibit 41: India’s median age is about 10 years lower than that of China

Median Age in India is About 10 Years Less Than the US and China

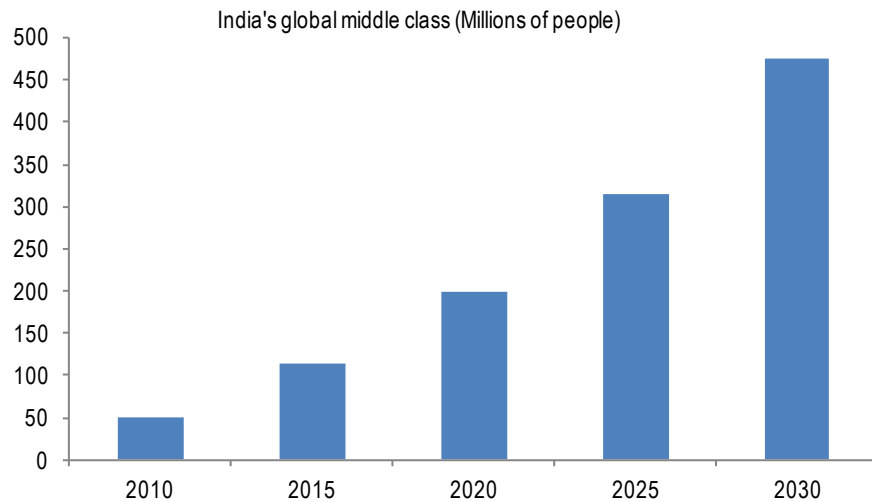


Source: United Nations, Haver's Analytics

Income is slowly rising and discretionary consumption is likely to improve

Indian household real incomes are rising slowly, may not be at the pace they were rising in the middle of the last decade, but definitely at a pace that is possibly the fastest among large economies in the world currently. Various studies indicate that the global middle class (earning between US\$10-US\$100 per day or higher) is 100mn-150mn in 2015. We believe it is this cohort which forms the core of the market that will be consumers of multiplex-filmed entertainment. This is actually a sliver of India’s population – about 7.5%-11.5%. However, we expect this number to move up over the next 10-20 years (as seen in Exhibit 42, 43). Also, the focus on containing inflation both from government’s and the Reserve Bank of India or RBI’s side indicates that real income growth is likely to be better going forward in the next three to five years compared to the previous five years. Also, the spending will tilt towards discretionary spending against spending on essentials as incomes rise (see Exhibit 44). The share of entertainment will keep moving up.

Exhibit 42: Size of India's middle class



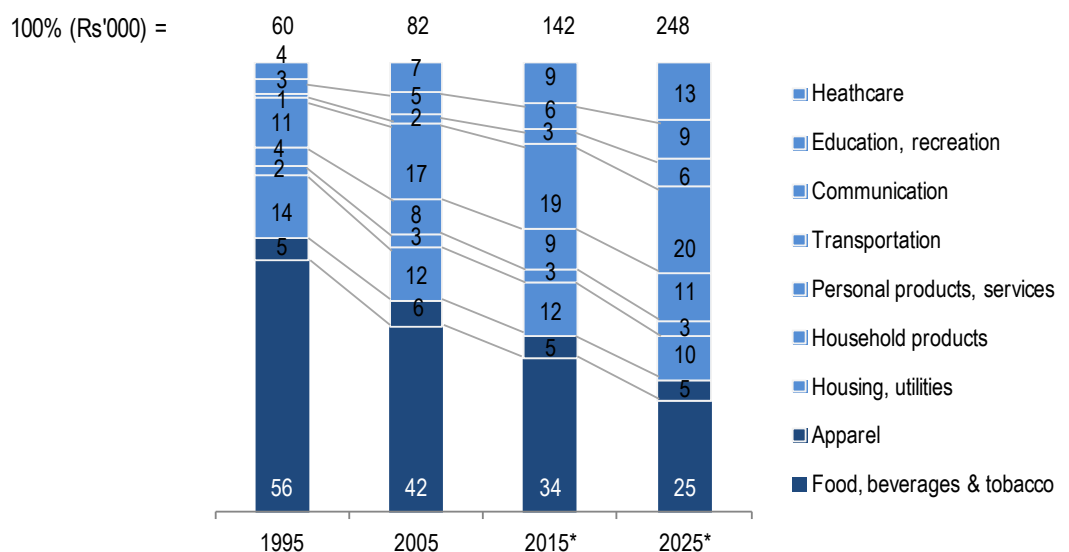
Source: Ernst & Young, IEMS

Exhibit 43: Shift in income distribution in India

(Number of households in mn)			
Annual Income Range	FY1990	FY2000	FY2015
>\$45,000	~1	1	3
\$15,000-45,000	~1	3	19
\$10,000-15,000	1	5	29
\$7,500-10,000	2	10	34
\$5,000-7,500	10	29	59
\$2,500-5,000	62	82	81
<\$2,500	71	57	42
Total	148	187	267

Source: Joydeep Bhattacharya & Shyam Unnikrishnan. Bain & Company India, Livemint.com

Exhibit 44: Shift in spending pattern as income goes up and discretionary spending rises



Source: McKinsey Global Institute

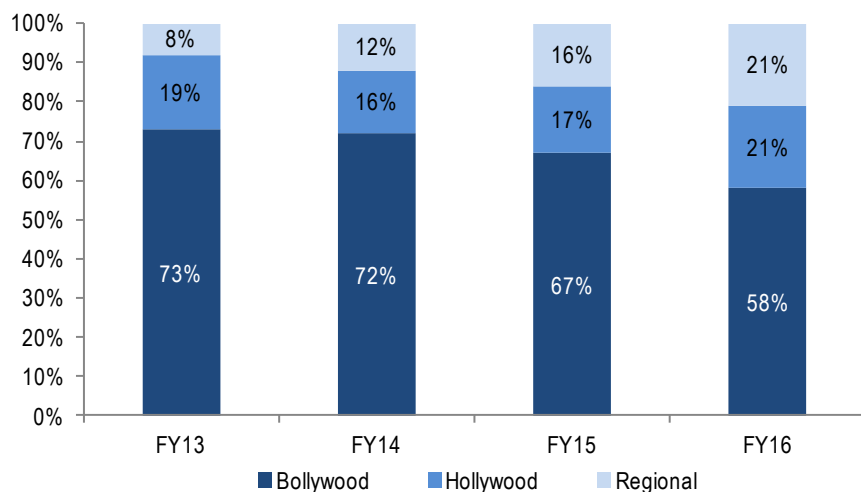
Diversified content will improve occupancy rate

Content is what brings people to theatres...and it has been getting better and diversified

As is widely understood in the industry and also corroborated by our consumer survey, content beyond anything else is what drives people to the theatres. India produces the most number of movies in the world in a year (it produced ~1,800 plus movies in FY15 according to CBFC, central board for film certification). However, the number is a bit misleading. Unlike in other countries, the number is an aggregation of movies made in different languages (Exhibit 50 gives a mix of movies produced in India). Thus, while Hindi movies may find an audience in non-Hindi speaking areas in India, a Telugu or a Tamil movie’s appeal is restricted to film patrons from that particular language group. There have been attempts at dubbing some regional movies into English and Hindi with some notable successes. Blockbusters like ‘Baahubali’ (a Telugu movie originally, made in 2015) have been dubbed in various other languages and have found audiences in different geographies. Another example is ‘Kabali’ (a Rajnikant starred Tamil blockbuster) which was released in other languages too. A blockbuster Hollywood movie is at times dubbed or transliterated into various languages.

Typically, the revenues for multiplexes have been driven by driven by Bollywood movies. In FY13, for instance, the number used to be as much as 73% for PVR (standalone). Over the past few years, the content part has got diversified/derisked with Bollywood’s share falling and Hollywood’s and regional movies’ revenue share moving up (Exhibit 47). With four or five screens at each property, the exhibitor is able to mix and match the needs of the audience based on demand.

Exhibit 45: Content mix is changing – for the better



Source: PVR, Nirmal Bang Institutional Equities Research

Better-scripted lower budget movies have been successful

Movie-watching tastes have been also been shaped by efforts of Hollywood (in terms of its efforts to reach out to a non-English audience), growth of multiplex which gives regional and Hollywood movies an exhibition platform, and better Bollywood films driven by efforts of both domestic and international production companies. A number of low-budget movies have been successful in recent times with better scripts and better acting. In recent times this has taken the form of a Hindi movie like ‘Pink’ which focused on women.

Exhibit 46: Ranking on ROI of Bollywood movies

Rank according to ROI%	Movie	Budget
1	Tanu Weds Manu Returns	Low
2	Bajrangi Bhaijaan	High
3	Pyaar Ka Punchnama 2	Low
4	Kis Kisko Pyaar Karoon	Low
5	Dum Laga Ke Haisha	Low
6	Piku	Low
7	Hate Story 3	Low
8	Badlapur	Low
9	ABCD 2	Medium
10	NH10	Low

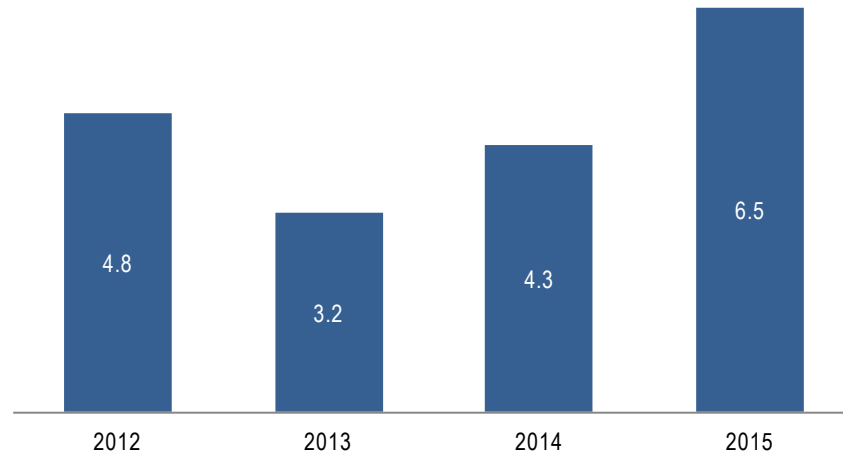
Source: Kinematograph Renters Society

Hollywood has started giving Bollywood good competition

Hollywood movies have also made a very big impact in India in recent times, especially as they are being dubbed in some of the popular local languages like Hindi, Telugu and Tamil (and sometimes transliterated - in the case of Jungle Book for instance - where dialogues are written in the local language and popular local language actors/actresses give voice over). This has resulted in some Hollywood movies generating revenues in India unheard of before and rivaling revenues of some of Bollywood blockbusters (see Exhibit 47). Four movies from Hollywood clocked more than Rs1bn in revenues over 2015 and the first two months of 2016 which is a path-breaking achievement.

Exhibit 47: Box office collection of Hollywood movies likely the highest in 2015

Total BO collection of top 10 Hollywood movies in 2015 (INR billion)



Source: Kinematograph Renters Society

Exhibit 48: The 10 leading Hollywood films in India (2015 and 2016)

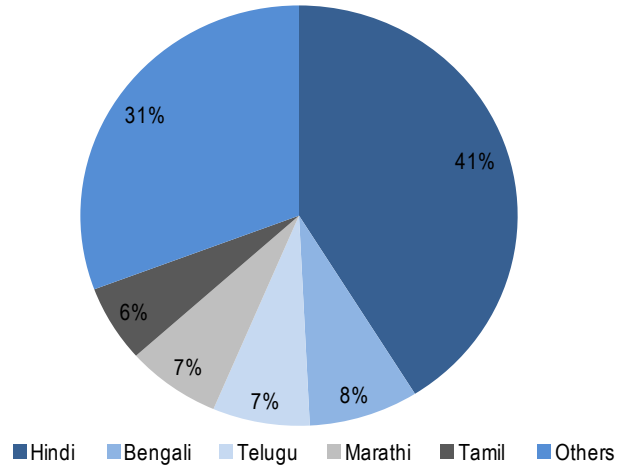
Titles	Lifetime GBO (Rsmn)
Jungle Book	2550
Fast & Furious 7	1550
Jurassic World	1456
The Avengers: Age of Ultron	1085
Captain America: Civil War	810
Mission Impossible: Rogue Nation	767
X-Men	388
Terminator Genisys	329
The Martian	314
Star Wars: The Force Awakens	310
Spectre	294
Everest	207
Minions	181

Source: Kinematograph Renters Society as received on 25 February 2016

We believe this is a big structurally positive move which reduces the cyclicity connected with content and de-risks the business. Besides, a number of Hollywood blockbusters are action-oriented and lend themselves better to large screen viewing, than much of Indian content.

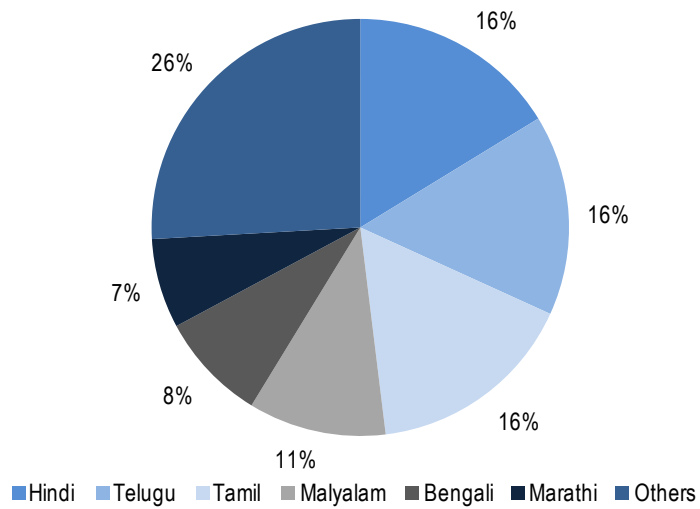
Some regional language movies have also become successful in recent times with box office revenues generated competing with the best of Bollywood's numbers. India is a diverse country linguistically (see Exhibit 49) and there is a lot of regional content that is being produced on annual basis (see Exhibit 50). Unfortunately thus far this content was confined to a certain region. However with mushrooming of multiplexes, linguistic minorities located in various metros can enjoy latest releases of their favourite local language movies. This adds to the occupancy of the exhibitors and is probably one of the reasons why occupancy is probably the highest in India.

Exhibit 49: Percentage of population speaking various languages in India



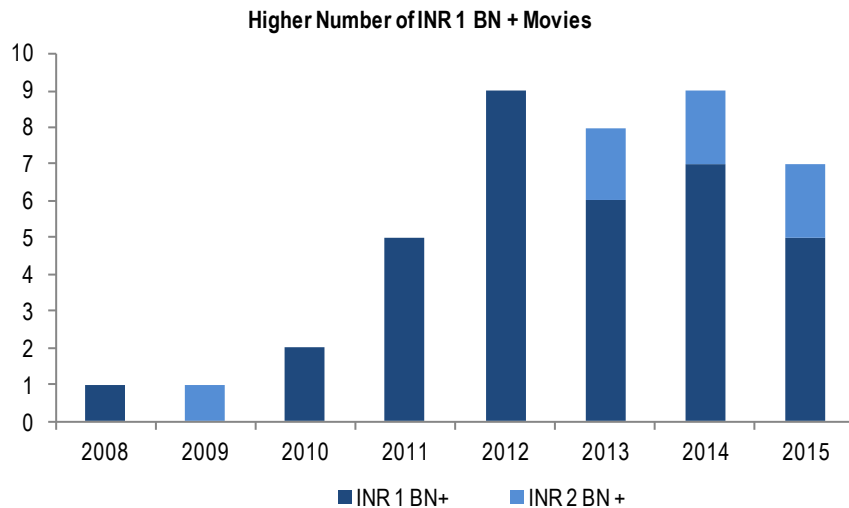
Source: Census 2001, Nirmal Bang Institutional Equities Research

Exhibit 50: Languages in which movies are produced in India (in FY15)



Source: CBFC, Nirmal Bang Institutional Equities Research

Exhibit 51: Number of Rs1bn and Rs2bn movies in a year



Source: Industry, Nirmal Bang Institutional Equities Research

Five Forces analysis of Indian exhibition sector

Entry barriers- High

Location is a key driver of demand and occupancy. Being located in a well-run mall in a good neighborhood is critical for success of a multiplex. Being located in a mall which has little competition in a catchment area is even better. Incumbents like PVR and Inox Leisure have sewn up leases for 15-20 years not only in existing malls, but also in quality mall space that is coming up over the next three to five years. Both multiplex operators and property owners are locked in for this time frame (15-20 years) although multiplex operators have the choice to opt out after five to seven years if the mall is not run successfully. Renewals typically go through smoothly and change in the tenant is a rare occurrence. This is one of the reasons why Cinepolis, a large Latin American player has been able to add only ~185 screens organically (it currently has ~270 screens) in the past eight years of its presence in the country.

Competition-Low to medium

With location being a key factor and consumers in cities not wanting to travel more than 5-7km to go to a multiplex screen, we believe competition is constrained to a location. In many parts of the country, in micro markets, the industry is monopolistic. In other parts, these tend to be at max oligopolies. The competitive situation has changed quite dramatically over the past five to six years because of consolidation. This is reflected in the steady increase in rates year after year by both PVR and Inox Leisure, the two large listed players. Single screens are no longer competition to multiplexes in a material way. Already multiplexes account for 40%-45% of domestic theatre revenues in India (despite having only about 25% of the screens) and the number will only keep rising on a yearly basis. More choice of content, location in a mall, better ambience, better all round viewing experience, better F&B, etc reduces competition from single screen theatres.

Bargaining power of buyers- Low

For consumers who want big screen entertainment, there are no other options. The convenience of going to a nearby mall, enjoy watching the movie in a theatre with a good ambience and facilities and being able to combine the visit with doing things like shopping and eating out reduces bargaining power significantly. The size of the personal wallet and the content, however, constrain demand. Currently, those who are considered buyers is a very small set.

Bargaining power of sellers- Low to medium

There are various kinds of sellers including those that: (1) Provide content to be exhibited (the distributors), (2) Providers of raw materials that are used for F&B outlets and (3) Agencies that source advertisements. The general impression is that film distributors' bargaining power will diminish with rising consolidation in the exhibition industry and that at some point the existing revenue-sharing structure (which involves sharing of about 42%-43% of net box office revenues – after deducting entertainment tax) could potentially be tweaked lower. In fact, the distributors' share was raised in 2009 by about 150bps after a dispute between the two. However, we believe it is unlikely. Content is the lifeblood of the film exhibition industry. Data suggests a large percentage of movies released do not recover their investment. It is in the film exhibitor's interest that distributors and producers make good money so that it can be invested back in developing good content. In F&B context, we believe the bargaining power is not very high. Advertising agencies do have some bargaining power when it comes to deciding the mix of media that they need to use to maximise the impact for a customer. However, compelling customer statistics will also help film exhibitors bolster their case for in-theatre advertising.

Threats from substitute-Low

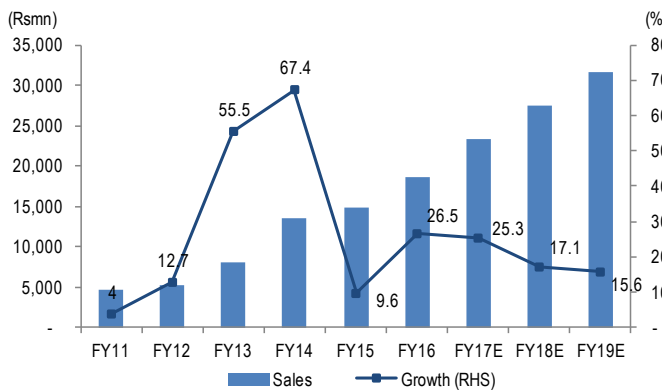
We believe there is absolutely no substitute for big screen film entertainment. There are other screens or formats of viewing film content, but we believe the immersive experience that a big screen viewing entails, especially with enhanced film exhibition technology involving 3D, 4DX, IMAX, DOLBY ATMOS, etc is something that is unlikely to be replicated.

Financials – sharp improvement with GST likely

GST to boost margins, earnings growth and RoICs over FY16-FY19E

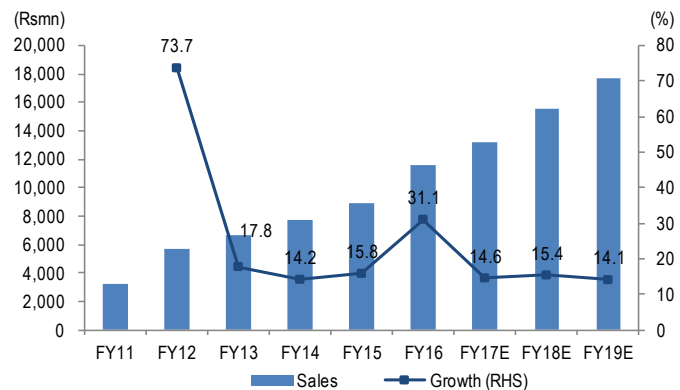
We expect PVR and Inox Leisure to grow revenues/EBTIDA/PAT by 19%/26%/30% and 15%/24%/28% over FY16-FY19E, respectively. Revenue growth will be on the back of screen addition, flat or marginally lower occupancy, higher ticket and F&B prices and higher advertisement revenues per screen. EBITDA margin improvement over this time frame will largely be driven by implementation of GST (where we assume 22% revenue neutral rate as our base case), better revenue mix (especially in case of Inox Leisure and a higher EBITDA margin of DT cinema portfolio for PVR), maturity of screen portfolio and higher ticket and F&B prices (leading to operating leverage as a large part of the costs are semi-variable in nature). We expect effective tax rates to jump substantially. From an average of 9%/4% for PVR/Inox Leisure respectively over FY13-FY16, to 34%/25% over FY16-FY19E, partly eating into higher profitability during this time frame. Return ratios have been the bane of this industry because of the reasons elaborated in an earlier section of the report. We believe they (especially pre-tax RoIC) will improve significantly driven by big EBIT margin expansion that is on the cards (largely GST-driven, although there are other drivers too) and a flat invested capital per screen (especially for Inox Leisure).

Exhibit 52: Revenue and Revenue Growth of PVR



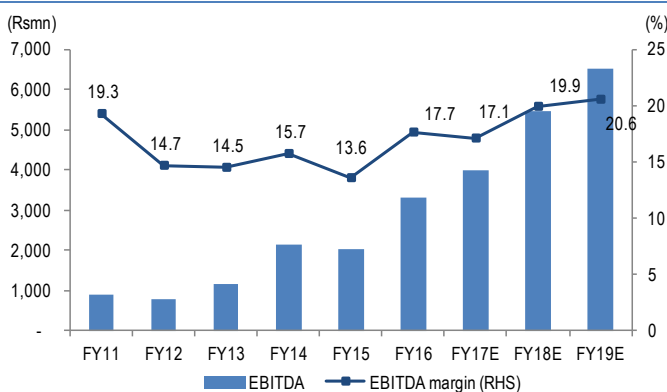
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 53: Revenue and Revenue Growth of Inox



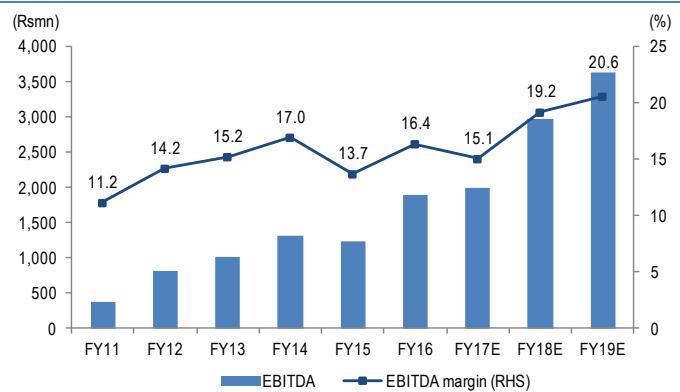
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 54: EBITDA and EBITDA margin of PVR



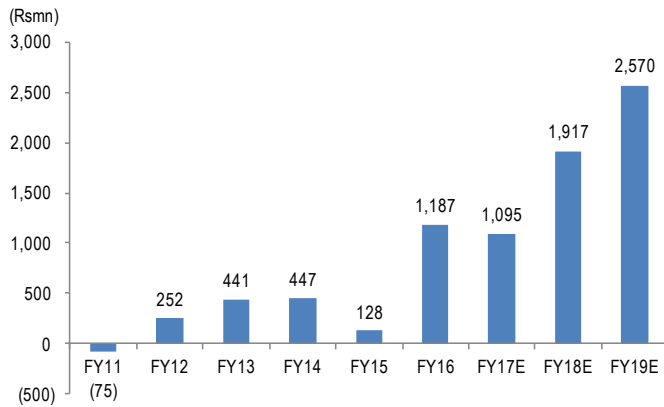
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 55: EBITDA and EBITDA margin of Inox



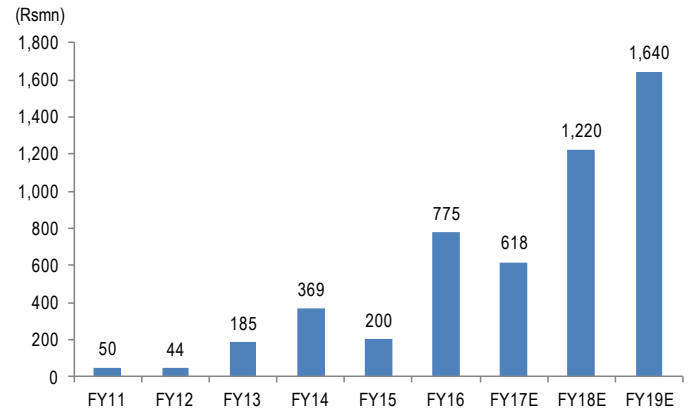
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 56: PAT of PVR



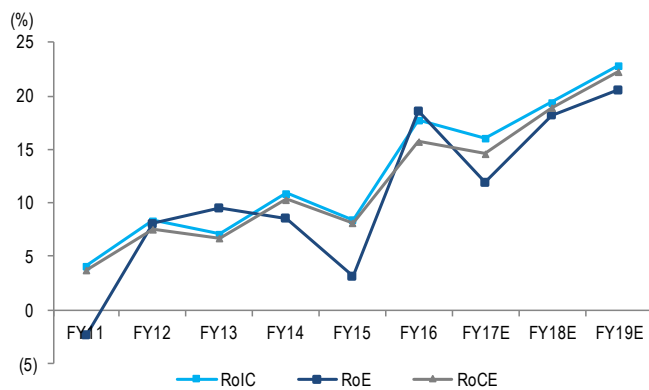
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 57: PAT of Inox



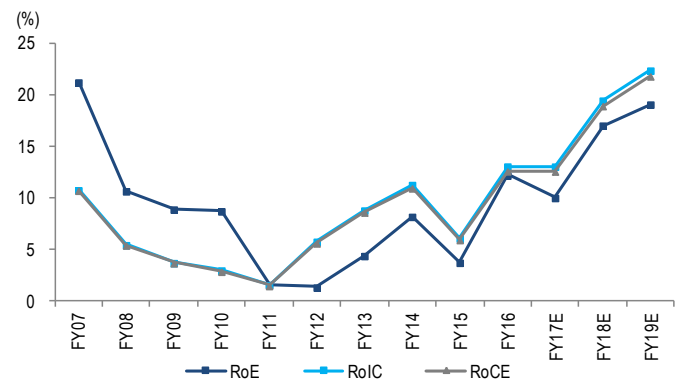
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 58: RoIC, RoE and RoCE of PVR



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 59: RoIC, RoE and RoCE of Inox



Source: Company, Nirmal Bang Institutional Equities Research

Revenue growth is a function of footfalls which is directly connected to content and screen growth

Footfalls grew 28%/16% for PVR/Inox Leisure over FY11-FY16, largely driven by screen growth of 30%/12%, respectively, during the same period. We expect footfalls CAGR of 12%/9% and screen CAGR of 12%/9% for PVR/Inox Leisure, respectively, over FY16-FY19E. Most of this footfall growth is likely shift of customers away from single-screen theatres and also entry of a new generation of customers who have not had the single-screen experience or do not like it. Beyond screen growth content is the key driver of footfalls/volume. FY16 has been a good year for content with a number of hits while FY15 was clearly not because of Cricket World Cup as well as general elections. We expect FY17 to be a good year too. However, success of content is not entirely predictable. For the same screens, assuming everything else remains constant (especially content), beyond Year 3 footfall growth (and occupancy) stagnates.

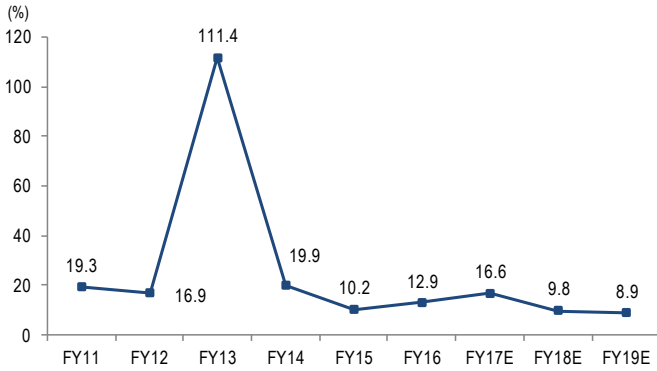
Same screen/store sales growth (SSG) likely to be around 5%-6%

We expect same screen/store sales growth to be 5%-6% over the long run, largely driven by price hikes and with very marginal increase in volume/footfall. This situation should arise post Year 3 of any property once it has established itself in the neighbourhood. Of course, this assumes that screen growth in the neighbourhood - both by competition as well as by the same company - will not be so aggressive that it leads to material cannibalisation of volume. We assume that the moderate increase in purchasing power of the population will increase the universe of households who can afford this type of entertainment to negate the increase in screens in catchment area. We have not considered any volatility of content in our assumptions.

Organic screen expansion will be moderate and will be funded from internal accruals

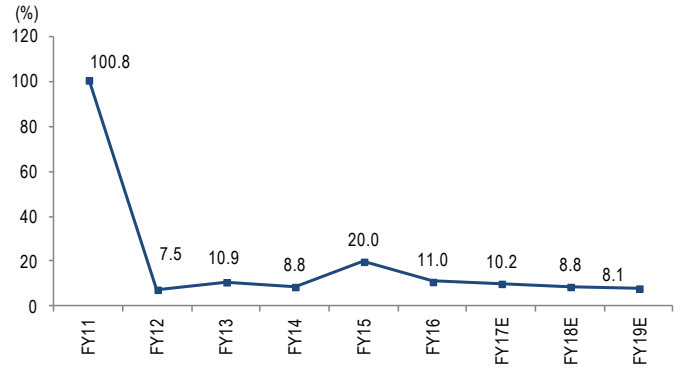
We expect screen expansion to be moderate with organic growth in screens to predominate over FY16-FY19E. We expect PVR and Inox Leisure to add on an average about 60/40 screens, respectively, each year over FY16-FY19E. The growth is modest as mall development has been lacklustre (mall economics are not very compelling currently) and there are also licencing-related problems in many states delaying the process of opening malls and theatres. We believe this moderate organic expansion can be largely handled by internally generated cash flow with no capital infusion required.

Exhibit 60: Screen growth for PVR



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 61: Screen growth for Inox Leisure

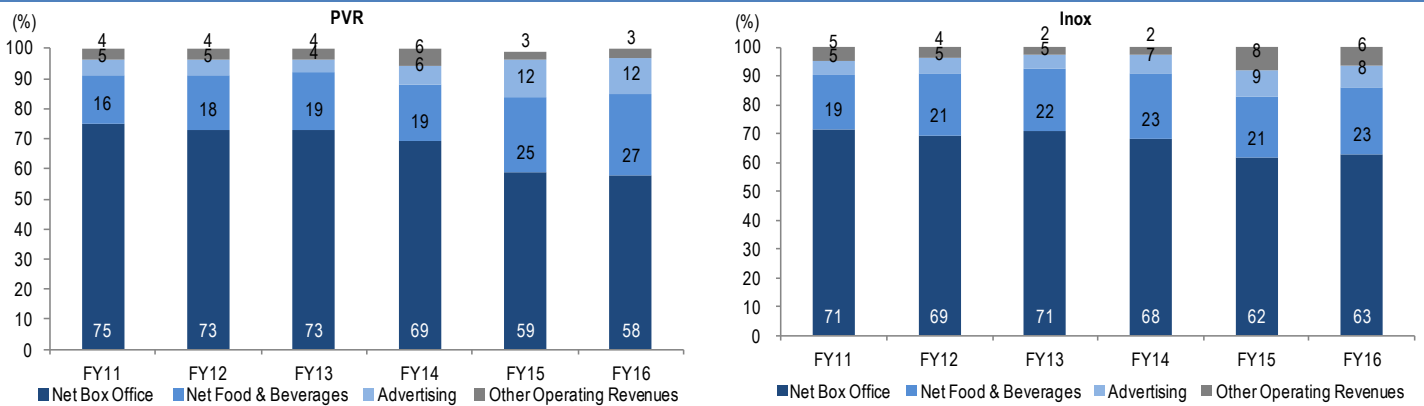


Source: Company, Nirmal Bang Institutional Equities Research

Three main revenue streams for the exhibitor

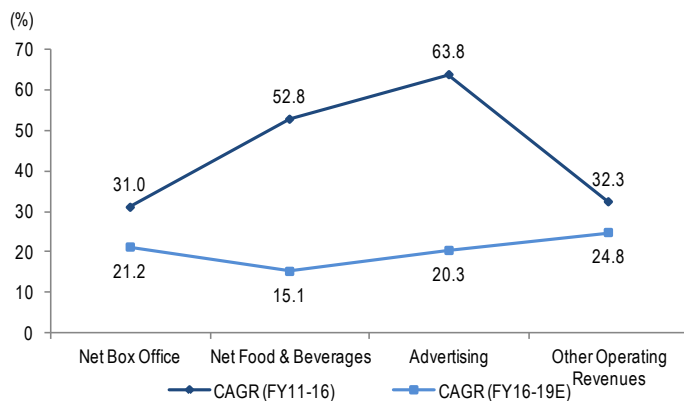
Net box office collection (NBOC), F&B and advertising revenues are the three key revenue streams of PVR and Inox Leisure, forming 58%/27%/12% and 63%/23%/8% of the revenues of PVR (standalone) and Inox Leisure, respectively, in FY16.

Exhibit 62: Revenue mix of PVR and Inox



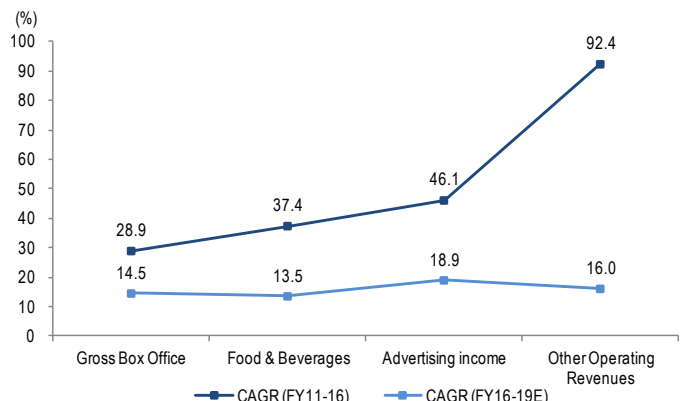
Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 63: PVR CAGR Segmental Revenue Growth



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 64: Inox CAGR Segmental Revenue Growth



Source: Company, Nirmal Bang Institutional Equities Research

We expect average ticket price (ATP) to grow 6%/5% for PVR/Inox over FY16-FY19E

Over FY11-FY16, Gross ATP posted 3.3% and 2.3% CAGR for PVR and Inox Leisure, respectively. We believe this is significantly lower than CPI inflation during this time. The moderate growth in ATP is also driven by property mix change (as more properties are added in not so premium locations within Tier-1 cities and expansion into Tier-2/Tier-3 cities) and probably a down trading element to it as customers shift to time/day slots that charge lower ticket prices even for the same screen. Players go for dynamic pricing depending on perceptions about a movie, day of the week, time of the day, etc.

We believe that part of the reason why ticket prices have not gone up or there has been down trading could be the pressure on real income in urban areas due to high inflation felt by consumers over a long period of time. While nominal income growth has likely been in high single-digit or very low double-digit, a large part of it has been eaten away by inflation, leaving a smaller part in the hands of consumers to spend on discretionary products and services.

We believe that continued moderate income growth along with restrained consumer inflation witnessed for the past few years should leave increased money in the hands of consumers and they, in our view, will likely be in a better position to absorb price hikes than they have in the past. This is on the assumption that CPI inflation will be in the 4%-6% range over the foreseeable future.

There is also an attempt to get those who can afford to spend more. While there is downtrading, the companies are also trying to get a part of the customers to trade up by creating special class of theatres for them or expanding a special class of seats in more theatres (the recliners).

SPH should also continue to grow at 6%-7% over FY16-FY19E

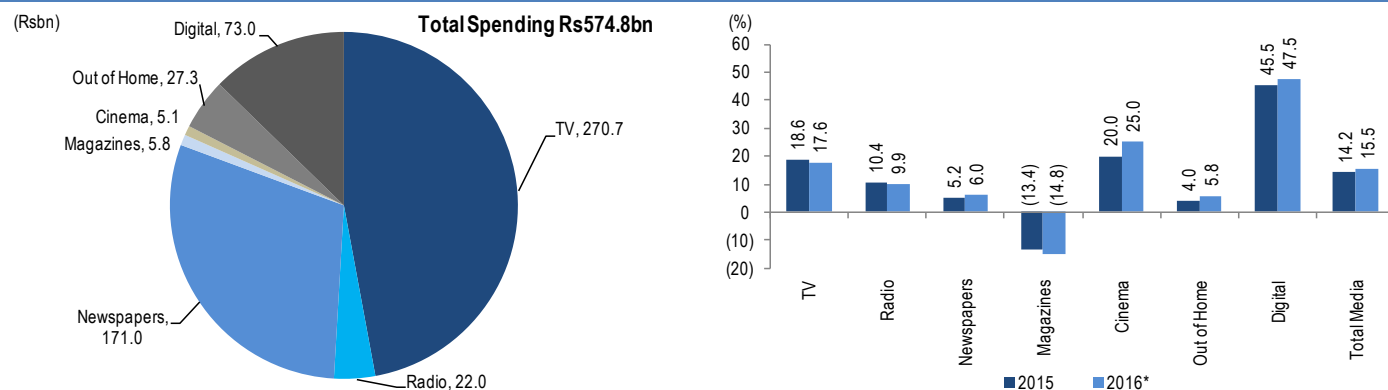
The spending per head (SPH) on F&B is a function of multiple things-price hikes, higher conversion of ticket buyers into F&B consumers (by giving a wider range of food products, allowing pre-booking of food, getting servers to solicit business at the seats, etc). Currently, F&B revenues are only about 35%-40% of box office revenues in India. In certain countries, this number is closer to 50% and higher.

Advertisement revenue/screen expected to grow at 7% over FY16-FY19E

Advertisement revenue per screen has seen a CAGR of 25% for both PVR and Inox Leisure over FY11-FY16. We are assuming that it will grow at 7% over FY16-FY19E respectively. We believe advertising revenue per screen is headed higher as this form of advertising can be targeted at audiences better, there is no competition for audience attention, etc. Based on Group M data cinema advertising will grow to a size of Rs5.1bn by 2016. **Of this, PVR and Inox Leisure will likely have a 50% and a 20% share respectively.** It seems to have grown far faster than advertising spending in the market (and second only to digital advertising based on Exhibit 65) and we believe it will continue to do so for some more time. Typically, advertising agencies decide on the budgets to be allocated (60%) while it depends on corporates for the rest (40%).

PVR has done an exceptional job of capturing a large share of the high gross margin (95%) advertising spend going by disproportionate share that it will have in FY17. This is when it has only about 25% share of multiplex screens and only ~7% share of the total screens in the country.

Exhibit 65: Prospects for the advertising market in India in 2016, Revenue and growth rates



Source: GroupM, livemint.com, Nirmal Bang Institutional Equities Research

A big portion of costs are semi-variable and hence the model has some operating leverage

About 40% of total costs are completely variable. The share of exhibitor from net box office revenues (post entertainment tax) and direct costs connected with F&B are completely variable. Most of the other costs – employee costs, rent, electricity, security, housekeeping, etc - are semi-variable in nature and greater the occupancy and better the revenue mix, there could be improvement in margins.

A long playing film brings better margins for film exhibition companies

Most films now garner about 60%-80% of their domestic theatre revenues in the first week of release. The share of exhibitor revenues of net box office collections (NBOC - post deduction of entertainment tax) is ~43%. The film exhibitor pays about 50% of NBOC to film distributors in the first week, 42.5% in the second week, 37.5% in the third week and 30% in the fourth week. There is system of bonuses and penalties depending on performance of the films vis-a-vis a minimum threshold on both the upside and downside.

GST will have a profound impact on EBITDA, PAT and RoIC

Film exhibition has been one of the highest-taxed services in the country with a blended average entertainment tax of 27% on net ticket price. Some states charge much higher - 110% in Jharkhand, 45% in Maharashtra, 40% in Delhi and 30% in Uttar Pradesh and Haryana and 30% in Karnataka. For a full picture of entertainment taxes being levied across the country please look at Exhibit 66. The VAT charged on food and beverage sold is on a blended basis, about 8% on a pan India basis.

Exhibit 66: Entertainment tax being levied in various states on net ticket price

State	Entertainment tax	Notes
(as percentage of net ticket price)		
Andhra Pradesh	20%	15% for Telugu Films
Bihar	50%	-
Delhi	40%	-
Gujarat	20%	-
Haryana	30%	-
Jharkhand	110%	Jharkhand films are tax-free
Karnataka	30%	Kannada films are tax-free
Kerala	30%	-
Madhya Pradesh	20%	-
Maharashtra	45%	Marathi films are tax-free
Odisha	25%	-
Rajasthan	30%	Rajasthani films are tax-free
Tamil Nadu	15%	Tamil films are tax-free
Uttar Pradesh	30%-40%	-
West Bengal	30%	2% for Bengali films

Source: Company, Nirmal Bang Institutional Equities Research

GST is truly on its way to being implemented in the country. The all-important unknowns now are revenue neutral rate and implementation date. Over the years there have been many rates discussed in the market from 15% to 28%. The market is veering towards a range of 18%-22%. We believe that GST will become reality in FY18 beginning 1QFY18 itself (that is what we have modeled in currently). We have assumed a revenue neutral rate of 22% in our current estimates for FY18 and beyond. Based on this rate and assuming no pass-through of benefits to consumers, EBITDA margin and RoIC improvement will be substantial.

Set-off on taxes currently paid on inputs is going to be one of the biggest factors driving margin gains

When GST gets levied, there will be a positive impact on net box office collection (NBOC), but negative impact on net F&B revenues. However, a big factor that comes into play is that service tax paid on input services like security, house-keeping, etc can now be set off. These typically amount to as much as 320-430bps in case of some companies on a yearly basis

A study of the impact of GST on FY16 numbers is given in more detail in Exhibit 13

EBITDA margin impacted positively by shift in revenue mix towards high-margin categories

Besides GST, which will be the biggest margin driver in FY18, there are other elements in the business that will make margins better in the medium term. The key driver of margins tends to be occupancy. We have assumed a modest deterioration in occupancy rate going forward for PVR and kept the number constant for Inox Leisure. With moderate increase in capacity in the industry and assuming no significant volatility in content, we believe occupancy will remain stable or go down a bit. Beyond occupancy, the next big driver is revenue mix. We believe this will change more for a player like Inox Leisure (relative to PVR). Box office revenues generates gross margin of ~55% while F&B revenues generate 75% gross margin and advertising revenues generate 95%. A greater share of revenues coming from the latter two revenue streams, in our view, will elevate gross margin for the companies. Immediately post GST implementation, it is quite likely that gross margin on F&B will go down (ceteris paribus, assuming product prices are not raised) and the mix may turn a bit adverse. However, over time we believe the mix will continue to move away from box office revenues.

Capex-intensive business, but will deliver great RoIC

As elaborated in single-property economics part of the report (Pages 7 and 8), as long as capex per screen is not extraordinarily high the economics of the business is very attractive. Currently, capex per screen on an average tends to be Rs20mn-Rs25mn. In premium locations and in premium formats (like Directors Cut and Gold Class) this number tends to go up by 50%-100%. But such screens are few within the portfolio. Maintenance capex is quite low and refurbishment capex can be 40% of capex and this can happen between Year 6 and Year 8 for PVR screens. However, as indicated in the financial model for single properties, RoIC tends to move higher as the property matures.

Exhibit 67: Asset turnover ratio is very good as the property matures – for a standalone property

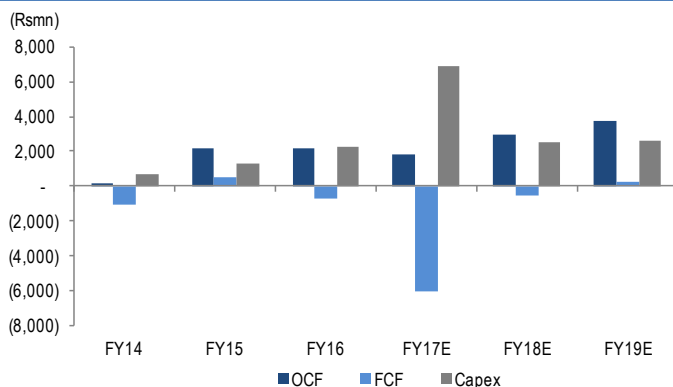
(Rsmn)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Fixed Asset Turnover (x)	1.1	1.6	1.9	2.1	2.4	2.7	2.0	2.3	2.8	3.4
Revenue Per screen	26.0	33.0	37.0	39.0	41.0	43.0	45.0	47.0	50.0	52.0
EBITDA per screen	(0.4)	4.3	6.0	6.4	6.8	7.3	7.8	8.3	8.8	9.3
EBIT per screen	(3.0)	2.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0

Source: Company, Nirmal Bang Institutional Equities Research

Good cash flow generation will make these companies significant dividend pay-out candidates

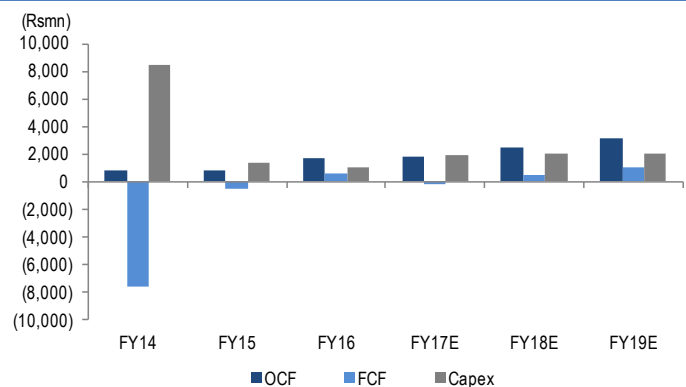
We believe good cash generation over the long run driven by better EBITDA margin, negative working capital and moderate capex will lead to wiping-out of not only existing debt but also the companies will be in a position to give generous dividends by FY19 and beyond. The high entry barriers ensure that the financial situation is not disturbed by new players.

Exhibit 68: OCF, capex and FCF generation - PVR



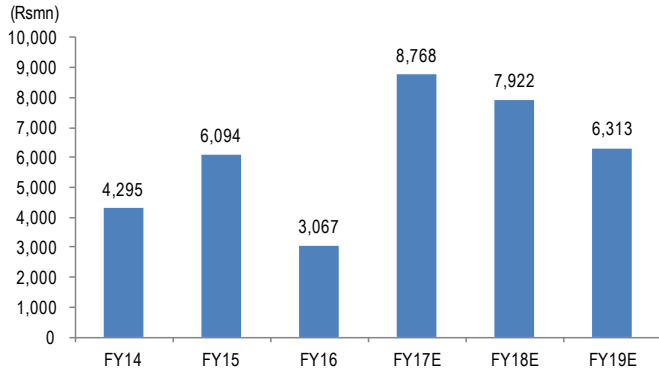
Source: Company, Nirmal Bang Institutional Equities Research

OCF, capex and FCF generation – Inox



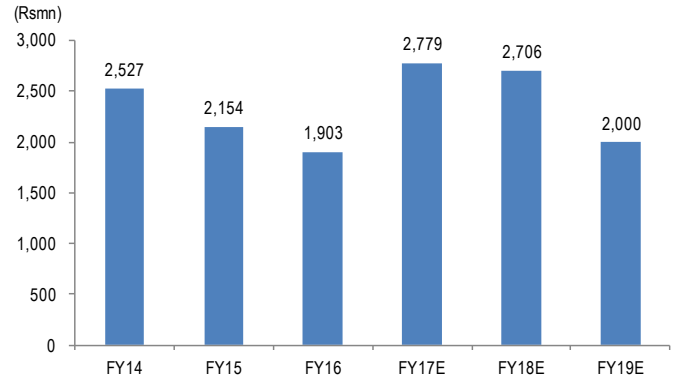
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 69: Net Debt - PVR



Source: Company, Nirmal Bang Institutional Equities Research

Net Debt - Inox



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 70: Financial Projections assumptions sheet for PVR and Inox Leisure

PVR

	FY14	FY15	FY16	FY17E	FY18E	FY19E
Number of Screens	421	464	524	611	671	731
Growth (%)	20	10	13	17	10	9
Number of screens added	70	43	60	87	60	60
Footfalls (mn)	60	59	70	81	89	98
Growth (%)	61	(1)	18	16	10	9
Occupancy Rate (%)	34.0	31.2	34.6	33.7	33.2	33.2
Gross ATP (Rs)	168	178	188	198	211	224
Growth (%)	1	6	6	6	6	6
Net ATP (Rs)	146	139	146	156	174	185
Growth (%)	11	(5)	5	7	12	6
Gross SPH (Rs)	54	64	72	78	83	89
Growth (%)	13	19	13	8	7	7
Net SPH (Rs)	40	59	67	72	68	73
Growth (%)	18	46	14	8	(5)	7
Advertisement Revenue per screen (Rsmn)	2.0	3.8	4.2	4.6	4.8	5.1
Growth (%)	91	93	10	10	5	7

Inox

	FY14	FY15	FY16	FY17E	FY18E	FY19E
Number of Screens	310	372	413	455	495	535
Growth (%)	9	20	11	10	9	8
Number of screens added	25	62	41	42	40	40
Footfalls (mn)	39	41	53	58	64	69
Growth (%)	9	6	30	8	10	8
Occupancy Rate (%)	28.0	25.0	29.0	28.4	28.8	28.8
Gross ATP (Rs)	156	164	170	178	187	196
Growth (%)	(3)	5	4	5	5	5
Net ATP (Rs)	127	134	137	143	154	162
Growth (%)	(2)	5	2	4	8	5
Gross SPH (Rs)	49	55	58	61	65	69
Growth (%)	4	12	5	5	6	6
Net SPH (Rs)	42	46	50	52	53	56
Growth (%)	5	11	7	5	1	6
Advertisement Revenue per screen (Rsmn)	1.8	2.5	2.5	2.5	2.8	3.0
Growth (%)	40	37	1	7	15	5

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Valuation

We believe multiplex stocks can be compared with a basket of Indian consumer discretionary ones as they possess business characteristics that are somewhat similar. And the universe that we have picked up for comparison (see Exhibit 71) consists of holiday time share companies, quick service restaurants, theme parks, travel companies, gaming companies, media companies, etc. These players possess the same growth drivers as the multiplex industry – higher level of urbanisation and rising purchasing power of urban India. Long-term growth is driven by increase in stores. Some of them sell products/services at price points that are similar to those of multiplex players.

Right valuation metric is EV/EBTIDA

We believe the right valuation metric that should be used to value PVR/Inox Leisure should be EV/EBITDA as depreciation & amortisation and finance costs total up to 45%-50% of EBITDA in the foreseeable future. We see that the basket of consumer discretionary stocks that we have picked up have as much capital intensity as do the multiplex companies (and based on numbers even higher) – see Exhibit 72 and have similar return ratios.

We expect the biggest driver to help achieve stock price targets is clarity regarding revenue neutral GST rate for the industry. It is our view that this rate will not breach 22% for multiplexes.

We believe comparing the valuation of Indian multiplex players with international ones (Exhibit 73) does not make much sense especially those in the developed markets where the box office revenues have been static for a while now. We think the Indian companies over the next decade can easily grow both revenue and EBITDA at a far faster pace than these companies. As regards Chinese companies Wanda Cinema and Imax we believe the high valuations are reflective of the explosive growth seen in the sector over the last 3-4 years in China. We do not think Indian players will be able to replicate it

Exhibit 71: Valuation comparison of Indian consumer discretionary basket

Company Name	EV/Sales (x)			EV/EBITDA (x)			P/E (x)			ROE (%)		
	FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17
Companies												
PVR	3.3	2.9	2.4	18.3	16.7	12.1	58.8	53.1	30.3	18.6	11.9	18.2
INOX	2.0	1.8	1.6	14.2	13.0	9.2	32.2	34.5	20.2	12.2	11.5	17.0
MAKE (MARICO KAYA)	-	4.5	3.7	-	40.3	29.5	48.8	37.7	37.7	9.1	15.4	18.5
JUBLIANT FOODWORKS	2.6	2.3	1.9	22.8	19.8	14.8	14.5	50.6	35.8	15.2	16.1	19.9
WEST LIFE	4.1	3.6	3.1	80.0	60.7	44.6	6.0	(186.2)	-	0.5	(3.6)	(0.1)
WONDERLA	11.7	7.2	5.9	24.6	18.4	14.0	16.2	33.2	25.4	15.7	15.9	18.1
MAHINDRA HOLIDAYS	3.2	2.3	2.1	21.9	13.5	11.7	43.0	28.8	23.6	14.2	19.9	20.9
ZEE	8.5	7.3	6.7	32.9	26.1	21.2	58.3	40.5	30.4	22.8	22.8	23.3
DISH TV	3.7	3.4	3.0	10.8	9.7	8.3	15.3	35.9	25.2		73.1	47.3
TITAN	3.3	2.8	2.5	39.4	29.6	24.4	53.6	43.6	35.4	21.0	22.7	24.0
THOMAS COOK	1.7	1.3	1.0	28.8	-	-	(191.9)	45.7	24.6	(3.0)	12.8	21.2
COX & KINGS	1.7	1.8	1.6	4.9	4.4	3.9	74.9	12.2	9.2	2.1	12.7	14.4
TALWARKARS	3.9	3.1	2.7	6.5	5.7	4.9	14.7	12.6	10.4	15.6	15.1	16.1
DELTA CORP	11.8	6.2	-	32.5	17.5	-	93.9	28.2	-	5.4	15.3	-
ADLABS	7.0	5.3	4.1	31.0	17.4	11.1	(7.2)	(10.3)	(32.4)	(13.7)	(12.1)	(2.4)

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 72: Comparison of EBITDA margins, Asset Turnover ratios and Return ratios of select Indian consumer discretionary stocks

(Rsm)	Sales		EBITDA		EBIT		PAT		Capital Employed		Networth	
	FY15	FY16	FY15	FY16	FY15	FY16	FY15	FY16	FY15	FY16	FY15	FY16
PVR	14,771	18,668	2,008	3,299	840	2,095	128	1,187	10,947	15,059	4,092	8,695
Inox	8,954	11,589	1,228	1,899	469	1,096	200	775	9,115	8,237	7,089	6,234
Maka (Marico Kaya)	3,315	4,004	329	450	213	NA	325	409	4,748	5,156	3,404	3,775
Jubliant Foodworks	20,924	24,372	2,565	2,792	1,554	1,510	1,111	1,048	10,747	12,241	6,462	7,324
West Life	7,643	8,238	194	426	(310)	(150)	(291)	28	7,759	8,378	5,336	5,381
Wonderla	1,819	2,054	814	842	652	703	506	598	3,976	4,524	3,564	4,030
Mahindra Holidays	7,509	14,808	1,209	2,195	546	1,220	812	991	28,299	39,255	7,255	7,453
Talwarkars	2,257	2,514	1,245	1,502	848	1,032	461	550	6,664	8,808	2,904	4,409
Delta Corp	3,000	3,779	688	1,228	NA	NA	(228)	426	12,177	11,810	7,895	8,269

	Margins (%)						Return Ratios (%)				Asset Turnover Ratio (x)	
	EBITDA		EBIT		PAT		RoCE		RoE		FY15	FY16
	FY15	FY16	FY15	FY16	FY15	FY16	FY15	FY16	FY15	FY16		
PVR	14	18	6	11	1	6	8	14	3	14	1.3	1.2
Inox	14	16	5	9	2	7	5	13	3	12	1.0	1.4
Maka (Marico Kaya)	10	11	6	-	10	10	4	-	10	11	0.7	0.8
Jubliant Foodworks	12	11	7	6	5	4	14	12	17	14	1.9	2.0
West Life	3	5	(4)	(2)	(4)	0	(4)	(2)	(5)	1	1.0	1.0
Wonderla	45	41	36	34	28	29	16	16	14	15	0.5	0.5
Mahindra Holidays	16	15	7	8	11	7	2	3	11	13	0.3	0.4
Talwarkars	55	60	38	41	20	22	13	12	16	12	0.3	0.3
Delta Corp	23	33	-	-	(8)	11	-	-	(3)	5	0.2	0.3

Note: We have used only the historical numbers. The return ratios and the Turnover ratios have been computed based on Year End capital employed and not average capital employed

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Exhibit 73: Valuation comparison of film exhibition companies

Company Name	Mcap US\$mn	EV/Sales (x)			EV/EBITDA (x)			P/E (x)			ROE (%)		
		FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17	FY16 CY15	FY17E CY16	FY18E CY17
Companies													
PVR	867	3.3	2.9	2.4	18.3	16.7	12.1	58.8	53.1	30.3	18.6	11.9	18.2
INOX	392	2.0	1.8	1.6	14.2	13.0	9.2	32.2	34.5	20.2	12.2	11.5	17.0
WANDA CINEMA	12,160	10.0	6.6	5.0	45.9	26.8	20.0	130.4	46.4	34.0	19.6	17.1	20.0
IMAX CINEMA	1,814	126.4	100.6	82.0	225.4	187.2	142.3	7.4	272.1	205.9	(197.6)	27.3	27.2
AMC	3,109	1.7	1.6	1.5	10.3	9.1	8.0	5.8	6.8	5.1	6.8	7.2	9.3
CINEMARK	4,473	2.0	2.0	1.8	9.4	8.4	7.7	2.8	19.7	17.0	19.6	19.6	20.1
CVG	1,661	1.5	1.2	1.0	10.0	8.7	7.0	3,687.8	30.4	22.0	12.9	13.3	16.3

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Indian multiplex theme can be played only through PVR and Inox Leisure in a meaningful way

Together, they account for ~45% of multiplex screens in the country. This has happened because of being early movers and through a combination of organic growth and acquisitions. PVR and Inox Leisure (in that order) have a stranglehold over quality retail real estate that is not only extant in urban India, but also which is likely to come up in the foreseeable future. The location, neighbourhood around the mall, extent of competition between malls in the area, etc determine not only the success of the mall, but also the multiplex.

Both PVR and Inox Leisure are present in Top 5 cities in India and in most premium malls

Quick-footed moves of PVR and Inox Leisure have ensured that competitors did not get more than a toehold in key cities like Mumbai and NCR which form a large part of total multiplex office revenues (these two cities account for 60% of the total box office revenue for Bollywood movies according to industry sources), but also in some Tier-2 cities. In Tier-1 cities, Carnival and Cinopolis have been barely able to get access to high quality locations. This will mean better occupancy, pricing discipline, better margin and better RoIC. Margin and RoIC are very sensitive to occupancy level. PVR and Inox Leisure are Tier-1 city-oriented with a large number of screens located in Top 5 cities of the country (see Exhibit 74). This is especially important as much of the urban purchasing power is concentrated compared to China where urbanisation has been much more spread out (see Exhibit 34).

Exhibit 74: Number of screens currently located Top 5 cities of each company

	PVR	Inox Leisure
Delhi NCR	93	-
Mumbai	84	54
Bangalore	63	31
Kolkata	-	34
Ahmedabad	21	-
Pune	20	20
Jaipur	-	15

Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 75: Most premium malls in Mumbai/Delhi-NCR/Bangalore and presence of PVR/Inox Leisure

	PVR	Inox Leisure
Mumbai	High Street Phoenix	R-City Mall
	Oberoi Mall	Inorbit, Malad
	Infinity, Andheri	Korum Mall
	Infinity, Malad	
Delhi NCR	Select CityWalk	-
	Ambience-Gurgaon	-
	Ambience-Vasant Kunj	-
	DLF Promenade	-
	MGF Metropolitan	-
	Pacific Mall - Subhashnagar	-
Bangalore	Forum-Koramangala	Garuda Mall
	Orion Mall	
	Phoenix Mall	

Source: Bookmyshow.com; Nirmal Bang Institutional Equities Research

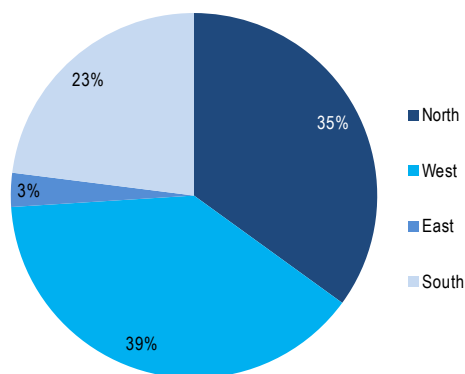
PVR will continue to command a premium over Inox Leisure

We believe PVR has commanded and will continue to command a premium valuation in the sector on the back of its pre-eminent position in the industry of being the largest and most profitable player. It has introduced a number of innovations to improve consumers' viewing experience to keep its lead over competition. It has the best locations in the country by being in some of the most premium malls. It has a higher exposure to Delhi-NCR region, a market that has the highest consumption track record in India. These points have led to it having the highest ATP and SPH. It also has the highest advertising rate per screen. The company has been a fast mover in doing M&A transactions and shutting out competition from certain geographic areas. Based on valuation of the consumer discretionary basket that we have created and looking at their financial metrics, we believe PVR and Inox Leisure deserve to trade at 12.5x and 11x EV/EBITDA respectively (implying target P/E multiple of 30x and 23x respectively), based on their September 2018E numbers (midway between FY18 and FY19).

While the valuation charts (see Exhibits 79-82) would suggest that the stocks are at the higher end of their trading range we think there is a fair chance that not only will these high multiples sustain they could probably expand a tad too. For PVR for instance most of the returns that we are envisaging is going to come not from multiple expansion but from EBITDA growth. However for Inox we see both multiple expansion as well as EBITDA expansion to drive the returns we are expecting. Based on the numbers we have projected for Inox and PVR we believe that the modest EBITDA margin gap and the large ROIC gap that exists between the two would be bridged in the coming days. Hence the expectation that the Inox's multiple will expand from here on. PVR in our view would see a slightly pressure on returns because of the DT Cinema acquisition while Inox would see better numbers on the back of

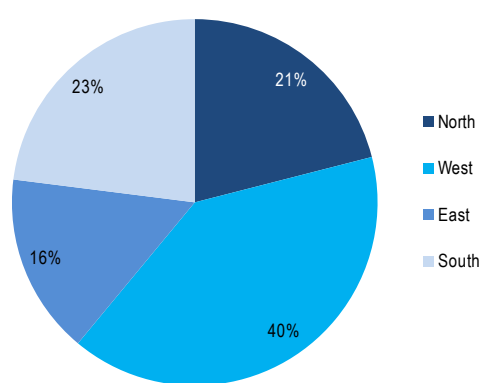
We are giving PVR a premium to Inox despite catch up by the latter on various financial parameters with the former. We give this for size (60% larger in revenue and almost double in EBTIDA), its premium locations, the fact that it made early moves in F&B and advertising monetization, faster organic screen addition, etc. Also based on the numbers available we believe PVR could be a bigger beneficiary of the GST vis-à-vis Inox because it incurs a higher entertainment tax burden (27% vs 23% of Inox) and will be a bigger beneficiary of the input tax credit.

Exhibit 76: PVR – Geographical spread of screens



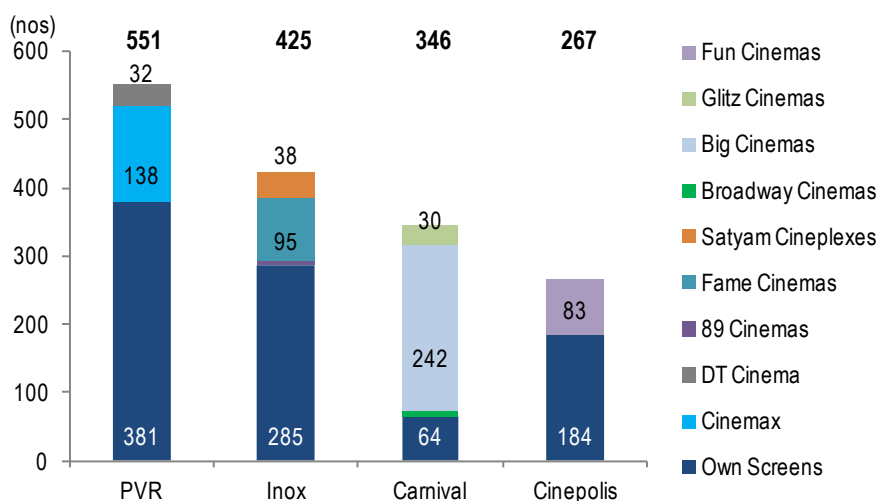
Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 77: Inox – Geographical spread of screens



Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 78: PVR management has been able to grow screens organically faster than Inox



Source: Media, Companies, Nirmal Bang Institutional Equities Research

We believe PVR and Inox Leisure deserve premium multiples for the following reasons:

- With introduction of GST, financial metrics of PVR and Inox Leisure will shift up significantly and will permanently move to the 20s,
- Many comparable consumer discretionary companies face industry-structure problems. For instance, in QSR (quick service restaurants), there is a big threat from substitutes with the onset of food-ordering apps. In case of multiplexes, there are no substitutes that could threaten their existence currently.
- We believe entry barriers are far higher in multiplex industry compared to some of the other consumer discretionary plays. This gives it steady pricing power.
- We believe volume growth could potentially be in high single-digit over the long run driven largely by a very low base, better disposable income and increase in the number of screens. We believe such kind of volume growth is difficult to come by over such long period of time in case of some of the other players.
- We believe that some of the advantage of a better industry structure will be reflected slowly in the financials of companies as pain of expensive acquisitions linger for some more time.

Exhibit 79: PVR 3-year PE chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

PVR 3-year EV/EBITDA chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Exhibit 80: PVR 5-year PE chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

PVR 5-year EV/EBITDA chart



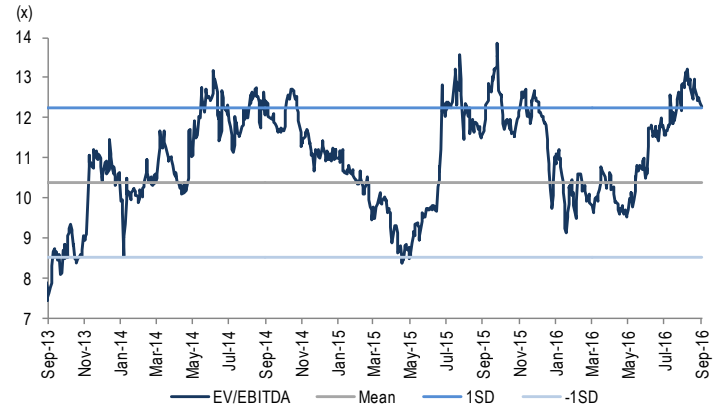
Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Exhibit 81: Inox 3-year PE chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Inox 3-year EV/EBITDA chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Exhibit 82: Inox 5-year PE chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

Inox 5-year EV/EBITDA chart



Source: Bloomberg, Company, Nirmal Bang Institutional Equities Research

PVR's premium to Inox Leisure on various parameters stem from its geographic mix

A look at various operating metrics of both companies (see Exhibit 83) indicates that PVR has an edge on each and every parameter. This largely stems from the fact that PVR has a stranglehold in Delhi- NCR market and Inox Leisure has a relatively weak position there. Delhi-NCR market is generally acknowledged by the industry to be a strong discretionary consumption market and slightly less price-sensitive. Inox Leisure has a strong position in eastern region, which according to industry sources has a lower purchasing power.

Exhibit 83: Comparison of Inox Leisure and PVR across various parameters

	FY11	FY12	FY13	FY14	FY15	FY16	1QFY17
Total Revenue (Rsmn) – PVR	4,593	5,177	8,053	13,481	14,771	18,688	5,702
Total Revenue (Rsmn) – Inox	3,267	5,699	6,669	7,717	8,954	11,589	3,370
Total Screens (Nos) – PVR	142	166	351	421	464	524	551
Total Screens (Nos) -Inox	239	257	285	310	372	413	425
Net Box office Revenue (Rsmn) - PVR	2,630	3,475	4,893	8,771	8,200	10,144	3,056
Net Box office Revenue (Rsmn) - Inox	2,052	2,301	4,567	4,905	5,496	7,312	2,135
Net F&B Revenue (Rsmn) - PVR	561	857	1,273	2,415	3,495	4,667	1,475
Net F&B Revenue (Rsmn) - Inox	544	708	1,418	1,623	1,910	2,657	807
Advertising Revenue (Rsmn) - PVR	175	238	268	763	1,685	2,066	515
Advertising Revenue (Rsmn) - Inox	137	178	324	495	815	911	213
Footfalls (mn)- PVR	20	25	37	60	59	70	21
Footfalls (mn)- Inox	26	31	35	39	41	53	16
Occupancy (%)- PVR	0.0	31.2	37.0	34.0	31.2	34.6	36.2
Occupancy (%)- Inox	23	25	28	28	25	29	31
Average Net Ticket Price (Rs)- PVR	132	141	132	146	139	146	148
Average Net Ticket Price (Rs)- Inox	80	75	129	127	134	137	137
Net Spend Per Head (Rs)- PVR	28	35	34	40	59	67	71
Net Spend Per Head (Rs)- Inox	21	23	40	42	46	50	52
Advertisement revenues per screen (Rsmn)- PVR	1.3	1.5	1.0	2.0	3.8	4.2	0.9
Advertisement revenues per screen (Rsmn)- Inox	0.6	0.7	1.1	1.6	2.2	2.2	0.5

Source: Companies, Nirmal Bang Institutional Equities Research

Exhibit 84: Per screen comparison

(in Rsmn)	FY11	FY12	FY13	FY14	FY15	FY16
Revenue/screen-PVR	32.3	31.2	22.9	32.0	31.8	35.7
Revenue/screen-Inox	13.7	22.2	23.4	24.9	24.1	28.1
EBITDA/screen-PVR	6.2	4.6	3.3	5.0	4.3	6.3
EBITDA/screen-Inox	1.5	3.1	3.6	4.2	3.3	4.6
PAT/screen-PVR	(0.5)	1.5	1.3	1.1	0.3	2.3
PAT/screen-Inox	0.2	0.2	0.6	1.2	0.5	1.9
Invested capital/screen-PVR	34.0	28.1	35.6	21.8	23.0	23.6
Invested capital/screen-Inox	39.7	21.4	27.2	20.8	24.0	18.9
Working capital/screen-PVR	(1.7)	(4.1)	(4.9)	(7.1)	(4.4)	(4.3)
Working capital/screen-Inox	3.6	(2.4)	(4.9)	(4.5)	(3.4)	(3.2)

Source: Companies, Nirmal Bang Institutional Equities Research

Risks to our investment thesis

- Slower real urban income growth:** A critical variable that we have assumed for steady revenue and earnings growth are increased higher real disposable income for urban households. Should for some reason this stalls, then there could be a risk to our financial estimates and our view on the sector. It our view that the slow rate of urbanisation in India is probably the consequence of inadequate gap between real income in urban and rural India. Had real income in urban India been much better (probably linked to lower real estate, food and other living costs), we hypothesize that urbanisation would have probably picked up at a greater pace. We believe a good increase in real income is critical to increase the universe of households that can consume this form of entertainment.
- All of GST benefits are passed on to consumers:** A significant reason for our bullishness on the sector would be impaired if governments and consumer associations force the multiplexes to pass on all of the benefits that they receive through GST to consumers. We have assumed GST rate in our projection of 22% and assumed that players will retain all of it to themselves (as the rate is at the higher end). Should the rate be sub-20%, then the government could force multiplexes to part with some of their gains. As long as that share is not enormous, we do not see a threat to our FY18/FY19 estimates.
- If GST rate is higher than 22%:** We believe that at ~22% the film exhibitor does not improve margins from the net of (lower entertainment taxes and higher taxes on F&B). It gains from the set off on taxes on input services. However if the rate is higher than 22%, it could potentially eat into the set-off benefits too.
- Push-back in implementation of GST:** It is our view that GST will be implemented from 1 April 2017. In case this gets pushed back by a few quarters, there will be an impact on earnings of the companies in FY18.
- Scramble to gain real estate:** If this happens between existing players when renewal comes up or when new mall space is available, it could bid up rentals. This may hit the cost structure and adversely impact margins and RoIC. We have assumed rational competition between players. While per screen rentals have gone up, as a percentage of sales rentals have broadly remained in a range of 17-18% over the past 5 years.
- Mall development may not be good enough for volume growth to come through:** While we are assuming a steady increase in volume on the back of increase in screens, it is entirely dependent on the state of consumer economy in urban India and health of malls. Lately, this has been disturbed because of poor retail sentiment, the onslaught of online market places and better returns in commercial and residential real estate for real estate companies. From a real estate player perspective, a mall takes a lot more time to build than a residential or an office complex within which time uncertainties build up with respect to pricing, consumer sentiment, competition, etc
- Retrofitted single screens could become a threat:** A few single screen players have been retrofitting their properties and converting them into 2/3 screen properties. The refurbished properties have better ambience and facilities than what they had earlier (the capex involved will be significantly lower than if the same were to be done in a mall). Some of them may be in a position to employ better exhibition technology like 3D if not 4DX, IMAX and Dolby Atmos. The ticket prices could be raised a bit and the occupancy rate could be increased as the same property can now come up with more shows. However, this may not be feasible for all single-screen theatres which are present in the market currently. Should this become a big trend, we believe it could be not only a threat but also an opportunity to expand screens for existing players.
- Technological changes:** Whether it will make big screen cinema-viewing experience less of an attractive proposition? Film exhibition technologies have evolved forcing film fans to step out of their homes and leave their electronics behind. These include 3D, 4DX, Imax and Dolby Atmos which enhance the viewing experience. Besides exhibition technology, film viewing in a multiplex is a 'hospitality experience' especially if one goes to premium screens like Director's Special. The food & beverage goes beyond the usual pop corn and snacks to gourmet-live food counters (see the media report on food served at PVR's 'Directors Cut' theatres in the Annexure). Thus, while many technology threats have made their presence felt over the years (TV, VCR player, DVD player, etc), film exhibition industry has fended off these threats by enhancing features of the product. It is our expectation that film viewing on the big screen will continue to a credible form of entertainment in the foreseeable future.

- **Piracy and live-streaming websites:** Despite digitisation, piracy is rampant. As can be seen in our consumer survey (see Annexure), a third of the respondents across income groups have been watching pirated movies. This results in revenue leakage (for the industry and the government) and affects industry economics. Industry puts revenue leakage estimate at 10%-30%. Websites like Torrents and Vimeo also make available movies and pose a revenue leakage threat. There have been attempts by film producers to get URLs blocked (through the legal route) preventing consumers in India from accessing these websites (for a specific movie). There have been recent moves to curb piracy through greater penalties for using blocked websites. This involves a maximum punishment of imprisonment for three years and also a fine of up to Rs3,00,000.
- **OTT technology risk:** Over-The-Top (OTT) content refers to content from a third party that is delivered to an end-user, with the Internet service provider (ISP) simply being an access provider. This model contrasts with the purchasing or rental of video or audio content from an ISP, such as pay television, video on demand or IPTV video service. Netflix and Amazon are the two players who have been involved in this in the US. Netflix has come to India too. However, as long as the content is not simultaneously streamed along with theatrical release, we do not believe this poses a greater challenge to the film exhibition sector than the current home video market does. Simultaneous release has been attempted by Netflix in the US (though not by Amazon so far) without any material impact on box office revenues. It is quite possible that small budget movies without large marketing budgets may attempt this form of distribution in the future. We believe the multiplex experience is a unique one and is 'an out-of-home experience' which is indulged in typically on the weekends by families/couples/friends along with shopping and/or eating out as multiplexes in India are housed in malls. Also, the number of per capita visits by the urban population (which we take as 35% of India's population of 1.25bn) we believe is at 0.6 visits a year. According to industry sources, an average multiplex patron goes to the theatre about three to four times in a year. Only compelling content as well as higher disposable income could probably prompt the patron to increase the number of visits.
- **Time window of theatrical release collapses:** Windowing is a concept whereby theatrical release of a new movie has a certain time window before it is released in DVD (digital video disc), VOD (video on demand) or other formats. In the Indian context, that period is about six weeks and can vary depending on the producer's expectations regarding performance of the movies at the box office, etc. Only if the producer of a movie decides to release it simultaneously on multiple formats would it pose a threat to the film exhibition industry. The availability of pirated versions of the movie almost simultaneously while the movie is released in theatres indicates that this damage is the norm already and should not hurt business any further. Traditionally, in the US, theatres are given 90 days between the premiere date and when a film is released on DVD, on-demand, or through other channels.
- **Content and events could generate uneven growth and margins from year to year:** From year-to-year perspective, the financial performance of players could vary. This is driven by quality and quantity of content. FY16 was a good year because a number of movies released became blockbusters not only from Bollywood, but also from Hollywood and regional cinema. FY15, on the other hand, suffered because of events like the general election and Cricket World Cup which led to fewer releases of big blockbusters (leading to low occupancy rate and consequent impact on revenues and margins).
- **Price control by state governments can be a problem:** Some states in India control cinema ticket prices. While free pricing is the norm in most parts of India, that is not the case in Telangana, Andhra Pradesh and Tamil Nadu where there are restrictions. Multiplex operators cannot price tickets higher than Rs150 per head in Andhra Pradesh/Telangana and Rs120 per head in Tamil Nadu. But multiplex operations have not been hurt by this very much as the occupancy rate trends higher by as much as 20 percentage points in these states which mitigates revenue loss. There is also a positive impact on F&B (which is freely priced) and advertising rates because of high occupancy.

PVR

5 October 2016

Reuters: PVRL.BO; Bloomberg: PVRL IN

Leader In Screens, Innovation And Execution

We believe PVR will be the prime beneficiary of the oligopolistic multiplex industry structure in India. A first-mover and focused player, PVR is currently the largest multiplex operator in India (~26% share of screens, 30% and 22% share of Hollywood and Bollywood box office revenues, respectively), occupying space in the largest number of premium malls in various cities of India with a very large presence in the Delhi-NCR and Mumbai regions, the key consumption pockets in the country. Consequently, it has a higher average ticket price (ATP), higher F&B spending per head (SPH) and higher advertising revenues per screen by 11%/24%/68%, respectively, compared to its second-largest peer Inox Leisure (as of FY16). Because of higher occupancy and better revenue mix, it had in FY16 an EBITDA margin that was 130bps higher than Inox leading to an RoIC which is 460bps higher. Because of its acquisitions, higher capex to maintain its premium positioning and higher security deposit paid on its leased premises, invested capital (ex-cash) of PVR was higher than that of Inox's by 24%. Despite being the third-largest player in 2011, it clawed its way to the top because of some debt acquisitions, sharp focus on business, strong innovations, good execution and some great financial support from a clutch of PE investors at critical junctures. It is dominant in northern region where consumption spending is probably the highest in India. We believe it has also done an exceptional job on the advertising front where we believe it has 50% market share of the Cinema advertising revenue despite having only 25%/7% of multiplex/overall screens in the country. We expect PVR to increase revenues/EBITDA/PAT by 19%/26%/29%, respectively, over FY16-FY19E. We expect RoIC to improve from 17.7% in FY16 to 22.8% in FY19. We are factoring in implementation of GST (at 22% revenue neutral rate) in FY16. We initiate coverage on PVR with a Buy rating and September 2017 target price of Rs1446 (17% up from CMP) and at target EV/EBITDA multiple of 12.5x (implying a P/E of 30x). The multiples are at 14%/30% premium to Inox.

Decisive M&A moves help it to achieve leadership position: Acquisitions of Cinemax in 2012 and DT Cinemas in 2015 have been key turning points. The first acquisition catapulted PVR from the third-largest to the largest and was done at valuations that were not exactly cheap. However, PVR was able to consolidate its position in Mumbai by adding difficult-to-get locations. In an environment where retail space development has become constrained in the city for various reasons, this move gave it an unassailable lead. The acquisition of DT Cinemas (at seemingly expensive valuation) is another move to retain its leadership position in North India – where per capita spending is the highest at this point. It shuts out any competitor taking a larger share in this market or upsetting pricing.

Focused on driving premiumisation: From Directors Cut and Gold Class where ATP is 2x-8x of the company average, PVR is pampering a sliver of its customers who can afford to pay more. While such capacity is miniscule currently, it will expand and drive realisation up in ticketing, F&B and advertising.

GST expected to enhance earnings and RoIC: GST implementation will enhance margins as well as RoIC in the coming days. From sub-15% levels of return ratios for a long period of time, GST will make them comparable with some of the other consumer plays. We believe it will be a bigger beneficiary of GST vis-à-vis Inox as entertainment tax is higher for it (27% vs 23% for Inox) and will benefit more from the input tax set off than would Inox (430bps vs 320bps).

Deserves rich valuation in line with consumer discretionary plays: We believe PVR's high multiples can not only sustain but also move up a tad as more investors appreciate the sweet spot which the multiplex industry is in and the leadership position PVR has in it. We believe PVR can become a multi-billion market capitalisation company over the next 5-10 years.

A credible acquisition target: with location being a big entry barrier and PVR possessing the same, we believe any credible player wanting to expand into India in the film exhibition space will have to look at PVR seriously even at its current valuation. The current valuation makes strategic sense if the incoming player has a long-term view and wants to expand organically going forward.

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Revenue (Rsmn)	14,771	18,688	23,413	27,413	31,702
YoY (%)	9.6	26.5	25.3	17.1	15.6
EBITDA	2,008	3,299	4,009	5,467	6,522
EBITDA (%)	13.6	17.7	17.1	19.9	20.6
Adj. PAT	128	1,187	1,095	1,917	2,570
YoY (%)	(71.5)	830.5	-7.8	75.1	34.1
FDEPS (Rs)	3.1	25.3	23.3	40.9	54.8
ROE (%)	3.2	18.6	11.9	18.2	20.5
ROCE (%)	8.2	15.7	14.6	18.9	22.3
ROIC (%)	8.5	17.7	16.1	19.4	22.8
P/E (x)	399.7	48.8	52.9	30.2	22.5
P/BV (x)	14.2	6.7	6.0	5.1	4.2
EV/EBTDA	31.9	18.5	16.6	12.0	9.8

Source: Company, Nirmal Bang Institutional Equities Research, Priced on 3rd October closing prices

BUY

Sector: Film Exhibition

CMP: Rs1,235

Target price: Rs1,446

Upside: 17%

Girish Pai

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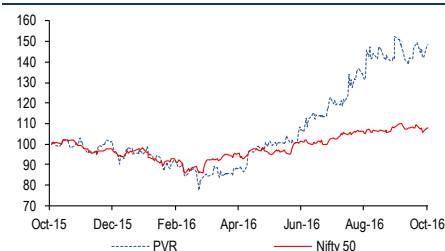
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Key Data

Current Shares O/S (mn)	46.7
Mkt Cap (Rsbn/US\$m)	57.9/863.6
52 Wk H / L (Rs)	1,335/645
Daily Vol. (3M NSE Avg.)	241,325

Shareholding (%)	3QFY16	4QFY16	1QFY17
Promoter	26.0	25.7	25.3
Institutional	59.3	59.2	60.2
General Public	14.7	15.1	14.5

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
PVR	(3.0)	67.7	50.8
Nifty Index	1.7	13.8	12.4

Source: Bloomberg

Financials

Exhibit 1: Income statement

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Net Sales	14,771	18,688	23,413	27,413	31,702
Growth (%)	9.6	26.5	25.3	17.1	15.6
Exhibition Cost (Distributor Share)	3,422	4,190	5,321	6,692	7,759
Food & Beverages Cost	1,074	1,248	1,453	1,765	2,066
Employee Benefits Expense	1,430	1,853	2,183	2,297	2,522
Rent	2,735	3,148	3,909	4,249	4,914
Repairs & Maintenance,	569	718	945	1,020	1,179
Electricity & common area	1,911	2,110	2,706	2,887	3,229
Other Expenses	1,622	2,123	2,888	3,035	3,510
Total Expenses	12,763	15,389	19,404	21,945	25,179
EBITDA	2,008	3,299	4,009	5,467	6,522
Growth (%)	(5.4)	64.3	21.5	36.4	19.3
% of sales	13.6	17.7	17.1	19.9	20.6
Depreciation & Amortization	1168	1252	1482	1688	1898
EBIT	840	2047	2526	3779	4624
% of sales	5.7	11.0	10.8	13.8	14.6
Other income (net)	89	283	117	94	100
Interest	783	839	927	969	831
Exceptional Item	22	67	26	-	-
PBT	125	1425	1691	2904	3893
PBT margin (%)	0.8	7.6	7.2	10.6	12.3
Tax	8	232	593	987	1324
Effective tax rate (%)	6.5	16.3	35.0	34.0	34.0
Net profit	116	1,193	1,098	1,917	2,570
Minority Interest	11	-	-	-	-
Adjusted Net Profit	128	1,187	1,095	1,917	2,570
Growth (%)	(71)	830	(8)	75	34
Net profit margin (%)	0.9	6.4	4.7	7.0	8.1

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 3: Balance sheet

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Equity capital	415	467	467	467	467
Reserves & surplus	3,677	8,228	9,209	10,900	13,187
Networth	4,092	8,695	9,676	11,367	13,654
Minority Interest	383	401	401	401	401
Other liabilities	118	222	222	222	222
Total Debt	6,355	5,741	9,241	8,441	6,841
Total liabilities	10,947	15,059	19,541	20,431	21,118
Net Fixed Assets	9,376	10,603	13,801	14,101	14,401
Goodwill on consolidation	31	52	3,202	3,202	3,202
Long term loans and advances	3,075	3,175	4,159	5,136	5,955
Deferred tax asset	-	42	42	42	42
Other non-current assets	237	759	759	759	759
Cash & cash equivalents	261	2,674	473	519	528
Current assets	1,308	1,845	1,845	1,845	1,845
Current liabilities	3,341	4,091	4,742	5,174	5,614
Net current assets	(2,033)	(2,246)	(2,896)	(3,328)	(3,769)
Total assets	10,947	15,059	19,541	20,431	21,118

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 2: Cash flow

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
EBIT	840	2,047	2,526	3,779	4,624
(Inc./dec. in working capital)	(953)	213	650	432	440
Cash flow from operations	(112)	2,260	3,177	4,211	5,065
Other income	89	283	117	94	100
Depreciation & amortisation	1,168	1,252	1,482	1,688	1,898
Financial expenses	783	839	927	969	831
Tax paid	8	232	593	987	1,324
Dividends paid	50	112	113	226	283
Net cash from operations	304	2,612	3,144	3,811	4,626
Capital expenditure	1,272	2,220	6,879	2,522	2,642
Increase in other non current assets	429	664	984	977	819
Net cash after capex	(1,397)	(272)	(4,719)	312	1,165
Inc./(dec.) in debt	1,565	(614)	3,500	(800)	(1,600)
(Inc./dec. in investments)	0	0	0	0	0
Equity Issuance	32	3,522	(4)	0	(0)
Cash from financial activities	1,597	2,909	3,496	(800)	(1,600)
Others	(434)	118	(8,746)	1,800	3,268
Opening cash	495	261	2,223	319	460
Closing cash	261	2,674	473	519	528
Change in cash	(234)	2,413	(1,750)	200	68

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 4: Key ratios

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Per share (Rs)					
FDEPS	3.1	25.3	23.3	40.9	54.8
Dividend Per Share	0.9	2.0	2.0	4.0	5.0
Dividend Yield (%)	0.1	0.2	0.2	0.3	0.4
Book Value	87	185	206	242	291
Dividend Payout Ratio (incl DT) (%)	39%	9%	10%	12%	11%
Return ratios (%)					
RoE	3.2	18.6	11.9	18.2	20.5
RoCE	8.2	15.7	14.6	18.9	22.3
ROIC	8.5	17.7	16.1	19.4	22.8
Turnover Ratios					
Asset Turnover Ratio	1.4	1.4	1.4	1.4	1.5
Debtor days	19	18	14	12	10
Working Capital Cycle Days	(50.2)	(43.9)	(45.2)	(44.3)	(43.4)
Solvency Ratios					
Net Debt/Equity	1.5	0.4	0.9	0.7	0.5
Net Debt/EBITDA	3.0	0.9	2.2	1.4	1.0
Valuation ratios (x)					
PER	399.7	48.8	52.9	30.2	22.5
P/BV	14.2	6.7	6.0	5.1	4.2
EV/EBTDA	31.9	18.5	16.6	12.0	9.8
EV/Sales	4.3	3.3	2.8	2.4	2.0
M-cap/Sales	3.9	3.1	2.5	2.1	1.8

Source: Company, Nirmal Bang Institutional Equities Research

Inox Leisure

5 October 2016

Reuters: INOL.BO; Bloomberg: INOL IN

Valuation Differential With PVR Will Be Partly Bridged

Inox Leisure is the second-largest player in Indian film exhibition industry with multiplex screen capacity of ~20%. It will be a key beneficiary of the oligopolistic (monopolistic in certain micro markets) structure of an industry which is in its infancy. We believe the significant valuation gap that exists between Inox Leisure and PVR will be bridged to a great extent in the coming years as return ratios of Inox Leisure converge with those of PVR on the back of better margins driven by better revenue mix, maturing of screen portfolio, growth in operating metrics like ATP, SPH and advertisement rates (as of FY16, PVR's were 11%/24%/68% higher respectively, than those of Inox). F&B and advertisement revenues have gross margins of ~75% and ~95%, respectively, higher than ~55% of box office revenues. Currently these constitute 22%/7% of total revenues of Inox Leisure's versus 27%/12%, respectively, of PVR's (standalone). The convergence of RoIC will also be helped by lower invested capital per screen over the next three years vis-à-vis PVR as the latter digests the expensive DT Cinemas acquisition (EV/screen of Rs135mn) and also has a more aggressive organic growth plan. It will be a beneficiary of implementation of GST, like the entire industry, even if the rate is at 22% (our neutral rate in base case for FY18E). We initiate coverage on Inox Leisure with a Buy rating and September 2017 target price of Rs.354. This is based on a Target EV/EBITDA multiple of 11x on September 2018 EBITDA (implying 23x P/E multiple). The target EV/EBITDA multiple used for PVR is 12.5x (implying 30x PE). We have used the EV/EBITDA for valuation as depreciation and interest costs constitute 45%-50% of FY18E EBITDA.

Organic growth to be the main driver: Of the 425 screens currently about 67% have been organically added and the rest have come from acquisitions. These have been in the form of Fame Cinemas (in 2010), Satyam (in 2014) and 89 cinemas (before 2010). Organic screen addition over FY11-FY16 has been slower than that of PVR's. Going forward, we believe organic addition of screens by Inox Leisure (on absolute basis) will be about 40 screens annually.

Weaker-than-PVR operational metrics partly geography-driven: Weaker ATP, SPH and advertisement revenue per screen are driven partly by the different geographic mix of screen portfolio and also the premiumness of locations. Inox Leisure has relatively more screens/seats in the eastern part of India which is price-sensitive compared to PVR which has focus on the northern and western regions. Industry interactions indicate that ATP and SPH are higher relatively in these regions. The other reason being the greater proportion of screens in top cities and in more premium locations within them that PVR has got which gives it greater pricing power.

Invested capital per screen low and will be flat: One of the key drivers of reduction of the gap in RoIC between Inox Leisure and PVR (460bps in FY16, which we believe will reduce to 40bps by FY19E) will be invested capital per screen. This will be driven by goodwill write-off (in FY16) and growth that is largely organic from here on. PVR, in the near term, will be weighed down by the expensive acquisition of DT Cinemas.

GST regime will not only improve margins but could also lead to sale of its owned properties: The GST bill has been finally cleared by both Houses of Parliament and we believe it will be implemented in FY18. To be on the conservative side, we have chosen 22% revenue neutral rate. This will elevate EBITDA margins and RoIC. Also, Inox Leisure is of the view that its owned properties (about six in number) have a greater chance of being sold and leased back under the new regime, though not a certainty. This could give it firepower to expand more rapidly in the future. However in comparison to PVR we believe the benefits from GST are likely to be lower for Inox, Ceteris Paribus, as its current Entertainment Tax is 23% (27% for PVR) and the set off on inputs is only to the extent of 320bps vs 430bps for PVR.

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Revenue	8,954	11,589	13,223	15,510	17,696
YoY (%)	16.0	29.4	14.1	17.3	14.1
EBITDA	1,228	1,899	1,992	2,977	3,647
EBITDA (%)	13.7	16.4	15.1	19.2	20.6
Adj. PAT	200	775	618	1,220	1,640
YoY (%)	(45.7)	286.7	(20.2)	97.4	34.4
FDEPS (Rs)	2.2	8.4	6.7	13.2	17.8
RoE (%)	3.8	12.2	9.9	17.1	19.1
RoCE (%)	6.0	12.6	12.5	19.0	21.9
RoIC (%)	6.1	13.1	13.0	19.5	22.4
P/E(x)	124.2	32.1	40.3	20.4	15.2
P/BV (x)	3.7	4.2	3.8	3.2	2.7
EV/EBTDA	22.0	14.1	13.9	9.3	7.4

Source: Company, Nirmal Bang Institutional Equities Research; Priced on 3rd October closing prices

BUY

Sector: Film Exhibition

CMP: Rs270

Target price: Rs354

Upside: 31%

Girish Pai

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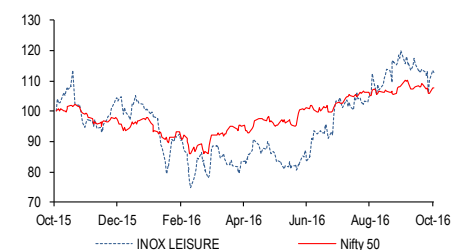
+91-22-3926 8017

Key Data

Current Shares O/S (mn)	96.5
Mkt Cap (Rsbn/US\$m)	24.9/371
52 Wk H / L (Rs)	293/170
Daily Vol. (3M NSE Avg.)	308,568

Share holding (%)	3QFY16	4QFY16	1QFY17
Promoter	48.7	48.7	48.7
Institutional	30.7	31.3	31.2
Public	20.6	20.0	20.1

One-Year Indexed Stock



Price Performance (%)

	1 M	6 M	1 Yr
Inox Leisure	(5.5)	36.0	14.6
Nifty Index	(0.6)	12.9	10.2

Source: Bloomberg

Financials

Exhibit 1: Income statement

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Net Sales	8,954	11,589	13,223	15,510	17,696
Growth (%)	16.0	29.4	14.1	17.3	14.1
Exhibition Cost (Distributor Share)	2,493	3,253	3,735	4,218	4,802
Food & Beverages Cost	496	661	739	980	1,126
Employee Benefits Expense	658	747	876	950	1,030
Property Rent, Conducting Fees	1,343	1,586	2,048	2,232	2,491
CAM, Power & Fuel, R&M & Other Exp	2,736	3,443	3,834	4,153	4,599
Total Expenses	7,726	9,690	11,232	12,533	14,049
EBITDA	1,228	1,899	1,992	2,977	3,647
% of sales	13.7	16.4	15.1	19.2	20.6
Growth (%)	(6.2)	54.7	4.9	49.5	22.5
Depreciation & Amortization	758	803	877	1,047	1,199
EBIT	469	1,096	1,114	1,930	2,448
% of sales	5.2	9.5	8.4	12.4	13.8
Other income (net)	83	43	73	41	46
Interest	386	244	310	344	308
Exceptional Items	6	50	0	0	0
PBT	160	846	877	1,627	2,186
PBT margin (%)	1.8	7.3	6.6	10.5	12.4
Tax	(41)	71	259	407	547
Effective tax rate (%)	(25.3)	8.4	29.5	25.0	25.0
Net profit	200	775	618	1,220	1,640
Growth (%)	(45.7)	286.7	(20.2)	97.4	34.4
Net profit margin (%)	2.2	6.7	4.7	7.9	9.3

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 3: Balance sheet

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Equity capital	962	962	962	962	962
Reserves & surplus	6,127	5,273	5,891	7,111	8,750
Net worth	7,089	6,234	6,852	8,072	9,712
Interest in Inox Benefit Trust	(327)	(327)	(327)	(327)	(327)
Long term borrowings	2,005	2,169	2,869	2,869	2,069
Deferred Tax Liabilities (Net)	243	59	59	59	59
Other Long-term liabilities	43	24	24	24	24
Long term provisions	61	78	78	78	78
Total liabilities	9,115	8,237	9,555	10,775	11,614
Goodwill on consolidation	1,652	4	4	4	4
Net Fixed Assets	6,681	7,043	8,163	9,163	9,963
Long term loans and advances	1,813	1,938	2,578	2,980	3,393
Long-term investments	7	11	11	11	11
Other non-current assets	40	128	128	128	128
Cash & cash equivalents	134	271	95	168	74
Total Current assets	888	882	991	1,084	1,185
Total current liabilities	2,100	2,041	2,417	2,764	3,145
Net current assets	(1,213)	(1,159)	(1,425)	(1,680)	(1,959)
Total assets	9,115	8,237	9,555	10,775	11,614

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 2: Cash flow

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
EBIT	469	1,096	1,114	1,930	2,448
(Inc./dec. in working capital)	(110)	38	266	255	279
Cash flow from operations	360	1,134	1,381	2,185	2,728
Other income	83	43	73	41	46
Depreciation & amortisation	758	803	877	1,047	1,199
Financial expenses	386	244	310	344	308
Tax paid	(41)	71	259	407	547
Dividends paid	0	0	0	0	0
Net cash from operations	855	1,665	1,761	2,521	3,117
Capital expenditure	1,354	1,032	1,966	2,000	2,080
Net cash after capex	(499)	634	(205)	521	1,037
Inc./(dec.) in debt	(143)	164	700	0	(800)
(Inc./dec. in investments)	(3)	4	0	0	0
Equity Issuance	1,482	(1,629)	0	(0)	(0)
Cash from financial activities	1,336	(1,461)	599	(135)	(791)
Others	(869)	1,433	(1,100)	65	1,497
Opening cash	166	134	(130)	245	168
Closing cash	134	271	69	175	74
Change in cash	(31)	136	199	(70)	(94)

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 4: Key ratios

Y/E March (Rsmn)	FY15	FY16	FY17E	FY18E	FY19E
Per share (Rs)					
FDEPS	2.2	8.4	6.7	13.2	17.8
Dividend Per Share	0.0	0.0	0.0	0.0	0.0
Book Value	73	64	71	84	102
Return ratios (%)					
RoE	3.8	12.2	9.9	17.1	19.1
RoCE	6.0	12.6	12.5	19.0	21.9
ROIC	6.1	13.1	13.0	19.5	22.4
Turnover Ratios					
Asset Turnover Ratio	1.1	1.6	1.6	1.6	1.7
Debtor Days	22	15	15	15	15
Working Capital Cycle Days	(44)	(32)	(34)	(35)	(36)
Solvency Ratios					
Net Debt/Equity	0.3	0.3	0.4	0.3	0.2
Net Debt/EBITDA	1.8	1.0	1.4	0.9	0.5
Valuation ratios (x)					
PER	124	32	40	20	15
P/BV	3.7	4.2	3.8	3.2	2.7
EV/EBTDA	22.0	14.1	13.9	9.3	7.4
EV/Sales	2.7	2.0	1.8	1.6	1.3
M-cap/Sales	2.4	1.9	1.6	1.4	1.2

Source: Company, Nirmal Bang Institutional Equities Research

Annexure

Profile of players

- PVR
- Inox Leisure
- Carnival Cinemas
- Cinepolis
- Wanda Cinema

Consumer survey

Overview of Indian film industry

Chinese film exhibition industry

Media report on food served at PVR's Director's Cut

Bollywood and Hollywood movie slate

Profile of players

PVR

PVR is the largest multiplex film exhibition company in India based on the number of screens. The company pioneered the multiplex revolution in India by establishing the country's first multiplex cinema in Delhi, in 1997. The company was incorporated in 1995 as Priya Village Roadshow. In 2002, the name of the company was changed to PVR after the exit of Village Roadshow.

Besides selling box office tickets, it earns revenues from in-cinema sale of food and beverages and in-cinema advertisements/product display.

Serving 75mn patrons at pan-India level currently, PVR acquired Cinemax in 2012 and recently acquired DT Cinemas. As of 30 June 2016, PVR operates 557 screens across 121 locations in 48 cities. It has a market share of 25% of total multiplex screens in India. PVR has 35% screens in northern region, 23% in southern region, 39% in western region and 3% in eastern region. The company has cornered best locations in various cities, thanks to its first-mover advantage and fleet-footed moves on the acquisition front. It has 5mn sq ft of operational retail space (as of FY16-end) and another 3mn sq ft under development.

PVR Group has four subsidiaries namely;

1. PVR Leisure – Into in-mall entertainment, gaming, food and leisure – 100% stake
2. Zea Maize Pvt Ltd – Manufactures and sells various varieties of gourmet Popcorn – 70% stake
3. PVR Pictures - Distribution of Indian and international films - 100% stake
4. PVR bluO Entertainment – operates bowling centres with bars and multi cuisine restaurants – 51% stake
5. Lettuce Entertainment – subsidiary of PVR Leisure – 100% stake

Exhibit 93: State-wise spread of PVR's screens

States = 18	Properties = 121	Screens = 557
Haryana	8	29
Delhi	14	47
Uttarakhand	1	5
Uttar Pradesh	10	52
Chandigarh	3	15
Punjab	7	39
Rajasthan	1	4
Madhya Pradesh	3	11
Gujarat	11	48
Maharashtra	35	147
Karnataka	10	73
Kerala	2	13
Tamil Nadu	2	12
Andhra Pradesh	1	4
Telangana	4	23
Chhattisgarh	4	17
West Bengal	3	13
Jharkhand	1	3
Assam	1	2

Source: Company, Nirmal Bang Institutional Equities Research

Premiumisation taking off in a small way

As incomes increase, households want to buy more premium products and services. PVR has introduced various categories of theatres to cater to different classes of audiences. At the higher end it has introduced theatres which are called Directors' Cut and Gold Class which have significantly higher ticket prices than company average (as much as 2x-8x), mostly premium recliner seats, significantly enhanced F&B (with live food counters and more exotic food like Sushi – see Annexure). The number of seats involved from an overall company perspective in premiumisation is not too much. But there is a sliver of exiting consumer base which does not mind paying for such facilities which PVR is trying to cater to. Also to cater to the class of people (typically in Tier-2 and Tier-3 cities) which are in the lower income category, PVR Talkies has been launched. Dynamic pricing also ensures that the same theater caters to cohorts of customers with different purchasing power by having different prices during different hours of the day and also days of the week.

Exhibit 94: Various film exhibition sub-brands of PVR

Brand	Description	Screens
PVR Director's Cut	7-star movie experience along with fine dining. One-of-a-kind movie-watching experience.	4
PVR Gold Glass	Luxurious comfortable reclining seats. Gourmet menu with live kitchen. Intended for an audience that desires a great, exclusive experience.	28
PVR Premiere	Premium seating. 7.1 Dolby surround system. 4k digital projection with 3D screens.	106
PVR Cinemax/DT Cinemas	Comfortable seating, with wider legroom. Mainstream cinema with latest amenities.	395
PVR Talkies	Caters to Tier-2 & Tier-3 markets. Hygienic environment with basic facilities.	20
		553

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 95: List of top 10 Shareholders and their holding (in %)

Bijli Holdings Private Limited	21.47
Reliance Capital Trustee Co. Ltd A/C Reliance Equity Opportunities fund	3.85
Individuals/Hindu Undivided Family	3.79
Baron Emerging Markets Fund	3.21
Plenty Private Equity FII Limited	2.98
Morgan Stanley Asia (Singapore) PTE	2.87
Parvest Equity India	2.86
Sundaram Mutual Fund A/C Sundaram Select Midcap	2.24
Bnp Paribas Equity Fund	1.24
Axis Mutual Fund Trustee Limited A/C Axis Mutual Fund A/C Axis Midcap Fund	1.13

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Key Management Personnel

Mr. Gautam Dutta, CEO, PVR Ltd: Mr. Dutta has over 21 years of experience in the advertising field. He currently handles the entire operations, F&B and sponsorship revenues of exhibition circuit and has been with the group for over 10 years

Mr. Kamal Gianchandani, CEO, PVR Pictures: Mr. Gianchandani has over 21 years of experience and presently handles film financing, distribution, syndication, licensing and exhibition for both Indian and foreign language films in India

Mr. Nitin Sood, CFO: Mr. Sood has over 18 years of experience. As a group CFO, he is involved in the overall business, financial and strategic planning for all businesses, project evaluations, compliance and corporate governance

Board Members

Mr. Ajay Bijli, Chairman, MD: Mr. Bijli established PVR in 1995 and has over 21 years of experience in the movie exhibition industry. He has a management degree from Harvard Business School

Mr. Sanjeev Kumar, Joint-MD: Mr. Kumar manages the film acquisition and distribution business and programming activities of PVR. He has over 21 years of experience in the cinema exhibition industry and is also involved in the development and growth strategy of PVR

Ms. Renuka Ramnath, Director: MD & CEO of Multiples Alternate Asset Management, a private equity firm. She was the Managing Director and CEO of ICICI Ventures and has over 25 years of experience in the Indian financial sector.

Mr. Amit Burman, Director: Mr. Burman is the Vice Chairman of Dabur India Ltd. He has over 22 years of experience in the FMCG industry

Ms. Sanjai Vohra, Director: Ms. Vohra is the former MD of JP Morgan Chase – Global Special Operations Group, Asia. She has over 30 years of experience in the banking industry, private finance and risk management

Mr. Vikram Bakshi, Director: Mr. Bakshi was the Managing Director of Connaught Plaza Restaurants Pvt Ltd – a JV with McDonald's. He successfully established McDonald's as the industry leader in the food service sector in North India

Mr. Sanjay Khanna, Director: Mr. Khanna has over 30 years of experience in the textile business and has been a Director since 2008.

Inox Leisure

Incorporated in 1999, Inox Leisure is the second-largest player in Indian multiplex film exhibition industry with ~20% share and is part of Inox Group, a subsidiary of Gujarat Fluorochemicals. From 2 properties – 8 screens in FY03, Inox Leisure now has 108 properties – 425 screens in 57 cities and 19 states as of 1QFY17-end. On the inorganic expansion front, Inox Leisure acquired '89 Cinemas' in FY08, 'Fame India' in FY11 & 'Satyam Cineplexes' in FY15.

Inox Leisure has 40% of its screens in western region, 23% in southern region, 21% in northern region and 16% in eastern region.

It also recently signed an agreement for five IMAX theatres in India. The theatres will be added to existing Inox multiplexes in the cities of Mumbai, Bangalore, Delhi and Kolkata. The agreement represents the largest theatre deal for IMAX in India and brings the total number of IMAX theatres in the country to 20, with nine currently open and 11 contracted to open.

Inox Group has a legacy of more than 80 years and has diversified businesses across industrial gases, engineering plastics, refrigerants, chemicals, cryogenic engineering, renewable energy and entertainment sectors with more than 8000 employees at more than 100 business units across India and a distribution network spread across more than 100 countries around the world.

Listed companies under Inox Group

1. Gujarat Fluorochemicals

- Largest producer of chloromethane, refrigerants and polytetrafluoroethylene in India.
- Pioneer of carbon credits in India.

2. Inox Wind

- Fully integrated player in wind energy market.
- State-of-the-art manufacturing plants near Ahmedabad (Gujarat) and at Una (Himachal Pradesh) and upcoming new facility in Madhya Pradesh.
- Ability to provide end-to-end turnkey solutions for wind farms.

3. Inox Leisure

- Second-largest multiplex chain in India.
- It is in the business of setting up, operating and managing a national chain of multiplexes under the brand name Inox.
- Present in 57 cities with 108 multiplexes and 425 screens.

Other key companies

1. Inox Air Products

- 50:50 joint venture with Air Products Inc., USA.
- Largest producer of industrial gases in India.
- 40 plants spread throughout the country.

2. Inox India

- Largest producer of cryogenic liquid storage and transport tanks in India.
- Offers comprehensive solutions in cryogenic storage, vaporisation and distribution engineering.
- Operates in India, USA, Canada, Netherlands and Brazil.

3. Inox Renewables

- Engaged in the business of setting up and operating wind farms.
- 213 MW operational capacity in three different states with another 20MW capacity ready for commissioning.

Exhibit 96: State-wise spread of Inox Leisure's screens

States = 19	Properties = 108	Screens = 425
Punjab	1	6
Delhi	4	13
Haryana	5	16
Rajasthan	11	35
Madhya Pradesh	4	16
Gujarat	11	44
Maharashtra	22	96
Goa	4	14
Karnataka	11	41
Kerala	1	6
Uttar Pradesh	4	16
Assam	1	2
Jharkhand	1	4
West Bengal	13	52
Odisha	1	3
Chhattisgarh	2	8
Telangana	2	11
Andhra Pradesh	7	28
Tamil Nadu	3	14

Source: Company, Nirmal Bang Institutional Equities Research

Exhibit 97: List of top 10 Shareholders and their holding (in %)

Gujarat Fluorochemicals	48.09
Goldman Sachs Group INC	4.74
Pavan Kumar Jain	4.51
Kuwait Investment Authority	3.61
Tata Balanced Fund	2.81
Macquarie Fund Solutions	2.58
Government Pension Fund Global	2.49
ICICI Prudential Exports And Other Services Fund	1.97
Reliance Capital Trustee Co Ltd A/C Reliance Media and Entertainment Fund	1.91
Morgan Stanley Sicav (Mauritius) Limited	1.88

Source: Bloomberg, Nirmal Bang Institutional Equities Research

Key Management Personnel

Mr. Alok Tandon, CEO: Mr. Alok Tandon is a Graduate in Mechanical Engineering with over 28 years of experience across Entertainment, Hospitality and Pharmaceutical industries. He has been part of the start-up team of the company and has helped develop the company since its inception

Board Members

Mr. Pavan Jain, Chairman: Mr. Pavan Jain, Chairman of the INOX Group, is a Chemical Engineer from IIT, New Delhi, and an industrialist with over 40 years of experience. He has over 30 years of experience as the Managing Director of INOX Air Products Private Limited

Mr. Vivek Jain, Director: Mr. Vivek Jain has graduated in Economics from St. Stephens, New Delhi, and did his post-graduation in business administration from IIM, Ahmedabad. He has over 35 years of business experience and is currently the Managing Director of Gujarat Fluorochemicals Limited

Mr. Deepak Asher, Director: Mr. Deepak Asher is a Commerce and Law graduate and a Chartered Accountant and Cost and Works Accountant with more than 32 years' of experience in the field of strategic business planning, formulation and implementation of various growth strategies as well as financial planning and management. He is a Director and Group Head (Corporate Finance) of the INOX Group of Companies, comprising of three listed companies and three international joint ventures

Mr. Siddharth Jain, Director: Mr Siddharth Jain earned a Bachelor's Degree in Mechanical Engineering at The University of Michigan, USA and an MBA from INSEAD, France. Mr Jain is currently a Whole-Time Director of INOX Air Products Private Limited, and also holds Directorship in other Group Companies as well

Mr. Amit Jatia, Director: Mr. Amit Jatia holds a degree in Business Administration from the University of Southern California, Los Angeles. Mr. Amit Jatia has over 25 years of experience in the QSR industry

Mr. Haigreve Khaitan, Director: Mr. Haigreve Khaitan is a Senior Partner of Khaitan & Co. Haigreve started his career in litigation at the company's Calcutta office and co-founded the Mumbai office in 2001

Mr. Kishore Biyani, Director: Mr. Kishore Biyani is a Commerce Graduate from the University of Mumbai and post graduate diploma in Marketing Management from the University of Mumbai. He is the founder of the Future Group of Companies

Ms. Girija Balakrishnan, Director: Ms. Girija Balakrishnan has graduated from the National Law School of India University in 1993. She is a Member of the Bar Council of Karnataka

Carnival Cinemas

Carnival Cinemas (a private company) is the third-largest multiplex chain operator in India currently. It operates ~350 screens across ~90 cities and has set a goal of operating 1,000 screens by 2018 and subsequently ~5,000 screens (no time line has been indicated). Based on media reports, Carnival Cinemas used to run four screens in 2010 – so the scale-up has been swift and massive. Carnival Group, a diversified corporate group, has interests in multiplexes, media, entertainment, hospitality and real estate.

Most of Carnival Cinemas' growth has been inorganic. Carnival Cinemas acquired 10 screens of Broadway Cinema from HDIL Group for Rs1.1bn in 2014, 242 screens of BIG Cinemas from Anil Ambani Group in 2015 by paying Rs2.8bn and taking on debt of Rs4.3bn, and 30 screens from Stargaze Entertainment's Glitz Cinemas (from Mukesh Ambani's Network 18 Group) in 2015 for Rs0.9bn.

Although Carnival Cinemas is third-largest in terms of screens (has about 17% share of total multiplex screens), the chain's box-office share is possibly smaller as it focuses on the mass market. While the above acquisitions have given it screens in Tier-1 cities, its strategy is to focus on Tier-2 and Tier-3 cities. Unlike PVR, Inox Leisure and Cinepolis which are targeting the upper urban middle class and focus on premiumisation, Carnival Cinemas focuses on bringing the multiplex experience to the mass market with a larger presence in Tier-2 and Tier-3 cities (where it has 60% of its screens). Ticket prices are lower, but occupancy rate is higher, according to the company. Rivals' ticket prices could be 20%-80% higher than those at Carnival Cinemas' multiplexes. This is because of the fact that capex per screen is likely to be lower. Carnival Cinemas' properties largely have 2D and 3D screens and mostly do not have advanced Dolby sound system, let alone Dolby Atmos, Imax and 4DX technology. Capex per screen in a Tier-2 or a Tier-3 city is Rs15mn versus average of Rs25m in a Tier-1 city.

Carnival Cinemas also plans to manage or go for tie-ups with single-screen theatres, either through a retainer or revenue-sharing/ profit-sharing basis for the massive scale-up.

Media reports indicate that Wanda Cinema of China has approached it with an acquisition proposal. This has been confirmed by Carnival Cinemas (again, according to media reports).

Cinepolis

Founded in 1971, Cinepolis is a Mexican multinational film exhibition company which is the fourth-largest in terms of number of screens in the world (~4,600) with presence in about 13 countries. It entered India in 2008 and is currently the fourth-largest player with current screen count of ~270. The company wants to take it up to 400 by the end of CY17 based on media reports. In India, it runs screens under brands such as Cinepolis, Cinepolis VIP and Fun Cinemas. It is the only foreign player in India currently. There have been media reports of the entry of Wanda Cinema (Chinese, arguably the largest player in film exhibition business globally based on both its home as well as overseas screens) and CJ CGV (Korean, the second-largest player in Asia).

Driven by innovation, Mexico-based Cinépolis was the first to introduce novel concepts to Latin American exhibition industry, such as the first multiplexes in 1972, the first megaplexes in 1994, the first IMAX screens in 2004, the first concept of edutainment with a six-screen Cinema Park in 2006 and the first digital 3-D screens with RealD in 2008.

Of the 4,600 screens internationally, Cinepolis has ~3000 in Mexico and the rest in other countries in Latin America, Spain and India. International expansion plan, in our view, has possibly been funded from the duopoly that exists in Mexico where it has ~50% share of the screens.

Besides organic screen growth, the big driver of screen growth in India has been Fun Cinemas' acquisition when it bought 83 screens from Subhash Chandra's Essel Group, in 2013 for Rs5.5bn (~Rs60bn per screen as EV). Recently, it also acquired seven screens from DLF for ~Rs640m in NCR region (screens that were not part of DT cinema deal that was struck between PVR and DLF because of Competition Commission of India's objections, Rs90mn per screen).

Cinepolis stated that it wants to take up screens in Delhi NCR to 75 from ~25 which it has currently (post acquisition of seven screens). Should that happen, it will be competing against PVR in the lucrative Delhi NCR market.

Globally, Cinépolis is known for its megaplexes (more than 10 screens per property). At a 12-screen or 15-screen megaplex, audiences can choose from at least three films over any half-hour period. Cinepolis claims that it is a premium player and that it prices its tickets at a 25% premium to competition. Despite this, its occupancy rate has been indicated to be 30% in CY15, rising from 26% in 2011. In terms of revenue mix, we believe Cinepolis has a mix in line with that of PVR currently.

Cinepolis has also introduced some new formats to India. In its 14-screen megaplex opened in 2014 in Thane, near Mumbai, it houses six concepts under one roof viz. Cinépolis VIP, IMAX, 4DX, Dolby Atmos, RealD 3D and 4K projection system. For the first time, audiences have access to 4DX to India which provides a fully immersive movie experience with real simulation of effects like motion seats, water, wind, fog, lightning and scents that enhance what one views on the screen.

Cinepolis, when it entered India, had a plan of establishing 500 screens in five to seven years, a plan that when awry because of weak retail real estate development and turbulence at top management level.

Recent media reports indicate that Cinépolis will become the first cinema exhibitor in India to operate two brands simultaneously — Cinepolis and Fun Cinemas. It will continue to operate its multiplex business under Cinepolis brand, and will keep the single-screen business under Fun Cinemas brand. In the latter, the company has started tie-ups with single-screen property owners. In single-screen business, Cinepolis will invest in refurbishing and rebranding the properties and the two parties will share the revenues from various streams — box office, food and beverage, parking and cinema advertising.

Media reports indicate that Cinepolis globally is targeting revenues of US\$2bn by 2017 with 35% of it coming from non-Mexican operations.

Wanda Cinema

Wanda Cinema, established in 2005, is the largest film exhibition company in the world with ~16,500 screens currently controlled by it directly and indirectly. It has a global footprint with operations in China, US, Europe and Australia. It had a share of 17% in 35,000-screen Chinese market as of end-June 2016 and 20% share in ~40,000 screens in the US market currently, making it the largest player in both markets. The latter is through its controlling stake in AMC Entertainment, the largest film exhibitor in the US with ~5,300 screens and Carmike Cinemas with ~3,000 screens. In July 2016, it also acquired a controlling stake in Odeon UCI which has ~2,300 screens, the largest film exhibitor in the UK and Europe. Details of the acquisitions done by Wanda Cinema are given in Exhibit 98

Wanda Cinema is a part of Dalian Wanda group – a diversified conglomerate in China - owned by Wang Jianlin, the wealthiest Chinese entrepreneur currently. Founded in 1988, Dalian Wanda is engaged in three key business activities - commercial properties, culture, and finance. In 2015, its assets amounted to ~US\$95bn with revenues of ~US\$44bn. Dalian Wanda claims that its commercial property business is the world's largest real estate enterprise and it is also the biggest five-star hotel owner in the world. Wanda Cultural Industry Group, it claims, is the largest cultural enterprise in China, and the world's largest cinema operator. It is also the world's biggest sports company. Wanda Financial Group is the largest Internet finance enterprise in China. By 2020, Wanda Group aims to become a world class multinational corporation with assets of US\$200bn, market capitalisation of US\$200bn, revenues of US\$100bn and net profit of US\$10bn. Media reports indicate that much of the expansion (including overseas ones) of Wanda Group has been funded by state-run banks in China.

Based on media reports, Wanda Cinema had 6,000 screens in China as of end-June 2016, having grown from 1,315 as of end-June 2014. Wanda Cinema has a customer loyalty membership programme which currently has 60mn members in China.

Exhibit 98: Acquisitions done by Wanda Cinema since 2012

Acquirer	Target	Valuation	Year of transaction	Comments
Wanda	AMC Entertainment, USA	US\$2.6bn	2012	AMC has ~5,350 screens mostly in the US.
Wanda	Hoyts, Australia	US\$365mn	June, 2015	Operates ~450 screens in Australia.
AMC Entertainment (Wanda subsidiary)	Carmike Cinemas	US\$1.2bn	June 2016	Carmike has ~3,000 screens in the US.
AMC Entertainment (Wanda subsidiary)	Odeon UCI	US\$1.2bn	July 2016	~2,300 screens makes Wanda the largest player in the UK and Europe.

Source: Media reports, Nirmal Bang Institutional Equities Research

Exhibit 99: Brief financials of Wanda Cinema

(CNYmn)	CY12	CY13	CY14	CY15	Last 12M 30/06/2016	CY16E	CY17E
Revenues	2,806	3,765	5,082	7,652	9,848	12,188	15,889
EBITDA	-	-	1,304	1,750	-	2,975	3,994
EBIT	469	684	943	1,503	1,843	2,244	3,045
PAT	388	603	801	1,186	1,362	1,752	2,404
Capital employed	1,600	2,213	3,013	12,933	13,014	-	-
Net worth	1,600	2,203	3,003	9,115	9,785	-	-
Capex	(553)	(537)	(672)	(1,098)	(1,258)	(670)	(817)
Growth (%)							
Revenues	-	34%	35%	51%	-	159%	30%
EBITDA	-	-	-	34%	-	170%	34%
EBIT	-	46%	38%	59%	-	149%	36%
PAT	-	55%	33%	48%	-	148%	37%
Capital employed	-	38%	36%	329%	-	-	-
Net worth	-	38%	36%	204%	-	-	-
Capex	-	(3%)	25%	63%	-	61%	22%
Margins (%)							
EBITDA	-	-	26%	23%	-	24%	25%
EBIT	17%	18%	19%	20%	19%	18%	19%
PAT	14%	16%	16%	15%	14%	14%	15%
Return ratios (%)							
RoCE	-	36%	36%	19%	-	-	-
RoE	-	32%	31%	20%	-	-	-

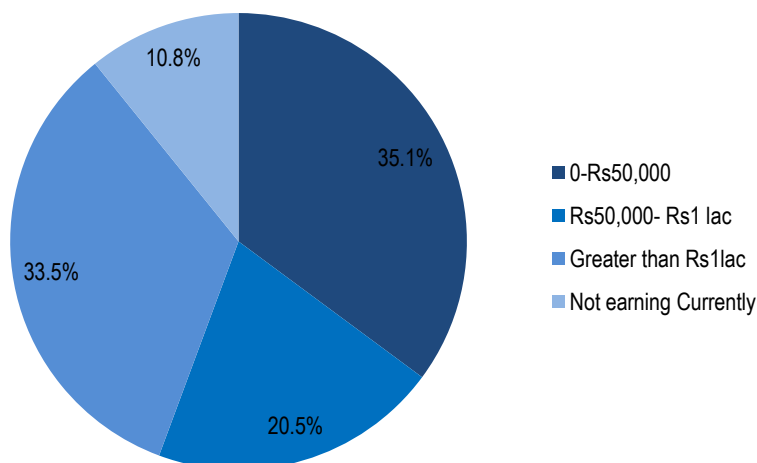
Source: Bloomberg, Nirmal Bang Institutional Equities Research

Consumer survey analysis

We did an online consumer survey on Indian multiplexes recently to capture consumer behaviour/perception vis-à-vis the multiplex industry. We had a total of 280 unique participants in the survey. A total of 180 answered all questions in the survey. About 100 participants did not respond to many of the questions we posed.

Profile of respondents to the consumer survey:

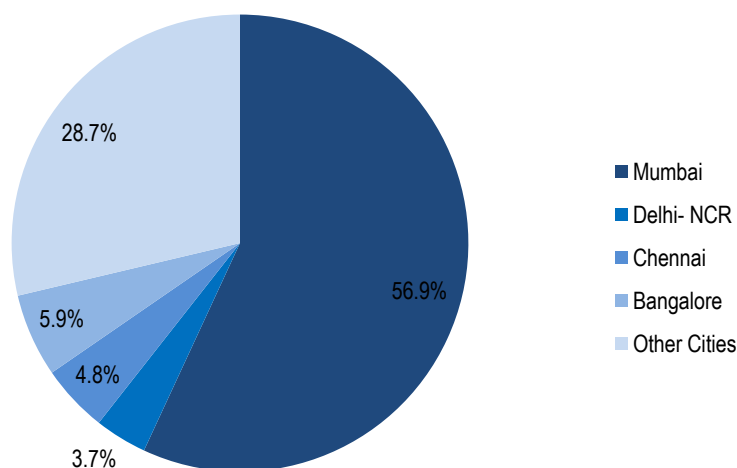
Exhibit 100: Income distribution of respondents



Note: Only 185 respondents answered this question

Source: Nirmal Bang Institutional Equities Research

Exhibit 101: Geographic distribution of respondents



Note: Only 188 respondents answered this question

Source: Nirmal Bang Institutional Equities Research

From the consumer survey, we gather the following:

- Content is a critical component for making a decision to go to a multiplex theatre. About 85%-90% of the responses across income groups indicated it to be the key factor driving a visit to the theatre.
- As regards customers in the highest income bracket, it was proximity that determined which theatre he/she visits followed by ambience of the theatre. Price of tickets and the brand came last. No surprises here. Thus, higher income group customers are less price-sensitive. However, for the lowest income bracket price of tickets was critical to decide which theatre to visit. It is quite likely that these customers travel long distances to visit a theatre that sells tickets at price points they can afford.

- The consumer survey throws up an interesting conclusion - if their incomes increase it is unlikely that they would spend more on movies. However, if their incomes take a hit, it is very likely that movie-going would be among the first things on the chopping block. This is very typical of consumer discretionary products and services where demand is directly related to real disposable income. As visits are likely to be few, the aim of the companies should be extract more from a customer by getting him to upgrade or buy more products and services – all this time ensuring that he comes back.
- Visits to multiplex theatres are at best monthly or quarterly affairs (with roughly 35%-40% falling into each bucket). We have been surprised by the percentage of people claiming to go to the movies at least once a month (35%-40%). According to consumer surveys done by film exhibitors themselves, visits to multiplexes are about 3-4 times in a year in case of existing consumers.
- There is price sensitivity – about 52%/37%/27% of respondents in income categories 1/2/3 (category 1 are those who earn Rs 0 to Rs 50,000 a month, category 2 earn Rs 50,000 to Rs 1,00,000 a month and category 3 earn greater than Rs 1,00,000 per month) indicated that they would stop seeing movies in theatres if ticket prices are raised by 5%-10% every year. Also, about 92/90/77% of respondents in income categories 1/2/3 indicated that food prices are too high in theatres. Our discussion with industry on this aspect (F&B pricing being high) throws up interesting insights. Apparently this is the perception of all customers globally about F&B prices at multiplexes, yet they buy the products.
- Only 54% of respondents felt their multiplex experience has been affordable.
- Fairly large component of respondents (33%-40% across various income groups) seem to be viewing pirated content of latest movies. And this is not just prevalent with lower income respondents. Even a third of those with income greater than Rs 100,000 per month seem to be doing this. This, in our view, represents a very large revenue leakage that needs to be plugged. This has been going on for a very long time. Recently, there have been attempts to plug this revenue leakage through strict implementation of piracy laws with larger monetary penalty and even incarceration.
- 75%-90% of respondents indicated that they book tickets online. However, the numbers indicate that only about 30%-35% of tickets are bought online through some portal or the other. It is quite likely that the survey did not reach out to larger part of the audiences of PVR and Inox Leisure.

Exhibit 102: A summary of responses to the questions

	Rs 0 to Rs 50,000	Rs 50,000 to Rs 1,00,000	Greater than 1,00,000
Frequency of multiplex visits			
Weekly	15.6%	13.2%	11.3%
Fortnightly	6.3%	21.1%	12.9%
Monthly	42.2%	36.8%	40.3%
Quarterly	35.9%	28.9%	35.5%
Reason for visiting multiplexes			
Movie preference	84.6%	97.4%	87.1%
Part of an outing to a mall	15.4%	2.6%	12.9%
Factors that determine the choice of multiplex on a scale of 1-5			
Price of tickets	3.54	3.63	3.09
Proximity to your house	3.24	4.17	4.02
Brand of the multiplex	2.78	2.58	2.33
Ambience & interiors	3.50	3.16	3.64
Increase in consumer income and its corresponding effect			
Will spend more on watching movies	32.3%	39.5%	12.9%
Will not spend more on watching movies	67.7%	60.5%	87.1%
Decrease in consumer income and its corresponding effect			
Cut out eating at restaurants/fast food joints	26.2%	34.2%	47.5%
Cut out watching movies at multiplexes	73.8%	65.8%	52.5%

	Rs 0 to Rs 50,000	Rs 50,000 to Rs 1,00,000	Greater than 1,00,000
Hike in ticket prices by 5-10% and its corresponding effect			
Stop watching movies at multiplexes	52.3%	36.8%	27.4%
Continue watching movies at multiplexes	47.7%	63.2%	72.6%
Hollywood/regional movies viewership lately			
Increased	60.0%	50.0%	44.3%
Has not changed	40.0%	50.0%	55.7%
Overall movie experience at a multiplex			
Affordable	55.4%	36.8%	56.5%
Not affordable	44.6%	63.2%	43.5%
Food prices at a multiplex			
Affordable	7.7%	10.5%	22.6%
Not affordable	92.3%	89.5%	77.4%
Pirated versions of newly released movies			
Watch	36.9%	39.5%	33.9%
Do not watch	63.1%	60.5%	66.1%
Download of new movies from websites like Torrent			
Download	47.7%	34.2%	35.5%
Do not download	52.3%	65.8%	64.5%
Online booking facility			
Use	78.5%	97.3%	88.7%
Do not use	21.5%	2.7%	11.3%
Current location			
Mumbai	63.1%	63.2%	49.2%
Delhi	1.5%	7.9%	4.9%
Chennai	4.6%	2.6%	4.9%
Bangalore	4.6%	5.3%	6.6%
Any other city	26.2%	21.1%	34.4%
Maximum amount respondent is willing to pay for ticket and F&B			
Rs200	27.7%	15.8%	17.7%
Rs250	21.5%	28.9%	14.5%
Rs300	26.2%	28.9%	25.8%
Rs350	15.4%	15.8%	12.9%
Rs400	9.2%	10.5%	29.0%

Source: Nirmal Bang Institutional Equities Research

Consumer survey questions

1. Do you watch movies in a multiplex?
 - A. Yes
 - B. No
- If no why not
 - A. Do not like watching movies
 - B. My income does not permit me
 - C. The theatre is too far away
 - D. Watch the pirated version of the movie
2. How often do you visit a multiplex?
 - A. Weekly
 - B. Fortnightly
 - C. Monthly
 - D. Quarterly
3. What determines your visit to a multiplex more?
 - A. Movie preference
 - B. Part of an outing to a mall
4. What affects your choice of one multiplex over the other?
 - A. Price of tickets
 - B. Proximity to your house
 - C. Brand of the multiplex
 - D. Ambience and interiors
5. If your income increased, would you spend more on watching movies?
 - A. Yes
 - B. No
6. If your income falls, what would you cut out first?
 - A. Eating at restaurants/fast food joints
 - B. Watching movies at multiplexes
7. Would you stop going for movies if ticket prices are hiked by 5%-10% annually?
 - A. Yes
 - B. No
8. Have you been watching more Hollywood and regional movies lately in multiplexes?
 - A. Yes
 - B. No
9. Do you find the overall movie experience at multiplex affordable?
 - A. Yes
 - B. No
10. Do you find the food at multiplex affordable?
 - A. Yes
 - B. No

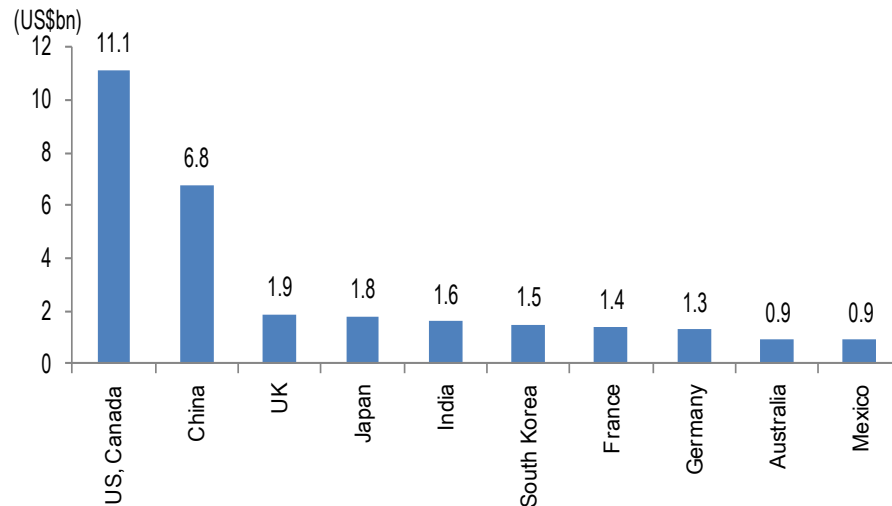
11. If you have been to any of these multiplexes, how would you rate your experience?
- PVR/Cinemax
- A. Satisfactory
 - B. Satisfactory, but expensive
 - C. Unsatisfactory
 - D. Have not been to one
- Inox
- A. Satisfactory
 - B. Satisfactory, but expensive
 - C. Unsatisfactory
 - D. Have not been to one
- Cinepolis
- A. Satisfactory
 - B. Satisfactory, but expensive
 - C. Unsatisfactory
 - D. Have not been to one
12. Do you watch pirated versions of newly released movies
- A. Yes
 - B. No
13. Do you download new movies from sites like Torrents and watch them
- A. Yes
 - B. No
14. Do you book tickets online
- A. Yes
 - B. No
15. What is your monthly income?
- A. Rs0 – Rs50,000 per month
 - B. Rs50,000 – Rs100,000 per month
 - C. Greater than Rs100,000 per month
 - D. Not working currently
16. Where are you located currently?
- A. Mumbai
 - B. Delhi
 - C. Chennai
 - D. Bangalore
 - E. Other City

17. You are willing to spend for overall movie-watching experience (including food) per person a maximum sum of ?
- A. Rs200
 - B. Rs250
 - C. Rs300
 - D. Rs350
 - E. Rs400

Overview of Indian film industry

India is the world's fifth largest movie market, trailing the likes of the US and Canada, China, Japan and the UK, according to Motion Picture Association of America's (MPAA) Theatrical Market Statistics Report 2015 (see Exhibit 103). Indian domestic theatrical revenues are set to post a CAGR of 9.5% over 2015-20 (see Exhibit 104). We believe companies in Indian multiplex film exhibition business will compound revenue at a faster rate over this time frame as they gain share from single screens. Multiplex industry has screen share of 25% and box office revenue share of 40%-45%.

Exhibit 103: The largest markets by box office revenues in 2015



Source: Motion Picture Association of America (MPAA) Theatrical Market Statistics Report 2015

Over the long run – 10 years - we expect volume CAGR of 5%-10% and realisation CAGR of 4%-6% driving 10-15% revenue CAGR. Our underlying assumption on volume growth is that it will be driven purely by growth in screens following the shift in customers from single screens to multiplex screens as these are set up in newer neighbourhoods, cities and towns. There will also be a new generation of customers who leapfrog from single-screen experience to multiplex experience. In our volume growth estimate, there is no expectation that it would be enhanced by increasing the number of per capita visits to multiplexes. Currently, the number is about 2-3 (assuming that the relevant population is 100mn-150m in size and multiplex admissions are ~300m in FY16). The underlying structural drivers of this growth include continued urbanisation, increased number of households entering the 'global middle class' as GDP grows at 6%-9%, a young population and lack of any meaningful entertainment options at a reasonable price point. We believe India's pace of urbanisation (slow relative to emerging market peers) and income growth should lead to steady improvement in demand, and not a scorching one that was witnessed in China in recent years (see Exhibit 110). We believe the situation in China is one of extant demand not being met. However, the possibility of explosive growth does exist if urbanisation and incomes hit certain tipping points. But it is difficult to forecast when this could happen. We believe the industry is in its infancy. Despite this, it is already oligopolistic (Top 4 players command 70% of multiplex screens). Both ticket prices and SPH have room to expand in coming years. The latter will lead to EBITDA expansion and better RoCE.

Exhibit 104: Indian film industry's revenues – historical and projection

Revenues (Rsbn)	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E	2014-15 (YoY growth %)	CAGR 2015-20 (%)
Domestic theatrical	68.8	85.1	93.4	93.5	101.4	115.8	125.7	136.1	147.6	159.9	8.5	9.5
Overseas theatrical	6.9	7.6	8.3	8.6	9.6	11.4	12.4	13.5	14.5	15.6	11.5	10.9
Cable & satellite rights	10.5	12.6	15.2	14.7	15.9	18.2	19.8	21.4	23.2	25.1	8.1	9.5
Home video	2	1.7	1.4	1.2	1	0.9	0.8	0.7	0.6	0.6	(14.0)	(12.2)
Ancillary revenue streams	4.7	5.4	7	8.4	10.2	12.5	15.4	18.3	21.9	26.1	22.3	21.1
Total	92.9	112.4	125.3	126.4	138.1	158.8	174.1	190	207.8	227.3	9.3	10.5

Source: KPMG FICCI - Indian Media & Entertainment Industry Report 2016, Nirmal Bang Institutional Equities Research

Exhibit 105: Share of revenues of individual segments

(percentage of total revenues) (%)	2011	2012	2013	2014	2015	2016E	2017E	2018E	2019E	2020E
Domestic theatrical	74	76	75	74	73	73	72	72	71	70
Overseas theatrical	7	7	7	7	7	7	7	7	7	7
Cable & satellite rights	11	11	12	12	12	11	11	11	11	11
Home video	2	2	1	1	1	1	0	0	0	0
Ancillary revenue streams	5	5	6	7	7	8	9	10	11	11
Total	100	100	100	100	100	100	100	100	100	100

Source: KPMG FICCI - Indian Media & Entertainment Industry Report 2016, Nirmal Bang Institutional Equities Research

In the above table, we see that the share of domestic theatrical revenues (which is slow-growing revenue stream) is coming down, but within that we believe the share of multiplex will go up as multiplex screens' share keeps rising in coming years.

Bollywood films have taken off in a big way post 2012

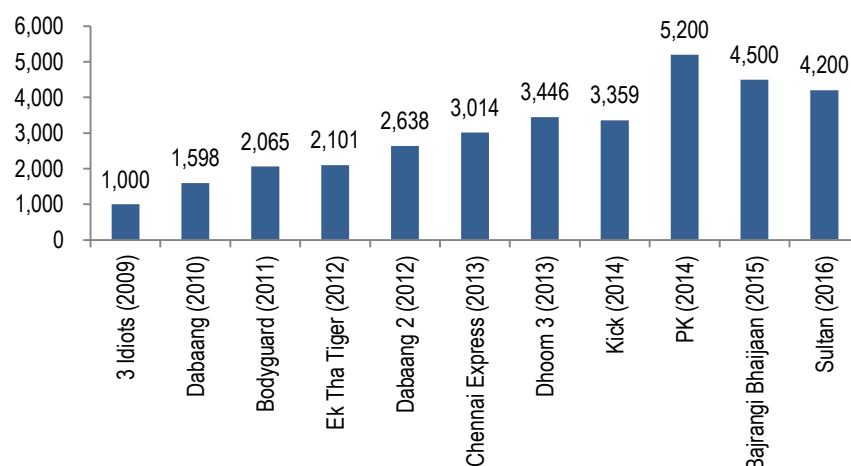
A look at the track record of the performance of Indian films indicates that the industry has been going through a purple patch since 2012. Only one movie of Top 15 blockbusters came from an earlier era. We attribute this to wider distribution of movies as they now use the digital format. Also, we believe the multiplex revolution has helped boost box office collections.

Exhibit 106: Top 15 blockbusters ever in Indian cinema

Rank	Movie	Year	Studio(s)/Producers	Language	Worldwide gross
1	PK	2014	Vinod Chooria Films/Raikumar Hirani Films	Hindi	₹Rs7.92bn (US\$120mn)
2	Baahubali: The Beginning	2015	Arka Media Works	Telugu	₹Rs6.5bn (US\$97mn)
3	Bajrangji Bhaijaan	2015	Salman Khan Films/Kabir Khan Films	Hindi	₹Rs6.26bn (US\$93mn)
4	* Sultan	2016	Yash Raj Films	Hindi	₹Rs5.84bn (US\$87mn)
5	Dhoom 3	2013	Yash Raj Films	Hindi	₹Rs5.4bn (US\$80mn)
6	Prem Ratan Dhan Payo	2015	Fox Star Studios/Rajshri Productions	Hindi	₹Rs4.32bn (US\$64mn)
7	Chennai Express	2013	Red Chillies Entertainment	Hindi	₹Rs3.96bn (US\$59mn)
8	3 Idiots	2009	Vinod Chopra Films	Hindi	₹Rs3.92bn (US\$58mn)
9	Dilwale	2015	Red Chillies Entertainment/Rohit Shetty Productions	Hindi	₹Rs3.72bn (US\$55mn)
10	Bajirao Mastani	2015	SLB Films	Hindi	₹Rs3.58bn (US\$53mn)
11	Kick	2014	Nadiadwala Grandson Entertainment	Hindi	₹Rs3.52bn (US\$52mn)
12	* Kabali	2016	V Creations	Tamil	₹Rs3.50bn (US\$52mn)
13	Happy New Year	2014	Red Chillies Entertainment	Hindi	₹Rs3.45bn (US\$51mn)
14	Ek Tha Tiger	2012	Yash Raj Films	Hindi	₹Rs3.08bn (US\$46mn)
15	Yeh Jawani Hai Deewani	2013	Dharma Productions	Hindi	₹Rs2.96bn (US\$44mn)

Source: Wikipedia, Nirmal Bang Institutional Equities Research

Exhibit 107: Movies that witnessed a wider release



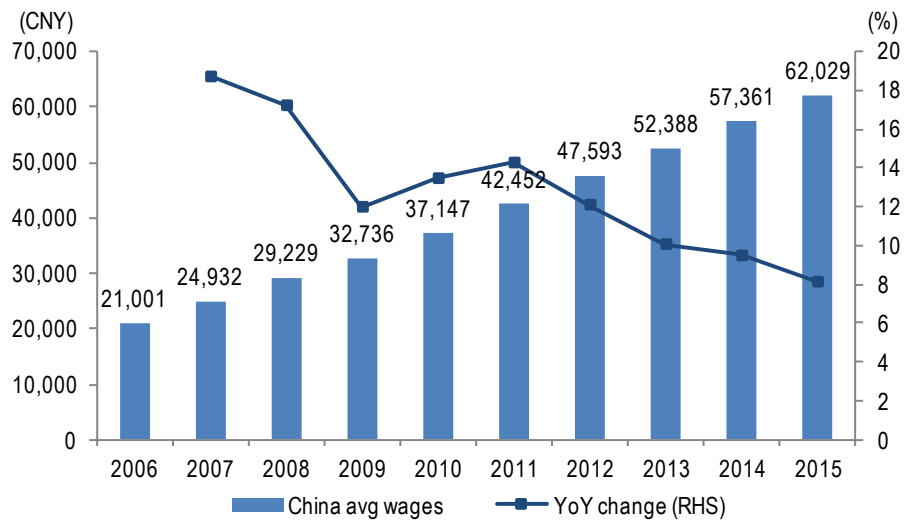
Source: Company Presentations, Nirmal Bang Institutional Equities Research

China's explosive multiplex growth story

Ingredients for a successful movie industry existed in China all along...

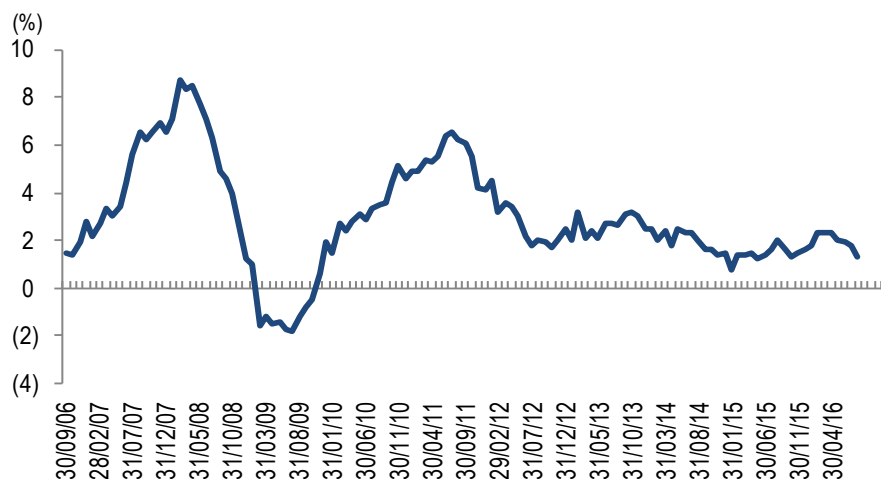
China's film industry underwent a metamorphosis over the past seven to eight years. In a way, one would say that all the ingredients for a successful movie industry existed in China all along such as urbanisation- which has been over 55% - and incomes of Chinese citizens moving up at a rapid pace over the past 30 years. Especially post 2008 global financial crisis, there has been focus on shifting the economy to a more domestic-oriented one by driving consumption. One of the ways this has been done was by increasing wages (Exhibit 108). With inflation under control, real income grew at a rapid pace. There was thus always pent-up demand for filmed entertainment which was not catered to. It was only change in attitude of the government that served as the catalyst.

Exhibit 108: Nominal wages have been rising at a rapid pace in China....



Source: Tradingeconomics.com, Nirmal Bang Institutional Equities Research

Exhibit 109: ... while CPI in China has been very low, leading to solid real wage growth

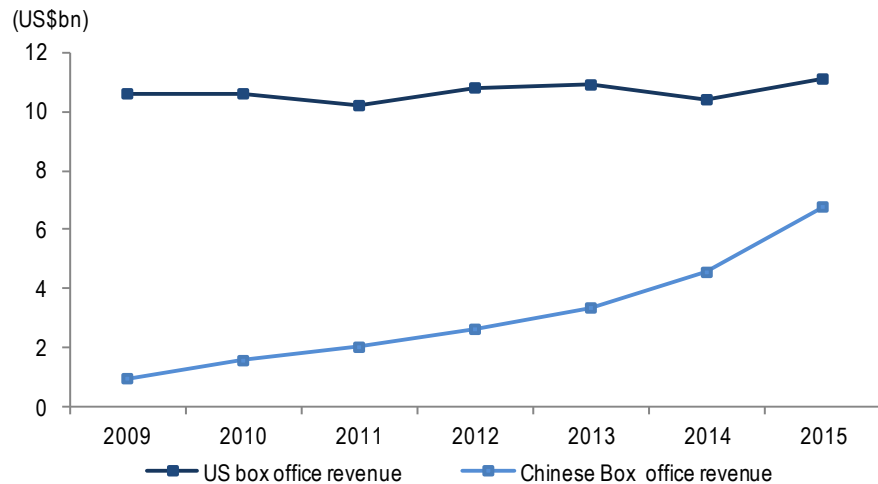


Source: Bloomberg, Nirmal Bang Institutional Research

...but politics prevented it from growing - government is now incentivising

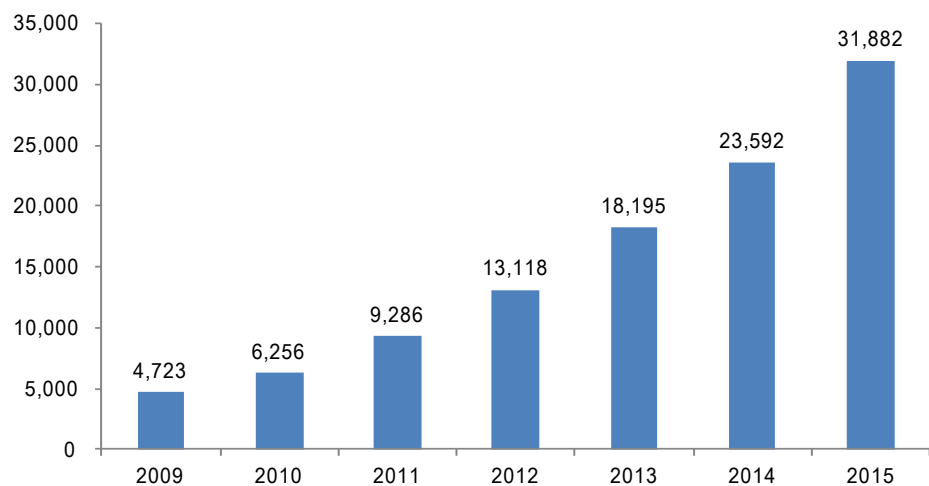
From 1979 to early 1990s, Chinese movies were mainly propaganda films approved by the government. As a result, attendance fell 79% from 1982 to 1991. To revive its movie business, the Chinese began importing more American films and today allows an annual quota of 34 films a year (from 20 earlier). The Chinese government introduced special tax breaks and incentives on film production as well as exhibition side for Chinese players. On the exhibition front, there has been considerable support to establish screens in non-metro areas with exemption from taxation. There have also been decrees to local governments to support setting up of new screens through specific funds earmarked for the purpose. So far the expansion in screens has found demand. However, it remains to be seen if there is going to be a massive misallocation of capital because of these incentives and local corruption in coming years.

Exhibit 110: Trend in box office revenues in China and the US



Source: Statista, MPAA, Nirmal Bang Institutional Equities Research

Exhibit 111: Number of screens in China



Source: Statista, Nirmal Bang Institutional Equities Research

Box office revenues exploded over the past six years and will shortly surpass that of the US

China's movie box office witnessed exponential growth, rising from less than US\$1bn in 2009 to US\$6.8bn in 2015. It grew 21% in 1H CY16 and expected to grow in mid-teens for a few years possibly surpassing the US box office by 2019. One of the advantages that China has is the fact that customers are leapfrogging into multiplexes straight away. For many years until the turn of the decade, there were only 4,000-5,000 screens. India started with a legacy of 12,000 single-screen theatres, half of which closed down since hitting the peak.

Set to have the largest number of screens in the world by early 2017

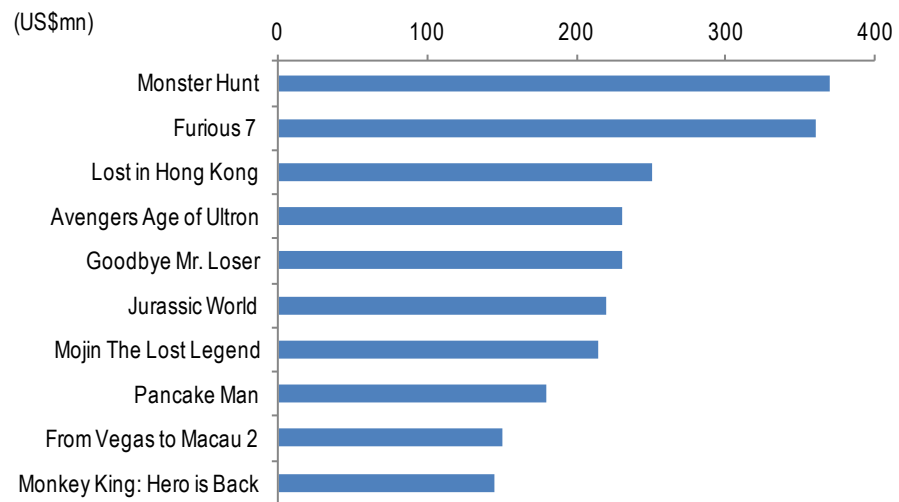
2015-end, China had ~32,000 screens, an increase of ~8,000 screens from the previous year and by June 2016, the number was 35,000. US screen number stood at ~40,500 in 2015. It is estimated that at the current rate of screen construction, China should have ~40,000 screens by the end of 2016 and is on track to overtake the US in early 2017.

Much of the growth is being driven by smaller inland cities where people, some of whom had never previously watched movies, now suddenly having access to multiplexes - driven to a very large extent by tax breaks and other incentives provided by Chinese government. Chinese New Year is the biggest box office time of the year when hundreds of millions go home from big cities to inland areas. A decade ago there wasn't much filmed entertainment available in small cities. With malls coming up in inland areas and consumers having the purchasing power, multiplex screens and box office revenues exploded in recent years. Industry analysts indicate that China's four biggest cities - Beijing, Shanghai, Guangzhou and Shenzhen - which accounted for 38% of China's total box office revenues a decade ago, now account for only 22%. Occupancy rate - based on conversation with Indian industry sources - indicate that they are probably in early 20s.

Focus on film production and exertion of Chinese soft power

China has been focusing on domestic production of movies and trying to shift away from dependence on Hollywood with some success. Chinese films accounted for ~61% of ticket sales in 2015 (up from 54% in 2014). Exhibit 112 gives top-grossing movies in China, many of which are Chinese movies. Average ticket price was down by about 2.5% to US\$5.36 in 2015. It also witnessed 51% increase in admissions, with 1.26bn people buying cinema tickets in 2015. During the week of 2016 Chinese New Year, the country set a new record for highest gross box office collection in one territory at US\$548mn, overtaking the previous record of US\$529.6mn of the period 26 December 2015 to 1 January 2016 in the US and Canada.

Exhibit 112: Highest-grossing films in China in 2015



Source: entgroup, Nirmal Bang Institutional Equities Research

Growth of domestic film production industry

Film production was not a strong point of China until the past five years. Hollywood movies used to dominate box office revenues. However, there is a perceptible shift in revenue mix with more Chinese movies being produced. This is largely driven by opening up of this segment of the market to private players as well as incentivising domestic film production through tax breaks and subsidies.

Hollywood wants a piece of Chinese market

With Chinese film box office revenues set to surpass that of the US in a few years, Hollywood film production companies are strategising as to how to gain a share of the market. Currently, only 34 Hollywood movies can be shown in a year and none during the Chinese New Year season, which is most lucrative for the film industry as there is a splurge by Chinese consumers on entertainment. Also, Hollywood movies currently get only 25% of box office revenues while in the US and other parts of the world this number is between 40%-50%. This is the reason why Hollywood companies have been open to Chinese investment as it helped them get around the quota system which limited their ability to show films on the mainland. With co-production, Hollywood can bypass the quota and receive about half of ticket sales revenues. To qualify as a local film, one-third of the film must be shot in China and one-third of lead actors have to be Chinese.

Wanda Films, Alibaba Pictures, Tencent etc have invested in Hollywood companies to gain access to content and expertise.

Some examples

Legendary – controlled by Wanda Group - is producing a US\$150mn English-language project 'The Great Wall', starring Matt Damon and Andy Lau, the largest co-production between the US and China. It is due for release in late 2016. Wanda bought a controlling stake in Legendary (producer of films like 'Batman', 'Godzilla', 'Pacific Rim', 'Jurassic Park', etc) in early 2016 for about US\$3.5bn.

Lionsgate, makers of 'Hunger Games' franchise, is partnering Hunan TV, the second-largest broadcaster in China. The US\$1.5bn deal will see the Chinese company paying 25% of production costs of at least 50 Lionsgate films in next three years in exchange for 25% of all returns.

DreamWorks partnered with Chinese state-owned businesses to open Oriental DreamWorks in Shanghai. This co-owned studio is behind the third sequel to the hit movie 'Kung Fu Panda'. 'Kung Fu Panda 3' was considered a local Chinese film and was allowed to be screened during the popular Chinese New Year holiday period. 'Kung Fu Panda 3' opened to a smashing US\$57mn first box office weekend collection in China - a record for an animation film there - beating the US opening by US\$16mn.

Why are we talking about China in this report?

While we have a population that can be compared to China, we are probably 15-20 years behind it when it comes to consumption and investment. Ceteris paribus, we believe India will be in a similar situation, possibly a few decades from now - at least on film exhibition front in terms of the number of screens. We, however, do not see in India a replication of the scorching growth witnessed in China over the past five years in foreseeable future because the reasons for the former are one-off and peculiar to Chinese context.

Food served at PVR's Director's Cut: A media report

PVR Cinemas Goes Gourmet: Introduces Sushi and Japanese Hot Dogs (Source: NDTV.COM)

Aashna Ahuja | Updated: June 29, 2016 13:11 IST

There was a time when going out for a movie in Delhi was just that, a movie. Then, perhaps, it led to eating a meal before or after the show. Cut to the present and dinner-after-movie has now advanced to dinner-with-movie. Thanks to cinema halls' elaborate food menus, most moviegoers now don't find the need to make a quick stop at the food court or reserve a table at a restaurant anymore.

Cinema owners have realised that a customer's experience can be so much more than what happens on the big screen. This revolution may have many participants, but one in particular is taking extraordinary steps to woo diners who are also movie enthusiasts. Renaud Palliere, CEO- International Development, PVR Ltd, explains this philosophy well, "Movies and food go hand-in-hand and food and beverages (F&B) are a great attraction for the audience." In this endeavour, PVR Cinemas has now introduced gourmet Japanese cuisine at Director's Cut and Gold Class in NCR. And as proof of their focus on this new endeavour, they have brought on board internationally renowned Chef Yutaka Saito, from Megu, The Leela Palace, Delhi, who knows his sushi better than most.

From Popcorn to Pasta

"When Gold Class menus initially went beyond popcorn and nachos, expanding into pasta, pizza, dimsums - people actually liked it and we surprised ourselves. PVR now has a menu with about 100-120 food items featuring gourmet salads, mezze platters, shawarma rolls, the works. We have classified the food into sections like 'with finger', 'with fork', etc. The idea is to provide the facilities of a restaurant inside the cinema hall, but at the same time - the food should be convenient to eat while watching a movie. It's really important to make sure the food isn't too fragrant, since it's being served inside the theatre and you have to think of the other customers", says Executive Chef Mayank Tiwari, PVR Cinemas.

Sushi While You Watch Movies?

Japanese cuisine has found tremendous popularity in India, and sushi is the flavour of the moment in Delhi, agreed. But sushi rolls inside a cinema hall? "It's bite-sized and cold, with a neutral smell. And there's no dripping, so you don't have to worry about your shirt getting ruined while eating in the dark. With our extensive menu, we're already dabbling a bit in many cuisines like Italian, Chinese, Lebanese, Indian. But Japanese? It's never been done before in this format, and that's what makes it so exciting. Chef Saito has been curating menus exclusively for Simply Sushi at PVR Director's Cut and Gold Class in Delhi. He's taking this endeavour to a whole new level, serving non-vegetarian and vegetarian sushi rolls, sashimi, nigiri in beautiful lacquer bento boxes - mostly cold offerings. Most of the produce is actually flown in from Japan".

Japanese-Inspired Hot Dogs

It's not just about sushi though. If you love your hot dogs, you have to try the Japadog, good old-fashioned hot dogs with a Japanese twist. "Chef Saito has been playing around with ingredients and come up with ingenious ideas like a pork hot dog spruced up with freshly grated daikon and zesty soya, or chicken hot dog with wasabi mayo, teriyaki sauce and seaweed. The combinations are endless and beyond delicious", adds Renaud Palliere, CEO, PVR Ltd.

You can even choose to be seated at the live kitchen counter at Simply Sushi, placed strategically between Mistral and Director's Cut. This 9-seater sushi bar might be small, but it delivers on big promises. "With Simply Sushi, we aim to demonstrate that good quality Japanese food can also be popular and enjoyed in a casual setting, not necessarily in a five star hotel. Simply Sushi is open to the general public as well - not just moviegoers", Chef Saito says. We highly recommend the delectable Tofu Spinach with shiraya white season paste, sugar, soy, vinegar and a surprise crunchy element, and the Furumi Salmon Carpaccio with jalapeno and white miso. They make a mean MushroomNigiri, which comes second to their Spicy Salmon Rolls. If you want to opt for more variety, there's a bento box combo with 4 rolls, 2 nigiris and 1 appetiser available as well. "Under Chef Saito's guidance, we're also planning to open a restaurant in Mumbai where we'll be serving hot Japanese food as well", says Renaud Palliere.

For the Sweet Tooth

"Chef Mayank will soon also be rolling out unconventional Italian gelato flavours as well, like mango and mascarpone, basil and lemon, organic cocoa and passion fruit, single origin dark chocolate with Cointreau, goji berries teamed with different herbs". Since PVR recently acquired majority stake of 4700BC, Chef Mayank has also been working with 4700BC's Co-Founder Chirag Gupta on ingenious popcorn flavours like black grape, pineapple, mango, orange, and more. "After all, popcorn is still the hero. You can even make a sundae with the gelato and popcorn as add ons", Renaud Palliere, PVR continues.

"We plan to launch PVR Director's Cut in the UK and the Middle East too. It will take about 3-5 years for us to set this up, but we think it's time to take the brand overseas. We are already looking at properties", Renaud told NDTV. While PVR Director's Cut changed Delhi's moviegoers' experience by elevating it to uber luxury, Simply Sushi promises to redefine your food experience while watching a movie. "We are gradually looking towards getting the same quality and standards at Gold Class theatres across India, Director's Cut was just a starting point", adds Renaud Palliere, CEO.

So prepare to devour a freshly rolled salmon maki while you watch the next blockbuster, while sinking further into your plush recliner under a blanket, and get spoilt rotten with a hot towel (and an upcoming Japanese burger) just a button away.

The movie slate for 2016 and 2017

Bollywood and Hollywood movies with their tentative release dates

Bollywood movies - 2QFY17 onwards

Already released			
		Stars	Director
July-16	Sultan	Salman Khan, Anushka Sharma	Ali Abbas Zafar
	Great Grand Masti	Riteish, Vivek, Aftab	Inder Kumar
	Kabali	Rajinikanth, Radhika Apte	Pa. Ranjith
	Madaari	Irrfan Khan, Jimmy Shergill	Nishikant Kamat
	Dishoom	Varun Dhawan, John Abraham	Rohit Dhawan
August-16	Mohenjo Daro	Hrithik Roshan, Pooja Hegde	Ashutosh Gowariker
	Rustom	Akshay Kumar	Tinu Suresh Desai
	Happy Bhag Jayegi	Diana Penty, Abhay Deol	Mudassar Aziz
	A Flying Jatt	Tiger Shroff, Jacqueline	Remo Dsouza
September-16	Akira	Sonakshi Sinha	A. R. Murugadoss
	Baar Baar Dekho	Katrina Kaif, Sidharth Malhotra	Nitya Mehra
	Pink	Amitabh Bachchan, Tapsee Pannu	Aniruddha Roy Chowdhury
	Raaz Reboot	Emraan Hashmi, Kriti Kharbanda	Vikram Bhatt
Release awaited			
September-16	Banjo	Riteish Deshmukh, Nargis Fakhri	Ravi Jadhav
	Manmarziyan	Ayushmann Khuranna, Bhumi Pednekar	Sameer Sharma
	M S Dhoni: The Untold Story	Sushant Singh Rajput, John Abraham	Neeraj Pandey
October-16	Mirziya	Harshvardhan Kapoor, Saiyami Kher	Rakeysh Omprakash Mehra
	Ae Dil Hai Mushkil	Ranbir Kapoor, Anushka Sharma, Aishwarya Rai Bachchan	Karan Johar
	Shivaay	Ajay Devgn, Sayesha	Ajay Devgn
November-16	Rock On!! 2	Farhan Akhtar, Arjun Rampal, Shraddha Kapoor	Shujaat Saudagar
	Tum Bin 2	Anubhav Sinha	Neha Sharma, Aditya Seal
	Force 2	John Abraham, Sonakshi Sinha	Abhinav Deo
	Dear Zindagi	Shahrukh Khan, Alia Bhatt	Gauri Shinde
	Kahaani 2	Vidya Balan, Arjun Rampal	Sujoy Ghosh
December-16	Befikre	Ranveer Singh, Vaani Kapoor	Aditya Chopra
	Dangal	Aamir Khan	Nitesh Tiwari
2016	Cabaret	Gulshan Devaiah, Richa Chadda	Kaustav Narayan Niyogi
2016	Haramkhor	Nawazuddin Siddiqui, Shweta Tripathi	Shlok Sharma
2016	Run Bhole Run	Govinda, Tusshar Kapoor, Ameesha Patel	Neeraj Vora
January-17	Commando 2	Vidyut Jammwal, Adah Sharma, Esha Gupta	Deven Bhojani
	Ok Jaanu	Aditya Roy Kapur, Shraddha Kapoor	Shaad Ali
	Kaabil	Hrithik Roshan, Yami Gautam	Sanjay Gupta
	Baadshaho	Ajay Devgn	
	Raees	Shahrukh Khan, Mahira Khan, Nawazuddin Siddiqui	Rahul Dholakia
February-17	Rangoon	Shahid Kapoor, Saif Ali Khan, Kangana Ranaut	Vishal Bhardwaj
March-17	Badrinath Ki Dulhania	Varun Dhawan, Alia Bhatt	Shashank Khitan
April-17	Jagga Jasoos	Ranbir Kapoor, Katrina Kaif, Govinda	Anurag Basu
May-17	Half Girlfriend	Arjun Kapoor, Shraddha Kapoor	Mohit Suri
June-17	Tubelight	Salman Khan	Kabir Khan
July-17	Mubarakan	Anil & Arjun Kapoor	Anees Bazmee

October-17	Sons of Sardaar	Ajay Devgn	Rajkumar Santoshi
November-17	Captain Nawab	Emraan Hashmi	Tony D'souza
2017	Meri Pyaari Bindu	Parineeti Chopra, Ayushmann Khurana	Akshay Roy
2017	Crack	Akshay Kumar	Neeraj Pandey
2017	No Entry Mein Entry	Salman Khan, Anil Kapoor	Anees Bazmeee
2017	Raabta	Sushant Singh Rajput, Kriti Sanon	Dinesh Vijan
2017	Aankhen 2	Amitabh Bachchan, Arshad Warsi	Anees Bazmee
2017	Aashiqui 3		Mohit Suri
2017	Veere Di Wedding	Kareena Kapoor, Sonam Kapoor	Shashanka Ghosh
2017	Student Of The Year 2		Karan Johar
2017	Noor	Sonakshi Sinha	Sunhil Sippy
2017	Sarkar 3		Ram Gopal Varma
2017	Hera Pheri 3	Akshay Kumar, Paresh Rawal, Suneil Shetty, John Abraham	Ahmed Khan
2017	Golmaal 4	Ajay Devgan, Kareena Kapoor, Arshad Warsi	Rohit Shetty

Hollywood movies - 2QFY17 onwards

		Already released
July-16		The Legend Of Tarzan The Secret Life Of Pets Ice Age:Collision Course Star Trek Beyond Lights Out Ghostbusters Bad Moms The BFG
August-16		Jason Bourne Suicide Squad Ben-Hur Pete's Dragon War Dogs Nine Lives Mechanic:Resurrection Don't Breathe Skiptrace
September-16		Sully The Shallows The Light Between Oceans Robinson Crusoe
		Release awaited
September-16		The Magnificent Seven Storks End of a Gun Bridget Jone's Baby Deepwater Horizon Goat Unnerved I.T. Gold The Windmill
October-16		The Girl On The Train The Great Gilly Hopkins The Accountant The Matchbreaker Miss Peregrines Home for Peculiar Children Queen of Katwe Gambit Inferno

	<p>Certain Women Jack Reacher:Never Go Back Keeping Up With The Joneses The Greasy Strangler Under The Shadow American Pastoral Lace Crater Rules Don't Apply Let's Be Evil Priceless A United Kingdom Jack Goes Home The Creature Below American Honey Hurricane Bianca Boo! A Madea Halloween The Disappointments Room USS Indianapolis:Men Of Courage Max Steel Rings</p>
November-16	<p>Hacksaw Ridge Doctor Strange Trolls A Street Cat Named Bob Shut In Arrival Fantastic Beasts And Where To Find Them Allied Moana Lion Nerve Equity The Lost City of Z Finding Altamira Elle Manchester By The Sea Loving Almost Christmas Bleed For This Beyond Skyline I am Not A Serial Killer</p>
December-16	<p>Exit Thread Collateral Beauty Sing Son Of Rambow Patriots Day Rogue One:A Star Wars Story Assassin's Creed Why Him? The Love Witch A Death In The Gunj Imperium Office Christmas Party Miss Sloane The Promise Don't Think Twice La La Land</p>
January-17	<p>Underworld:Blood Wars The Founder Split XXX:The Return Of Xander Cage</p>

	<p>Live By Night Hidden Figures Passengers The Bye Bye Man Resident Evil:The Final Chapter</p>
February-17	<p>T2:Trainspotting 2 Same Kind of Different As Me Fifty Shades Darker The LEGO Batman Movie</p>
March-17	<p>Sheene Ghost In The Shell Power Rangers Table 19 King Arthur:Legend Of The Sword In The Shadows Beauty & The Beast Monster Trucks Smurfs:The Lost Village</p>
April-17	<p>Going In Style Stagecoach:The Texas Jack Story Furious 8 Lighthouse Keeper</p>
May-17	<p>Baywatch Annabelle 2 Kong:Skull Island</p>
June-17	<p>Bad Boys 3 World War Z 2 Transformers 5 Kingsman:The Golden Circle</p>
July-17	<p>Dunkirk Jumanji Transformers:The Last Knight The Great Wall Spider-Man:Homecoming Wonderwoman</p>
August-17	<p>Blazing Samurai Terminator 2</p>
November-17	<p>Thor:Ragnarok Mission Impossible 6 Justice League</p>

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BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

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