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Kotak Institutional Equities

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Updates

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News Roundup

Corporate

- Nalco has plans to set up an alumnium park close to its smelter plant in Orissa's Angul district. (FE)
- Leading pharmaceutical firm Ranbaxy Laboratories said it has received approval to manufacture and market Tamsulosin Hydrochloride (bio-equivalent to Flomax Capsules used to treat Beningn Prostatic Hyperplasia -BPH) capsules in Canada. (FE)
- Punjab National Bank has given a go-ahead to PNB Gilts to work out a scheme of merger with the bank, which holds 74% of PNB Gilts. (FE)

Economic and political

- Kolkata city was convulsed by rioting on Wednesday, November 21, when mobs attacked police, burnt cars and damaged property as a protest by the All India Minority Forum over the extended stay by Bangla author Taslima Nasreen turned into a free-for-all over Nandigram. The state government called in the army to regain control of the situation. (Media reports)
- Chinese Prime Minister Wen Jiabao has made a dramatic offer of Chinese nuclear commerce with India. (ET)
- The government wants to bring goods sold over the Internet to customers in India under the purview of domestic retail trade guidelines. (FE)

Source: ET = Economic Times, BS = Business Standard, FE = Financial Express, BL = Business Line.

EQUITY MARKETS

		Change, %		
India	**21-Nov**	**1-day**	**1-mo**	**3-mo**
Sensex	18,603	(3.5)	5.6	30.6
Nifty	5,561	(3.8)	7.3	33.9
Global/Regional indices				
Dow Jones	12,799	(1.6)	(5.7)	(3.3)
Nasdaq Composite	2,562	(1.3)	(7.0)	0.4
FTSE	6,071	(2.5)	(6.0)	(2.0)
Nikkie	14,778	(0.4)	(10.1)	(7.1)
Hang Seng	26,798	0.7	(5.6)	19.9
KOSPI	1,799	(0.4)	(5.5)	2.3

Value traded - India

			Moving avg, Rs bn	
	21-Nov		**1-mo**	**3-mo**
Cash (NSE+BSE)	270.0		289.1	242.3
Derivatives (NSE)	707.6		831.0	454.9
Deri. open interest	1,065.7		956.9	835.8

Forex/money market

		Change, basis points		
	21-Nov	**1-day**	**1-mo**	**3-mo**
Rs/US$	39.4	-	(50)	(153)
6mo fwd prem, %	0.7	(25)	71	24
10yr govt bond, %	7.9	1	2	(4)

Net investment (US$mn)

	20-Nov		**MTD**	**CYTD**
FIIs	(266)		(401)	16,885
MFs	35		34	204

Top movers -3mo basis

		Change, %		
Best performers	**21-Nov**	**1-day**	**1-mo**	**3-mo**
Neyveli Lignite	186	(10.9)	64.2	152.7
Reliance Energy	1,693	(5.7)	23.6	133.6
Reliance Cap	2,168	(4.8)	42.1	109.5
Escorts	143	(11.6)	35.2	89.1
Engineers India	831	(4.9)	48.0	82.8
Worst performers				
i-Flex	1,356	(3.0)	(14.4)	(28.4)
Infosys	1,548	(1.0)	(17.9)	(13.5)
Punjab Tractors	196	(2.1)	(8.4)	(13.2)
Ingersoll Rand	305	(5.3)	4.5	(9.8)
Glaxosmithkline	1,041	0.4	1.3	(6.8)

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Strategy

Sector coverage view	N/A

Embedded valuations—what lies beneath?

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We analyze stocks with large embedded value to better understand the sustenance of embedded valuations (and thus, stock prices) and conclude that embedded valuations may be exaggerated in many cases. We note that expansions in valuations of 'embedded' assets have contributed to a significant portion of the increase in market valuations and hence a more pragmatic view of embedded valuations may be negative for the market.

Analysis of embedded value stocks: Valuations exaggerated in many cases

Our analysis of stocks with large embedded valuations shows that the implied valuations of 'embedded' assets (assets that do not contribute to earnings currently but contribute to valuations) may be exaggerated in many cases, particularly in case of the power sector and Reliance Industries. Also, such valuations largely ignore execution risks with the market willing to ascribe valuations from any favorable development to all the stocks in a sector.

Vague and hence, in vogue

It is difficult to establish a fair value for ’embedded’ assets with a great deal of confidence. The very concept of embedded valuations (what lies beneath?) leads to vagueness and hence, uncertainty about fair valuations of ’embedded’ assets. We believe bullish market conditions and large liquidity have resulted in a somewhat indulgent approach towards valuations and analysis; the generous approach has been a prime reason for the acceptance, sustenance and even exaggeration of embedded valuations in certain cases.

Expansion in embedded valuations has been an important driver of the market

We estimate that embedded valuations account for 17% of the market as measured by BSE-30 Index. Our estimate of embedded valuations for BSE-30 Index stocks has expanded by 223% compared to a similar exercise done in September 2006. Also, we note that, of late, a large portion of our upgrades of target prices have been due to (1) increases in embedded valuations and (2) higher target multiples, which perhaps attempt to capture higher earnings stream from a yet unknown source (potential ’embedded’ asset) in the future.

IPOs/FPOs leading to re-rating of peer stocks similar to embedded value concept

We see an increasing tendency of IPOs or FPOs/QIPs leading to a steep increase in stock prices of peers and related stocks. This peculiar behavior seems to be an extension of the embedded valuation concept with the IPO/FPO company becoming the equivalent of an ’embedded’ asset for related stocks. It also highlights the increasing dominance of relative valuations as opposed to absolute valuations. We see no reason for sudden and large discoveries of ’value’ in well-researched and well-followed stocks.

We find embedded valuations are exaggerated in power, energy and telecom stocks

Summary of our analysis

	Exaggerated	Undervalued	Reasonable
Reliance Industries			
NTPC			
Reliance Energy			
Bharti Airtel			
Reliance Communications			
State Bank of India			
Housing Development Finance Corp.			
Sterlite Industries			
Cairn India			
Bajaj Auto			
Aditya Birla Nuvo			
DLF			
ICICI Bank			
Larsen & Toubro			
Jindal Steel & Power			
Tata Power			

Source: Kotak Institutional Equities estimates.

Companies with embedded value have outperformed the Sensex

Performance of 'embedded-value' companies versus Sensex

	Mkt cap.	Performance (%)				CYTD growth in mkt cap.
Company	(US$ bn)	1 month	3 months	6 months	CYTD	(US$ bn)
Reliance Industries	87	13	51	67	114	46.1
ICICI Bank	31	22	45	53	49	10.2
State Bank Of India	29	18	38	101	81	12.9
Larsen & Toubro	30	54	77	156	209	20.3
Reliance Petroleum	23	68	138	232	328	17.8
HDFC	19	2	33	58	63	7.3
Tata Steel	18	20	55	82	110	9.4
Reliance Capital	12	9	72	163	227	8.6
Cairn India	9	23	56	68	—	—
Reliance Energy	10	28	146	262	256	7.0
GMR Infrastructure	9	1	10	104	157	5.8
Jaiprakash Associates	8	23	75	136	99	4.0
Jindal Steel and Power	8	135	217	324	458	6.4
Aditya Birla Nuvo	4	(11)	4	35	24	0.7
Reliance Natural Resources	5	51	229	440	540	4.5
IDBI	3	4	46	76	108	1.5
Pantaloon Retail India	2	5	12	48	46	0.7
IFCI	1	(14)	36	77	580	1.1
IVRCL	2	18	33	60	36	0.4
Max India Limited	1	1	19	12	49	0.5
GVK Power & Infrastructure	1	(7)	36	107	141	0.6
Average for embedded value companies		22	68	127	175	
Sensex	**643**	**12**	**32**	**43**	**45**	**199**

Note:
(1) Embedded value companies are defined as companies with significant assets, which do not contribute to earnings currently.
(2) Shares of Reliance Industries are adjusted for treasury shares.

Source: Bloomberg, Kotak Institutional Equities.

Embedded valuations for BSE-30 Index stocks has expanded by 220% compared to a similar exercise done in September 2006
Embedded value computation of BSE-30 Sensex stocks

				Embedded value			
				21-Nov-07		7-Sep-06	
	Price	Shares o/s	Free float mkt cap.	Value	FF market cap.	FF market cap.	Growth
	(Rs)	(mn)	(US$ mn)	(Rs)	(US$ mn)	(US$ mn)	(%)
Reliance Industries	2,787	1,254	44,401	1,052	16,761	5,538	203
ICICI Bank	1,167	1,106	32,795	482	13,542	2,731	396
Larsen & Toubro	4,336	288	28,528	360	2,368	1,731	37
Bharti Airtel Limited	903	1,898	15,230	83	1,400	—	—
HDFC	2,639	287	17,297	936	6,136	1,824	236
Tata Steel	860	860	13,143	42	642	695	(8)
State Bank of India	2,280	526	13,715	687	4,133	1,268	226
Oil & Natural Gas Corporation	1,222	2,139	13,274	107	1,163	216	438
Grasim Industries	3,766	92	6,579	356	622	187	—
Reliance Communications	709	2,045	12,894	33	600	—	—
Bajaj Auto	2,430	101	4,372	1,231	2,215	837	165
Tata Motors	708	405	4,372	269	1,661	1,143	45
Hindalco Industries	194	1,307	4,834	78	1,942	400	386
Mahindra & Mahindra	731	257	3,813	390	2,035	—	—
Reliance Energy	1,794	228	7,785	330	1,432	943	52
BSE 30 :	**19,281**		**325,064**	—	**56,653**	**17,513**	**223**

Source: Kotak Institutional Equities estimates.

Economy

Sector coverage view	N/A

Subprime crisis deepens with Freddie Mac imploding; bailouts may follow

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- **Losses amounting to US$2.0 bn and a 29% plunge in Freddie Mac stock in a single day deepen the fallout from the subprime crisis**
- **We see systemic implications of the unfolding story of the US mortgage giants, but believe that contagion can be contained through tax cuts and further rate cuts**
- **We also expect the impact on the Indian market to be contained as a correction could follow with renewed buying**

The US mortgage market continues to take a beating and the subprime fallout has started to take a toll of mortgage lending giants. We believe this would have systemic implications for the US financial markets. Consequent risk aversion could also have some impact on the Indian markets. However, we believe the adverse impact could be contained within the US through tax cuts and further rate cuts. The impact on India would be small due to limited exposures to MBS.

Mortgage giants troubles deepen

We believe the higher-than-anticipated impact of the subprime crisis on mortgage giants may have systemic implications on the US economy—possibly triggering tax cuts, further Fed funds rate cuts and institution-specific bailouts, in that order. The US economy has three mortgage giants – Federal National Mortgage Association (FNMA or Fannie Mae), Federal Home Loan Mortgage Association (FHLMA or Freddie Mac) and the Government National Mortgage Association (GNMA or Ginnie Mae). These three are large secondary lenders to the housing market and assist primary lenders in housing finance, inter-alia, through Mortgaged Backed Securities (MBS). The Exhibit below lists November's disastrous news flows from the subprime crisis.

Currently, Freddie and Fannie are together involved with US$4.8 tn or 40% of US home-mortgage loans and their downhill slide would have serious systemic implications. However, we believe that the adverse impact could be cushioned through tax cuts and further rate cuts. Another unscheduled meeting of the FOMC is unlikely but cannot be ruled out. More likely, in our view, is a 25 bps cut at the next scheduled meeting on December 11. With the Fed getting concerned about inflationary potential of the fast falling US dollar, it is unlikely to cut in a hurry. Tax cuts and even bailouts of some specific institutions could be the preferred policy options. Tax cuts matter because they are the best option to improve cash flows and remove financing constraints.

Implications of the US subprime crisis for the US economy

We believe the implications of the US subprime crisis for deceleration of growth in the US economy are serious. In our assessment, the impact could be:

- Real GDP growth could drop to 1.6% in CY2008, led by consumption expenditure arising mainly from wealth effect of falling home values and the Mortgage Equity Withdrawal (MEW) effect.
- Home prices in US could fall by nearly 15%. Since Fed estimates place the market value of the US residential property at US$12 tn, a 15% drop would mean that household wealth would drop by US$1.8 tn. This could mean that personal consumption expenditure could drop by close to US$90 bn.

- Consumption would be further impacted by the Mortgage Equity Withdrawal (MEW) effect. MEW occurs by taking a mortgage for a value higher than the house value. This effect is expected to surpass the direct wealth effect. MEW is understood to have peaked at nearly US$700 bn in 2005 and has dropped to about US$145 bn currently. Since estimates of consumption of MEW have ranged from 20% to 50% in the literature, this could mean that private consumption expenditure could drop by US$111 bn to US$277 bn. Most of this effect could occur in 2008.
- Further adverse impact could come from general risk aversion, worsening of liquidity conditions and possible credit crunch. Private estimates have placed the impact on lending at US$2 tn.

Implications of the US subprime crisis for the Indian economy

We believe the impact of the subprime crisis on Indian financial markets would be limited on account of the lack of direct linkages. Indian financial institutions are not known to be exposed to the US mortgage market in any significant way. The central bank has been risk averse and so have been most of India's financial institutions. As such, MBS is not known to reside in the portfolio of the Indian entities. The indirect impact could come from general risk aversion and some exposure to the MBS market of some foreign institutions operating in Indian markets. The Sensex did drop 678 points or 3.5% on November 21, 2007 largely on account of global cues (deteriorating financial conditions worldwide and the growing impression that Indian markets are overvalued) but we believe the impact would be limited. However, our opinion is at considerable variance from the small though very vocal view that categorises India amongst the riskiest emerging markets (for one, *The Economist, November 15, 2007*).

Our conviction is underpinned by several factors, which we believe would ensure continued liquidity in the Indian markets in spite of the subprime fallout: (1) considerable cushion in the form of robust invisible earnings, (2) backlog of large pending ECB applications, (3) ability to expand access to FDI and ECB routes and (4) cuts in policy rates along with increased government spending ahead. The rationale for our views is detailed in our economy report '*India Story to Continue'* of *November 5, 2007,* in which we reasoned that the India story would sustain despite risks from volatile capital flows.

A cold November for US mortgage lenders

Negative newsflows for mortgage lenders in November 2007

November 9, 2007	Fannie Mae reported US$ 1.4 bn loss for 3QCY2007
November 13, 2007	In its report to Congress, Ginnie Mae placed the September 2007 gross unrealized losses at US$ 0.59 bn, up from US$ 0.08 bn a year ago
November 20, 2007	Freddie Mac reported a shocking US$ 2.0 bn loss and its share price plunged to US$26.74 from US$37.50 in a single day. This was in spite of Freddie Mac buying back large quantities of its stock this year

Source: FNMA, GNMA, FHLMA.

Media

WWIL analyst meeting: Upbeat management but industry dynamics will be the key driver

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- **Management upbeat on HITS and voluntary CAS rollout across India; carriage and placement revenue expected to increase substantially**
- **WWIL guidance of 6.9 mn digital subs, Rs300 ARPU and 35% EBITDA margins by FY2013E; looks challenging**
- **Still no escape from unfavorable industry structure and consumer inertia**

WWIL management shared its future plans and views on the prospects of cable/CAS in India in an analyst briefing on November 21. The key takeaways were (1) WWIL targeting the launch of its HITS service by 4QFY08 and scaling it up to cover the entire country in 18-24 months, (2) industry consolidation with smaller LCOs and MSOs looking to sell or partner with WWIL/other large MSOs given likely threat from DTH, (3) carriage and placement fees to increase substantially given the large number of channel launching in the coming months and (4) investment requirement of Rs12 bn for HITS and digitalization over the next three years to be funded 50:50 by debt and equity. However, we believe the unique three-tier structure (LCO, MSO, broadcaster) of the Indian cable industry is unlikely to change, with LCOs continuing to command a majority share of the subscription revenue pie. Additionally, we believe that consumer inertia and affordability (CPE cost, higher ARPUs) will be key stumbling blocks in the spread of voluntary digitalization and addressability in India.

'HITS' to hit Indian shores, finally. WWIL management has firmed up its plans to launch voluntary CAS service over the 'HITS' platform by 4QFY08. The management was very upbeat on the launch since this will give WWIL a pan-India digital footprint at a fraction of the cost required to setup terrestrial digital head-ends. However, we note that the success of HITS would be contingent upon (1) large scale acceptance of voluntary CAS by consumers and (2) support of LCOs. We note that the present analogue cable system in India is characterized by very low declaration (20-25%), favorable to both the subscribers (low ARPUs) and LCOs (higher share of subscription pie). We do not believe that subscribers, especially in tier-II and tier-III cities, will be particularly inclined towards voluntary CAS given the upfront cost (CPE) and likely higher ARPUs. The WWIL management was quite confident that the LCOs would be supportive given the threat to their business from DTH. However, we note that LCOs may find the option of reducing rates more profitable than shifting to CAS (see Exhibit 1) in order to hold on to their subscriber base.

Mandatory CAS could provide the necessary fillip but the government does not appear to be keen. An addressable system like a CAS on cable would improve transparency of subscription revenues in the cable network, with healthy improvement in realizations of MSOs. However, the government does not appear to be in favor of mandatory CAS in the country, as can be seen by its reluctance to take the first step with a timeframe for extending CAS to other parts of the notified metros. Also, the experience of mandatory CAS in the notified areas of Mumbai, Delhi and Kolkata has not been very encouraging (see Exhibit 2); WWIL's management estimates the number of digital subscribers has increased to 850,000 (600,000 for CAS and 250,000 for DTH) currently. Voluntary CAS, delivered on a scalable digital platform like HITS, will result in improved financials, albeit at a much slower pace (see Exhibit 3). However, a HITS operator (like a DTH operator) may be forced to heavily subsidize STBs (30-50% of cost of STB) in order to make potential subscribers switch to a CAS from the current analog system.

Consolidation and carriage fee are two bright spots. The management noted the ongoing consolidation in the industry and strong growth in carriage fees as a precursor to improving industry attractiveness, especially for large players like WWIL. The smaller MSOs and LCOs do not have the resources to upgrade their analog networks and have been looking to sell out or partner with WWIL/other large MSOs. This will likely have a beneficial impact on the industry as (1) larger players can negotiate better rates from broadcasters, (2) it will result in a larger target audience for voluntary CAS and internet and (3) investments in the business will be utilized more efficiently (lower fixed costs). This will have a positive impact on carriage and placement charges as well, which are already on the rise given the large number of channel launches in India in recent times and many more broadcasters planning their entry in the coming months. WWIL earned Rs553 mn from carriage fees in FY2007 and expects it to increase to Rs1 bn by FY2009E.

Cable versus DTH—we prefer DTH. We would have preferred cable over DTH given the ability of cable to offer triple play services to subscribers but for the three-tier structure of the Indian cable market and the lack of addressability in cable in India. We note that DTH operators in India are in a better position since they have direct access to the consumer and do not have to share their revenues with an intermediary. We believe LCOs would continue to exist irrespective of the pace of digitalization in cable networks through a mandatory or voluntary CAS on cable. Exhibit 4 shows that an LCO would continue to earn decent profitability and profits in various scenarios (no CAS, CAS) and thus would be reluctant to sell its cable plant at a low valuation.

Thus, a HITS operator or a conventional MOS will have a lower net ARPU (ARPU less content cost and sharing with other entities in the distribution chain) versus a DTH operator. This would result in lower financial ability for a HITS operator or conventional MSO to subsidize an STB (whether cable or DTH) versus a DTH operator in order to increase penetration of digital systems (see Exhibit 5). However , the WWIL management expects to make up the difference in net ARPUs through lower costs per subscriber. It is also confident about realizing higher ARPUs over a period of time through value-added services (internet, VOD).

Management guidance on WWIL financials looks aggressive. We find the management guidance of 6.9 mn digital subscribers, ARPU of Rs300 and EBITDA margin of 35% by FY013E challenging. We note that even with our expected 112 mn C&S households by end-FY2013E and WWIL maintaining its current market share (10%), the assumed digital penetration rate is over 60% by end-FY2013E. The average ARPUs in India currently is US$5 (Rs200) versus US$12-20 in other Asian countries and the management expects it to increase to US$8 (Rs300) in the coming years. However, we find simultaneous strong growth in ARPUs and in the subscriber base hard to justify in light of expected strong competition from aggressive players entering the MSO (TV18, Digicable) and DTH (Sun group, Reliance, Bharti) segments.

We believe that the FY2013E EBITDA margin assumption of 35% is aggressive; the expected share of broadcasters (35-40%) and LCOs (25-30%) in gross revenues leaves little room for other expenses such as transponder costs, subscriber management and servicing charges. As per the management, WWIL will continue to make negative EBITDA until FY2010E when it will break even; EBITDA loses will be higher in the near term due to upfront CPE subsidy burden and other CAS-related costs (LCO incentives, marketing). WWIL has a capex plan of Rs11.8 bn over the next three years, which it plans to fund through a 50:50 mix of debt and equity. We note that the current capital base of WWIL is Rs3.2 bn with Rs600 mn in equity and Rs2.6 bn in debt; the total market capitalization of WWIL is Rs12.1 bn currently.

LCO may find reducing rates to be more effective against DTH rather than CAS

Economics of operations of a LCO under various scenarios (Rs)

	CAS (a)	CAS (b)	No CAS (d)
Average revenue of local cable operator (Rs/sub/month)	**200**	**250**	**150**
Service tax (@12.36%)	25	31	4
Entertainment tax (Rs20/sub/month)	20	20	4
Total cost to subscriber	**245**	**301**	**158**
% declaration of subscriber base (%)	100	100	20
Pay-TV channels rate	122	172	200
Basic Tier package cost under CAS	78	78	—
LCOs share of pay-channel fees under CAS (@25%)	31	43	—
MSOs share of pay-channel fees under CAS (@30%)	37	52	—
Broadcasters share of pay-channel fees under CAS (@45%)	55	77	—
Amount to broadcasters/MSOs	**92**	**129**	**40**
Net retention of cable operator	**109**	**121**	**110**
Cost of operations per subscriber per month	40	40	40
Pretax profit per subscriber per month	69	81	70
Tax per subscriber per subsriber per month (@ 33.99%) (c)	23	28	5
Post tax profit per subscriber per month	45	53	65
Post tax profit per subscriber per annum	**543**	**642**	**783**

LCOs will be more profitable with lower ARPUs than shift to CAS

Note:
(a) CAS introduced in a city without an increase in cost to cable TV subscriber.
(b) CAS introduced in a city with an increase in cost to cable TV subscriber.
(c) Low tax payment under 'No CAS' scenario reflects under-reporting of subs.
(d) DTH makes rapid progress; cable operators respond by reducing rates.

Source: Kotak Institutional Equities estimates.

CAS penetration levels in CAS-notified areas lower than expected

Penetration levels of STBs in the CAS-notified areas (%)

	SEC A	SEC B	SEC C	SEC D	SEC E	Total HHs
Mumbai						
Base HHs (#)	118,404	143,000	131,560	111,540	67,496	572,000
CAS HHs (#)	76,619	76,674	49,300	26,731	20,660	249,985
Penetration (%)	**65**	**54**	**37**	**24**	**31**	**44**
Delhi						
Base HHs (#)	278,355	166,290	105,558	89,652	83,145	723,000
CAS HHs (#)	121,024	49,965	22,194	9,482	9,718	212,384
Penetration (%)	**43**	**30**	**21**	**11**	**12**	**29**
Kolkata						
Base HHs (#)	88,749	114,699	101,205	107,433	106,914	519,000
CAS HHs (#)	40,119	29,617	14,883	5,654	3,888	94,162
Penetration (%)	**45**	**26**	**15**	**5**	**4**	**18**

Source: TAM Media Research, compiled by Kotak Institutional Equities.

MSOs share of ARPUs improves considerably as cable networks move to a CAS

Share of revenues of various players in the media value chain under various scenarios (Rs)

	No CAS	CAS
Average revenue of local cable operator (Rs/sub/month)	**200**	**200**
Service tax (@12.36%)	5	25
Entertainment tax (Rs20/sub/month)	4	20
Total cost to subscriber	**209**	**245**
% declaration of subscriber base (%)	20	100
Pay-TV channels rate	200	122
Basic Tier package cost under CAS	—	78
LCO's share of pay-channel fees under CAS (@25%)	—	31
MSO's share of pay-channel fees under CAS (@30%)	—	37
Broadcasters share of pay-channel fees under CAS (@45%)	—	55
Net retention of cable operator	**160**	**109**
Amount payable to broadcasters/MSOs	**40**	**92**
Assumed share of MSO (%)	30	—
Net retention of MSO	**12**	**37**
Net retention of broadcaster	**28**	**55**

Source: Kotak Institutional Equities estimates.

Acquisition price of LCO is a key issue for consolidation in cable distribution

Economics of operations of a LCO under various scenarios (Rs)

	No CAS	CAS (a)	CAS (b)	DTH (d)
Average revenue of local cable operator (Rs/sub/month)	**200**	**200**	**250**	**150**
Service tax (@12.36%)	5	25	31	4
Entertainment tax (Rs20/sub/month)	4	20	20	4
Total cost to subscriber	**209**	**245**	**301**	**158**
% declaration of subscriber base (%)	20	100	100	20
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MSOs share of pay-channel fees under CAS (@30%)	—	37	52	—
Broadcasters share of pay-channel fees under CAS (@45%)	—	55	77	—
Amount to broadcasters/MSOs	**40**	**92**	**129**	**40**
Net retention of cable operator	**160**	**109**	**121**	**110**
Cost of operations per subscriber per month	40	40	40	40
Pretax profit per subscriber per month	120	69	81	70
Tax per subscriber per subsriber per month (@ 33.99%) (c)	8	23	28	5
Post tax profit per subscriber per month	112	45	53	65
Post tax profit per subscriber per annum	1,342	543	642	783
Valuation per subscriber (@ 10X)	**13,421**	**5,426**	**6,416**	**7,829**
Valuation per subscriber (@ 5X)	**6,711**			**3,914**
Valuation per subscriber (@ 3X)	**4,026**			**2,349**

No need for LCOs to sell cheap to MSOs especially as revenue share is 'legitimate'.

Note:
(a) CAS introduced in a city without an increase in cost to cable TV subscriber.
(b) CAS introduced in a city with an increase in cost to cable TV subscriber.
(c) Low tax payment under 'No CAS' scenario reflects under-reporting of subs.
(d) DTH makes rapid progress in non-CAS areas; cable operators respond by reducing rates.

Source: Kotak Institutional Equities estimates.

DTH is in a better position versus cable until resolution of last-mile problems in cable

Comparison of economics of cable and DTH (Rs/sub/month)

	Cable	DTH	Comments
Scenario A			
ARPU	200	200	Cost to the consumer without taxes
Basic access cost	78	—	Taken by local cable operators/last mile operators
ARPU less basic access cost	122	200	For distribution among LCOs, MSOs and broadcasters
Share of last mile operators	31	—	25% of pay channel rates (ARPU less basic access cost)
Programming/content cost (a)	90	90	45% of ARPU in case of DTH as base
Net ARPU for operations, subsidies	**2**	**110**	**Amount left for subsidies, operating costs**
Scenario B			
ARPU	200	200	Cost to the consumer without taxes
Basic access cost	78	—	Taken by local cable operators
ARPU less basic access cost	122	200	For distribution among LCOs, MSOs and broadcasters
Share of last mile operators	31	—	25% of pay channel rates (ARPU less basic access cost)
Programming/content cost (a)	37	37	30% of pay channel rates (ARPU less basic access cost) in cable as base
Net ARPU for operations, subsidies	**55**	**163**	**Amount left for subsidies, operating costs**

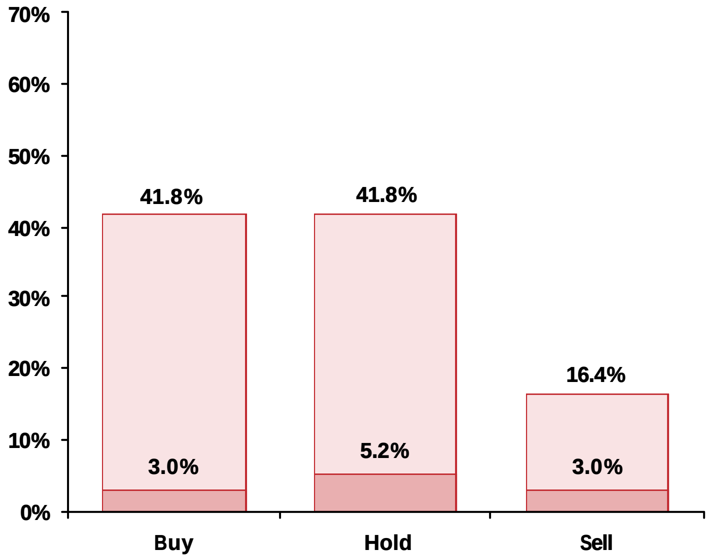
Note:
(a) We assume that content cost will be the same in both cable and DTH for a subscriber.

Source: Kotak Institutional Equities estimates.

"Each of the analysts named below hereby certifies that, with respect to each subject company and its securities for which the analyst is responsible in this report, (1) all of the views expressed in this report accurately reflect his or her personal views about the subject companies and securities, and (2) no part of his or her compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report: Sanjeev Prasad, Mridul Saggar."

Kotak Institutional Equities Research coverage universe

Distribution of ratings/investment banking relationships



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* The above categories are defined as follows: Buy = OP; Hold = IL; Sell = U. Buy, Hold and Sell are not defined Kotak Institutional Equities ratings and should not be constructed as investment opinions. Rather, these ratings are used illustratively to comply with applicable regulations. As of 09/30/07 Kotak Institutional Equities Investment Research had investment ratings on 144 equity securities.

Source: Kotak Institutional Equities. As of September 30, 2007

Ratings and other definitions/identifiers

New rating system

Definitions of ratings

BUY. We expect this stock to outperform the BSE Sensex by 10% over the next 12 months.
ADD. We expect this stock to outperform the BSE Sensex by 0-10% over the next 12 months.
REDUCE: We expect this stock to underperform the BSE Sensex by 0-10% over the next 12 months.
SELL: We expect this stock to underperform the BSE Sensexby more than 10% over the next 12 months.

Old rating system

Definitions of ratings

OP = Outperform. We expect this stock to outperform the BSE Sensex over the next 12 months.
IL = In-Line. We expect this stock to perform in line with the BSE Sensex over the next 12 months.
U = Underperform. We expect this stock to underperform the BSE Sensex over the next 12 months.

Our target price are also on 12-month horizon basis.

Other definitions

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Other ratings/identifiers

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