kotak® Institutional Equities

Real Estate

India

NEUTRAL

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UPDATE

BSE-30: 9,370

Searching for stability. We present parameters to determine stability in demand, selling prices and business models. We see valuations driven by strong balance sheets and land banks capable of near-term monetisation. We believe further price correction is imperative for residential demand to pick up—lower interest rates alone are insufficient to improve affordability. Our revised target prices assume a 10% correction in property prices in FY2010E, indicating a 30% decline from peak levels.

Residential demand pick-up dependent on lower property prices

We expect residential prices to correct 30% from peak levels with correction to be most severe in the luxury segment where margins are higher. However, we estimate a gradual readjustment in residential prices on account of (1) latent demand, (2) low finished inventory and (3) falling interest rate environment. We expect demand recovery to start in end CY2009 as indicated by the previous cycle.

Higher transparency, balance sheet comfort needed for stock performance to become stable

We believe key themes that will drive stock performance for CY2009 include lower interest rates, momentum in residential demand, asset-liability equation, debt availability and manageability, corporate governance (or lack of it), commercial IT demand and GDP growth. We expect stock performance to remain volatile till disclosure norms improve resulting in rational price discovery.

We base our target prices assuming 10% further correction in FY2010E across verticals

We advise investors to be selective and focus on companies with healthy balance sheets and good quality assets. DLF, IBREL and PHNX are factoring in 40%+ correction in prices in FY2010E, which is unlikely in our view. We maintain our REDUCE rating on Unitech and Sobha on account of high financial leverage and low operational momentum. We downgrade HDIL to ADD (BUY earlier) on concerns regarding asset-liability mismatch. Our base case now assumes a 10% correction across verticals in FY2010E, indicating a 30% correction from peak prices.

Key risk—prolonged demand slowdown, lower selling prices, intergroup transactions

We see the following risks to our earnings estimates—(1) demand pick-up could take longer than expected, (2) lower transparency with respect to land banks, (3) selling prices could correct higher than expected, (4) intergroup transactions lead to lower transparency, (5) interest rate risk and (6) weaker-than-expected economic growth.

Company data and valuation summary

Company	Price (Rs) 14-Jan-09	Target price	Rating	Mkt cap. (Rs mn)	Mkt cap. (US$ mn)
DLF	212	325	BUY	362,099	7,420
Housing Development & Infrastructure	106	165	ADD	29,271	600
Indiabulls Real Estate	122	180	ADD	31,496	645
IVR Prime Urban Developers	34	120	BUY	2,200	45
Mahindra Life Space Developer	152	410	BUY	6,392	131
Phoenix Mills	67	215	ADD	9,755	200
Puravankara Projects	41	90	ADD	8,825	181
Sobha	86	105	REDUCE	6,295	129
Unitech	35	45	REDUCE	56,818	1,164

Source: Kotak Institutional Equities.

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Kotak Institutional Equities Research

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VALUATION: DLF AND PHNX MOST PREFERRED; UNITECH LEAST

We assume a further correction of 10% across verticals in FY2010E and flat pricing in FY2011E. Correction in FY2010E would imply a 30%+ correction from peak level. DLF, IBREL and PHNX are best suited to ride the current slowdown given healthy balance sheets and good operational momentum. We downgrade HDIL to ADD (BUY earlier) on concerns regarding asset-liability mismatch.

Revisit NAVs for lower selling prices, commercial volumes

We base our NAVs considering stress-case scenario for real estate prices and model in a 10% drop across all verticals for FY2010E. This assumption would result in price correction of more than 30% from peak. We model flat prices for FY2011E as we believe the next 8-10 months will be a stabilization period, post which demand will start recovering but price recovery will likely take longer. We also model in lower commercial revenues as demand is likely to suffer in FY2010-11E on account of likely slowdown in IT hiring. Based on these changes and other few company-specific changes, we revise our March 2010-based NAV downward by 20-45%. Exhibit 2 summarizes changes to NAV and earning estimates.

Exhibit 1: Coverage valuation summary for real estate sector
Key valuation parameters of companies under coverage, March fiscal year-ends, 2009-2010E

Company name	Land bank (mn sq. ft)	Rating	Target price (Rs)	Market cap. (US$ mn)	EV (US$ mn)	Price (local curr.)	Book value (Rs) 2009E	Book value (Rs) 2010E	EPS (Rs) 2009E	EPS (Rs) 2010E	P/B (X) 2009E	P/B (X) 2010E	P/E (X) 2009E	P/E (X) 2010E	EV/EBITDA (X) 2009E	EV/EBITDA (X) 2010E	EBITDA margin (%)	NAV (Rs/ share)
DLF	748	BUY	325	7,273	9,532	212	147.3	177.3	39.4	37.7	1.4	1.2	5.4	5.6	5.3	5.4	60.8	410
HDIL	125	ADD	165	569	1,287	106	159.9	183.5	33.4	30.4	0.7	0.6	3.2	3.5	5.2	5.5	67.9	335
Indiabulls Real Estate	225	ADD	180	643	643	122	260.3	260.4	4.0	5.1	0.5	0.5	30.7	24.1	(220.9)	46.9	(6.6)	211
IVR Prime	75	BUY	120	40	73	34	153.5	153.3	2.9	7.8	0.2	0.2	12.0	4.4	15.5	3.8	17.3	245
Mahindra Lifespaces	67	BUY	410	130	105	152	211.1	216.9	10.2	10.3	0.7	0.7	14.9	14.7	14.6	11.6	21.4	473
Phoenix Mills	34	BUY	215	186	166	67	104.6	113.7	5.2	9.2	0.6	0.6	12.8	7.4	11.7	4.4	68.6	309
Puravankara Projects	125	ADD	90	176	366	41	63.9	70.3	9.3	9.9	0.6	0.6	4.4	4.2	5.7	7.0	55.2	132
Sobha Developers	138	REDUCE	105	128	449	86	160.9	181.9	26.8	25.6	0.5	0.5	3.2	3.4	5.7	5.4	26.2	212
Unitech	650	REDUCE	45	1,160	2,790	35	28.0	31.0	8.1	7.6	1.3	1.1	4.3	4.6	6.2	6.3	55.6	90

Source: Kotak Institutional Equities estimates

Exhibit 2: We reduce our EPS estimates to account for lower selling prices
Changes in our EPS estimates for March fiscal year-ends, 2009-2011E

	Rating	New TP (Rs/share)	Old TP (Rs/share)	TP change (%)	New NAV (Rs/share)	Old NAV (Rs/share)	NAV change (%)	New EPS estimates FY2009E	New EPS estimates FY2010E	Old EPS estimates FY2009E	Old EPS estimates FY2010E	% change in EPS FY2009E	% change in EPS FY2010E
DLF	BUY	325	440	(26.1)	410	546	(24.9)	39.4	37.7	44.2	46.9	(11.0)	(19.7)
HDIL	ADD	165	380	(56.6)	335	551	(39.2)	33.4	30.4	44.8	42.1	(25.4)	(27.7)
IBREL	ADD	180	200	(10.0)	211	241	(12.5)	4.0	5.1	5.4	5.0	(26.3)	1.6
IVR Prime	BUY	120	170	(29.4)	245	345	(29.1)	2.9	7.8	2.9	9.7	0.1	(19.8)
Mahindra Lifespace	BUY	410	500	(18.0)	473	550	(14.0)	10.2	10.3	12.4	16.4	(17.9)	(36.8)
Phoenix Mills (a)	BUY	215	280	(23.2)	309	375	(17.6)	5.2	9.2	5.5	12.0	(4.2)	(24.0)
Purvankara	ADD	90	120	(25.0)	132	174	(24.3)	9.3	9.9	10.1	10.8	(7.3)	(8.8)
Sobha	REDUCE	105	250	(58.0)	212	502	(57.9)	26.8	25.6	30.8	33.4	(13.0)	(23.4)
Unitech	REDUCE	45	100	(55.0)	90	138	(35.0)	8.1	7.6	10.3	10.0	(21.5)	(24.1)

Source: Kotak Institutional Equities estimates

Discount or premium to NAVs? We believe discount or premium to NAV will depend on direction of NAV movement and growth opportunities available to the sector. When there is uncertainty on NAV direction and limited confidence in NAV calculations, stocks will tend to trade at a discount to NAVs, which is the case currently. Most real estate companies have land banks which will take at least 7-10 years to develop and calculation of NAVs assume a large set of assumptions, thus increasing uncertainty. Another important reason for discount to NAVs is that companies with high leverage will likely face difficulty in funding projects.

While assigning discount to NAVs for our target prices we have considered these parameters—(1) quality of land bank, (2) execution ability, (3) near-term land bank monetization, (4) brand name and (5) financial condition.

Exhibit 3: Key parameters for real estate companies which justify the NAV premium/discount
Ratings on a scale of 1-3 (3 is highest)

	DLF	Unitech	HDIL	Sobha	Puravankara	Phoenix	Indiabulls
Balance Sheet	2	1	1	1	2	2	3
Qaulity of land bank	3	2	2	2	2	3	2
Execution	3	2	3	2	2	2	1
Diversification	3	3	2	2	2	1	2
Land cost unpaid	1	2	3	2	3	3	3
Brand Equity	3	2	2	3	3	3	2
Near-term land bank monetization	3	2	3	1	2	3	2
NAV premium/discount (%)	**(20)**	**(50)**	**(50)**	**(50)**	**(30)**	**(30)**	**(30)**

Source: Kotak Institutional Equities

However, as economic environment improves and confidence on demand and prices return, we believe well-managed companies can trade at a premium to NAVs. Companies with good funding capability will start reinvesting in the current phase as land prices correct on account of limited competition. Though companies have enough land banks for 8-10 years, various firms will keep investing in quality city-centric properties. Exhibit 4 highlights that a large percentage of NAV will likely get realized over FY2009-15E, which will enable reinvestment.

Another key reason for premium to NAV is that valuing a company based only on its NAV will not give due credit to a company's franchise value or its ability to create value for its shareholders. NAV-based valuation results in no terminal value while real estate opportunities are likely to continue for a longer term.

Exhibit 4: Large part of NAV getting realized in FY2009-15E
Year-wise breakup of NAVs for the coverage stocks, March fiscal year-ends,FY2009-15E

	Before 2015E	% of NAV in each year					
	(% NAV)	2010E	2011E	2012E	2013E	2014E	2015E
DLF	72.5	5.3	11.2	18.6	13.2	14.4	9.7
HDIL	57.8	10.6	5.9	10.3	9.8	14.1	7.0
IBREL	14.6	0.4	5.4	4.5	(0.7)	2.5	2.5
IVR Prime	52.9	(7.6)	13.8	3.2	12.0	11.6	19.8
PHNX	100.0	9.6	70.4	20.0	0.0	0.0	0.0
Purvankara	29.4	2.8	(1.0)	7.6	(3.6)	10.2	13.4
Sobha	22.6	1.2	(0.3)	7.2	(6.8)	(7.0)	28.3
Unitech	35.4	2.4	3.8	6.3	9.6	1.4	11.8

Source: Kotak Institutional Equities estimates

NAV-downgrade cycle likely to turn in end-CY2009 as property prices start stabilizing

NAV can be defined as a function of land bank (quality as well as quantity), initial selling prices, capitalization rates, phasing, construction costs and WACC. We expect NAV-downgrade cycle to turn as and when selling prices become stable, which could take six-nine months. While uncertainty on selling prices is likely to continue, NAVs could see upside potential on account of at least three parameters (capitalization rates, construction costs and WACC) due to lower interest rate environment and decline in commodity prices. Thus, while NAV estimates may not have bottomed, sharp NAV downgrades will be limited in our view.

Analyzing impact of key parameters on March 2010-based NAVs. While CY2008 saw each of the above discussed factors behave adversely, CY2009 will likely see a few parameters providing upside impetus to NAVs.

- **Selling prices.** We model FY2010E selling prices to correct further 10% in FY2010E across all verticals. Such a scenario would mean a correction of 30%+ from peak levels. We expect price stability post this correction. Higher correction in certain pockets will likely be balanced by areas where prices are more resilient. We highlight that selling prices of most recent residential launches of DLF are taking place at our FY2009E modeled prices.

- **Cap. rates.** Cap. rate increases are unlikely especially since 10-year Gsec yields have decreased 350 bps in the past quarter. Also, with decrease in risk weights and standard provisioning requirements for commercial real estate, borrowing costs are likely to come down. We model post-tax capitalization rate of 9% for commercial and 10% for retail real estate. The biggest beneficiaries from lower cap. rates will be DLF, IBREL and PHNX, in our view.

- **Construction costs.** We estimate construction costs to remain flat in FY2010E. However, if the current trend of steel pricing continues and with decrease in CENVAT, construction costs will decline 10%+. The biggest beneficiaries from decrease in construction costs will be PVKP and Sobha since they operate with lowest EBITDA margins.

- **Land bank phasing.** We note that large downgrades have already taken place as reflected in flat earnings growth projected by consensus for FY2009-10E (see Exhibit 5). Furthermore, large increase in residential affordability due to lower selling prices and interest rate will likely improve the demand environment. However, if GDP growth suffers for a longer period, there could be downside risks to our phasing assumptions.

- **WACC. The c**ost of equity will likely trend downward on account of sharp decrease in risk-free rates. Borrowing costs will also likely decline as various banks are reducing their Prime Lending Rates (PLRs) sharply. We have taken a WACC of 14% with cost of equity and debt at 15%.

Exhibit 5: Consensus estimates show flat growth in FY2010E; large downgrades in past six months
Consensus estimates (Rs/share) for March fiscal year-ends, FY2009-10E

	2009E		2010E		Downgrades in EPS (%)		Growth in EPS (%)
Company	**7-Dec-07**	**12-Jan-09**	**16-Apr-08**	**12-Jan-09**	**2009E**	**2010E**	**2010E/09E**
Coverage companies							
DLF Limited	53.3	41.7	72.7	40.1	(21.8)	(44.8)	(3.8)
HDIL	60.0	42.6	87.0	47.5	(29.1)	(45.4)	11.5
Indiabulls Real estate		5.6		9.4			67.9
Mahindra Lifespace Developers	32.0	18.6	50.6	30.2	(41.9)	(40.3)	62.4
Phoenix Mills		9.2		13.7			48.9
Purvankara	23.0	9.6	31.4	8.8	(58.3)	(72.0)	(8.3)
Sobha Developers	46.9	25.5	77.0	26.0	(45.6)	(66.2)	2.0
Unitech	20.3	8.8	26.0	8.3	(56.7)	(68.1)	(5.7)
Non-coverage companies							
Akruti City	98.4	89.3	245.0	160.2	(9.2)	(34.6)	79.4
Anant Raj Industries	19.7	12.4	42.0	20.0	(37.1)	(52.4)	61.3
Omaxe	36.6	9.3	69.5	6.8	(74.6)	(90.2)	(26.9)
Orbit Corp	91.0	30.2	148.8	43.7	(66.8)	(70.6)	44.7
Parsvnath Developers	48.8	9.5	69.7	14.5	(80.5)	(79.2)	52.6

Source: Bloomberg, Kotak Institutional Equities

Limited investor confidence in NAVs of various companies. Investor confidence is low on various NAV calculations as there have been sharp NAV downgrades. Each of the key parameters that determine NAVs came under pressure over the past 12 months. We try and analyze impact of each of these parameters below.

- **Quantity and quality of land banks.** The ability to launch projects is a key indicator of land bank quality. Project launches reaffirm actual land ownership as well as a firm's ability to monetize the land bank. Over the past twelve months we have observed divergent trends with largest launches by DLF, IBREL and HDIL. We have observed very few launches by UT, Sobha and PVKP. Exhibit 6 compares the % of land bank likely to be monetized in key locations by various companies. We find limited monetization by Unitech in Chennai and Kolkata, where it has got large land banks. We expect market participants to raise questions on land bank locations where firms are unable to launch projects.

Exhibit 6: We expect DLF to be ahead of others in monetizing its land bank
Location-wise area sold (mn sq. ft) for March fiscal year-ends, 2009-12E

	DLF		Unitech		Puravankara		Sobha	
	Area sold	% of total land bank	Area sold	% of total land bank	Area sold	% of total land bank	Area sold	% of total land bank
Bangalore	8.5	27.4	1.6	21.1	4.8	5.6	8.5	11.0
Chennai	5.9	18.1	10.2	8.5	2.7	25.5	0.9	3.2
Delhi	11.3	35.1	—	—	—	NA	—	NA
Gurgaon	34.9	16.1	7.1	14.1	—	NA	—	NA
Hyderabad	9.3	20.0	3.2	16.9	—	0.0	—	NA
Kochi	0.5	70.0	2.3	6.1	2.7	22.4	—	NA
Kolkata	1.8	20.0	2.6	2.4	—	NA	—	NA
Mumbai	0.9	9.3	0.4	10.0	—	NA	—	NA
Pune	3.2	38.0	—	NA	—	NA	2.7	13.3
Total	**76.3**	**19.7**	**27.4**	**7.9**	**10.2**	**8.9**	**12.1**	**9.7**

Source: Kotak Institutional Equities estimates

- **Initial selling prices.** NAV calculations are most sensitive to changes in initial selling prices; the lower the project margins, higher the NAV sensitivities to drop in selling prices. Initial selling prices have been under pressure across all three verticals—residential, commercial as well as retail. Exhibit 7 highlights the sensitivity of valuation to residential selling prices.

Exhibit 7: Lower the selling prices, sharper the correction in NAVs
Sample model showing sensitivity to selling prices

Assumptions	
Selling price (Rs/sq. ft)	2,700
Construction cost (Rs/sq. ft)	1,600
Land cost (Rs/sq. ft)	500
WACC (%)	14

		Year I	Year II	Year III	Year IV
Low pre-sales scenario					
Land cost	Rs/sq. ft	(500)			
Construction schedule	(%)		30	30	40
Cost incurred	Rs/sq. ft		(480)	(480)	(640)
Yearly sales (%)	(%)	20	30	50	
Cash inflow (a)	(%)	25	23	23	30
Sale inflow	Rs/sq. ft	135	506	1,249	810
Tax (~8% of sales inflow)	Rs/sq. ft	(11)	(41)	(100)	(65)
Net cash flow	Rs/sq. ft	(376)	(14)	669	105
PV of cash flows	Rs/sq. ft	(376)	(13)	515	71
NPV	**Rs/sq. ft**	**197**			

	Selling prices				
	2,000	**2,500**	**3,000**	**3,500**	**4,000**
NPV	(300)	55	411	766	1,122
% increase in NPV		(118)	644	87	46
% increase in selling prices		25	20	17	14
% decrease in NPV	(644)	(87)	(46)	(32)	
% decrease in selling prices	(20)	(17)	(14)	(13)	

Note:
(a) Cash inflow is based on 25% upfront payment and balance linked to construction.

Source: Kotak Institutional Equities estimates

- **Capitalization (cap.) rates.** Valuation of rental properties is extremely sensitive to cap. rates. Expectations with respect to cap. rates have varied significantly moving in the 7-12% range. We highlight valuation of rental property earning Rs60/sq. ft drops by 62% if cap. rate increases from 7 to 12% (see Exhibit 8).

Exhibit 8: Cap. rate compression would result in higher NAVs
A sample model showing sensitivity to capitalization rates

Assumptions	
Leasing volumes (mn sq. ft)	1
Lease rentals (Rs/sq. ft/month)	60
Construction cost (Rs/sq. ft)	2,000
Capitalization rate (%)	9
WACC (%)	14

	Year I	Year II	Year III	Year IV	Year V	Year VI
Operational space (mn sq. ft)				**1**	**1**	**1**
Leasing rate (Rs/sq. ft)				60	60	60
Income (Rs mn)				720	720	720
Operating costs (Rs mn) ~5% of revenues				36	36	36
EBIDTA (Rs mn)				**684**	**684**	**684**
EBIDTA margin (%)				95%	95%	95%
PBT				684	684	684
PAT (~tax rate 20%)				**547**	**547**	**547**
Cash accrual				547	547	547
% complete	30	40	30	—	—	—
Construction cost @Rs2,000/sq. ft	(600)	(800)	(600)	—	—	—
Valuation						
Construction cost incurred	(600)	(800)	(600)	—	—	—
Capitalized leases (~10% rate)	—	—	—	6,080	—	—
PV (Rs mn)	(600)	(702)	(462)	4,104	—	—
NAV (Rs mn)	**2,340**					

	Capitalization rates (%)						
	13	**12**	**11**	**10**	**9**	**8**	**7**
NPV (Rs mn)	1,078	1,314	1,594	1,930	2,340	2,853	3,513
Increase in NPV (%)		22.0	21.3	21.1	21.3	21.9	23.1

Source: Kotak Institutional Equities estimates

- **Land bank phasing.** Various companies have guided for aggressive new launches and fast utilization of land banks. As launches have lagged guidance, there have been large earnings downgrades. However, land bank phasing on its own for large projects has limited NAV impact. Stretching cash flow cycle of a project from three to six years affects NAV estimates by 16%. Exhibit 9 gives NAV impact for various cash flow scenarios.

Exhibit 9: Project delays would have higher impact on NAVs then slower sales
A sample model showing sensitivity to phasing of projects

WACC (%)	14

	Year I	Year II	Year III	Year IV	Year V	Year VI	NAV	% decrease in NAV
Cashflows scenario I (3 years)	200	200	200				529	
Cashflows scenario II (4 years)	150	150	150	150			498	(5.9)
Cashflows scenario III (5 years)	120	120	120	120	120		470	(11.3)
Cashflows scenario IV (6 years)	100	100	100	100	100	100	443	(16.3)
Cashflows scenario V (3 years delay)				200	200	200	357	(32.5)

Note:
(a) Assuming equal cashflows spread over the duration of the project.
(b) Total cash flows from the project remain the same in each case.

Source: Kotak Institutional Equities estimates

- **Construction costs.** Construction costs have increased 15-20% over the past 12 months driven primarily by higher cost of steel and labor. Construction cost as percentage of revenues is 25-50%. A 20% increase in construction costs is equivalent to a 5-10% drop in selling prices.

- **WACC.** The cost of equity went up due to large volatility shown by the real estate sector. Debt also became costlier due to monetary tightening as well as increased risk perception of the sector.

What is the bottom of these stocks? Does it exist? Most of the currently traded real estate companies have got listed over the past 24 months and hence have limited trading histories. There is no historical P/E, P/B or P/NAV bands available for these stocks across cycles, thus making this sector volatile and sentiment driven. But now we see signs of the sector bottoming out with most stocks trading at less than 1X FY2010E P/B. We expect P/B multiples, along with near-term RoEs, to define bottom valuations of these stocks. Companies having historical land banks and their near-term monetization will earn higher RoE's, thus justifying higher P/B multiples for them.

Exhibit 10 gives P/B multiples as well as RoE's for FY2007-11E. DLF's RoE is amongst the highest and thus it will trade at a premium P/B multiple compared to its peers. IBREL and IVR have raised large amount of equity that will start delivering returns over the next two-three years. Thus, these companies are likely to trade at a discount to peer group on a P/B basis.

Exhibit 10: DLF has highest RoEs and thus will trade at a P/B multiple at premium to its peers
P/B (X) and RoE (%) for coverage companies, March fiscal year-ends, FY2007-2011E

	Prices	2007		2008		2009E		2010E		2011E	
	(Rs/share)	RoE (%)	P/B (X)	RoE (%)	P/B (X)	RoE (%)	P/B (X)	RoE (%)	P/B (X)	RoE (%)	P/B (X)
DLF	212	78.6	8.0	66.0	1.8	30.2	1.5	23.5	1.2	20.4	1.0
HDIL	106	118.7	3.4	64.5	0.8	22.9	0.7	17.7	0.6	19.7	0.5
IBREL	122	0.9	1.2	10.8	0.6	1.7	0.5	2.0	0.5	4.1	0.5
IVR Prime	34	31.1	1.9	32.4	0.2	1.9	0.2	5.1	0.2	9.3	0.2
MLIFE	152	3.4	2.4	8.4	0.7	5.0	0.7	5.0	0.7	8.8	0.7
PHNX	67	56.9	4.7	22.1	0.6	5.2	0.6	8.4	0.6	10.5	0.5
PVKP	41	78.0	3.6	33.4	0.7	15.4	0.6	14.7	0.6	13.3	0.5
Sobha	86	33.9	0.7	25.3	0.6	17.9	0.5	15.0	0.5	8.9	0.4
Unitech	35	115.0	2.8	59.3	1.6	31.4	1.2	23.4	1.0	17.6	0.9

Source: Kotak Institutional Equities estimates

Exhibit 11: Current stock prices already pricing in large drop in selling prices

Our NAV for various real estate stocks for different values of correction in prices in FY2010E prices and WACC (Rs/share)

DLF — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	10	20	30	40
13	422	358	294	229
14	410	348	286	224
15	399	339	278	218
16	389	330	271	213
17	379	322	265	208
18	369	314	258	203
19	360	306	252	199

Unitech — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	10	20	30	40
13	95	67	39	11
14	90	63	37	10
15	85	60	34	9
16	81	56	32	8
17	76	53	30	7
18	73	51	29	7
19	69	48	27	6

Indiabulls Real estate — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	10	20	30	40
13	188	144	99	55
14	181	139	97	56
15	174	135	96	57
16	168	131	94	57
17	162	128	93	58
18	157	125	92	59
19	153	122	91	60

HDIL — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	10	20	30	40
13	344	280	215	151
14	335	271	206	142
15	327	262	198	133
16	319	254	190	125
17	311	247	182	118
18	304	240	175	111
19	297	233	168	104

Purvankara — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	5	10	15	20
13	180	142	104	67
14	168	132	96	60
15	156	122	88	53
16	146	113	80	47
17	136	104	73	42
18	126	97	67	37
19	118	89	61	32

Sobha — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	5	10	15	20
13	374	282	191	99
14	340	253	166	78
15	308	225	142	59
16	279	200	120	41
17	252	176	100	24
18	226	154	81	9
19	203	133	64	(6)

IVR Prime — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	5	10	15	20
13	325	258	191	125
14	309	245	180	116
15	294	232	170	108
16	280	220	160	100
17	266	209	151	93
18	254	198	142	86
19	242	188	133	79

Phoenix Mills — NAV (Rs/share); Reduction in FY2010E selling prices (%)

WACC (%)	10	20	30	40
13	311	265	219	173
14	309	263	217	172
15	307	261	216	171
16	305	260	215	169
17	303	258	213	168
18	301	256	212	167
19	299	255	210	166

Note:
Reduction in selling prices refers to all segments- residential, retail and commercial.

Source: Kotak Institutional Equities estimates

P/E unlikely to be the right valuation tool in the near term? We believe a P/E-based approach is not appropriate for valuing these stocks for the following reasons

- **Historical land banks.** Several real estate companies have historical land banks in premium locations wherein they can earn supernormal profit margins. Thus, following a P/E-based approach could result in overvaluation of these companies.

- **Lumpy earnings.** This is particularly relevant for companies executing fewer projects. The accounting of profits from a large project in a particular year can result in overvaluation in that year and undervaluation in subsequent years. Also, in commercial and retail businesses, profits can vary significantly, based on leasing or selling of these properties.

- **Non-uniform accounting policies.** Currently, real estate companies follow three set of accounting policies—(1) percentage completion based on project cost basis, (2) percentage completion based on construction cost basis and (3) project cost basis.

- **Reinvestment.** We feel real estate companies need to buy more land in order to earn profits in the future. This is different from other sectors as companies do not need to invest on an ongoing basis to sustain their businesses at the same level. However, if a real estate company has a large land bank, the need to reinvest to sustain in the business is likely to be lower.

Better disclosures required to improve investor confidence

Limited quarterly disclosures, different accounting policies and cash flow/PAT mismatch have led to low investor confidence in quarterly numbers. We believe confidence in quarterly results is necessary for investors to develop more comfort on NAV estimates. We recommend a few items which all real estate companies should disclose for better decision making by investors below.

- **Quarterly balance sheet data.** We would like companies to disclose balance sheet (along with schedules) and cash flow statements. Large differences between PAT and operating cash flow which may stem from higher working capital (loans and advances, sundry debtors) should be suitably explained.

- **Selling volumes.** Apart from DLF, there is limited disclosure with respect to selling volumes. Companies cite reasons as this information is sensitive, but we believe real estate is no different from other sectors such as automobiles, cement etc. In fact it is more competitive having a larger number of players.

- **New launches.** We would expect companies to give information on launches in the previous quarter and planned launches in the next two quarters. While one can track, projects launched through channel checks, company data will help in forming estimates accurately. Any deviation from planned launches will help in formulating a view on company’s performance as well as broad macro environment.

- **Revenue mix.** Disclosure of quarterly revenue mix will give investors more confidence in quarterly numbers. We would expect disclosures of revenue mix—vertical and geography-wise.

- **Debt covenants.** More disclosures on debt covenants and payment schedules will limit speculation about the liquidity position of the company.

- **New land acquisitions.** We would like disclosures on amount spent to acquire new land banks.

Higher disclosure is going to be an important parameter for any stock to outperform and it is even more important for real estate. We believe there could be large valuation differences intra sector and real estate vis-à-vis others just on account of disclosure pattern and perceived corporate governance.

IDENTIFYING THEMES FOR STOCK PERFORMANCE FOR CY2009

We believe macro themes that will drive stock performance for CY2009 include interest rates, pick-up in residential demand, regulations, commercial IT demand and GDP growth. Corporate themes that will drive stock performance include asset-liability equation, operational momentum and corporate governance (or lack of it).

Macro Theme I: Lower interest rates to result in multiple benefits

Interest rates affect real estate companies in multiple ways affecting project financing, end-user affordability and asset valuations.

Cost of borrowing likely to see a large decline. Borrowing costs for select real estate companies are likely to decline 350-400 basis points over the next six months from current levels of 15-18%. A softer interest rate environment and loose monetary policy of RBI will result in lower lending rates. SBI has decreased its PLR by 150 bps as RBI has cut CRR, reverse repo and repo rates sharply (see Exhibit 13). The sharp rise in lending rates was also driven partly by RBI's decision to increase risk weights and raise provisioning norms for real estate companies. These measures have been reversed by RBI in November 2008 and can result in lending rates borrowing costs becoming lower by 150-175 bps in case banks decide to pass on the full benefits (see Exhibit 15). Past analysis indicates that select companies used to borrow at sub-PLR rates in FY2002-04 (see Exhibit 12).

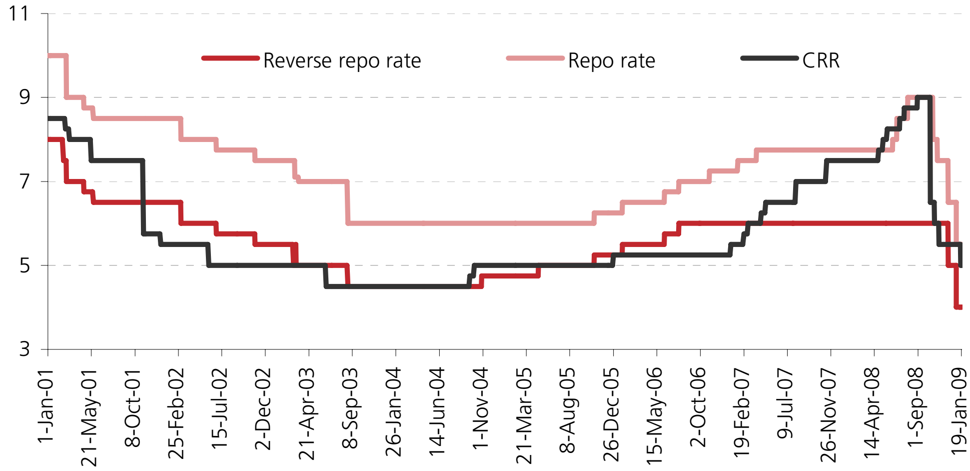
Most real estate companies have borrowed aggressively and lower interest rates will help debt-servicing capabilities. The largest beneficiaries of lower interest costs will be Unitech, HDIL and Sobha as their leverage ratios are the highest. We highlight that all the three verticals for real estate development require large upfront investments though in varying proportions with residential requiring the least investment. The retail segment requires the largest working capital since it warrants premium location and has the highest construction cost.

Exhibit 12: Borrowing cost for real estate companies has been below PLR historically
Borrowing cost for real estate companies over the past few years

	Amount (Rs mn)	Lender	Rate (%)	SBI PLR (%)	Comment
DLF					
Jul-04	US$0.75	HSBC	6.46	10.25	Rate as on March 31, 2007
Sep-04	1,300	Citibank	10.5	10.25	
Aug-05	1,500	SBI	10	10.25	Interest at 2.25% below SBI Advance Reference Rate
Oct-05	1,000	United Bank of India	8.1	10.25	Repayment in 5 equal installments of Rs. 20 crore each commencing from April 1, 2011
Apr-06	5,000	ICICI	10.2	10.25	2.85% per annum below the sum of ICICI Benchmark Advance Rate
Aug-06	1,816	DSP Merrill Lynch	9.25	11	
Oct-06	9,300	DSP Merrill Lynch	10.5	11	This loan is now assigned to UTI Bank Ltd Trust
Mar-07	2,500	ICICI	12	12.25	
Unitech					
FY2007	1,000		9.05		Secured redeemable non-convertible debentures redeemable at par in Sept 2007
FY2008	500		10.5		Secured redeemable non-convertible debentures redeemable at par in Jan 2009
FY2008	250		11.5		Secured redeemable non-convertible debentures redeemable at par in Jan 2009
FY2008	750		12.25		Secured redeemable non-convertible debentures redeemable at par in Dec 2009
Sobha					
Nov-05	90	Dhanalaxmi Bank	8.5	10.25	Interest rate at designated bank lending rate minus 4%
FY2007	150	Standard Chartered	9.6		
FY2008	1,000	LIC MF	10		Redeemable non-convertible debentures redeemable at par in Aug 2008
FY2008	250	DSP Merrill Lynch	11.9		Redeemable non-convertible debentures redeemable at par in May 2009

Source: Company, Kotak Institutional Equities

Exhibit 13: RBI's key policy rates have come down to the lowest level in the past 10 years
RBI's repo, reverse repo rates and cash reserve ratio (%)



Source: RBI, Kotak Institutional Equities

Exhibit 14: Recent RBI actions indicate change of stance towards real estate
Chronological actions by RBI along with risk weightages and standard provisioning

		Risk weights		
Date	**Chronological actions by RBI**	**Residential**	**Commercial**	**Provisioning**
Nov-08	Provisions on standard assets for personal loans, capital market exposure, commercial real estate loans reduced to 0.4%, risk weights on these assets reduced to 100%	50	100	0.4%
May-07	Risk weight in respect of housing loans up to Rs2 mn to individuals against the mortgage of residential housing properties was reduced from 75% to 50%	50		
Jan-07	Provisions on standard assets for personal, loans against equity, commercial real estate loans hiked to 2% from 1% .			2.0%
Oct-06	Housing loans above Rs1.5 mn will not be treated as priority sector lending			
Sep-06	Exposure of banks to entities for setting up SEZs would be treated as exposure to commercial real estate sector with immediate effect			
May-06	Provisions on standard assets against personal, loans against shares, residential loans > Rs2 mn hiked to 1% from 0.4%			1.0%
May-06	Risk weight on commercial real estate increased to 150% from 125%.		150	
Jul-05	Risk weight on commercial real estate loans enhanced to 125% from 100%		125	
Jan-05	Risk weight on housing loans increased from 50% to 75% and from 100% to 125% in the case of consumer credit including personal loans and credit cards increased.	75	125	
Jul-04	Investment by banks in the mortgage backed securities (MBS) to be classified as direct lending to housing within the priority sector lending, subject to certain conditions.			
May-03	Direct housing loans up to Rs1 mn in rural and semi-urban areas to be reckoned for priority sector lending			
May-02	Loans and advances secured by mortgage of residential property may be assigned a risk weight of 50% instead of the existing 100% for the purpose of capital adequacy, commercial real estate would continue with 100% risk weightage	50	100	
May-02	Bank's investment in mortgage backed securities (MBS) of residential assets of Housing Finance Companies (HFCs) which are supervised by the National Housing Bank (NHB) would be eligible for risk weight of 50% for the purpose of capital adequacy.	50		

Source: RBI, Kotak Institutional Equities

Exhibit 15: Banks can maintain their current profitability despite decreasing rates by ~2%
A sample model to illustrate the impact on yields

Case A: Risk weight of 150% and standard provisioning at 2%
Case B: Risk weight of 100% and standard provisioning at 2%
Case C: Risk weight of 100% and standard provisioning at 0.4%

	Case A	Case B	Case C
Interest income	14.00	13.41	11.87
Yield on advances (%)	**14.00**	**13.41**	**11.87**
Interest expenses	6.21	6.48	6.48
Cost of funds	7.00	7.00	7.00
Net interest income	7.79	6.94	5.40
Other income (@1% of assets)	1.00	1.00	1.00
Opex (@1.9% of assets)	1.90	1.90	1.90
NPL provisions	2.40	2.40	2.40
Standard asset provisions	1.92	1.92	0.38
PBT	2.57	1.72	1.71
Tax	0.87	0.58	0.58
PAT	1.69	1.13	1.13

Commercial real estate (Rs)	100	100	100
Risk weight	**150%**	**100%**	**100%**
Equity (Tier I @7.5%) (Rs)	11.25	7.5	7.5
Borrowings (Rs)	88.75	92.5	92.5
RoE (%)	15.1	15.1	15.1
Gross NPL ratio (%)	4.0	4.0	4.0
Coverage ratio (%)	60.0	60.0	60.0
Net NPL ratio (%)	1.60	1.60	1.60
Standard provisioning (%)	**2.00** `	**2.00**	**0.40**

Source: Kotak Institutional Equities estimates

End-user affordability. A lower interest rate environment will reduce mortgage rates and borrowing costs for investors. The EMI for Rs100,000 20-yr loan declines 15.5% to Rs916/month in case of a drop of 250bps in interest rates to 9.25% (see Exhibit 16). DLF is best positioned to take advantage as and when demand recovers as it as it has launched a large number of projects in the mid-income range over the past six months.

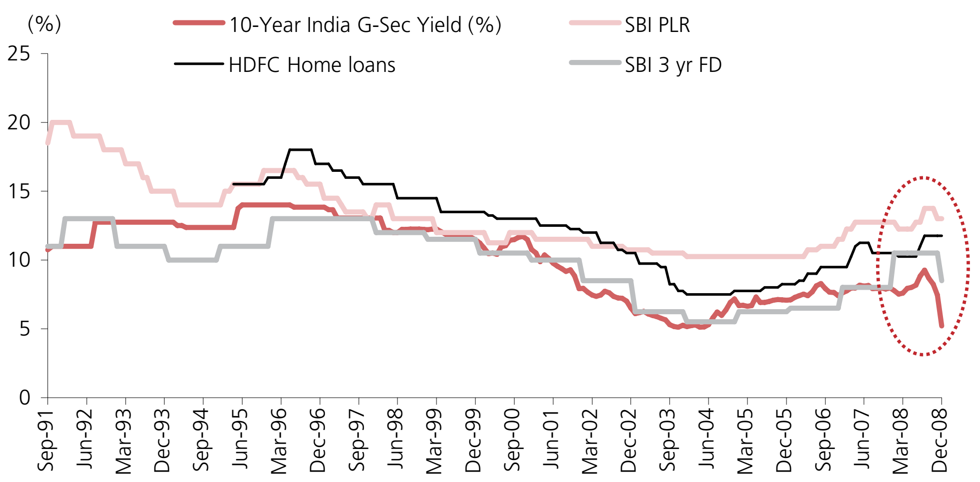
Exhibit 16: Declining interest rates would result in increase in affordability
EMI (Rs/month) per Rs100,000 housing loan for different tenures, interest rates

		Interest rate (%)									
		7.5	**8**	**8.5**	**9**	**9.5**	**10**	**10.5**	**11**	**11.5**	**12**
Loan duration (no. of years)	**10**	1,187	1,213	1,240	1,267	1,294	1,322	1,349	1,378	1,406	1,435
	15	927	956	985	1,014	1,044	1,075	1,105	1,137	1,168	1,200
	20	806	836	868	900	932	965	998	1,032	1,066	1,101
	25	739	772	805	839	874	909	944	980	1,016	1,053
	30	699	734	769	805	841	878	915	952	990	1,029
	40	658	695	733	771	810	849	889	928	968	1,008
	50	640	679	719	759	799	839	880	921	961	1,003

Source: Kotak Institutional Equities estimates

Asset valuation. Decrease in interest rate environment will result in decrease in capitalization rates, thus increasing asset valuation. As discussed earlier, decreasing cap. rate by 1% increases the asset valuation by 15-20%. We believe pre-tax capitalization rates in India will be linked to 10-yr GSec and bank fixed deposit (FD) rates, both of which have declined sharply in the past two months (see Exhibit 17).

Exhibit 17: Decrease in interest rate environment will result in lower capitalization rate expectations
Different interest rates for the period, 1991-2008 (%)



Source: RBI, HDFC, Kotak Institutional Equities

DLF and Unitech are going to be biggest beneficiaries of declining interest rate environment as they would benefit on all of the above three factors (see Exhibit 18).

Exhibit 18: DLF is best positioned across all the key parameters
Comparison across the key macro parameters

	Project financing	End user affordability	Asset valuation
DLF	✓✓	✓✓	✓✓
HDIL	✓✓✓	✓	✓
Indiabulls Real Estate	—	—	✓✓
IVR Prime	—	✓	—
Mahindra Gesco	—	✓	—
Phoenix Mills	✓	—	✓✓✓
Puravankara	✓✓	✓✓	—
Sobha	✓✓✓	✓✓	—
Unitech	✓✓✓	✓	✓

Source: Kotak Institutional Equities estimates

Macro Theme II: Pick-up in residential demand

We believe residential demand is a function of interest rates and direction of selling prices. The direction of selling prices depends on volume offtake at that price and consumer confidence. Currently, most regions in India are undergoing price adjustment cycle and hence the direction of selling prices is downward. We discuss present real estate cycle in much greater detail later in the report.

Real estate companies which have large exposure to residential real estate are DLF, UT, PVKP and Sobha. While DLF has taken the lead in rationalizing prices and has launched multiple projects, we find resistance amongst other companies to reduce price levels meaningfully. Consequently, we expect DLF to benefit the most as and when demand environment improves. Exhibit 19 highlights that except for DLF, area under residential construction has remained stagnant for all real estate companies. Exhibit 20 gives details of project launches of these companies in CY2008.

Another important sub-theme that is emerging is low-cost housing. As recommended by the government, banks plan to lend at lower rates of 9.25% to loans below Rs2 mn. Given the impetus of the government towards low-cost housing, bank financing for these projects will likely be easier. IVR and PVKP will benefit the most from the government's thrust on low-cost housing. IVR intends to develop a large-scale township primarily targeted towards low-cost housing while PVKP also intends to launch projects in affordable housing space through a fully-owned subsidiary, Provident Housing.

Exhibit 19: Except for DLF, area under construction has remained stagnant for other companies
Area under construction (mn sq. ft), 2QFY08-2QFY09

	2QFY08	3QFY08	4QFY08	1QFY09	2QFY09
DLF	7.5	7.5	12.1	14.2	16.5
Puravankara	15.0	16.0	17.6	18.0	18.3
Sobha	10.8	10.7	11.1	10.3	10.3
Unitech	25.0	25.0	25.0	25.0	25.0

Source: Company, Kotak Institutional Equities

Exhibit 20: DLF has launched the maximum projects in the past four quarters
Project launches by real estate companies under coverage

Type	Project	Location	Launch	Project size (mn sq. ft)	Area sold (mn sq. ft)
DLF					
Residential	New town heights	Kolkata	3QFY08		1.2
Residential	DLF Riverside	Kochi	3QFY08		0.3
Residential	Garden city OMR	Chennai	4QFY08		3.9
Residential	New town heights	Gurgaon	4QFY08		7.7
Residential	Garden city- plots	Indore	4QFY08		1.1
Residential		Indore	1QFY09		0.2
Residential		Kakkanad	2QFY09		0.3
Residential	New town, Off Bannerghatta Road	Bangalore	3QFY09		0.0
Residential	SBM	Delhi	3QFY09	2.5	
Residential	DLF Lake View	Hyderabad	3QFY09		
Residential	Green Estate, Shamshabad Extn.	Hyderabad	3QFY09	125 acres	
HDIL					
Residential	Ghatkopar	Mumbai	2QFY09		
Residential	Goregaon	Mumbai	2QFY09	0.1	
Indiabulls Real estate					
Residential	Indiabulls Green, near OMR	Chennai	2QFY09	15.6 acres	
Residential		Sonepat	2QFY09		
IVR Prime					
Residential	Hazirapahad	Nagpur	1QFY09	0.2	
Residential	Minjur	Chennai	1QFY09	0.7	
Residential	Veduravada	Vishakapatnam	1QFY09	6.2	
Mahindra Lifespaces					
Residential	Mahindra Chloris	Faridabad	1QFY09	0.4	
Residential	Bhandup	Mumbai	1QFY09	0.3	
Puravankara					
Residential	Windmere Phase II	Chennai	1QFY09	0.6	
Residential	Elita Garden Vista	Kolkata	3QFY08	2.3	
Residential	Windermere	Chennai	3QFY08	2.9	
Sobha					
Residential	Sobha City	Thrissur	2QFY09		
Residential	Sobha Scarlet	Mysore	2QFY09	14.2 acres	
Unitech					
Residential	Woodstock floors, Nirvana Country	Gurgaon	FY2009	1.0	
Residential	Capella (Phase I, Uniworld city)	Noida	FY2009	1.0	
Residential	Kolkata West International City	Kolkata	FY2009	1.0	
Residential	Uniworld City	Mohali	FY2009	1.0	

Source: Kotak Institutional Equities

Macro Theme III: Regulations to kick start REITs and REMFs

The Securities and Exchange Board of India (SEBI) has over the past twelve months come out with guidance on Real Estate Investment Trusts (REITs) and has amended the mutual fund regulations to allow mutual funds to launch real estate mutual funds (REMFs). Both Real Estate Investment Trusts (REITs) and REMFs will likely provide additional liquidity to real estate companies. They will also provide retail investors an opportunity to take professional help in real estate investments without the hassles involved in investing in a project in terms of large capital requirement, title rights, development and other issues. Though, REITs and REMFs will likely serve the same purpose, the nature of these instruments is different and we highlight the key differences between these entities below.

- **Timing of investment identification.** REITs are going to be floated for identified assets while REMFs will make investments after funds have been raised.
- **Sponsors.** In case of REMFs, the quality of sponsor is very important while in case of REITs the quality of assets will be of more importance.
- **Investment philosophy.** REITs will invest primarily in income yielding assets while REMFs will invest in mix of asset classes such as income yielding assets, debt securities and listed equity.
- **Risk-reward.** In the case of REITs, the risk will be lower as investors will know about the details of assets that are going to be part of it. REMFs could also churn their portfolio and hence returns will likely be more volatile in their case.

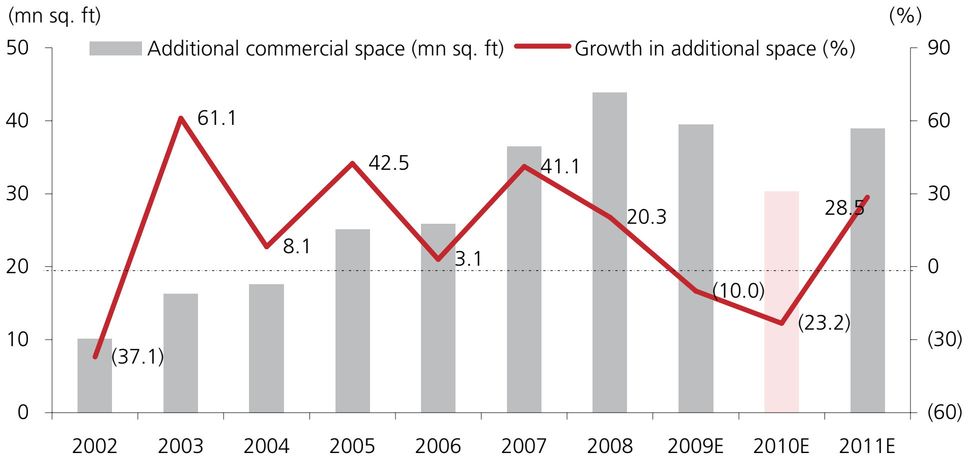
However, taxation aspects with respect to income tax, dividend distribution tax and mutual fund classification (debt/equity) need more clarifications. Success of REITs/REMFs will benefit real estate companies, private equity players and also the banking system. These regulations will permit a rent-yielding asset to be taken off from balance sheet of both real estate companies as well as banks permitting these entities to focus on development assets. Higher capital availability will lead to development of better quality assets at competitive prices. DLF and PHNX have largest area of leasable assets and will benefit if more clarity emerges on this front.

Macro Theme IV: Slowdown in IT hiring to affect commercial demand

IT/ITeS is the largest tenant for commercial space and contributes to 75-80% of absorption in cities such as Bangalore, Chennai and Pune. IT hiring have been adversely affected with the demand environment worsening due to the ongoing global recession. Our IT research team of Kawaljeet Saluja and Rohit Chordia expect IT hiring to decline 17% in FY2009E and 39% in FY2010E, thus affecting commercial real estate sales. DLF has emerged as amongst the largest suppliers of commercial SEZ space and will be the most affected due to this slowdown.

We expect companies to alter their development plans for good-quality land parcels earlier slotted for IT SEZ development. DLF has already altered plans and withdrawn application for setting up an IT SEZ in Delhi and plans to use that land for residential development.

Exhibit 21: Slowdown in IT hiring would put pressure on commercial demand
Estimation of additional commercial space demand (mn sq. ft) from 2002-2011E



Source: Kotak Institutional Equities estimates

Macro Theme V: News flow, direction of GDP growth likely to remain adverse for CY2009

CY2009 is going to be a readjustment phase across various verticals. Media reports will keep on highlighting pricing fall from peak in select locations. On the retail front, client churn will likely remain in media focus. Continuous adverse news flow will likely affect stock performance even if the bad news is already factored in stock prices. We believe news flow on the sector will start turning positive only when new residential launches start being successful.

The direction of GDP growth is important for increase in real estate opportunities. If GDP growth is slowing down, then lesser growth opportunities will be available for real estate companies to reinvest generated cash flows. Thus P/NAV rerating is likely to be limited and it is unlikely that stocks will trade at a premium to NAVs in a weakening GDP growth scenario.

Corporate Theme I: Balance sheet quality—asset-liability mismatch

Land bank of real estate companies has grown manifold over the past few years, which has been funded through debt and equity through in varying proportions. Similar attention has not been paid to land bank monetization which has resulted in lower asset turnover and, in turn, ROCE. In many cases, where land bank accretion has been funded through debt purchases, debt/EBITDA ratio has increased creating problems in debt servicing.

Exhibit 22: Land bank of real estate companies has grown manifold over the past few years
Company-wise land bank (in mn sq. ft) since March 2006

	Mar-06	Dec-06	Mar-07	Mar-08	Sep-08
DLF	228	574	574	751	751
Unitech	200	475	500	700	700
Puravankara			116	125	125
Indiabulls Real Estate			100	225	225
Sobha	100	139	139	200	200
HDIL			112	125	192

Source: Kotak Institutional Equities

As debt/EBITDA levels increase, raising debt becomes more difficult. Keeping this ratio is essential as limited long-term funding is available for real estate and any debt/EBITDA ratio > 3 can be problematic. We observe asset-liability mismatch in Unitech, HDIL, Sobha and Puravankara. Unitech has funded land banks largely though debt and is slow on monetizing these land parcels. HDIL has made large investments in airport slum rehabilitation projects, which has created a mismatch.

Exhibit 23: Large short-term debt repayment has created problem in debt servicing
Debt and other relevant data as of March 2008 and September 2008 (Rs bn)

	As of Sept 2008										
				Repayable			As of Mar 2008			Sales	
	Secured	Unsecured	Debt	2HFY09	12 months	FY2010	Secured	Unsecured	Debt	FY2008	1HY09
DLF	94.7	52.1	146.7	23.0	40.0	40.0	80.5	42.2	122.6	144.3	75.6
HDIL	29.4	10.1	39.5	5.0	10.0	10.0	19.5	11.7	31.1	23.8	10.5
IBREL	0.7	1.7	2.5	—	—	—	0.0	3.4	3.4	1.4	0.9
Mahindra Lifespaces	—	—	—	—	—	—	2.9	0.0	2.9	1.7	0.8
Orbit	—	—	5.5	1.5	1.8	0.5	3.0	2.3	5.3	7.1	1.6
Parsvnath	—	—	20.3	3.8	4.0	5.6	17.2	1.0	18.2	17.7	5.9
Purvankara	7.3	0.8	8.1	1.5	5.0	4.5	5.8	0.8	6.5	5.7	3.0
Sobha	—	—	19.5	4.6	9.2		14.4	3.2	17.6	14.3	6.5
Unitech	—	—	100.0	26.0	>26		62.3	23.2	85.0	41.4	20.1
Total			**342.0**	**65.4**	**>100**		**205.6**	**87.7**	**292.5**	**257.4**	**124.8**

Source: Kotak Institutional Equities estimates

Exhibit 24: Leverage trend for real estate companies
Key parameters for real estate companies ,March fiscal year-ends, 2006-11E (Rs mn)

	Debt	Equity	Revenues	EBITDA	ROCE (%)	Debt/EBITDA (X)	Debt/Revenues (X)
DLF							
2006	41,320	9,500	11,536	4,757	4.5	8.7	3.6
2007	99,328	39,672	39,233	28,034	22.9	3.5	2.5
2008	122,771	196,883	144,375	97,151	35.3	1.3	0.9
2009E	119,328	251,047	143,777	87,368	20.1	1.4	0.8
2010E	89,328	302,313	164,032	86,909	17.7	1.0	0.5
2011E	89,328	355,614	194,055	95,664	16.2	0.9	0.5
HDIL							
2006	1,965	1,850	4,377	1,376	45.4	1.4	0.4
2007	3,757	7,268	12,165	6,622	78.1	0.6	0.3
2008	31,127	36,415	23,804	16,914	39.1	1.8	1.3
2009E	37,965	44,052	17,858	12,128	15.2	3.1	2.1
2010E	37,965	50,554	25,731	11,470	12.6	3.3	1.5
2011E	32,965	58,806	30,544	14,284	14.3	2.3	1.1
Puravankara							
2006	1,622	1,114	2,797	900	39.7	1.8	0.6
2007	6,761	2,218	4,169	1,493	20.7	4.5	1.6
2008	6,524	12,127	5,658	2,417	15.5	2.7	1.2
2009E	9,833	13,630	5,653	2,250	8.5	4.4	1.7
2010E	11,833	15,003	6,539	2,699	8.0	4.4	1.8
2011E	14,833	16,099	8,543	3,249	7.4	4.6	1.7
Sobha							
2006	4,231	1,368	6,277	1,407	25.3	3.0	0.7
2007	5,837	8,155	11,865	2,562	20.8	2.3	0.5
2008	17,831	10,109	14,311	3,703	13.3	4.8	1.2
2009E	18,000	11,729	17,769	4,237	9.5	4.2	1.0
2010E	20,700	13,264	22,001	4,909	8.8	4.2	0.9
2011E	22,000	14,144	27,934	5,914	6.2	3.7	0.8
Unitech							
2006	10,449	2,597	9,412	1,834	12.2	5.7	1.1
2007	39,805	19,944	32,883	20,018	41.8	2.0	1.2
2008	85,524	36,003	41,400	22,287	20.9	3.8	2.1
2009E	104,537	47,250	39,766	22,126	12.9	4.7	2.6
2010E	102,394	57,680	42,119	21,602	11.2	4.7	2.4
2011E	103,394	64,803	47,275	21,864	11.2	4.7	2.2

Source: Kotak Institutional Equities estimates

Corporate Theme II: New launches will determine direction of operating cash flows

As discussed in the previous theme, many real estate companies have bought land aggressively creating asset-liability mismatches. We believe this mismatch can be corrected only through a firm's ability to generate operating cash flow which will depend upon monetization of these land banks and aggressively launching and selling projects. The land bank quality will determine the ability to launch new projects as choices available to customers increase. As a result, launching and selling projects on city outskirts will likely be much more difficult unless they are offered at steep discounts.

Exhibit 25 indicates that DLF, HDIL and PHNX generated operating cash flow in 2QFY09.

Exhibit 25: DLF well positioned across key parameters for real estate companies
Key parameters for real estate companies

	Operating cash flow	Increase in debt	New launches/ Project progress	Balance sheet comfort	FY2009E EPS Consensus downgrades (%)
DLF	✓	✓	✓	✓✓	(5.4)
HDIL	✓	—	✓	—	(10.3)
IBREL	—	—	✓	✓✓	(61.2)
IVR Prime	—	—	—	✓	(81.3)
MLIFE	—	—	—	✓✓	(32.2)
Phoenix Mills	✓	—	✓	✓✓	0.3
Puravankara	—	✓✓	—	—	(20.6)
Sobha	—	✓	—	—	(18.9)
Unitech	—	✓	—	—	(16.4)

Source: Kotak Institutional Equities estimates

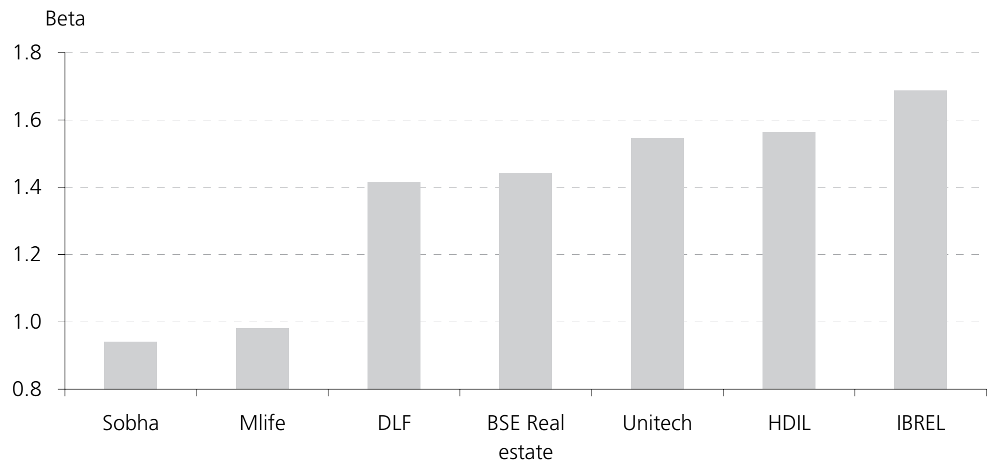
Corporate Theme III: Limited corporate governance prevents price discovery

We find large inconsistency in financial/business reporting across various real estate companies. Most companies do not report basic information such as revenue-mix, sale details and detailed balance sheet. Limited information has resulted in high volatility amongst real estate stocks as indicated by high beta of all stocks (see Exhibit 26). We discuss key parameters of disclosures below.

Availability of information. Most companies in the sector have track record of investor participation for less than two years and disclosure norms are primitive. Level of information sharing is limited across various parameters such as (1) quarterly balance sheet data, (2) new launches, (3) selling volumes, (4) revenue mix, (5) new land acquisitions and (6) debt covenants. Improving disclosure norms will tremendously help to improve investor confidence.

Accounting policy. Currently, real estate companies follow three set of accounting policies—(1) percentage completion based on project cost basis, (2) percentage completion based on construction cost basis and (3) project cost basis. Furthermore, a few companies take a threshold before they start to book revenues while others start booking revenues as soon as they start construction. Exhibits 27, 28 summarize accounting policies followed by different companies.

Exhibit 26: High beta indicates price discovery taking longer
1-yr beta (X) for real estate companies



Source: Kotak Institutional Equities

Exhibit 27: Revenue booking occurs faster on project accounting basis
Sample model to show the difference in accounting policy

Selling price	(Rs/sq. ft)	15,000
Land cost	(Rs/sq. ft)	5,000
Construction cost	(Rs/sq. ft)	2,500
Customer payments	Linked to construction schedule	

		Project cost basis	Construction cost basis
Construction incurred	(%)	10	10
Customer payments (a)	(Rs/sq. ft)	1,500	1,500
Cost incurred (I)	(Rs/sq. ft)	5,250	250
Relevant total cost (II)	(Rs/sq. ft)	7,500	2,500
Percentage completion ((I)/(II)	(%)	70	10
Revenues booked (b)	(Rs/sq. ft)	10,500	1,500
Receivables ((b)-(a))	(Rs/sq. ft)	9,000	—

Source: Kotak Institutional Equities

Exhibit 28: Each company has its own different accounting policy
Accounting policy description of different real estate companies

Company	Accounting policy	Threshold limit (%)
DLF	Percentage of completion- project cost (land cost and construction cost)	30
Unitech	Percentage of completion- construction cost	20
HDIL	Project completion method	
Sobha	Percentage of completion- construction cost	25
Puravankara	Percentage of completion- construction cost	
Parsvnath	Percentage of completion- project cost (land cost and construction cost)	30
Orbit corporation	Percentage of completion- project cost (land cost and construction cost)	25
Akruti Nirman	Percentage of completion- construction cost	40

Source: Kotak Institutional Equities

Interest rate capitalization. All companies capitalize a large portion of interest citing reasons that debt has been taken for construction of lease commercial properties or for purchasing land that will yield revenues in the future. Exhibit 29 summarizes proportion of interest that has been capitalized for FY2007-08.

Exhibit 29: Interest capitalization by companies has increased over the past three years
Interest cost paid and booked (in Rs mn), March fiscal year-ends, 2006-08

	Interest paid	Interest cost booked in P&L	Interest capitalized (%)	Debt
2006				
DLF	1,759	1,685	4.2	41,320
HDIL	331	106	68.1	1,965
Puravankara	122	122	0.0	1,622
Sobha	219	219	0.0	4,231
Unitech	465	465	0.0	10,449
2007				
DLF	8,907	3,076	65.5	99,328
HDIL	430	430	0.0	3,757
Puravankara	170	46	73.1	1,622
Sobha	571	481	15.8	5,837
Unitech	3,409	3,020	11.4	39,805
2008				
DLF	11,890	3,100	73.9	122,771
HDIL	1,680	1,408	16.2	31,127
Puravankara	699	36	94.8	6,761
Sobha	1,780	615	65.5	17,831
Unitech	8,891	2,804	68.5	85,524

Source: Kotak Institutional Equities

INDUSTRY—HOUSING: DEMAND PICKUP LIKELY TO TAKE 12-14 MONTHS

We factor in a further 10% correction in residential pricing in FY2010E and flat pricing in FY2011E. Cumulatively this will result in correction of 30%+ from peak levels across various locations. We believe adjustment in pricing to be a gradual affair and not a crash on account of latent demand, low finished inventory and falling interest rate environment. Pricing correction and drop in interest rates will likely take the affordability to 2005 level, a period which saw good demand from investors as well as end-users.

Demand pickup in the past has taken 12-14 months in stable interest rate environment

Currently, residential markets are in an adjustment phase with developers starting to offer 10-15% discounts while buyers holding on for further correction. We try and analyze from previous cycles the period for which the stalemate between developers and builders can continue as price correction takes place. In order to carry this analysis, we consider two data points for which time series data is available for the past 15 years—(1) household savings data and (2) HDFC loan approvals.

Household savings data. In the previous cycle, savings in physical assets rebounded strongly in FY1998 after declining sharply by 16% in FY1997. Savings in physical assets grew 50% in FY1998 and increased at 34% CAGR during FY1998-2000. Lower savings in physical assets in FY1997 were substituted by large increase in fixed deposits with banks.

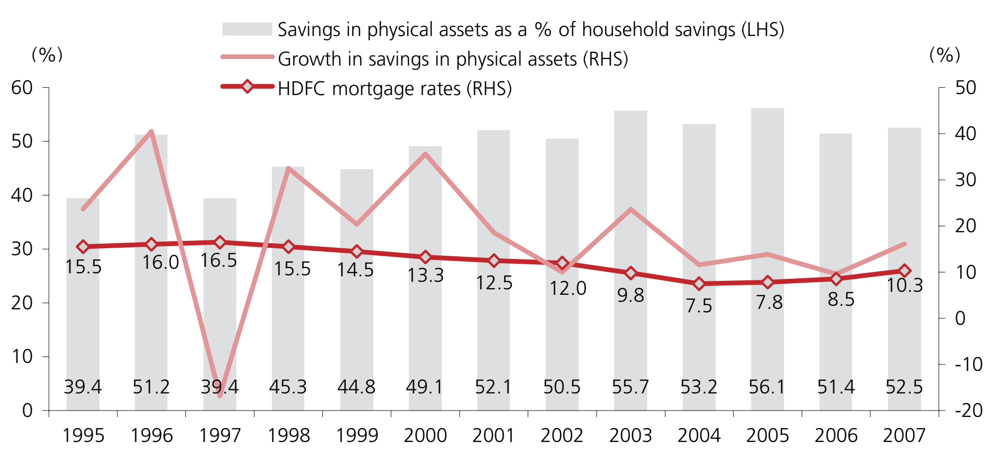
HDFC loan sanction data. Loan sanction growth declined to 20% in FY1997 against 38% in FY1996 and 45% in FY1995.

We believe demand pickup could be similar in the present cycle and will be further aided by limited hyper-investment and softening interest rate environment.

Limited hyper-investment. The current property cycle did not see any large surge in household physical investments in any year. In fact, savings in physical assets over FY2005-07 grew at 13% CAGR, amongst the slowest in the past 15 years. In the previous cycle, decline in FY1997 came in after sharp increase of 40% in FY1996 and 24% in FY1995 (see Exhibits 30, 32).

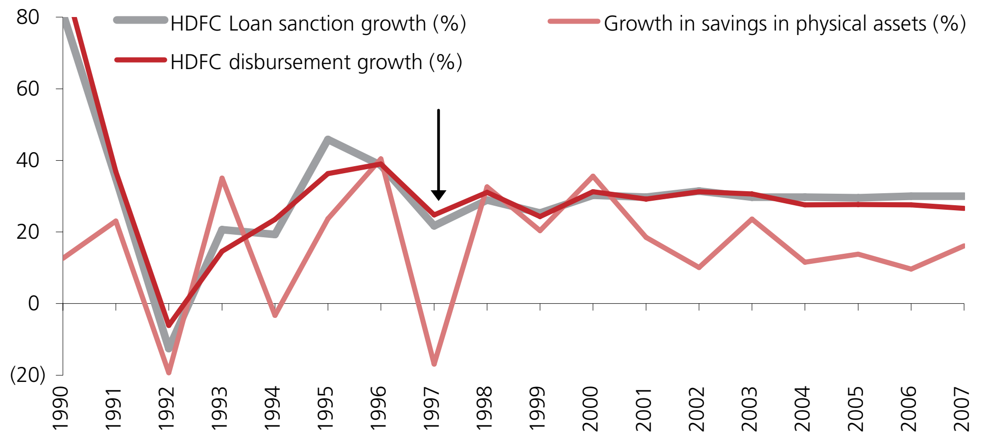
Softer interest rate environment. Correction in property prices will be accompanied with a fall in interest rates compounding affordability benefits. Various financial institutions have lowered interest rates by 50-100 bps. In the previous cycle, interest rates rose sharply with HDFC mortgage rate touching an all-time high of 16.5%.

Exhibit 30: Current property cycle did not see any large surge in household physical investments
Savings in physical assets a % of total household savings, March fiscal year-ends, FY1995-2007



Source: RBI, Kotak Institutional Equities

Exhibit 31: Savings in physical assets saw a sharp dip in 1997 but recovered sharply
Growth rate (%) in HDFC loan sanctions, disbursements, savings in physical assets, 1990-2007



Source: RBI, HDFC, Kotak Institutional Equities

Exhibit 32: Higher interest rate tends to have immediate impact on physical savings
Key household savings indicators, March fiscal year-ends, FY1995-2007 (US$ bn)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
GDP at market prices	**236**	**277**	**321**	**355**	**407**	**454**	**489**	**530**	**571**	**641**	**732**	**833**	**964**
Growth (%)	17.3	17.3	15.7	10.8	14.7	11.5	7.7	8.4	7.7	12.2	14.3	13.7	15.8
Household savings	**46**	**50**	**54**	**62**	**76**	**94**	**105**	**119**	**134**	**156**	**169**	**202**	**229**
as a % of GDP	19.6	18.1	16.9	17.6	18.7	20.7	21.5	22.5	23.4	24.4	23.0	24.2	23.8
Net financial savings	**28**	**24**	**33**	**34**	**42**	**48**	**50**	**59**	**59**	**73**	**74**	**98**	**109**
as a % of household savings	60.6	48.8	60.6	54.7	55.2	50.9	47.9	49.5	44.3	46.8	43.9	48.6	47.5
Currency	3.7	3.8	3.2	3.0	5.1	4.8	3.6	6.5	6.6	9.8	6.3	8.5	9.4
Net Deposits	9.8	8.0	13.8	13.1	12.8	13.3	16.9	17.3	16.2	21.8	27.5	46.1	60.6
Shares and Debentures	4.0	2.1	2.4	1.2	1.6	4.2	2.4	1.8	1.3	1.3	0.8	4.8	6.9
Net claims on government	3.0	2.2	2.7	5.0	6.4	6.5	8.8	11.9	14.5	17.1	18.1	14.3	5.7
Net insurance funds	2.6	3.1	3.6	4.4	5.2	6.4	7.6	10.7	9.4	11.3	11.6	13.7	16.3
Provident and Pension funds	5.0	5.2	7.1	7.5	10.8	12.5	11.1	10.8	11.1	11.7	9.6	10.3	10.0
Savings in physical assets	**18**	**26**	**21**	**28**	**34**	**46**	**55**	**60**	**74**	**83**	**95**	**104**	**120**
as a % of household savings	39.4	51.2	39.4	45.3	44.8	49.1	52.1	50.5	55.7	53.2	56.1	51.4	52.5
Growth (%)	23.7	40.4	(16.9)	32.5	20.4	35.6	18.5	10.0	23.6	11.6	13.8	9.6	16.1
g-sec yields (%)	**12.6**	**9.9**	**10.1**	**9.6**	**9.7**	**10.2**	**10.3**	**7.5**	**6.4**	**5.2**	**6.6**	**7.4**	**8.2**
HDFC mortgage rates (%)	**16**	**16**	**17**	**16**	**15**	**13**	**13**	**12**	**10**	**8**	**8**	**9**	**10**
Average Inflation (%)	**10.4**	**2.9**	**5.4**	**4.5**	**5.2**	**4.2**	**4.9**	**1.6**	**6.5**	**4.6**	**5.1**	**4.1**	**5.9**

Source: RBI, Kotak Institutional Equities

Price pickup likely to take much longer

To understanding pricing behavior post correction, we try and analyze pricing pattern over past 16 years (see Exhibit 33). We observe that post corrections in FY1997, prices were stable for the next four years and the correction from peak prices in most cases was 30%. As is the situation now, even the FY1997-01 phase was accompanied with softening interest rate environment with HDFC's lending rate declining by 300 bps. We would highlight that the FY1997-01 phase also saw a sharp decline in stock prices in CY2000, which played a role in slower price recovery.

We believe price recovery should take a similar time period in the present cycle since post price decline conditions are quite similar, in both cycles— (1) Price increased 2.5-3X across most locations, (2) softening interest rate environment and (3) subdued stock markets.

Exhibit 33: We expect the drop in residential prices to be similar to the 1997-1998 property prices drop
Residential prices (Rs/sq. ft) city-wise, 1993-2008

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Current*	CAGR (%) 1997-2008	CAGR (%) Peak to current
Mumbai																			
South Bombay	10,000	14,000	22,000	20,000	17,000	17,000	14,500	14,000	15,000	14,700	15,500	17,000	22,000	25,000	30,000	50,000	40,000	8.7%	6.5%
Bandra (W)	5,500	7,000	11,000	10,000	9,000	8,000	8,000	7,000	7,000	8,000	8,500	9,000	10,000	14,000	18,000	20,000	16,000	6.5%	4.4%
Andheri (W)	2,600	3,000	5,000	4,600	4,100	3,500	3,000	2,800	3,100	3,300	3,600	3,800	4,200	4,600	8,500	11,000	9,500	8.2%	6.8%
Sion/Chembur	2,700	3,300	5,000	4,600	4,300	4,100	3,100	3,000	3,200	3,500	3,600	3,800	4,400	6,200	7,500	9,000	8,000	6.3%	5.2%
Goregaon	2,000	2,100	3,500	3,400	3,000	2,250	2,000	1,800	1,800	2,000	2,500	2,800	3,300	4,300	5,500	8,200	7,000	8.3%	6.8%
Bangalore																			
M.G Road	1,250	1,350	2,500	4,500	3,750	3,600	3,250	3,100	3,700	3,000	3,000	3,500	4,000	6,750	11,500	12,000	10,000	9.3%	7.5%
Koramangala	850	850	1,200	2,200	1,850	1,850	2,000	1,900	1,800	1,750	1,900	2,350	2,800	4,750	4,750	5,500	4,000	8.7%	5.6%
Indira nagar	750	750	1,200	2,000	1,750	1,600	1,600	1,450	1,300	1,300	1,400	2,200	3,000	4,150	7,000	8,250	6,000	13.7%	10.5%
Delhi/NCR																			
Greater Kailash	2,400	2,700	3,200	5,500	5,000	4,600	4,400	4,100	3,900	4,000	4,050	5,413	6,775	8,138	9,500	16,000	14,000	10.2%	8.9%
Gurgaon				1,800	1,500	1,600	1,800	2,400	2,500	2,600	2,600	2,706	2,813	4,450	7,000	6,250	5,500	12.0%	10.7%
Noida				2,000	1,800	2,100	2,300	2,400	2,500	2,600	2,600	3,050	3,500	3,950	4,400	5,000	4,000	8.7%	6.5%
Pune																			
Aundh	650	1,000	1,500	1,800	1,650	1,500	1,350	1,250	1,250	1,250	1,250	1,800	2,100	3,500	4,550	5,000	4,000	9.7%	7.5%
Kothrud	600	750	1,200	1,200	1,050	950	750	700	700	920	1,140	1,400	1,550	2,500	4,250	4,600	3,800	13.0%	11.0%
Kalyani Nagar	1,000	1,250	1,500	2,000	1,800	1,600	1,400	1,250	1,250	1,500	1,650	2,200	2,525	3,500	4,750	6,750	5,500	11.7%	9.6%

Note:
* In many cases, these are secondary market prices.

Source: Cushman & Wakefield, Kotak Institutional Equities

Currently, property markets are in various phases of pricing adjustments. Discounts have started in Bangalore, NCR and Chennai markets while developers in Mumbai and Kolkata are trying to hold on to prices. Based our analysis of this current property cycle, we see five distinct phases:

Phase I: This was the start of current real estate boom. Increase in affordability as a result of declining interest rate triggered huge demand.

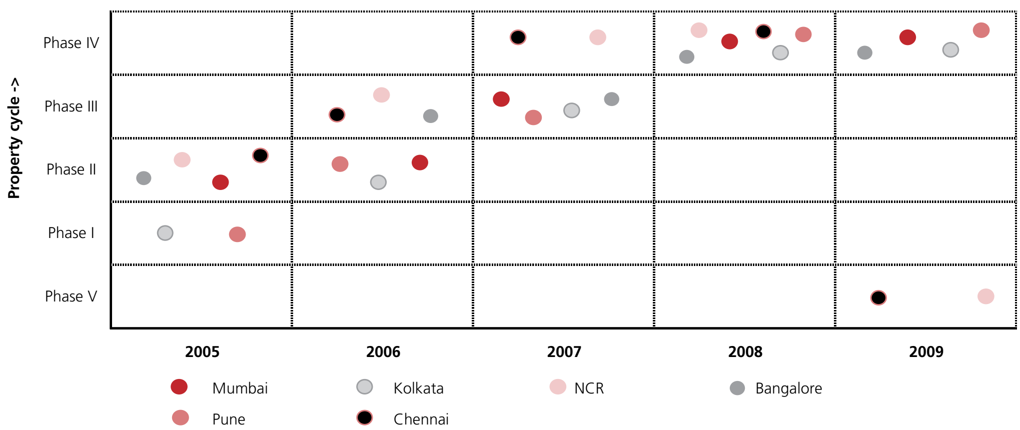
Phase II: This phase saw acceleration of project launches as developers become more confident of demand. New launches were at slight premium to projects launched in Phase I.

Phase III: Developers gained more confidence and increased prices aggressively. Growth in absorption of real estate remained stagnant in this phase.

Phase IV: This was characterized by large price increases. However, low demand at higher prices results in sharp slowdown in new launches.

Phase V: This is the pricing readjustment phase. Developers realize futility of holding on to prices as there is no demand visibility at higher prices. Buyers tend to have a wait-and-watch attitude.

Exhibit 34: Mumbai and Kolkata in Phase IV; Gurgaon is already witnessing a correction
Different phases in the property cycle



Source: Kotak Institutional Equities

We anticipate pricing readjustment and not a crash

We believe adjustment in pricing to be a gradual affair and not a crash on account of (1) sharp increase in affordability, (2) low finished inventory, (3) latent demand and (4) favorable demographics.

I. Affordability cycle turning after four years of sharp increase

Affordability cycle for residential real estate is turning around sharply due to a combination of lower interest rates and selling prices. We calculate affordability using a combination of income, interest rates and selling prices. We expect prices to correct 25% in FY2008-10E while interest rates are likely to decline to sub-10% levels. Such a scenario results in sharp increase in affordability by 35% taking it to CY2005 level (see Exhibit 35).

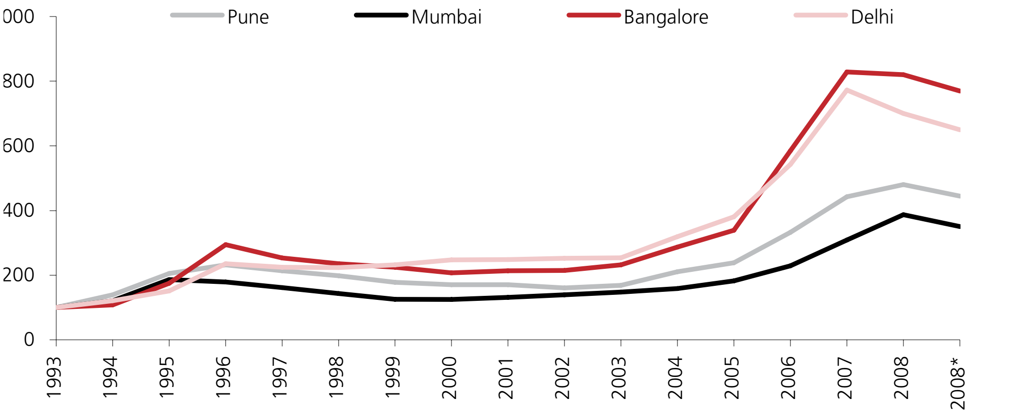
Affordability in FY2005-08 declined sharply on a pan-India basis led by a sharp increase in selling prices. Exhibit 36 shows price movements across pan-India basis for 1993-2007. As part of this exercise we have used data from 58 locations across six cities. We will track these indices on a quarterly basis. We note that prices in all metros have become at least 2X in the past three years.

Exhibit 35: Increase in affordability in FY2010E because of decline in interest rates and selling prices
Measurement of affordability of housing in India, March fiscal year-ends, 1999-2010E

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009E	2010E
Housing loan interest rates (%)	**14.5**	**13.9**	**12.8**	**12.1**	**10.4**	**8.9**	**8.0**	**8.5**	**9.5**	**10.5**	**11.75**	**9.25**
EMI per Rs100,000 on 20 yr loan (Rs)	1,366	1,240	1,160	1,110	995	895	836	868	932	998	1,084	916
Avg annual household income (for households with annual income > Rs200,000)		577,201	606,061	636,364	668,182	701,591	736,671	788,238	843,414	902,453	947,576	947,576
Income growth (%)			5.0%	5.0%	5.0%	5.0%	5.0%	7.0%	7.0%	7.0%	5.0%	0.0%
Taxes		115,440	121,212	127,273	133,636	140,318	147,334	157,648	168,683	180,491	142,136	142,136
Post tax income		461,761	484,849	509,091	534,546	561,273	589,337	630,590	674,731	721,963	805,439	805,439
Selling prices decline by 10% each in FY2009E and FY2010E												
Capital price in Koramangala,Bangalore		**1,900**	**1,800**	**1,750**	**1,900**	**2,350**	**2,800**	**4,500**	**4,750**	**4,750**	**4,000**	**3,600**
Price of 1,500 sq. ft house (Rs mn)		2.9	2.7	2.6	2.9	3.5	4.2	6.8	7.1	7.1	6.0	5.4
EMI payable assuming 70% LTV		24,738	21,924	20,396	19,850	22,084	24,578	41,013	46,484	49,775	45,528	34,625
Price/income ratio (X)		4.9	4.5	4.1	4.3	5.0	5.7	8.6	8.4	7.9	6.3	5.7
Affordability Index (assuming FY2000 as 100)		**100**	**84**	**75**	**69**	**73**	**78**	**121**	**129**	**129**	**106**	**80**
Capital price in Bandra, Mumbai		**7,992**	**8,791**	**8,000**	**8,500**	**8,500**	**10,000**	**13,000**	**16,000**	**20,000**	**18,000**	**15,000**
Affordability Index (assuming FY2000 as 100)		**100**	**98**	**81**	**74**	**63**	**66**	**83**	**103**	**129**	**113**	**79**

Source: RBI, Kotak Institutional Equities

Exhibit 36: Prices have risen at least 2X over the past three years
Residential price indices, 1993-2008



Note:
* indicates price index as of Dec 2008

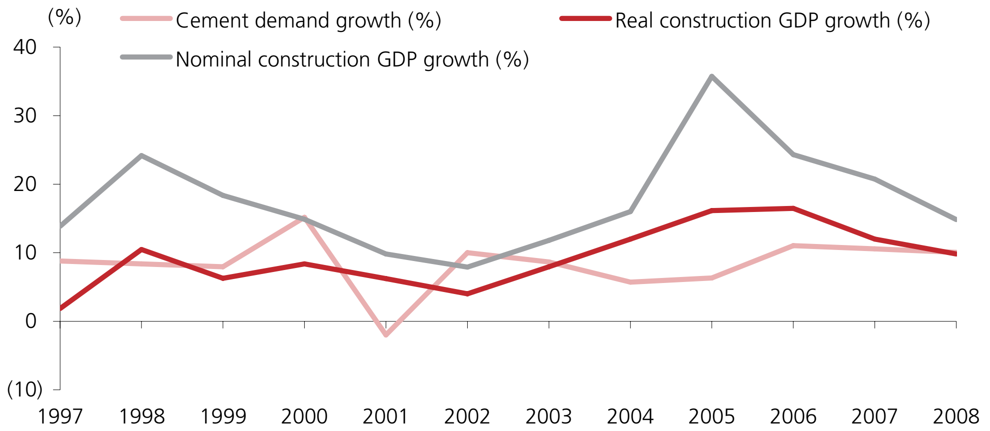
Source: Knight Frank, Cushman & Wakefield, Kotak Institutional Equities

II. Low inventory as developers have slowed down construction

Finished inventory is limited across all locations as speculative construction is limited in India. Developers rely on pre-sales to fund construction cost and in absence of pre-sales delay construction. We believe such an adjustment has already been going on for the past 24 months in many locations such as NCR, Mumbai and Bangalore. As developers delay construction of existing projects, they also minimize new launches. Anecdotal data also indicates that launches by large residential companies (UT, Sobha and PVKP) have been limited over the past 24 months.

Slowdown in the residential market is reflected in lower construction GDP growth and cement consumption for the FY2006-08E period (see Exhibit 37). This was in spite of a strong growth witnessed by infrastructure companies like L&T, IVRCL Infra and BHEL (see Exhibit 38).

Exhibit 37: Slowdown in the residential market evident from lower construction GDP and cement consumption growth
Construction GDP growth and cement consumption for FY2006-08E



Source: RBI, Kotak Institutional Equities

Exhibit 38: Slowdown in construction activity may not be due to infrastructure activity
Revenues for large construction companies, March fiscal year ends, FY2003-08 (Rs mn)

	2003	2004	2005	2006	2007	2008
Larsen & Toubro	105,258	109,738	145,517	165,613	205,153	293,504
BHEL	67,537	78,060	92,935	132,275	172,375	193,046
IVRCL	4,403	7,735	10,547	14,957	23,059	36,606
Nagarjuna Constructions	4,537	7,582	11,885	18,404	28,711	34,729
Total	**181,736**	**203,114**	**260,884**	**331,249**	**429,297**	**557,886**
Growth (%)		**11.8**	**28.4**	**27.0**	**29.6**	**30.0**

Source: Kotak Institutional Equities

III. Low demand over the past two years has led to latent demand

While we have used cement consumption data and construction GDP growth as key indicators to track supply, we believe the key demand indicator is housing loan disbursements. Housing loan disbursement growth has been low since 1QFY08, though there has been a nominal pickup recently. For tracking housing loan disbursements, we use data given by HDFC, ICICI Bank and LIC Housing Finance which constitute approximately 70% of the total market (see Exhibits 39, 40, 41).

We believe that as prices rose sharply and interest rates started rising, investment into residential real estate declined. Thus, the last leg of property price rise has not been backed by corresponding demand either from end-user or investor. Auto correction in demand at peak prices is likely to prevent a "negative equity" situation wherein value of the house becomes lesser than loan outstanding against the same.

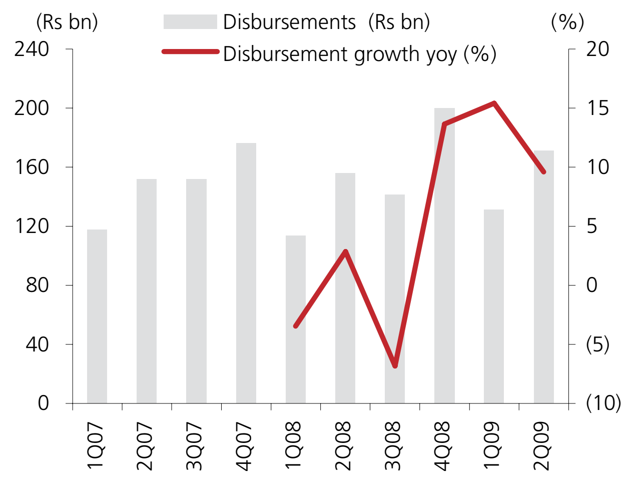
Analysis of balance sheet also indicates that pre-sales in the residential market have reduced sharply over FY2006-08 as indicated by lower customer advances and rising debtors (see Exhibit 42).

Exhibit 39: Slowdown in disbursement growth for housing and commercial construction
Housing and commercial construction disbursements by three leading institutions (Rs bn)

	2004	2005	2006	2007	2008	2009E
ICICI Bank	133	189	257	284	222	250
HDFC	127	162	207	262	328	388
LICHF	41	47	49	51	71	87
Total	**301**	**397**	**514**	**597**	**621**	**725**
% growth		**32.1**	**29.3**	**16.2**	**4.0**	**16.8**

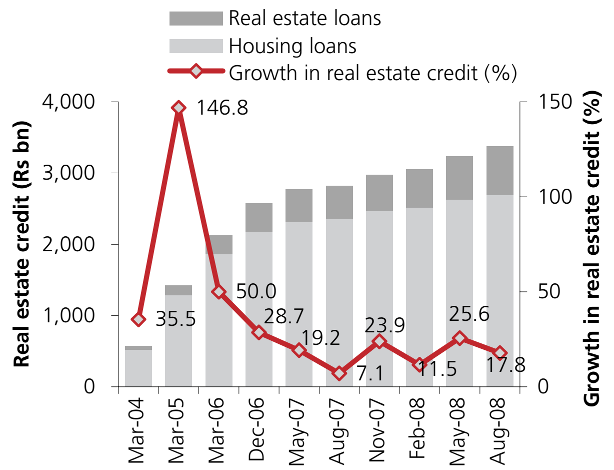
Source: Company, Kotak Institutional Equities estimates

Exhibit 40: Disbursement growth in FY2008 were down yoy; growth picking up lately
Quarterly disbursements for housing and commercial construction by HDFC, ICICI Bank and LICHF (Rs bn)



Source: Company, Kotak Institutional Equities

Exhibit 41: Growth in real estate credit has come down significantly
Real estate loans (in Rs bn) and growth in real estate credit (%), March 2004-August 2008



Source: RBI, Kotak Institutional Equities

Exhibit 42: Declining customer advances indicate decrease in pre-sales
Working capital analysis of real estate companies (average days)

	DLF	HDIL	Sobha
Sundry creditors			
2006	78	54	20
2007	119	191	49
2008	34	224	26
Advances from customers			
2006	354	277	197
2007	336	155	70
2008	64	23	28
Sundry debtors			
2006	208	66	47
2007	212	94	49
2008	203	9	142
Loans and advances			
2006	337	77	295
2007	732	51	360
2008	198	201	441

Source: Kotak Institutional Equities

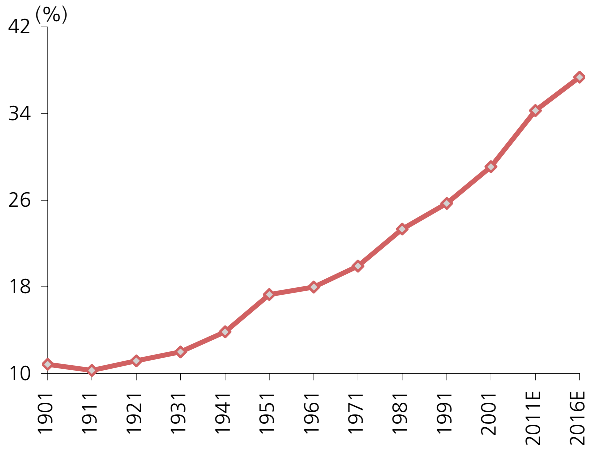
IV. Favorable demographics trends will result in strong underlying demand

We believe several favorable demographic trends and positive economic factors to drive demand for housing in India for the next several years. Among the key factors, we highlight (1) rapid urbanization and trend toward nuclear families, (2) rising income levels and (3) growing shift in consumer preferences to owned housing.

Ongoing urbanization of India to drive demand for urban housing

Exhibit 43 shows the growth in urban population in India as a percentage of total population; we expect the urbanization trend to likely drive demand for housing, real estate and construction. India's Planning Commission estimates that the share of urban population in India's total population would rise to 37% by 2016 from the current 28%; by 2016 India's urban-rural ratio would be similar to the current pattern in other Asian economies (see Exhibit 44). Additionally, the share of working population in the total population will also increase over the next few decades, further boosting the numbers of earning households and thus, demand for housing (see Exhibit 45).

Exhibit 43: India is steadily urbanizing
Urban population/total population (%)



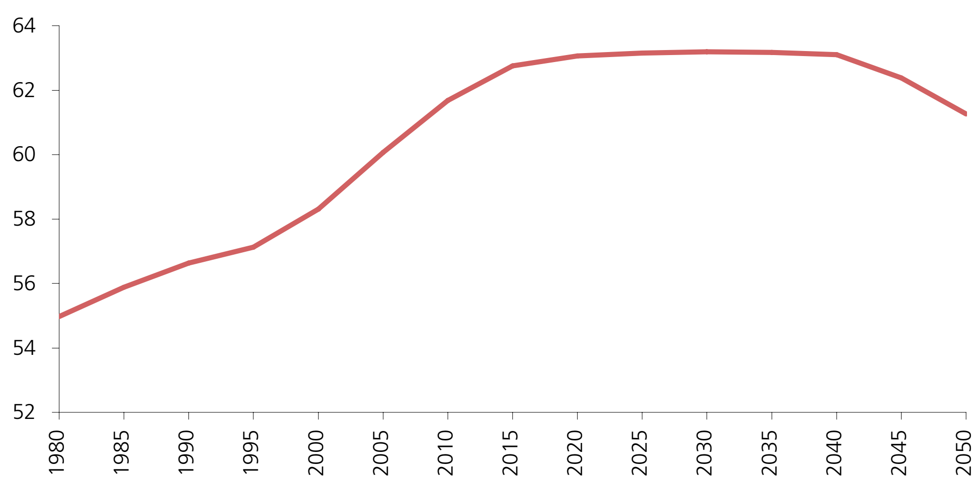
Source: Kotak Institutional Equities

Exhibit 44: Urbanization in India could be comparable to current East Asian levels by 2016
Urbanization levels (%) in different countries

Country	Urban/Total Population (%)
World	48
More developed regions	75
Less developed regions	42
Eastern Asia	43
China	39
India 2003	**28**
India 2016E	37

Source: UN, Kotak Institutional Equities

Exhibit 45: Demographic profile will work towards enhancing India's growth profile
Working population share, people in age group 15-59 (%)



Source: Planning commission, UN, Kotak Institutional Equities

Interestingly, Census 2001 data suggests a gradual shift to nuclear family units away from joint families. This trend is driven by social and economic factors; as per National Sample Survey Organization (NSSO) data, as household incomes increase, families tend to become nuclear (see Exhibit 46). We believe this trend would also result in increased demand for housing.

Exhibit 46: Household growth exceeds population growth
Size of household (#) and number of households, population (mn)

Year	No. of households (mn)	Population (mn)	Household size (#)	Pop growth (%)	Household growth (%)
1991	153	846	5.5		
2001	192	1,027	5.3	1.96	2.27

Source: Census data, Kotak Institutional Equities

Higher income leading to housing upgradation, increase in PCFSA

We expect urban incomes to increase driven by buoyancy in manufacturing and services sectors. We estimate the number of urban households with monthly household income (MHI)> Rs16,000 to increase to 7.6 mn in FY2010E from 5.3 mn in FY2007E (see Exhibit 47). Rising household incomes will likely result in upgrades to housing (quality and area) as has been the trend (see Exhibit 48). The floor space area (FSA) is a function of the number of people in a household and the per capita floor space area (PCFSA). Higher incomes will likely lead to demand (given ability to pay) for more FSA and PCFSA (see Exhibit 49); in India, this trend may accelerate as rising incomes also lead to smaller households.

Exhibit 47: Income is rising across all household categories
Estimation of households by income categories ('000)

Source: National Readership Survey (NRS 2005), Kotak Institutional Equities estimates

Exhibit 48: Number of permanent houses is on the increase
Distribution in type of housing over the past few decades

Category	1971	1981	1991	2001
Urban total (mn units)	**18**	**27**	**39**	**52**
% Concrete (pucca)	64	65	73	75
% Semi concrete (pucca)	23	22	18	18
% Others (kutcha)	13	14	10	7
Rural total (mn units)	**73**	**87**	**109**	**135**
% Concrete (pucca)	19	23	31	35
% Semi concrete (pucca)	38	37	36	37
% Others (kutcha)	44	41	34	28
Total (mn units)	**91**	**114**	**148**	**187**
% Concrete (pucca)	28	33	42	47
% Semi concrete (pucca)	35	33	31	31
% Others (kutcha)	37	34	27	22

Source: 2001 Census, Government of India, Kotak Institutional Equities

Exhibit 49: Housing area increases with higher household income
Per capita FSA (PCFSA) demanded (sq. ft)

Monthly per capita expenditure (Rs)		
From	**To**	**PCFSA (sq. m.)**
—	300	8.1
300	350	6.5
350	425	6.5
425	500	8.6
500	575	8.6
575	665	9.8
665	775	11.0
775	915	12.0
915	1120	15.0
1,120	1500	21.7
1,500	1925	26.6
1,925	and Above	50.2

Source: NSSO 58th Round, Cris Infac, Kotak Institutional Equities

Additionally, we note that there is a growing shift in consumer preference to owned houses from rented houses. We believe there has been a significant decline in the proportion of families staying in rented premises versus in owned premises, which we attribute to rising income levels and improved affordability. In addition, the old Rent Control Act (yet to be repealed in key real estate markets like Mumbai and Delhi), which offered greater protection to tenants as well as low rentals, has made returns on investments in rental property unattractive. Accordingly, consumers find it more attractive to purchase property for self-occupancy given the paucity of properties available on rent and increasing rentals.

We estimate 2 bn sq. ft of property demand over the next five years in top seven cities

We estimate real estate demand based on number of urban households that will be added with MHI > Rs30,000 over FY2009-2014E. We model total demand of 2 bn sq. ft in seven largest cities of India—Mumbai, Delhi, Kolkata, Chennai, Bangalore, Pune, Hyderabad (see Exhibit 50). For our analysis, we use average gross floor area (GFA) of 1,000 sq. ft for Mumbai housing and average GFA of 1,200 sq. ft for non-Mumbai).

Exhibit 50: We estimate additional demand of 2 bn sq. ft for premium housing between FY2009 and FY2014E
Estimation of demand for housing of the high income households (mn sq. ft), FY2008-14E

City	Residential units		Annual growth		Residential units						
	1991	2001	%		2008	2009E	2010E	2011E	2012E	2013E	2014E
				No. of households (mn)	4.4	4.6	4.7	4.8	5.0	5.1	5.3
				Growth %	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%	2.85%
Mumbai	2,757,805	3,650,951	2.8%	(HH% with >Rs30,000 pm)	10.1%	12.1%	14.1%	16.1%	18.1%	20.1%	22.1%
				HH with >Rs30,000 pm	0.45	0.56	0.66	0.78	0.90	1.03	1.16
				Avg sq. ft/ HH for >Rs30,000 pm	1,040	1,061	1,082	1,104	1,126	1,149	1,172
				Demand (in mn sq. ft)	**110.1**	**120.0**	**130.6**	**142.0**	**154.2**	**167.2**	**181.2**
				Growth in demand %	**9.2%**	**9.0%**	**8.9%**	**8.7%**	**8.6%**	**8.5%**	**8.3%**
				No. of households (mn)	2.9	3.0	3.1	3.2	3.3	3.4	3.6
				Growth %	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%	3.45%
Delhi	1,628,678	2,286,703	3.5%	(HH% with >Rs30,000 pm)	9.6%	11.1%	12.6%	14.1%	15.6%	17.1%	18.6%
				HH with >Rs30,000 pm	0.28	0.33	0.39	0.45	0.52	0.59	0.66
				Avg sq. ft/ HH for >Rs30,000 pm	1,248	1,273	1,299	1,325	1,351	1,378	1,406
				Demand (in mn sq. ft)	**69.6**	**76.4**	**83.8**	**91.8**	**100.4**	**109.6**	**119.6**
				Growth in demand %	**10.0%**	**9.8%**	**9.7%**	**9.5%**	**9.4%**	**9.2%**	**9.1%**
				No. of households (mn)	1.0	1.0	1.0	1.0	1.1	1.1	1.1
				Growth %	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Kolkatta	848,085	906,125	0.7%	(HH% with >Rs30,000 pm)	3.1%	4.1%	5.1%	6.1%	7.1%	8.1%	9.1%
				HH with >Rs30,000 pm	0.03	0.04	0.05	0.06	0.08	0.09	0.10
				Avg sq. ft/ HH for >Rs30,000 pm	1,248	1,273	1,299	1,325	1,351	1,378	1,406
				Demand (in mn sq. ft)	**13.2**	**14.2**	**15.3**	**16.4**	**17.6**	**18.9**	**20.3**
				Growth in demand %	**7.9%**	**7.8%**	**7.6%**	**7.5%**	**7.4%**	**7.3%**	**7.2%**
				No. of households (mn)	1.3	1.3	1.4	1.4	1.4	1.5	1.5
				Growth %	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Chennai	937,556	1,106,712	1.7%	(HH% with >Rs30,000 pm)	4.8%	5.8%	6.8%	7.8%	8.8%	9.8%	10.8%
				HH with >Rs30,000 pm	0.06	0.08	0.09	0.11	0.13	0.15	0.16
				Avg sq. ft/ HH for >Rs30,000 pm	1,248	1,273	1,299	1,325	1,351	1,378	1,406
				Demand (in mn sq. ft)	**18.9**	**20.6**	**22.5**	**24.5**	**26.7**	**29.0**	**31.5**
				Growth in demand %	**9.5%**	**9.3%**	**9.2%**	**9.0%**	**8.9%**	**8.7%**	**8.6%**
				No. of households (mn)	1.6	1.7	1.8	1.8	1.9	2.0	2.1
				Growth %	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%	4.03%
Bangalore	831,006	1,233,512	4.0%	(HH% with >Rs30,000 pm)	5.3%	6.7%	8.2%	9.8%	11.5%	13.2%	14.9%
				HH with >Rs30,000 pm	0.09	0.11	0.14	0.18	0.22	0.26	0.31
				Avg sq. ft/ HH for >Rs30,000 pm	1,248	1,273	1,299	1,325	1,351	1,378	1,406
				Demand (in mn sq. ft)	**31.0**	**36.7**	**43.1**	**50.2**	**58.2**	**64.5**	**71.2**
				Growth in demand %	**19.3%**	**18.3%**	**17.4%**	**16.6%**	**16.0%**	**10.7%**	**10.5%**
				No. of households (mn)	1.2	1.2	1.3	1.3	1.4	1.4	1.5
				Growth %	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%	4.32%
Pune	565,256	862,781	4.3%	(HH% with >Rs30,000 pm)	3.0%	4.0%	5.0%	6.0%	7.0%	8.0%	9.0%
				HH with >Rs30,000 pm	0.03	0.05	0.06	0.08	0.10	0.11	0.13
				Avg sq. ft/ HH for >Rs30,000 pm	1,248	1,273	1,299	1,325	1,351	1,378	1,406
				Demand (in mn sq. ft)	**16.2**	**18.2**	**20.4**	**22.7**	**25.3**	**28.1**	**31.2**
				Growth in demand %	**12.4%**	**12.1%**	**11.8%**	**11.6%**	**11.3%**	**11.1%**	**10.9%**
				No. of households (mn)	1.4	1.4	1.5	1.5	1.6	1.6	1.7
				Growth %	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%	3.16%
Hyderabad	826,024	1,127,769	3.2%	(HH% with >Rs30,000 pm)	5.4%	6.9%	8.4%	9.9%	11.4%	12.9%	14.4%
				HH with >Rs30,000 pm	0.08	0.10	0.13	0.15	0.18	0.21	0.24
				Avg sq. ft/ HH for >Rs30,000 pm	1,561	1,592	1,624	1,656	1,689	1,723	1,757
				Demand (in mn sq. ft)	**37.0**	**40.7**	**44.6**	**48.9**	**53.4**	**58.3**	**63.6**
				Growth in demand %	**10.1%**	**9.9%**	**9.7%**	**9.5%**	**9.3%**	**9.2%**	**9.0%**
Total demand from HH with income > Rs30,000 pm					**296.0**	**326.8**	**360.2**	**396.5**	**435.8**	**475.7**	**518.6**

Source: Census 1991, 2001 and NSR 2002, 2005, 2006, Kotak Institutional Equities estimates

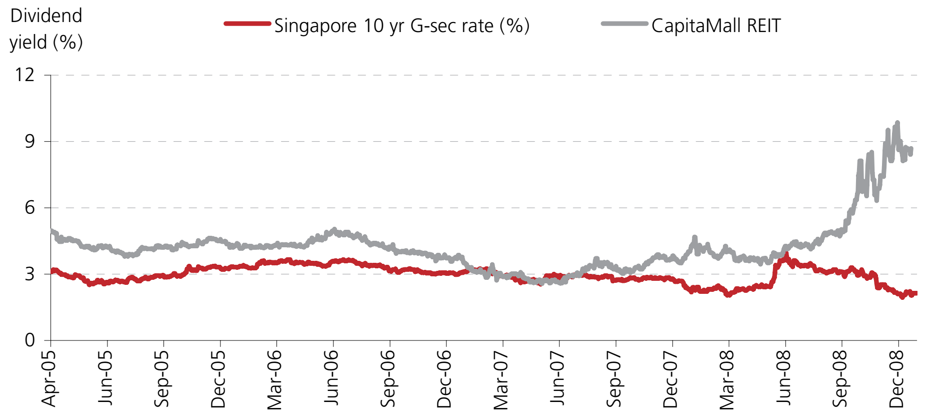
INDUSTRY—RETAILING: AFFORDABILITY & LOCATION WILL DETERMINE DEMAND

We expect demand for retail malls that offer a mix of good location and reasonable pricing. We expect high churn rates as various retail models evolve and companies rationalize their business strategies. However, factors supporting growth in organized retailing such as low penetration and emergence of new formats remain intact though growth will likely be slower than earlier expectations. We have modeled in rentals which are 30-40% lower than peak levels.

Key determinants for valuations in retail real estate—location, leasing rates, cap. rates, vacancies

- **Location.** Location plays a significant role in success of a retail mall. A successful retail mall requires high footfalls and thus should be in a highly accessible/prominent location and have a large catchment area. Adverse/new location mall will have very limited or no NAV accretion.
- **Leasing rates.** These will depend upon city and specific location within it. Prime locations in metros will attract rentals of Rs250+/sq. ft/ month. Malls in good metro locations can attract rentals of Rs70-100/sq. ft/ month. In case mall owners are not willing to accept these rates, we would expect higher vacancies.
- **Cap. rates.** We have taken a post-tax cap. rate of 10% (pre-tax 13%). We believe retail malls have higher risk than commercial assets on account of large number of clients.
- **Vacancies.** Client churn are expected to be high as most retail franchisees are currently in exploratory mode. Some retail chains will likely be unsuccessful but will be substituted by other stores. Further, correction of rentals will make opening stores viable for larger number of clients, thus limiting vacancy.

Exhibit 51: Fall in capitalization rates would result in higher commercial/retail asset values
Dividend yield (%) movement for CapitaMall Trust in Singapore



Source: Bloomberg, Kotak Institutional Equities

Funding difficulties, higher risk perception to start limiting future supply

Mall construction is a highly capital-intensive business. Setting up a mall requires a land parcel in good location, cost of which needs to be borne upfront. Construction cost is also the highest amongst all verticals and varies between Rs2,200-3,000/sq. ft. Therefore, total cost/sq. ft is Rs6,000+ and setting up of 500,000 sq. ft mall will result in an upfront investment of Rs3 bn. Thus mall construction requires large bank funding, which is likely to remain constrained in the near future.

As supply reduces, rentals will start stabilizing and concerns on vacancies will start receding. Consequently, we expect mall supply that comes up in 18-24 months will start attracting a premium as mall construction completes.

Exhibit 52: Retail supply coming up across major cities
Retail supply (in mn sq. ft), March fiscal year-ends, FY2004-2011E

	2004	2005	2006	2007	2008E	2009E	2010E	2011E
Retail (additions in malls, mn sq. ft)								
Bangalore	0.3	0.5	1.0	1.2	0.6	1.5	4.0	4.0
Chennai	0.2	0.3	0.5	0.5	0.5	0.3	1.0	2.0
Hyderabad	0.5	0.5	0.6	0.5	0.5	1.5	2.3	2.3
Kolkata	0.3	0.5	1.0	1.0	0.5	2.0	1.5	1.5
Mumbai	2.0	3.0	4.0	4.7	1.6	4.0	4.5	2.8
NCR	2.0	3.0	4.0	1.2	3.9	5.0	5.8	4.0
Others	2.0	3.0	4.0	8.0	10.0	8.0	8.0	8.0
Pune	1.0	1.0	1.5	0.8	0.9	1.4	2.5	2.5
Total	**8.3**	**11.8**	**16.6**	**17.8**	**18.5**	**23.7**	**29.6**	**27.1**

Source: Cushman & Wakefield, Kotak Institutional Equities estimates

Real estate is an integral component of retailing

We note that the cost of real estate and location of a shopping mall plays an important role in the economics of retailing. Location is important from a footfall and revenue perspective. Cost of leasing is important from a profitability perspective. Rental levels are expected to stabilize at levels at which retail chains can be profitable. We believe a hyper-mart will be willing to pay a rental of Rs40-50/sq. ft while a luxury apparel store can pay rentals of Rs150-175/sq. ft (see Exhibit 53). Super-luxury mall is a new category which has emerged with opening of DLF Emporio in Delhi and will be followed by PHNX's Palladium in Mumbai. Rentals in these stores are likely to be Rs300+/sq. ft.

Exhibit 53: Leasing costs is critical for the economics of retail stores
Indicative P&L account of a Hypermarket, luxury apparel store (%)

	(Rs/sq ft)	Margin (%)
Hypermart store		
Average sales	9,000	
Gross margin	2,700	30
Employee cost	360	4
Corporate expenses	450	5
Misc expenses	720	8
PBT margins before leasing expenses	1,125	12.5
Leasing cost (at Rs40/sq ft)	**480**	**5.3**

	(Rs/sq ft)	Margin (%)
Luxury Apparel store		
Average sales	9,000	
Gross margin	4,500	50
Employee cost	450	5
Corporate expenses	450	5
Misc expenses	900	10
PBT margins before leasing expenses	2,700	30
Leasing cost (at Rs200/sq ft)	**2,400**	**27**

Source: Kotak Institutional Equities estimates

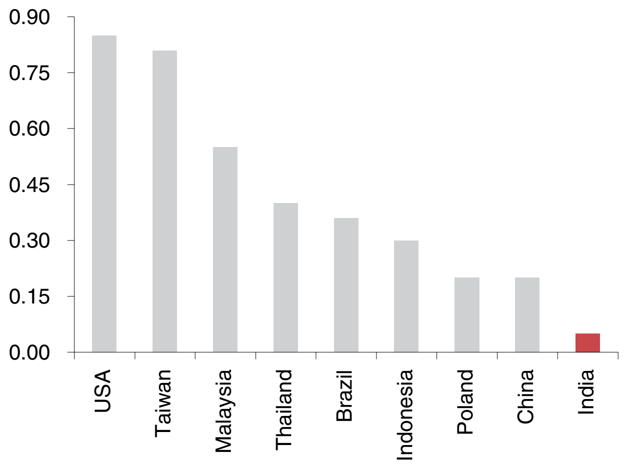
Large potential exists for Indian retailing though business model still evolving

We estimate organized retail penetration to grow to 10-11% by 2014 from 5% at present (see Exhibit 54). This implies a market size of US$40 bn by 2014E. The experience in other parts of the world (see Exhibit 55), where large format retailing has established a strong foothold, leads us to expect penetration to also increase very rapidly in India. We believe conditions are right in India for a similar growth.

Indian retailing is the largest contributor to GDP with total sales of US$250 bn+ in FY2009E, accounting for almost 55% of total private consumption expenditure. However, small shops—about 12 mn of them—dominate the Indian retailing sector. India has among the highest number of outlets per capita but the lowest per capita retail space in the world. The share of organized retail is a low 5%, one of the lowest in the world, even lower than other emerging markets.

We expect the expansion of India's retailing sector into more segments (other than the traditional segments of groceries, apparel) and drive demand for retailing space. Exhibit 56 summarizes announced plans of retailers over the past 12 months.

Exhibit 54: India is at a nascent stage of penetration
Organized retail share in Total retail



Source: Businessworld Marketing Whitebook 2005

Exhibit 55: Organized retail has penetrated fast in other countries
Growth of organized retailing in various countries

Country	Share of large format retailers (%)	No of years taken
Thailand	40	13
Brazil	36	11
Poland	20	6
China	20	6

Source: KSA Technopak, Kotak Institutional Equities

Exhibit 56: Various kinds of retail formats lined up in the future
List of companies with their retail plans for the future

Type of format	Companies (stores)
Departmental stores	JC Retail (Pune), Espirit (250), Tommy Hilfiger (10), Wills Lifestyle (30), Spykar (140), TCNS clothing (100), Monte Carlo (75), Marks and Spencers (50), Colorplus (25), Raymonds (430), Levis (70), Koutons (1400), Gini & Jony, Mr.Deal (7), Groggy (12), Pantaloon Retail (15), Turtle (8), Venus Garments (10), Indian Terrain (20), Mayur Suitings (100), Brandhouse Retail (180), Trigger Apparels (100), F2F, Kazo (30), Bombay Dyeing (100), Girls Forever, Triump (450), Madura Garments (10), Mahtani fashion (35), Indus Fila (30), Peter England (80), Just in Vogue
Supermarkets	Spencers (200), Heritage Foods (75), Nilgiri Retail (300), Reliance Retail (500), Bharti Retail, Wadhawan Group
Hypermarkets	Spencers Hyper (50), Metro AG (double), Star Bazaar (50), Big Bazaar (100), Videocon (6), Total Hypermarket, Bharti Retail
Discount stores	Vishal Retail (15), Subhiksha (70), Loot (70), Triveni Kushal Bazaar (4), Suvidhaa (1,000), Zerostock Retail (1,000), Vishwas Business Synergies , Lal Mahal Retail (250)
Specialty stores	Titan Eye (250), Gitanjali Gems (50), Big C Mobiles (100), Ebony (20), Timex (38), Cellucom (500), Nitco Tiles (200), Reliance communication (100,000), SRS Group (10), Samsung (300), Planet M (400), Cool Zones (200), BigFlix (200), Lava Electronics (30), PVR (15 gaming zones), UniverCell (1,000), Hanung Retail (150), Salora Group (300), Wardrobe (30), Forever (20), Zapak (500), Mont Blanc (5), Heritage Foods (5 Fresh stores), de Grisogono , Indo Rama Retail, Reebok, Jotun Group, Hydrobath (10), Joy Alukkas (15), Kamla Dials and Devices, Tanishq (7), Bang Overseas (12)
Multiplex	Fame (70), Adlabs (10-15), Satyam Cineplex (100)
Food & beverage	Mark Pi International (100), Jumbo King (500), Costa Coffee (300),, Café Coffee Day (1380), Oriental Cuisine (11), McDonalds (60), Baskin Robbins (100), Barista (80), KFC (60), Pizza Hut (140), Eatout (50), RWH Hotel Services (50), Oriental Cuisines, Pasta Mania (50), SRS (18), Bon South, Bloom Juices (10)

Source: Media reports, Kotak Institutional Equities

In Exhibit 57, we show a sensitivity of space required by the organized retailing segment based on (1) growth in overall retailing (organized plus unorganized) and (2) share of organized retailing out of total retailing. As of 2008, the total mall space in India is around 75-80 mn sq. ft. Our base case estimate for space required by organized retailing by FY2014E is about 200 mn sq. ft.

Exhibit 57: Retail mall growth to be driven by increased consumerism, penetration
Estimates of retail space requirement based on various scenarios, FY2013E and FY2018E (mn sq. ft)

Assumptions:	
Current retail market size (US$ bn)	250
Retail market sales (Rs/sq. ft)	9000

		CAGR of retailing (2009-14E)					CAGR of retailing (2009-19E)			
		8%	**9%**	**10%**	**11%**		**8%**	**9%**	**10%**	**11%**
% Organized share	**8%**	163	171	179	187	**11%**	330	362	396	434
	9%	184	192	201	211	**13%**	390	427	468	513
	10%	204	214	224	234	**15%**	450	493	540	592
	11%	224	235	246	257	**17%**	510	559	612	670

Source: KSA Technopack, Images retail estimates, Kotak Institutional Equities estimates

INDUSTRY—COMMERCIAL: TO BE THE WEAKEST AS GDP GROWTH, IT SLOWS

The commercial sector is most dependent on IT and GDP growth, both of which have come under pressure in the near term. Consequently, we expect subdued demand for commercial real estate for FY2009-11E. However, we expect limited oversupply as speculative construction is limited. We are already seeing various developers slowing down construction as pre-leasing activity slows down.

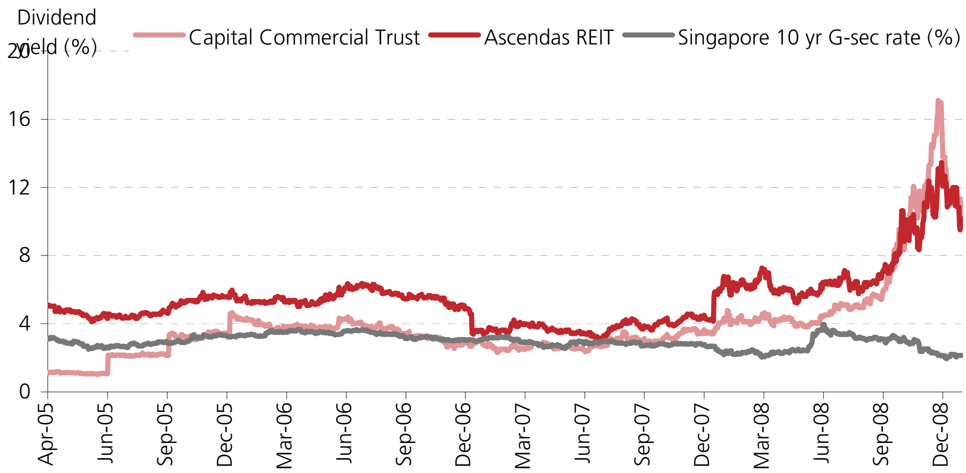
Determination of valuation in commercial real estate—absorption, cap. rates, vacancies

Absorption. Commercial absorption is a function of IT and GDP growth, and both are under pressure. Consequently, we expect commercial absorption to be subdued for FY2009-11E.

Cap. rates. We have taken post-tax cap. rates of 9%. We believe such cap. rate is reasonable considering alternative investment channels are available for post-tax yield of sub 7% with sharp downward bias. Exhibit 58 indicates that Singapore-listed commercial REITs are commanding a cap. rate of 10% assuming historical dividends, which will be under pressure due to lower rentals/occupancy.

Vacancies. Vacancies are largely going to be a function of speculative construction. Speculative construction is limited since developers tend to pre-lease a large portion before undertaking construction.

Exhibit 58: Fall in capitalization rates would result in higher commercial/retail asset values
Dividend yield (%) movement for 2 Singapore listed REITs



Source: Bloomberg, Company, Kotak Institutional Equities

Commercial real estate grew rapidly driven by IT/ITES demand

Exhibit 59 summarizes growth of commercial real estate city-wise over FY2004-10E. A large part of this growth has been driven by IT/ITES. Consequently, Bangalore saw the largest commercial absorption over this period. We would highlight that lower IT demand will automatically slow down the construction activity and push back supply. We have already seen large delays Unitech's plans.

Exhibit 59: Commercial supply across major cities
Commercial addition in office spaces (mn sq. ft), March fiscal year-ends, FY2004-10E

	2004	2005	2006	2007	2008	2009E	2010E
Bangalore	4.6	6.1	8.5	11.4	12.0	12.0	12.6
Chennai	1.6	1.7	3.3	4.9	10.0	10.0	9.5
Hyderabad	2.8	2.2	3.4	3.5	4.0	4.0	4.0
Kolkata	0.4	0.5	1.0	1.4	2.5	2.0	2.5
Mumbai	2.0	2.6	4.2	4.5	5.0	4.5	4.0
NCR	2.2	2.9	3.2	6.4	9.0	8.0	8.2
Pune	1.3	1.5	1.8	2.1	5.0	6.0	4.2
Total	**14.9**	**17.6**	**25.4**	**34.2**	**47.5**	**46.5**	**45.0**

Source: Cushman & Wakefield, Kotak Institutional Equities estimates

Exhibit 60: Commercial space demand has been dependent on growth in IT/ITeS
Estimation of commercial area required, March fiscal year-ends, FY2001-11E

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009E	2010E	2011E
IT employees (in '000)												
IT, Engineering and R&D, Software product exports	110	162	170	205	296	390	513	690	860	975	1,020	1,122
IT-enabled services exports	42	70	106	180	216	316	415	553	700	840	941	1,082
Domestic sector	132	198	246	285	318	352	365	378	450	518	569	655
Total	**284**	**430**	**522**	**670**	**830**	**1,058**	**1,293**	**1,621**	**2,010**	**2,333**	**2,530**	**2,859**
Addition space required (mn sq. ft)												
Total space required in India (assuming 100 sq. ft/ employee)		15	9	15	16	23	24	33	39	32	20	33
IT space required (assuming 33% built to suit)		10	6	10	11	15	16	22	26	21	13	22
Other commercial space		6	4	7	7	10	10	15	18	18	17	17
Total commercial space required		**16**	**10**	**16**	**18**	**25**	**26**	**36**	**44**	**39**	**30**	**39**
Growth rate in employee additions(%)												
IT, Engineering and R&D, Software product exports		47	5	21	44	32	32	35	25	13	5	10
IT enabled services Exports		67	51	70	20	46	31	33	27	20	12	15
Domestic sector		50	24	16	12	11	4	4	19	15	10	15
Total		**51**	**21**	**28**	**24**	**27**	**22**	**25**	**24**	**16**	**8**	**13**

Source: Media reports, Kotak Institutional Equities

LARGE SEZ DEVELOPMENT: LIMITED VALUE ACCRETION IN THE NEAR TERM

We see problems with respect to large SEZ developments in the near term—(1) land acquisition issues, (2) financing, and (3) muted demand for new locations. Development in the near term is going to be limited to city-centric SEZs. However, longer-term attractive fiscal terms will attract export-based units. We highlight that employment as well as exports from SEZs grew rapidly in FY2006-08.

We expect limited value accretion from large SEZ development

As adjustment takes place in city-centric selling prices, we expect corporates and customers to prefer these locations. As a result demand for large SEZs, situated away from cities is likely to be muted in the near term. We expect demand to emerge in these SEZs as and when it becomes costlier to purchase/rent space inside cities or companies undertake large expansion plans, both of which are unlikely in the near term. Land acquisition is also an issue in most cases as landowners desire compensation linked to developed value of the land. Furthermore, SEZs are long-duration projects, funding for corresponding duration is difficult for real estate companies in the current macro environment.

In the near term, development in SEZs will be limited to city-centric smaller SEZs. Exhibit 61 highlights that large numbers of SEZs have been approved. As of end-October 2006, the Ministry of Commerce has approved 237 SEZs and given in-principle approval to another 167 SEZs. The IT/ITES sector has seen the maximum activity with 142 sector-specific SEZs receiving approval from the Ministry of Commerce. Among the states, Gujarat and Haryana have shown maximum initiative in setting up of SEZs. Many of the smaller non city-centric SEZs will take time to get developed. Exhibit 62 gives details of formally-approved SEZs of listed companies.

Exhibit 61: Multiproduct SEZs constitute a major proportion of the formally-approved SEZs
State-wise and sector-wise distribution of formally-approved SEZs

State	Area (hectares)	Distribution (%)
Andhra Pradesh	12,332	18.8
Chandigarh	58	0.1
Chhattisgarh	11	0.0
Dadra & nagar Haveli	118	0.2
Delhi	16	0.0
Goa	370	0.6
Gujarat	20,165	30.7
Haryana	1,798	2.7
Himachal Pradesh	—	0.0
Jharkhand	36	0.1
Karnataka	2,995	4.6
Kerala	1,020	1.6
Madhya Pradesh	547	0.8
Maharashtra	13,146	20.0
Nagaland	450	0.7
Orissa	2,405	3.7
Pondicherry	346	0.5
Punjab	313	0.5
Rajasthan	541	0.8
Tamil Nadu	5,386	8.2
Uttaranchal	468	0.7
Uttar pradesh	898	1.4
West Bengal	2,336	3.6
All India	**65,755**	**100.0**

Sector	Area (hectares)	Distribution (%)
Agro & Food Processing	752	1.1
Apparel and Textile	2,859	4.3
Automobiles & Auto ancilliaries	461	0.7
Biotech	730	1.1
Ceramic and glass	171	0.3
Chemicals	484	0.7
Electronic Hardware	1,033	1.6
Energy	588	0.9
Engineering	2,170	3.3
Free Trade Warehousing Zone	424	0.6
Gems and Jewellery	257	0.4
IT/ITES	8,794	13.4
Metals	1,242	1.9
Multiproduct	30,205	45.9
Pharmaceuticals	2,641	4.0
Port based	1,410	2.1
Power	1,598	2.4
Services	1,931	2.9
Others	8,004	12.2
Total	**65,755**	**100.0**

Source: www.sezindia.nic.in, Kotak Institutional Equities

Exhibit 62: List of formally-approved SEZs for real estate companies
Formal approved SEZs company-wise

Company	City	State	Sector	Area (hectares)
Ansal Properties and Infrastructure Ltd				
Ansal IT City and Parks Ltd.	Greater Noida	Uttar Pradesh	IT/ITES	30.4
Ansal Properties and Infrastructure Ltd	Gurgaon	Haryana	IT/ITES	10.9
Ansal Kamdhenu	Sonepat	Haryana	Engineering	10.1
Total 3 SEZ's for Ansal Properties and Infrastructure Ltd				**51.5**
DLF				
DLF Info City Developers (Chennai) Ltd.	Chennai	Tamil Nadu	IT/ITES	15.0
DLF Info City Developers (Kolkata)	Rararath	West Bengal	IT/ITES	10.1
DLF Commercial Developers Ltd	Ranga Reddy District	Andhra Pradesh	IT/ITES	10.6
DLF Limited	Gurgaon	Haryana	IT/ITES	12.1
DLF cyber city	Gurgaon	Haryana	IT/ITES	10.7
DLF Limited (DLFL)	Sonepat	Haryana	Electronic Hardware	10.1
DLF	Bhubaneshwar	Orissa	IT/ITES	22.0
DLF Akruti Infopark (Pune) Ltd.	Pune	Maharashtra	IT/ITES	24.0
M/s DLF Commercial Developers Limited	Gandhinagar	Gujarat	IT/ITES	10.0
DLF Akruti Infopark (Pune) Ltd.	Pune	Maharashtra	IT/ITES	11.8
DLF Commercial Developers Ltd	Noida	Uttar Pradesh	IT/ITES	10.0
Total 11 SEZ's for DLF				**146.5**
Mahindra Lifespace				
Mahindra Gesco Developers Ltd	Thane	Maharashtra	Biotech	28.0
Mahindra Gesco	Jaipur	Rajasthan	IT/ITES	49.0
Mahindra Worldcity (jaipur) Ltd	Jaipur	Rajasthan	Handicrafts	103.1
Mahindra Worldcity (jaipur) Ltd	jaipur	Rajasthan	Light Engineering	104.4
Total 4 SEZ's for Mahindra Lifespace				**284.5**
Parsvnath developers				
Parsvnath developers	Ernakulam	Kerala	IT/ITES	30.8
Parsvnath Developers	Gurgaon	Haryana	IT/ITES	43.0
Parsvnath Developers	Indore	Madhya Pradesh	IT/ITES	30.9
Parvnath developers	Dehradhun	Uttaranchal	IT/ITES	14.0
Parvnath developers	Ranga Reddy District	Andhra Pradesh	Biotech	10.1
Total 5 SEZ's for Parsvnath				**128.8**
Unitech				
Unitech Real Estate Project Ltd.	Ernakulam	Kerala	IT/ITES	10.0
Unitech - Seaview Develpers Ltd.	Noida	Uttar Pradesh	IT/ITES	12.2
Unitech Hi-tech Structures Limited,	Kolkata	West Bengal	IT/ITES	19.6
Unitech - Gurgaon Infospace Limited	Gugaon	Haryana	IT/ITES	11.6
Unitech Infopark Ltd.	Kancheepuram, Chennai	Tamil Nadu	IT/ITES	10.0
Unitech Realty Projects Limited	Tikri, Gurgaon	Haryana	IT/ITES	10.5
Unitech Infra-con limited	Greater Noida	Uttar Pradesh	IT/ITES	30.3
Unitech Hi-tech Projects Pvt. Ltd	Noida	Uttar Pradesh	IT/ITES	10.1
Total 8 SEZ's for Unitech				**114.2**
Others				
Peninsula Pharma	Goa	Goa	Biotech	20.4
Indiabulls Industrial Infrastructure Limited	Nashik	Maharashtra	Multiproduct	1023.4
Anant Raj Industries	Sonepat	Haryana	IT/ITES	10.0
Brigade Enterprises	Mangalore	Karnataka	IT/ITES	10.1
Godrej Real Estate Pvt Ltd	Patancheru, Medak	Andhra Pradesh	IT/ITES	13.8
IVR Prime	Noida	Uttar Pradesh	IT/ITES	10.0

Source: Kotak Institutional Equities

Large fiscal benefits to result in long-term demand

Units operating in SEZ enjoy fiscal benefits with respect to income tax, custom duties and service tax, besides others. We present key highlights of the Special Economic Zone Act, 2005 below in Exhibit 63. A SEZ is a specifically delineated duty-free enclave, deemed to be a foreign territory for the purposes of trade as well as taxes. The objective behind the SEZ policy is to attract international and domestic investors to set up low-cost manufacturing and services hubs. Besides fiscal benefits, other key factors that will likely attract companies to a SEZ include single window clearance and a more favorable working environment. World-class infrastructure and flexible labor policies will likely help in enhancing competitiveness of companies operating within SEZs.

Exhibit 63: Key SEZ guidelines
SEZ guidelines

Guidelines	No minimum export performance required for a SEZ unit; needs to be a net foreign exchange earner
	Profits can be repatriated freely
	Minimum area of 1,000 hectacres. Not applicable for product specific SEZs
	Minimum 35 % of the area is to be earmarked for developing industrial area for setting up of units
Financing	External commercial borrowings by units up to US$500 million a year allowed without any maturity restrictions
	Flexibility to keep 100% of export proceeds in EEFC account. Freedom to make overseas investment from it
	Setting up off-shore banking units allowed in SEZs
Customs	No import duty on import of capital goods, raw material spares
	No license required for imports
	In-house customs clearance; no routine cargo examination by customs
Administration	Units will have to abide by local laws, rules, regulations or bye-laws in regard to area planning, sewerage disposal, pollution control among others. They shall also comply with industrial and labour laws as may be locally applicable
	Performance of the SEZ units monitored by a Unit Approval Committee consisting of Development Commissioner, Custom and representative of State Government on annual basis
	"Public Utility Service status" for an SEZ
	Single window clearance
	Open access in transmission & distribution of power
Tax exemptions	Income Tax: IT tax holiday for the first five years (Section 10AA); 50% for the next five years; 50% for the next five years subject to plough back of profits
	Service Tax: 12.24% service tax exempted in the SEZs
	Local taxes and levies, including sales tax, turnover tax, VAT, purchase tax, octroi, or any other kind of cess or any other levy of the state government are exempt. Exemption from excise and CST.
	Exemption from payment of stamp duty and registration charges
	Inome tax exemption for developer: Full tax exemption to developer of SEZ (Section 80IAB) for 10 consecutive years out of a block of 15 years
Foreign direct investment	100% FDI allowed under automatic route except for prohibited items
	No cap on foreign investments for small-scale industries reserved items

Source: Kotak Institutional Equities

Existing SEZs mainly active in IT/ITES, gems and jewelry

Mahindra World City, Chennai, is the first SEZ that has been developed on a private-public partnership (PPP) model. Historically, as a measure to encourage exports, the central government had set up export processing zones, which also enjoyed certain fiscal benefits. The government has converted export processing zones located at Kandla and Surat (Gujarat), Cochin (Kerala), Santa Cruz (Mumbai, Maharashtra), Falta (West Bengal), Chennai (Tamil Nadu), Visakhapatnam (Andhra Pradesh) and Noida (Uttar Pradesh) into SEZs. Exhibit 64 and 65 highlights that there has been a 381% increase in exports over FY2004-08 and the major contributor has been the gems and jewelry sector.

Exhibit 64: 381% increase in exports over four years (FY2004–08)
SEZ physical exports from old and new SEZs (Rs bn)

	Value of physical exports from SEZs (Rs bn)				
Year	Total	Govt SEZs	State Govt/Pvt SEZs prior to SEZ Act, 2005	SEZs notified under SEZ Act	Total growth rate (%)
FY2004	139	139			39.0
FY2005	183	183			32.0
FY2006	228				24.7
FY2007	346	254	91	1	52.0
FY2008	666	393	222	52	92.0

Source: www.sezindia.nic.in, Kotak Institutional Equities

Exhibit 65: Sector-wise breakup of physical exports from Special Economic Zones in India
Sector-wise breakup of physical exports from Special Economic Zones in India

	Value of physical exports from SEZs (Rs bn)								
	FY2007				FY2008				
	Govt SEZs	State Govt/Pvt SEZs prior to SEZ Act, 2005	SEZs notified under SEZ Act	Total	Govt SEZs	State Govt/Pvt SEZs prior to SEZ Act, 2005	SEZs notified under SEZ Act	Total	Growth (%)
Gems and Jewellery	117.4	43.3		160.7	159.8	70.3	0.0	230.0	43.2
Trading and services	7.0	16.7		23.7	140.7	67.9		208.7	780.8
Electronics Hardware	20.7	17.8		38.5	14.1	63.1	34.0	111.2	189.2
Computer/Electronic software	18.5	7.3	0.1	26.0	26.6	10.5	2.8	39.8	53.4
Engineering	12.6	1.3		13.9	8.9	4.2	3.4	16.5	18.8
Chemicals and Pharmaceuticals	9.9	0.6	0.5	11.0	10.7	0.2	3.3	14.2	28.8
Textiles and garments	11.3	1.8	0.3	13.3	11.4	1.0	0.8	13.2	(1.2)
Misc	46.7	0.3		47.0	3.1	1.0	4.3	8.5	(81.9)
Plastics and Rubber	1.8	2.1		3.9	3.5	3.0		6.6	67.3
Food and Agro industry	5.7			5.7	6.5			6.5	12.6
Electronics	0.0			0.0	5.2			5.2	398,362
Leather, footwear and sports goods	1.7			1.7	1.9		0.5	2.4	40.5
Biotech			0.3	0.3			1.6	1.6	376.0
Non-conventional energy				0.0			1.3	1.3	NA
Handicrafts		0.1		0.1		0.3		0.3	366.9
Ceramics	0.2			0.2	0.2			0.2	5.4
Tobacco related products		0.0		0.0	0.1	0.1		0.2	513.3
Total	**253.5**	**91.3**	**1.2**	**346.0**	**392.7**	**221.6**	**51.9**	**666.2**	**92.5**

Source: www.sezindia.nic.in, Kotak Institutional Equities

LOOKING FOR THE RIGHT BUSINESS MODEL

We find desire from companies to move to land banking as they aspire to become bigger in size. We classify companies under three broad categories—(1) build-and-sell (all companies), (2) build-and-lease (DLF, PHNX) and (3) land sale model (HDIL). We look at past performance analyze balance sheet. DLF, PVKP are enjoying higher EBIDTA margins than peers on account of historical land bank. We would prefer more focused strategy than a pan-India all vertical strategy.

The real estate value chain—land to lease

We broadly classify real estate value chain into three parts which are described below

Land aggregation. This involves land buying from farmers, aggregation and then either selling it to another developer or developing it on their own. Another way to generate land is through slum rehabilitation in cities. Typical land aggregation stage takes 18-24 months.

Plotted development. This involves developing basic infrastructure and then selling it after cutting land into small parcels. This is a common strategy used by developers to sell lands in upcoming locations. Post land aggregation, delivering plots take 6-12 months.

Build-and-sell. Developers, who have balance sheet strength to hold land for longer duration, construct commercial real estate and sell it to end-user. Development in this case takes place in multiple phases with revenues from Phase I accruing over a 36-month period.

Build-and-lease. This becomes the most capital intensive model as revenues start accruing only on completion of the project. However, having higher proportion of EBITDA coming from leased properties brings more stability to cash flows.

Exhibit 66: Real estate value chain—land to sell/lease
Value chain for the developer

	Rs/sq. ft	% of sales
Step I: Buy agricultural land	**200-400**	**8-17%**
Step II: Regultatory approvals	**200-250**	**8-10%**
This cost is a pass through for devloper		
Step III: Construction cost	**1,400-1,600**	**56-64%**
Step IV: Total selling price	**2,500**	**100%**

Source: Kotak Institutional Equities

North-South divide getting bridged with all companies going for land banking

Analyzing operating performance and balance sheet, we have seen a desire amongst North-based companies to accumulate land banks and go for larger format projects like townships. South-based companies have focused on faster development cycle though in recent times, there has been a desire to acquire large land parcels. This difference is visible as we analyze key ratios below.

Asset turnover. Sobha and Puravankara have higher asset turnover ratios vis-à-vis DLF, Unitech and Parsvnath.

EBITDA margins. DLF and Unitech have enjoyed higher margins due to lower land costs. Exhibit 67 gives common size P&L statement for DLF, Unitech, Sobha, PVKP and HDIL. DLF has the highest EBIDTA margins on account of monetization of historical land bank and higher proportion of revenues from commercial sector. Amongst South-based companies, PVKP enjoys significantly higher margins as compared to Sobha. HDIL has higher margins because cost of land is equal to cost of constructing rehabilitation projects, which is much lower than buying land in prime locations in cities like Mumbai. Taxes for Sobha, Puravankara and HDIL are lower due to larger portion of projects availing taxation benefits under section 80-IB (10).

We expect EBITDA margins to come under pressure in FY2009-10E on account of (1) change in revenue mix towards mid-income housing, (2) lesser selling prices. Exhibit 68 summarizes that EBIDTA margins will drop by 10%+ for DLF and Unitech.

Exhibit 67: Business model difference between North India and South India based developers
Common size P&L, FY2007 and FY2008

	DLF			Unitech			Sobha			Puravankara			HDIL		
	2007	2008	2009E	2007	2008	2009E	2007	2008	2009E	2007	2008	2009E	2007	2008	2009E
Total revenues	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Land + construction cost	(27.7)	(26.2)	(32.9)	(37.2)	(43.8)	(36.4)	(62.6)	(54.3)	(54.3)	(55.4)	(50.7)	(59.5)	(42.8)	(26.6)	(27.8)
Gross margins	**72.3**	**73.8**	**67.1**	**62.8**	**56.2**	**63.6**	**37.4**	**45.7**	**45.7**	**44.6**	**49.3**	**40.5**	**57.2**	**73.4**	**72.2**
Employee costs	(4.0)	(2.2)	(2.2)	(1.7)	(2.3)	(3.7)	(6.0)	(7.2)	(8.1)	(2.1)	(3.6)	(4.5)	(0.7)	(0.5)	(1.3)
SG&A costs	(11.9)	(3.0)	(4.1)	(0.2)	0.0	(4.3)	(9.8)	(13.6)	(11.5)	(10.1)	(8.2)	(3.0)	(1.7)	(1.8)	(3.0)
EBITDA	**56.4**	**68.5**	**60.8**	**60.9**	**53.8**	**55.6**	**21.6**	**24.9**	**26.2**	**32.5**	**37.5**	**33.0**	**54.8**	**71.1**	**67.9**
Other income	53.9	1.9	2.3	3.0	3.4	3.0	0.5	0.8	0.4	0.8	2.4	1.0	2.7	2.2	3.9
Interest	(11.7)	(2.1)	(1.5)	(9.2)	(6.8)	(14.7)	(4.3)	(4.2)	(7.1)	(1.1)	(0.6)	(1.6)	(5.5)	(5.9)	(13.5)
Depreciation	(2.2)	(0.6)	(1.8)	(0.2)	(0.5)	(0.6)	(2.1)	(2.5)	(2.8)	(0.4)	(0.8)	(1.1)	(0.1)	(0.1)	(0.2)
Pretax profits	**96.4**	**67.8**	**59.7**	**54.5**	**49.9**	**43.3**	**15.7**	**19.0**	**16.7**	**31.7**	**38.4**	**31.3**	**51.9**	**67.3**	**58.2**
Extraordinary items*	(0.0)	0.0	0.0	(0.7)	0.0	0.0	(0.0)	0.0	0.0	3.4	5.2	4.8	(0.5)	0.0	0.0
Minority Interest	(0.0)	(0.2)	0.0	(0.0)	(0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current tax	(22.9)	(12.2)	(12.7)	(14.8)	(9.6)	(10.3)	(2.1)	(3.0)	(3.7)	(3.6)	(3.3)	(1.0)	(6.4)	(8.0)	(6.5)
Deferred tax	(0.0)	(0.1)	0.2	0.0	(0.1)	(0.0)	(0.0)	0.0	0.2	(0.5)	2.1	0.2	(0.0)	(0.0)	(0.1)
Net income	**73.5**	**55.4**	**47.1**	**39.7**	**40.3**	**32.9**	**13.6**	**16.0**	**13.3**	**27.6**	**37.2**	**35.2**	**45.5**	**59.2**	**51.6**
Adjusted net income	**73.4**	**55.2**	**47.1**	**39.0**	**40.1**	**32.9**	**13.6**	**16.0**	**13.3**	**31.0**	**42.4**	**35.2**	**45.0**	**59.2**	**51.6**

Note:
* Share of profit from associates included in this line item.

Source: Kotak Institutional Equities

Exhibit 68: EBITDA margins to come under pressure in FY2009-10E
EBITDA margins, March fiscal year-ends, FY2006-2010E (%)

	EBITDA margins (%)				
	2006	2007	2008	2009E	2010E
DLF	41.2	71.5	67.3	60.8	53.0
Unitech	19.5	60.9	53.8	55.6	51.3
HDIL	31.4	54.4	71.1	67.9	44.6
IBREL	10.6	(3.1)	(1.4)	(6.6)	14.7
Puravankara	31.8	32.5	37.5	33.0	34.1
Sobha	22.4	21.6	25.9	23.8	22.3
PHNX	54.1	64.5	54.7	68.6	81.9
MLIFE	17.4	13.0	22.1	21.4	20.2
IVR Prime	9.9	25.4	39.0	17.3	21.4

Source: Kotak Institutional Equities estimates

RoE's driven by lower margins, asset turnover

Exhibit 69 analyzes FY2007-09E RoE trends. We see RoEs declining largely as a result of lower margins. We summarize key trends below.

Asset Turnover. All companies except DLF and Sobha have asset turnover of less than 0.3X resulting from large recent land bank accretion. Sobha has high asset turnover due to 40% revenues coming from contractual division. Phoenix Mills has low asset turnover due to rental model.

Equity multiplier. Sobha and Unitech have highest equity multipliers on account of high D/E ratios. However, RoE of Unitech is getting depressed due to lower asset turnover while Sobha has low net margins.

Exhibit 69: Lower asset turnover resulting in lower RoE
ROE decomposition analysis for real estate companies, March fiscal year-ends, FY2007-09E

(Rs mn)	DLF	Unitech	HDIL	Sobha	Puravanakara	Phoenix Mills
FY2007						
Revenue (total)	39,233	32,883	12,165	11,865	4,169	1,095
PAT	19,425	13,055	5,420	1,620	1,304	396
Assets	181,708	130,900	18,897	20,333	14,043	5,290
Equity	39,672	19,944	7,268	8,155	2,218	875
Net margins (%)	49.5	39.7	44.6	13.7	31.3	36.1
Asset turnover (%)	21.6	25.1	64.4	58.4	29.7	20.7
Equity multiplier (X)	4.6	6.6	2.6	2.5	6.3	6.0
ROE (%)	**49.0**	**65.5**	**74.6**	**19.9**	**58.8**	**45.2**
FY2008						
Revenue (total)	144,375	41,400	23,804	14,311	5,658	766
PAT	78,203	16,614	14,103	2,315	2,400	382
Assets	396,065	233,794	75,034	33,675	23,394	17,351
Equity	196,883	36,003	36,415	10,109	12,127	14,386
Net margins (%)	54.2	40.1	59.2	16.2	42.4	49.9
Asset turnover (%)	36.5	17.7	31.7	42.5	24.2	4.4
Equity multiplier (X)	2.0	6.5	2.1	3.3	1.9	1.2
ROE (%)	**39.7**	**46.1**	**38.7**	**22.9**	**19.8**	**2.7**
FY2009E						
Revenue (total)	143,777	39,766	17,858	17,769	5,653	1,013
PAT	67,772	13,097	9,208	2,244	1,990	760
Assets	448,453	245,427	94,442	35,779	28,493	17,381
Equity	251,047	47,250	44,052	11,729	13,630	15,146
Net margins (%)	47.1	32.9	51.6	12.6	35.2	75.0
Asset turnover (%)	32.1	16.2	18.9	49.7	19.8	5.8
Equity multiplier (X)	1.8	5.2	2.1	3.1	2.1	1.1
ROE (%)	**27.0**	**27.7**	**20.9**	**19.1**	**14.6**	**5.0**

`Source: Kotak Institutional Equities

High proportion of current assets, rising debt key balance sheet indicators

We summarize key trends in balance sheet over FY2007-09E below (see Exhibit 70).

High current assets. This is characteristic of build-and-sell model of real estate companies. Since land is a raw material for these companies, it is shown as part of current assets.

Decreasing current liabilities. Current liabilities have been on a downward trend as pre-sales have declined as discussed earlier. Higher customer advances give higher revenue visibility.

Large sundry debtors. DLF has large sundry debtors, mostly on account of receivables from DLF Assets Limited (DAL).

Low net fixed assets. Though in general these comprise less than 25% of assets, DLF has largest proportion in fixed assets owing to large leasable portfolio and power assets.

Increase in total equity. Net worth as proportion of total liabilities increased rapidly for DLF and Puravankara on completion of their IPO's.

Exhibit 70: Business model difference between North India and South India based developers
Common size balance sheet, FY2007 and FY2008

	DLF		Unitech		HDIL		Sobha		Puravankara		Indiabulls	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
Equity												
Share capital	6.9	4.3	1.2	1.4	9.0	2.9	3.6	2.2	6.8	4.6	14.3	5.8
Preference capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserves/surplus	14.9	47.1	14.0	14.0	27.7	45.7	36.5	27.2	9.0	47.3	46.1	46.3
Total equity	**21.8**	**51.4**	**15.2**	**15.4**	**36.8**	**48.5**	**40.1**	**29.3**	**15.8**	**51.8**	**60.4**	**52.1**
Minority Interest	0.1	1.0	0.0	0.5	0.0	0.0	0.0	0.7	0.0	0.0	14.2	17.4
Deferred tax liability/(asset)	0.1	0.1	0.0	8.2	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0
Liabilities												
Secured loans	50.7	19.5	29.8	26.7	18.8	25.9	26.8	42.7	48.1	24.7	0.0	0.0
Unsecured loans	4.0	11.1	12.7	9.9	0.0	15.5	1.9	10.2	0.0	3.2	5.9	4.1
Total borrowings	**54.7**	**30.6**	**42.5**	**36.6**	**18.8**	**41.5**	**28.7**	**52.9**	**48.1**	**27.9**	**5.9**	**4.1**
Currrent liabilities	**23.4**	**16.9**	**42.3**	**39.3**	**44.4**	**10.0**	**31.1**	**17.1**	**36.0**	**20.2**	**19.5**	**26.3**
Sundry Creditors	1.5	0.9	5.6	3.6	13.5	5.2	4.9	2.4	3.5	3.9	18.2	0.0
Advances from Customers	13.3	6.2	31.3	6.5	25.6	2.0	11.1	3.3	28.2	13.5	0.0	0.0
Provisions	4.9	6.4	4.4	4.0	4.7	2.3	5.1	2.7	1.5	2.2	0.6	5.2
Others	3.7	3.4	0.9	25.2	0.5	0.5	9.9	8.7	2.8	0.7	0.6	21.1
Total capital	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Assets												
Cash	2.3	4.8	7.8	6.0	0.3	4.7	3.4	0.9	2.7	1.5	50.5	19.9
Current assets	**68.6**	**62.8**	**81.6**	**74.0**	**90.3**	**91.8**	**84.5**	**92.7**	**91.9**	**92.6**	**23.7**	**76.3**
Inventory	31.4	23.7	66.5	58.2	66.3	73.6	19.2	24.9	51.0	56.0	8.3	14.0
Sundry Debtors	8.4	19.7	1.1	3.2	15.6	0.8	7.8	16.5	3.3	3.5	0.2	1.4
Loans & Advances	28.9	19.3	14.1	12.5	8.4	17.5	57.5	51.3	16.4	12.3	15.2	60.7
Others	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	21.3	20.8	0.0	0.2
Gross block	**14.7**	**13.2**	**5.4**	**4.8**	**1.5**	**0.8**	**11.5**	**8.1**	**3.2**	**2.6**	**1.1**	**1.9**
Less: accumulated depreciation	1.3	0.8	0.0	0.3	0.1	0.0	2.4	2.5	0.4	0.5	0.0	0.0
Net fixed assets	**13.4**	**12.4**	**5.4**	**4.5**	**1.4**	**0.7**	**9.0**	**5.6**	**2.7**	**2.1**	**1.0**	**1.8**
Capital work-in-progress	14.6	12.6	1.6	9.0	0.0	0.2	0.5	0.8	0.1	0.0	0.0	0.9
Total fixed assets	**28.0**	**25.0**	**7.1**	**13.4**	**1.4**	**0.9**	**9.6**	**6.4**	**2.8**	**2.1**	**1.0**	**2.7**
Investments	1.2	2.2	3.5	6.5	7.9	2.6	2.6	0.1	2.6	3.8	24.7	1.1
Misc. expenses	0.0	5.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total assets	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Kotak Institutional Equities

KEY RISKS: DEMAND, TRANSPERANCY, PROPERTY PRICES, ECONOMIC SLOWDOWN

We see the following risks to our earnings estimates—(1) demand pickup could take longer than expected, (2) lower transparency with respect to land banks, (3) selling prices could correct higher than expected, (4) intergroup transactions lead to lower transparency, (5) interest rate risk and (6) weaker-than-expected economic growth.

Selling prices could correct higher than expected

Selling prices have the largest effect on company valuations and correction of more than 30% presents a key valuation risk. It is difficult to assess the sustainability of prices across various cities and localities since real estate research is at a preliminary stage in India. Currently, there are no reliable data sources available tracking prices in main cities on a fortnightly or on a monthly basis. Certain data points are available but only on quarterly basis. In addition, there is no data available to track supply coming up in the near future thus making forecast of residential prices in future an extremely difficult task.

Demand could remain subdued longer than expected

Demand adjustment phase may last longer which will have adverse effect on cash flows. Residential demand has been subdued in the recent past owing to high prices while commercial demand will be muted due to slowdown in IT/ITeS. There is likely to be a price adjustment phase of six-nine months for residential segment before demand starts picking up.

Low transparency with respect to land banks

Limited land bank disclosures can lead to incorrect valuations. There is no regulatory format which determines land bank disclosures which are of utmost importance for valuation of real estate companies. Companies include partly paid and non-zoned lands as part of their land banks. Many companies have not been able to launch projects in cities, despite having large land banks. There is limited clarity with respect to balance amount to be paid for acquisition of land banks. Companies may not disclose new land details or disclose them selectively resulting in erroneous NAV calculations.

Intergroup transactions lead to lower transparency

Large intergroup transactions can affect investor confidence, especially since corporate governance perception of the sector is on the lower side. DLF and IBREL are undertaking a large quantum of inter-group transactions. DLF sells commercial IT properties to DLF Assets Limited (DAL) and these sales constitute more than 40% of PBT. IBREL gave large advances of Rs30 bn in FY2008 to a group company, IBFSL in which the promoters own 29.7% stake. We believe such intergroup transactions would lead to lower transparency resulting in higher risk for investors.

Interest rate risk

Change in softening interest rate environment would have impact on affordability and thus, may dampen demand for housing. Current expectations are that interest rates are likely to decline 150-200 bp in the near future. This would naturally impact revenues and earnings of housing segment. We note that a moderate interest rate regime over FY2002-06 and the availability of low-cost financing from housing finance companies and banks helped fuel the recent growth in demand for residential real estate.

Weaker-than-expected economic growth

Weaker-than-expected growth may result in a demand slowdown for housing and commercial space. A prolonged period of weak economic growth may also lead to a surplus in developed real estate (office space, malls), which may result in a sharp decline in selling prices and rentals. We note that real estate is a cyclical business.

DLF LIMITED: BEST PLACED TO RIDE THE SLOWDOWN

Exhibit 71: Company data stock

Rating	BUY	Promoters			88.2
Price (Rs)	212	FIIs			6.8
Target price (Rs)	325	MFs			0.3
Shares o/s (m)	1,705	Ticker			DLFU IN
Market capitalization (US$ mn)	7,420	**Performance**			
Free float (%)	11.8		**1mo**	**3mo**	**12mo**
Average daily traded (US$ mn)	90.2	Absolute (%)	(23.4)	(31.7)	(82.4)
Net debt (US$ mn)	2,077	Relative (%)	(19.4)	(11.3)	(17.8)

Source: Bloomberg, Kotak Institutional Equities estimates

Exhibit 72: DLF forecasts and valuation
March fiscal year-ends, 2007-10E

	PAT (Rs mn)	EPS (Rs)	P/E (X)	BVPS (Rs)	P/B (X)	RoA (%)	RoE (%)	DPS (Rs)	Dividend yield (%)
2007	19,425	13.0	21.2	26.5	10.4	10.7	78.6	0.0	0.0
2008	78,203	46.7	5.9	117.3	2.3	19.7	66.0	5.0	1.8
2009E	67,772	39.4	7.0	145.8	1.9	15.1	30.2	7.0	2.5
2010E	64,873	37.7	7.3	175.6	1.6	13.5	23.5	7.0	2.5

Source: Company, Bloomberg, Kotak Institutional Equities estimates

DLF has taken a series of steps over the past twelve months to improve its cash flows, (1) converted a few retail malls to commercial complexes, (2) launched large number of residential projects after reducing rates by 15-20% and (3) converted space meant for IT development to residential segment. DLF's balance sheet is amongst the strongest and it is well placed to ride out the current real estate slowdown.

We lower our volume assumptions for commercial segment

We lower our sale expectation from this segment as pre-leasing activity has seen a decline in the recent past. Accordingly, we reduce our FY2009E and FY2010E commercial revenue estimates to Rs50.4 bn (Rs56.1 bn earlier) and Rs37.2 bn (Rs58.4 bn earlier). We would watch this segment closely as demand could remain under pressure on account of slowdown in IT hiring. We highlight that most of DLF's commercial properties are in good locations and DLF may consider alternative usages of these properties if demand for IT space remains weak.

Management taking various steps to accelerate cash flow cycle

DLF has taken a series of steps over the past twelve months to improve its cash flows— (1) conversion of a few retail malls to commercial complexes, (2) launching large number of residential projects after reducing rates by 15-20%, (3) converting space meant for IT development to residential segment, (4) slowing down the pace of capital-intensive hotel construction and (5) launching plotted development in Pune (Talegaon) and Hyderabad (Shamshabad). We saw affect of these steps in 2QFY09, when DLF reported positive operating cash flow.

Receivables issue to remain an overhang on the stock

DLF receivables have shown a sharp upward trend over the past four quarters (see Exhibit 74). DLF's DAL debtors rose by Rs14.7 bn to Rs48 bn and non-DAL debtors increased by Rs8 bn. During 1HFY09, DAL debtors have increased by Rs30 bn while non-DAL debtors have declined by Rs10 bn. Therefore DLF received customer inflows of Rs57 bn in 1HFY09. We think financing of DAL will be difficult in the current macro environment and would closely monitor developments in this regard. We would highlight that DLF generated operating cash flow during the 2QFY09 in spite of this increase in receivables.

Pre-launches large number of projects in residential segment

DLF has sold 4.9 mn sq. ft in 1HFY09 against our FY2009E expectation of 11.9 mn sq. ft. 2QFY09 saw launch of residential projects in Bangalore (Bannergatta Road) and Hyderabad (Shamshabad). Also DLF has pre-launched a large number of projects that will soon be formally—Hyderabad (Kompally, Kokapet), Gurgaon (Regal Towers), Pune (Talegaon) and Bangalore (Bannergatta Road). We like DLF's pricing strategy as DLF is launching projects after assessing affordability of each market and would attribute successful launches to this strategy. DLF will likely be the largest gainer as and when interest rates decline, on account of affordable prices and large geographical spread of projects.

Revise estimates to factor in lower commercial revenues

Continued slowdown in IT will affect commercial demand, we reduce our volume assumptions by 30-35% in FY2010-11E versus no growth assumed earlier. We also incorporate residential projects launched in Hyderabad and Pune into our revenue estimates. Accordingly, we revise our FY2009E and FY2010E revenue estimates to Rs144 bn (Rs158 bn earlier) and Rs164 bn (Rs192 bn earlier) and PAT estimates to Rs68 bn (Rs76 bn earlier) and Rs65 bn (Rs80 bn earlier). Our revised NAV is Rs410/share (earlier Rs548/share) after incorporating new estimates. Our revised target price is Rs325/share (earlier Rs440/share) which is based on a 20% discount to our March 2010-based NAV.

Exhibit 73: Our target price for DLF is Rs325/share
NAV sensitivity for DLF for different growth rate in selling prices

		March '10 based NAV Growth rate in selling prices (%)			
	Valuation methodology	**0%**	**3%**	**5%**	**10%**
Valuation of land reserves		**627**	**691**	**727**	**872**
Residential		229	265	293	374
Retail		286	313	333	390
Commercial		237	263	282	336
Add: 22 Hotel sites	1X land acquisition cost	25	25	25	25
Add: Construction JV	7X FY2010E P/E	16	16	16	16
Add: Present value of project management fees		8	8	8	8
Add: Investments in power business		15	15	15	15
Less: Net debt as on March 31, 2009		(114)	(114)	(114)	(114)
Less: Land cost to be paid as on March 31, 2009		(20)	(20)	(20)	(20)
NAV (Rs bn)		606	671	706	851
NAV/share (Rs)		**352**	**389**	**410**	**494**
Target price@20% discount to NAV				**325**	

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 74: DLF has high receivables from DAL
Details of transactions between DLF and DAL, March fiscal year-ends,2008-2QFY09 (Rs bn)

		2009	
	2008	1Q	2Q
Sales to DAL			
Revenues	53	16	15
PBT	38	11	10
Receivables	19	34	48
Receivables (No. of days)	**131**	**196**	**294**
Non-DAL Sales			
Revenues	92	23	24
PBT	58	12	12
Receivables	60	42	49
Receivables (No. of days)	**235**	**166**	**188**

Source: Company, Kotak Institutional Equities estimates

Exhibit 75: Profit model of DLF, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Total revenues	**11,536**	**39,233**	**144,375**	**143,777**	**164,032**	**194,055**
Land costs	(4,416)	(6,319)	(37,774)	(12,284)	(16,710)	(26,358)
Construction costs	—	—	(2,223)	(35,045)	(50,791)	(61,389)
Employee costs	(397)	(922)	(2,998)	(3,214)	(3,815)	(4,836)
SG&A costs	(1,966)	(3,958)	(4,229)	(5,865)	(5,807)	(5,808)
EBITDA	**4,757**	**28,034**	**97,151**	**87,368**	**86,909**	**95,664**
Other income	883	1,108	2,464	3,344	2,543	3,582
Interest	(1,685)	(3,076)	(3,100)	(2,204)	(3,747)	(1,715)
Depreciation	(361)	(571)	(901)	(2,658)	(3,052)	(4,253)
Pretax profits	**3,594**	**25,494**	**95,614**	**85,850**	**82,652**	**93,277**
Profit/(loss) share of associates	—	—	—	—	—	—
Current tax	(2,537)	(6,058)	(17,146)	(18,327)	(18,255)	(26,844)
Deferred tax	870	—	(176)	249	475	475
Net income	**1,927**	**19,436**	**78,293**	**67,772**	**64,873**	**66,908**
Reported net income	**1,917**	**19,425**	**78,203**	**67,772**	**64,873**	**66,908**
EPS (Rs)						
Primary	12.7	13.0	47.1	39.8	38.1	39.2
Fully diluted	12.7	13.0	46.7	39.4	37.7	38.9
Shares outstanding (mn)						
Year end	1,511	1,530	1,705	1,705	1,705	1,705
Primary	152	1,496	1,661	1,705	1,705	1,705
Fully diluted	152	1,496	1,678	1,722	1,722	1,722
Cash flow per share (Rs)						
Primary	18.4	4.2	46.4	33.8	34.2	36.9
Fully diluted	18.4	4.2	45.9	33.5	33.8	36.6
Growth (%)						
Net income (adjusted)	122	913	303	(13)	(4)	3
EPS (adjusted)	103	2	259	(16)	(4)	3
DCF/share	273	(77)	1,000	(27)	1	8
Cash tax rate (%)	70.6	23.8	17.9	21.3	22.1	28.8
Effective tax rate (%)	46.4	23.8	18.1	21.1	21.5	28.3

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 76: Balance model of DLF, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Equity						
Share capital	378	3,059	3,410	3,410	3,410	3,410
Reserves/surplus	9,122	36,613	193,473	247,638	298,903	352,204
Total equity	**9,500**	**39,672**	**196,883**	**251,047**	**302,313**	**355,614**
Deferred tax liability/(asset)	93	187	359	109	(366)	(840)
Liabilities						
Secured loans	39,560	92,053	80,534	119,328	89,328	89,328
Unsecured loans	1,760	7,275	42,237	—	—	—
Total borrowings	**41,320**	**99,328**	**122,771**	**119,328**	**89,328**	**89,328**
Currrent liabilities	18,469	42,429	72,157	74,513	86,767	103,219
Total capital	**69,435**	**181,708**	**396,065**	**448,893**	**481,937**	**551,216**
Assets						
Cash	1,950	4,155	21,421	4,913	8,685	42,365
Current assets	35,113	124,639	244,579	301,043	307,881	310,259
Gross block	11,237	17,787	51,626	75,949	87,201	121,520
Less: accumulated depreciation	1,891	2,412	3,435	7,524	10,576	14,829
Net fixed assets	9,346	15,375	48,191	68,425	76,625	106,691
Capital work-in-progress	6,239	26,497	51,840	44,039	53,274	31,428
Total fixed assets	**15,585**	**41,872**	**100,031**	**112,463**	**129,899**	**138,119**
Intangible assets	—	—	—	—	—	—
Investments	16,789	11,042	30,033	30,033	35,033	60,033
Misc. expenses	—	—	—	—	—	—
Total assets	**69,437**	**181,708**	**396,065**	**448,893**	**481,937**	**550,216**
Leverage ratios (%)						
Debt/equity	430.7	249.2	62.2	47.5	29.6	25.2
Debt/capitalization	81.2	71.4	38.4	32.2	22.8	20.1
Net debt/equity	410.4	238.8	51.4	45.6	26.7	13.2
Net debt/capitalization	80.4	70.5	33.9	31.3	21.1	11.7
RoAE	**21.3**	**78.6**	**66.0**	**30.2**	**23.5**	**20.4**
RoACE	**4.5**	**22.9**	**35.3**	**20.1**	**17.7**	**16.2**

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 77: Cash model of DLF, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Operating						
Pre-tax profits before extraordinary items	3,595	25,495	95,585	85,850	82,652	93,277
Depreciation	362	571	901	2,658	3,052	4,253
Taxes paid	(751)	(6,078)	(18,208)	(18,327)	(18,255)	(26,844)
Other income	98	(13,857)	591	—	—	—
Interest expenses	970	3,076	3,100	2,204	3,747	1,715
Interest paid	(1,483)	(2,898)	(4,909)	(14,751)	(12,929)	(9,418)
Working capital changes (a)	(15,225)	(66,758)	(105,815)	(41,562)	14,599	21,776
Total operating	**(12,436)**	**(60,449)**	**(28,756)**	**16,072**	**72,867**	**84,760**
Operating, excl. working capital (b)	**2,789**	**6,309**	**77,059**	**57,634**	**58,268**	**62,984**
Investing						
Fixed assets	(3,863)	(18,878)	(47,678)	(16,521)	(20,488)	(12,473)
Investments	(14,797)	14,044	(12,464)	—	(5,000)	(25,000)
Total investing (c)	**(18,660)**	**(4,834)**	**(60,142)**	**(16,521)**	**(25,488)**	**(37,473)**
Financing						
Issue of share capital	—	—	91,957	—	—	—
Borrowings	32,638	58,007	23,177	(3,443)	(30,000)	—
Dividend (d)	(16)	(18)	(7,979)	(13,607)	(13,607)	(13,607)
Total financing	**32,622**	**67,487**	**107,156**	**(17,050)**	**(43,607)**	**(13,607)**
Net increase in cash and cash equivalents	1,526	2,204	18,258	(17,499)	3,772	33,680
Beginning cash	424	1,951	4,155	22,412	4,913	8,685
Ending cash	**1,951**	**4,155**	**22,412**	**4,913**	**8,685**	**42,365**
Gross cash flow (b)	2,789	6,309	77,059	57,634	58,268	62,984
Free cash flow (b) + (a) + (c)	**(31,096)**	**(65,283)**	**(88,898)**	**(449)**	**47,379**	**47,287**
Excess cash flow (b) +(a) + (c) + (d)	(31,112)	(65,301)	(96,877)	(14,057)	33,772	33,680

Source: Company, Bloomberg, Kotak Institutional Equities estimates

UNITECH: RAISE CAPITAL WHEN YOU CAN AND NOT WHEN YOU MUST

Exhibit 78: Company data stock

Rating	REDUCE	Promoters			74.6
Price (Rs)	35	FIIs			5.3
Target price (Rs)	45	MFs			0.3
Shares o/s (m)	1,623	Ticker			UT IN
Market capitalization (US$ mn)	1,164	**Performance**			
Free float (%)	25.4		**1mo**	**3mo**	**12mo**
Average daily traded (US$ mn)	57.3	Absolute (%)	1.9	(60.5)	
Net debt (US$ mn)	1,464	Relative (%)	5.0	(35.6)	

Source: Bloomberg, Kotak Institutional Equities estimates

Exhibit 79: Unitech forecasts and valuation
March fiscal year-ends, 2007-2010E

	PAT (Rs mn)	EPS (Rs)	P/E (X)	BVPS (Rs)	P/B (X)	RoA (%)	RoE (%)	DPS (Rs)	Dividend yield (%)
2007	13,055	8.0	5.7	12.3	3.7	10.0	115.0	0.5	1.1
2008	16,614	10.2	4.5	22.2	2.1	7.1	59.3	1.0	2.2
2009E	13,097	8.1	5.7	29.1	1.6	5.3	31.4	1.0	2.2
2010E	12,284	7.6	6.1	35.5	1.3	5.0	23.4	1.0	2.2

Source: Company, Bloomberg, Kotak Institutional Equities estimates

We are disappointed by lack of operational momentum in Unitech as indicated by minimal launches and low progress on commercial construction. Media reports suggest that Unitech is trying to sell key properties or raise equity, both of which are NAV dilutive. We retain our REDUCE rating with a revised target price of Rs45/share.

Unitech exploring all options to reduce leverage

Unitech has a leveraged balance sheet with a D/E of 2.5X as of September 2008 (Debt: Rs100 bn, cash: Rs17 bn and net worth: Rs41 bn) and absolute debt levels have been rising for the past few quarters. Even more important, Unitech needs to refinance/repay Rs26 bn debt in the near term. Unitech needs to reduce its debt to Rs50 bn level for us to become more comfortable about its debt levels. We discuss various options available in order of our preference to Unitech's management below:

- **Cash from operations.** Unitech needs to make interest payments of Rs3.5 bn/quarter at an average cost of 14% while its average EBIDTA for the past three quarters has been Rs6 bn thus leaving limited surplus for debt repayments.

- **Telenor deal.** Debt of Rs100 bn includes Rs12 bn debt in Unitech Wireless and Rs8 bn raised by Unitech for investing in the subsidiary. We expect Unitech to benefit from the Telenor deal as Unitech would receive Rs7.8 bn from Unitech Wireless, which could be used to retire debt. Unitech had invested Rs1.4 bn as paid-up capital and Rs7.8 bn as shareholder's loan in Unitech Wireless.

- **Sale of assets.** Currently, most real estate companies are not looking to make more land acquisitions unless valuations are extremely attractive. Unitech intends to sell hotel properties in Gurgaon and Kolkata and an office property in South Delhi. Unitech may have to sell these assets at distress valuations.

- **Equity sale**. Unitech is planning to take approval to issue equity up to Rs50 bn. In the current environment, it would be difficult to raise such a large sum. Any new investor is likely to come in at sharp discount to NAV. If such an amount can be raised, it would result in an equity dilution of more than 50% at the current market price of Rs35.

We believe that option 3 and 4 will be sharply NAV dilutive in the current environment. However, any large fund raising of more than Rs30 bn will result in lower NAV discount for Unitech.

No launches in South India raises doubt about land bank quality of Unitech

Unitech has 177 mn sq. ft (42% of total land bank under consideration for valuation) in three cities of South India viz. Hyderabad, Kochi and Chennai. However, it is yet to launch a single project in this region. Exhibit 80 highlights Unitech's initial plan for project launches according to which 14 projects were to be launched in FY2008. We observe that most of the launches have been delayed. Most of the projects that had to become operational in the past 24 months are yet to start such as Faridabad (earlier expected start April 2007), Chennai (November 2006 and June 2007), Kochi (February 2007, September 2007 and December 2007), and Hyderabad (December 2006, February 2007 and October 2007).

We reduce our revenue estimates to Rs39.7 bn (earlier Rs47.5 bn) in FY2009E and Rs42.1 bn (earlier Rs52.1 bn) in FY2010E to reflect the following changes.

Slowdown in new launches. Unitech's management was guiding for strong pace of launches in 2HFY09 in South India but we observe delays in the same. Accordingly, we adjust downwards our volume assumptions. We now estimate Unitech to sell 6.9 mn sq. ft in FY2009E versus 11.4 mn sq. earlier and 10.5 mn sq. ft in FY2010E versus 13 mn sq. ft earlier. We would closely observe project launches and highlight downward risk to our volume estimates.

Dropped projects. We are dropping projects in Kochi as there is limited visibility of project launch in that location.

We observe further sharp delay in commercial projects

We observe large quantum of delay in commercial projects being undertaken by Unitech. Exhibit 81 highlights expected delay in commercial projects as compared to initial expectations of the management. These delays indicate large over estimation of demand and construction by management. The status of Greater Noida property (N3) clearly indicates the initial management guidance was aggressive. As against management's initial guidance of completion of 4.9 mn sq. ft by June 2009, construction is yet to start. Low pre-leasing also indicates inferior location of these projects and we would expect further delays in construction.

We retain our REDUCE rating with a revised March 2010-based target price of Rs45/share

We retain our REDUCE rating on Unitech with a target price of Rs45/share based on 50% discount to March 2010 NAV of Rs90/share. Our NAV include Rs20 for telecom business after factoring in 20% holding company discount and target price includes Rs10/share for telecom business. We would keenly watch for improvement in financial position and higher operational activity.

Exhibit 80: Unitech's project launches have been significantly delayed
Launch schedule for Unitech projects post October 2006

	Area			Original schedule		
	(acres)	(mn sq. ft)	Stake (%)	Start date	End date	Current status
Gurgaon						
G1	258	3.8	50	Oct-07	Oct-10	Not launched
G5	21	1.8	62	Nov-06	May-09	Launched
G8	4	0.4	65	Apr-07	Apr-10	Not launched
G9	4	0.3	42.5	Aug-07	Aug-10	Not launched
G10	7	0.7	67	Apr-07	Apr-10	Not launched
G12	410	14.2	50	Jun-07	Jun-13	Not launched
Faridabad						
F1	10	0.9	75	Apr-07	Apr-10	Not launched
Noida						
N2	340	16.6	51	Jan-07	Jan-12	Launched a small portion
Greater noida						
GN1	183	15.8	100	Mar-07	Nov-11	Launched a small portion
Kolkata						
K2	100	6.7	45	Mar-07	Mar-13	Launched
K3	4,840	142.2	40	Jan-08	Jan-20	Not launched
Chennai						
C1	2,040	101.1	100	Jun-07	Jun-13	Not launched
C2	45	4.1	50	Nov-06	Nov-09	Not launched
Kochi						
K1	353	21.3	100	Sep-07	Apr-12	Not launched
K2	70	7.6	90	Dec-07	Dec-11	Not launched
K3	250	9.5	75	Feb-07	Feb-11	Not launched
Bangalore						
B1	36	4.0	100	Sep-07	Mar-11	Not launched
B3	53	5.8	67	Jan-07	Apr-10	Launched
Hyderabad						
H1	119	9.4	100	Feb-07	Oct-11	Not launched
H2	36	3.8	65	Feb-07	Feb-10	Not launched
H3	120	5.5	75	Dec-06	Dec-10	Not launched
H4	84		50	Oct-07	Oct-11	Not launched
Mohali						
M1	350	12.0	100	Jun-07	Jun-12	Launched
Agra						
A1	1,500	31.3	100	Aug-07	Aug-15	
Varanasi						
V1	1,500	34.0	100	Aug-07	Aug-15	

Source: Unitech corporate presentation (September 2006), Kotak Institutional Equities

Exhibit 81: UCP has seen low pre-leasing activity
Leasing activity at UCP, March 2008 and September 2008

UCP Assets	Start date	Estimated completion date Initial	3QFY08	3QFY09	Estimated lettable area (mn sq. ft)	LA completed Actuals March	Sept	% March	Sept	LA currently leased Actuals March	Sept	% March	Sept
G2	Oct-05	Mar-09	Jul-10	Jan-11	3.7	0.5	0.5	12.7	12.7	0.3	0.5	8.7	12.7
K1	Dec-05	Apr-10	Oct-10	Apr-11	4.4	0.8	0.8	18.3	18.3	0.0	0.2	0.7	3.5
N1	Jul-06	Dec-08	Oct-09	Sep-10	2.1								
N2	Jan-07	Jun-09	Feb-11	Feb-11	3.2								
N3	Jan-07	Jun-09	Mar-12	Mar-12	4.9								
G1	Feb-07	Jul-09	Nov-11	May-12	3.3								
Total					**21.4**	**1.3**	**1.3**	**5.9**	**5.9**	**0.3**	**0.6**	**1.6**	**2.9**

UCP Assets	Start date	Estimated completion date Initial	3QFY08	3QFY09	Estimated lettable area (mn sq. ft)	Commitment leases: Agreement to lease (ATL) Actuals March	Sept	% March	Sept	Letter of Intent (LoI) Actuals March	Sept	% March	Sept
G2	Oct-05	Mar-09	Jul-10	Jan-11	3.7	0.5	0.6	14.2	17.8	0.2	0.0	5.9	0.3
K1	Dec-05	Apr-10	Oct-10	Apr-11	4.4	1.0	1.0	22.0	22.0	0.0	0.2	0.0	4.1
N1	Jul-06	Dec-08	Oct-09	Sep-10	2.1		0.1						
N2	Jan-07	Jun-09	Feb-11	Feb-11	3.2								
N3	Jan-07	Jun-09	Mar-12	Mar-12	4.9								
G1	Feb-07	Jul-09	Nov-11	May-12	3.3								
Total					**21.4**	**1.5**	**1.7**	**6.9**	**8.1**	**0.2**	**0.2**	**1.0**	**0.9**

Source: Company, Kotak Institutional Equities

Exhibit 82: Unitech's target price is Rs45/share
NAV sensitivity for Unitech for different growth rate in selling prices

	March '10 based NAV, Growth rate in selling prices per annum 0%	3%	5%	10%
Valuation of land reserves	**131**	**162**	**181**	**251**
Residential projects	117	153	180	261
Commercial projects	61	68	73	86
Retail projects	55	65	73	93
Add: Hotel business	15	15	15	15
Add: Investments as on March 31, 2009	15	15	15	15
Add: Consultancy fees received from Unitech Corporate Parks, JVs	10	10	10	10
Less: Net debt as on March 31, 2009	(88)	(88)	(88)	(88)
Less: Land cost to be paid as on March 31, 2009	(20)	(20)	(20)	(20)
NAV (Rs bn)	63	94	113	183
NAV/share (Rs)	39	58	70	113
Valuation for telecom business	**33**	**33**	**33**	**33**
Total no. of shares (mn)				**1,624**
Valuation/share (Rs)				**90**
Target price@50% discount to NAV				**45**

Source: Company, Kotak Institutional Equities estimates

Exhibit 83: Profit model of Unitech Ltd, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Total revenues	**9,412**	**32,883**	**41,400**	**39,766**	**42,119**	**47,275**
Land costs	(1,971)	—	—	(1,982)	(2,418)	(3,564)
Construction costs	(4,165)	(11,167)	(14,159)	(12,500)	(14,401)	(17,357)
Employee costs	(366)	(568)	(1,067)	(1,468)	(1,909)	(2,481)
SG&A costs	(1,077)	(1,129)	(3,888)	(1,690)	(1,790)	(2,009)
EBITDA	**1,834**	**20,018**	**22,287**	**22,126**	**21,602**	**21,864**
Other income	133	1,000	1,401	1,184	1,254	1,332
Interest	(465)	(3,020)	(2,804)	(5,860)	(6,631)	(9,327)
Depreciation	(112)	(80)	(205)	(250)	(296)	(431)
Pretax profits	**1,390**	**17,919**	**20,678**	**17,200**	**15,929**	**13,437**
Extraordinary items	—	—	—	—	—	—
Current tax	(521)	(4,864)	(3,967)	(4,089)	(3,596)	(2,560)
Deferred tax	8	—	(19)	(14)	(49)	(52)
Net income	**874**	**13,055**	**16,692**	**13,097**	**12,284**	**10,825**
Adjusted net income	**874**	**13,055**	**16,614**	**13,097**	**12,284**	**10,825**
EPS (Rs)						
Primary	0.5	8.0	10.2	8.1	7.6	6.7
Fully diluted	0.5	8.0	10.2	8.1	7.6	6.7
Shares outstanding (mn)						
Year end	1,623	1,623	1,623	1,623	1,623	1,623
Primary	1,623	1,623	1,623	1,623	1,623	1,623
Fully diluted	1,623	1,623	1,623	1,623	1,623	1,623
Cash flow per share (Rs)						
Primary	0.8	10.8	12.2	3.6	2.6	3.3
Fully diluted	0.8	10.8	12.2	3.6	2.6	3.3
Growth (%)						
Net income (adjusted)	151.0	1,394	27.3	(21.2)	(6.2)	(11.9)
EPS (adjusted)	151.0	1,394	27.3	(21.2)	(6.2)	(11.9)
DCF/share	150.5	1,217	13.3	(70.6)	(28.1)	28.5
Cash tax rate (%)	37.5	27.1	19.2	23.8	22.6	19.1
Effective tax rate (%)	36.9	27.1	19.3	23.9	22.9	19.4

Source: Company, Kotak Institutional Equities estimates

Exhibit 84: Balance model of Unitech Ltd, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008E	2009E	2010E	2010E
Equity						
Share capital	125	1,623	3,247	3,247	3,247	3,247
Reserves/surplus	2,472	18,320	32,757	44,003	54,434	61,556
Total equity	**2,597**	**19,944**	**36,003**	**47,250**	**57,680**	**64,803**
Deferred tax liability/(asset)	151	20	60	74	123	175
Liabilities						
Secured loans	9,557	39,499	62,311	81,325	80,026	81,026
Unsecured loans	893	306	23,212	23,212	22,369	22,369
Total borrowings	**10,449**	**39,805**	**85,524**	**104,537**	**102,394**	**103,394**
Currrent liabilities & Provisions	31,087	71,118	111,048	92,408	82,885	77,851
Minority Interest	237	13	1,159	1,159	1,159	1,159
Total capital	**44,521**	**130,900**	**233,793**	**245,426**	**244,241**	**247,381**
Assets						
Cash	3,899	10,227	14,083	16,304	5,133	283
Current assets	34,762	106,851	172,979	171,184	179,039	182,362
Gross block	4,530	6,470	11,120	11,241	13,063	14,964
Less: accumulated depreciation	911	475	661	911	1,207	1,638
Net fixed assets	3,620	5,995	10,459	10,330	11,857	13,326
Capital work-in-progress	1,268	2,153	20,982	22,318	22,922	26,119
Total fixed assets	**4,887**	**8,148**	**31,442**	**32,648**	**34,778**	**39,445**
Intangible assets	824	1,126	1,126	1,126	1,126	1,126
Investments	145	4,548	14,165	24,165	24,165	24,165
Misc. expenses	5	—	—	—	—	—
Total assets	**44,522**	**130,900**	**233,794**	**245,427**	**244,241**	**247,382**
Key ratios (%)						
Debt/equity	380.3	199.4	237.1	220.9	177.1	159.1
Debt/capitalization	79.2	66.6	70.3	68.8	63.9	61.4
Net debt/equity	238.4	148.2	198.1	186.4	168.3	158.7
Net debt/capitalization	70.4	59.7	66.5	65.1	62.7	61.3
RoAE	**36.2**	**115.0**	**59.3**	**31.4**	**23.4**	**17.6**
RoACE	**12.2**	**41.8**	**20.9**	**12.9**	**11.2**	**11.2**

Source: Company, Kotak Institutional Equities estimates

Exhibit 85: Cash model of Unitech Ltd, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Operating						
Pre-tax profits before extraordinary items	1,390	17,918	20,678	17,200	15,929	13,437
Depreciation	112	91	205	250	296	431
Taxes paid	(148)	(235)	(415)	(4,089)	(3,596)	(2,560)
Other income	102	(414)	(736)	(1,184)	(1,254)	(1,332)
Interest expenses	337	2,660	2,329	5,860	6,631	9,327
Interest paid	(465)	(2,534)	(2,246)	(12,209)	(13,815)	(13,921)
Extraordinary items	—	(119)	389	—	—	—
Working capital changes (a)	(3,575)	(37,520)	(29,956)	(10,497)	(10,193)	(3,764)
Total operating	**(2,247)**	**(20,154)**	**(9,750)**	**(4,668)**	**(6,003)**	**1,619**
Operating, excl. working capital (b)	**1,328**	**17,485**	**19,816**	**5,828**	**4,190**	**5,383**
Investing						
Capital expenditure	(4,000)	(3,340)	(23,508)	(1,456)	(2,426)	(5,098)
(Purchase)/Sale of assets	483	—	—	—	—	—
(Purchase)/Sale of investments	146	(4,376)	(3,409)	(10,000)	—	—
Interest/dividend received	288	464	(4,957)	1,184	1,254	1,332
Total investing (c)	**(3,083)**	**(7,253)**	**(31,874)**	**(10,272)**	**(1,172)**	**(3,766)**
Financing						
Proceeds from issue of share capital	(23)	4,699	84	—	—	—
Proceeds from borrowings	6,603	29,425	45,343	19,013	(2,143)	1,000
Dividends paid (d)	(60)	(391)	53	(1,851)	(1,853)	(3,702)
Total financing	**6,520**	**33,734**	**45,480**	**17,162**	**(3,996)**	**(2,702)**
Net increase in cash and cash equivalents	1,191	6,327	3,855	2,222	(11,170)	(4,850)
Beginning cash	2,717	3,899	10,227	14,082	16,304	5,133
Ending cash	**3,899**	**10,227**	**14,082**	**16,304**	**5,133**	**283**
Gross cash flow (b)	1,328	17,485	19,816	5,828	4,190	5,383
Free cash flow (b) + (a) + (c)	**(5,329)**	**(27,288)**	**(42,014)**	**(14,941)**	**(7,174)**	**(2,148)**
Excess cash flow (b) +(a) + (c) + (d)	(5,389)	(27,678)	(41,961)	(16,792)	(9,028)	(5,850)

Source: Company, Kotak Institutional Equities estimates

HDIL: LAND SALE MODEL LIKELY TO TAKE LONGER TO REVIVE

Exhibit 86: Company data stock

Rating	ADD	Promoters			61.5
Price (Rs)	106	FIIs			10.7
Target price (Rs)	165	MFs			1.2
Shares o/s (m)	275	Ticker			HDIL IN
Market capitalization (US$ mn)	600	**Performance**			
Free float (%)	38.5		**1mo**	**3mo**	**12mo**
Average daily traded (US$ mn)	63.6	Absolute (%)	(2.5)	-	-
Net debt (US$ mn)	566	Relative (%)	0.8	-	-

Source: Bloomberg, Kotak Institutional Equities estimates

Exhibit 87: HDIL forecasts and valuation
March fiscal year-ends, 2007-2010E

	PAT (Rs mn)	EPS (Rs)	P/E (X)	BVPS (Rs)	P/B (X)	RoA (%)	RoE (%)	DPS (Rs)	Dividend yield (%)
2007	5,420	23.4	6.0	31.4	4.5	28.7	118.7	4.0	2.9
2008	14,103	53.8	2.6	138.8	1.0	18.8	64.5	6.0	4.3
2009E	9,208	33.4	4.2	159.9	0.9	9.7	22.9	5.0	3.6
2010E	8,389	30.4	4.6	183.5	0.8	7.6	17.7	6.0	4.3

Source: Company, Bloomberg, Kotak Institutional Equities estimates

HDIL's land-sale model will likely remain under pressure in the near term as various developers start cutting back on land purchases. We revise our near-term assumptions for TDR prices and delay FSI sale in various projects. Our revised target price of Rs165 is based on 50% discount to March 2010-based NAV of Rs335/share.

Recovery in land sale model will likely be delayed

HDIL drives most of its revenues from FSI sale or TDR sale. Both are obtained by undertaking slum rehabilitation work. FSI or TDRs to be sold are generated post completion of rehabilitation work, thus making slum rehabilitation projects very capital intensive. Currently, most developers have cut expansion plans and have shifted attention to ongoing projects. Therefore, we believe HDIL's land-sale model will likely take longer to revive as various developers start cutting back on land purchases. This has potential to put strain on HDIL's balance sheet since it has funded the airport slum rehabilitation project largely through debt.

Large investments in airport alum rehabilitation project creating an asset-liability mismatch

HDIL has invested Rs30 bn in airport slum rehabilitation project which has largely been financed by debt with maturity of two-four years while revenues accruing from this project are back-ended. In case credit availability to real estate sector remains limited, HDIL will likely face difficulty in funding future phases of this project. Exhibit 90 showcases cash flow nature of this project. HDIL needs to pay for land and also incur large construction costs for units for slum dwellers. Revenues will accrue over time from sale of TDRs and sale of FSI.

We lower near-term assumption of TDR selling prices

We decrease selling price assumptions on TDRs in the near term to Rs1,500/sq. ft. Post FY2012E, we maintain our selling price assumption of Rs2,000/sq. ft as for most developers cost of generation is Rs1,500+/sq. ft. To generate 1 sq. ft of TDR, one needs to construct similar amount of area for slum dwellers. In many cases, land is also provided by the developer and thus cost of TDR generation is more than Rs1,500/sq. ft. Thus, as stress sales reduce and large TDR volumes start picking up, we expect TDR prices to return to a minimum level of Rs2,000/sq. ft.

We would like HDIL to reduce asset-liability mismatch

We would like HDIL to take following steps to make D/E comfortable.

Arrange long-term financing. HDIL is trying to arrange long-term financing (long-tenure debt, private equity) to replace short-term debt. If that doesn't happen, the fate of Mumbai airport modernization will be affected. HDIL currently has a debt of Rs38 bn against net worth of Rs40 bn.

Launch higher proportion of residential projects. Commercial/retail projects are very capital-intensive in nature and it is becoming difficult to construct on a company's balance sheet. Residential projects, if priced correctly can generate large pre-sales and thus are largely self-funded.

Revise estimates to factor in lower commercial revenues

We revise our estimates for lower TDR prices in the near term and lower FY2010E selling prices. Accordingly, we revise our FY2009E and FY2010E revenue estimates to Rs17.8 bn (Rs24.1 bn earlier) and Rs25.7 bn (Rs29.1 bn earlier) and PAT estimates to Rs9.2 bn (Rs12.3 bn earlier) and Rs8.4 bn (Rs11.6 bn earlier). Our March 2010-based NAV is revised to Rs335/share (earlier Rs550/share) after incorporating new estimates and our target price is based on 50% discount to NAV. NAV is likely to be realized in the long term but near term stock performance is going to be driven by balance sheet improvement or deterioration. We downgrade our rating to ADD (BUY earlier).

Exhibit 88: HDIL target price is Rs165/share
NAV sensitivity to growth rate in selling prices

	March '10 based NAV Growth rate in selling prices			
	0%	3%	5%	10%
Valuation (Rs bn)	**58**	**69**	**78**	**102**
Residential projects	20	29	36	55
Commercial/retail projects	35	38	41	48
Slum rehabilitation projects	22	24	26	30
Add: BKC rental property	1.5	1.5	1.5	1.5
Add: Net cash	(35.2)	(35.2)	(35.2)	(35.2)
Add: Mumbai slum rehabilitation project	18.2	18.2	18.2	18.2
Add: Land cost paid for airport SRA	30.0	30.0	30.0	30.0
NAV (Rs bn)	**72.2**	**83.9**	**92.5**	**116.7**
Total no of shares				275.8
NAV/share				**335**
Target price @50% discount to NAV				**165**

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 89: We value HDIL's land bank at Rs78 bn
Key details of developable area (mn sq. ft) and NAV (Rs bn)

	Land area	March'10 based NAV (Rs bn)			
	(mn sq. ft)	**0%**	**3%**	**5%**	**10%**
Mumbai	15.9	40.3	42.5	44.1	48.1
Vasai Virar	84.7	19.0	25.9	31.0	45.7
Kochi	14.4	(0.6)	1.0	2.2	5.9
Hyderabad	9.8	(0.5)	0.2	0.8	2.4
Pune	1.2	(0.3)	(0.2)	(0.1)	0.2
Total	**126**	**57.8**	**69.5**	**78.0**	**102.2**

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 90: We decrease selling price assumptions on TDRs from airport SRA in the near term to Rs1,500/sq. ft
Key details of developable area (mn sq. ft) and NAV (Rs bn)

		FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
HDIL has full benefits/ costs											
Rehabilitation area constructed (mn sq. ft)		7.4	7.4	7.4	7.4						
Cost of construction (Rs bn)		(9.3)	(9.3)	(9.3)	(9.3)						
Purchase of land		37.5									
Sale of TDR (mn sq. ft)		2.5	3.0	3.5	3.5	4.0	4.0	4.0	4.0	4.0	5.3
Selling price assumption of TDR (Rs/sq. ft)		2,300	1,500	1,500	1,500	2,000	2,000	2,000	2,000	2,000	2,000
Sale Inflow from TDR (Rs bn)		5.8	4.5	5.3	5.3	8.0	8.0	8.0	8.0	8.0	10.5
NPV (Rs bn)	**(27.7)**										
HDIL gets 55% share of land											
Saleable area constructed (mn sq. ft)			1	1	2	2	2	2	2	1	1
Selling price (Rs/sq. ft)			10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Construction cost(Rs/sq. ft)			3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Sale Inflow (Rs bn)			10	10	20	20	20	20	20	10	10
Construction cost (Rs bn)			(3)	(3)	(6)	(6)	(6)	(6)	(6)	(3)	(3)
Taxes (Rs bn)			2	2	3	3	3	3	3	2	2
NPV (Rs bn)	**46**										

Source: Company, Bloomberg, Kotak Institutional Equities estimates

Exhibit 91: Profit model of HDIL, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Total revenues	**4,377**	**12,165**	**23,804**	**17,858**	**25,731**	**30,544**
Land costs	(3,767)	(10,116)	(47,040)	(421)	(1,759)	(1,483)
Construction costs	855	4,879	40,703	(4,548)	(11,358)	(13,440)
Employee costs	(11)	(84)	(122)	(225)	(372)	(421)
SG&A costs	(79)	(222)	(431)	(536)	(772)	(916)
EBITDA	**1,376**	**6,622**	**16,914**	**12,128**	**11,470**	**14,284**
Other income	24	0	529	700	700	700
Interest	(106)	(430)	(1,408)	(2,413)	(2,658)	(2,483)
Depreciation	(4)	(10)	(15)	(29)	(48)	(74)
Pretax profits	**1,291**	**6,182**	**16,021**	**10,386**	**9,465**	**12,427**
Profit/(loss) share of associates	—	—	—	—	—	—
Current tax	(149)	(758)	(1,910)	(1,165)	(1,062)	(1,646)
Deferred tax	(2)	(4)	(7)	(13)	(14)	(16)
Net income	**1,139**	**5,420**	**14,103**	**9,208**	**8,389**	**10,765**
EPS (Rs)						
Primary	4.9	23.4	53.8	33.4	30.4	39.1
Fully diluted	4.9	23.4	53.8	33.4	30.4	39.1
Shares outstanding (mn)						
Year end	231	231	275	275	275	275
Primary	231	231	262	275	275	275
Fully diluted	231	231	262	275	275	275
Cash flow per share (Rs)						
Primary	5	26	53	22	18	28
Fully diluted	5	26	53	22	18	28
Growth (%)						
Net income (adjusted)	681	376	160	(35)	(9)	28
EPS (adjusted)	134	376	130	(38)	(9)	28
DCF/share	103	409	104	(58)	(17)	51
Cash tax rate (%)	12	12	12	11	11	13
Effective tax rate (%)	12	12	12	11	11	13

Source: Company, Kotak Institutional Equities estimates

Exhibit 92: Balance model of HDIL, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Equity						
Share capital	500	1,800	2,143	2,143	2,143	2,143
Reserves/surplus	1,350	5,468	34,272	41,910	48,412	56,663
Total equity	**1,850**	**7,268**	**36,415**	**44,052**	**50,554**	**58,806**
Deferred tax liability/(asset)	4	8	15	28	42	58
Liabilities						
Secured loans	1,965	3,757	19,461	37,965	37,965	32,965
Unsecured loans	—	—	11,667	—	—	—
Total borrowings	**1,965**	**3,757**	**31,127**	**37,965**	**37,965**	**32,965**
Currrent liabilities	4,163	7,864	7,477	12,397	21,788	24,489
Total capital	**7,982**	**18,897**	**75,034**	**94,443**	**110,349**	**116,318**
Assets						
Cash	397	48	3,505	2,771	7,440	1,256
Current assets	6,387	16,947	68,903	88,525	99,659	111,658
Gross block	56	249	576	677	829	1,056
Less: accumulated depreciation	6	13	32	61	109	183
Net fixed assets	49	236	544	616	720	874
Capital work-in-progress	10	3	52	—	—	—
Total fixed assets	**60**	**239**	**596**	**616**	**720**	**874**
Intangible assets	—	—	—	—	—	—
Investments	1,133	1,650	2,006	2,506	2,506	2,506
Misc. expenses	6	13	24	24	24	24
Total assets	**7,982**	**18,897**	**75,034**	**94,442**	**110,349**	**116,318**
Leverage ratios (%)						
Debt/equity	105.9	51.6	85.4	86.1	75.0	56.0
Debt/capitalization	51.4	34.0	46.1	46.3	42.9	35.9
Net debt/equity	84.5	51.0	75.8	79.8	60.3	53.9
Net debt/capitalization	45.8	33.8	43.1	44.4	37.6	35.0
RoAE	**88.7**	**118.7**	**64.5**	**22.9**	**17.7**	**19.7**
RoACE	**45.4**	**78.1**	**39.1**	**15.2**	**12.6**	**14.3**

Source: Company, Kotak Institutional Equities estimates

Exhibit 93: Cash model of HDIL, March fiscal year-ends, 2006-2011E (Rs mn)

	2006	2007	2008	2009E	2010E	2011E
Operating						
Pre-tax profits before extraordinary items	1,291	6,182	16,021	10,386	9,465	12,427
Depreciation	3	6	15	29	48	74
Taxes paid	(92)	(199)	(1,637)	(1,165)	(1,062)	(1,646)
Other income	(24)	(0)	(527)	(700)	(700)	(700)
Interest expenses	31	40	43	2,413	2,658	2,483
Interest paid	(31)	(40)	(43)	(4,825)	(5,315)	(4,965)
Extraordinary items	(6)	(7)	7	—	—	—
Working capital changes (a)	(1,282)	(7,420)	(53,449)	(12,290)	914	(6,815)
Total operating	**(111)**	**(1,439)**	**(39,569)**	**(6,152)**	**6,007**	**858**
Operating, excl. working capital (b)	**1,177**	**5,989**	**13,872**	**6,138**	**5,093**	**7,673**
Investing						
Capital expenditure	(30)	(186)	(455)	(49)	(152)	(228)
(Purchase)/Sale of assets/businesses	—	—	—	—	—	—
(Purchase)/Sale of investments	(532)	(518)	190	(500)	—	—
Interest/dividend received	—	—	-	700	700	700
Total investing (c)	**(561)**	**(703)**	**(265)**	**151**	**548**	**472**
Financing						
Proceeds from issue of share capital	—	—	17,136	—	—	—
Proceeds from borrowings	1,051	1,792	27,371	6,838	—	(5,000)
Dividends paid (d)	—	—	(1,230)	(1,571)	(1,887)	(2,513)
Total financing	**1,051**	**1,792**	**43,277**	**5,267**	**(1,887)**	**(7,513)**
Net increase in cash and cash equivalents	378	(350)	3,443	(734)	4,668	(6,183)
Beginning cash	19	397	62	3,505	2,771	7,440
Ending cash	**397**	**47**	**3,505**	**2,771**	**7,440**	**1,256**
Gross cash flow (b)	1,177	5,989	13,872	6,138	5,093	7,673
Free cash flow (b) + (a) + (c)	**(667)**	**(2,135)**	**(39,841)**	**(6,001)**	**6,555**	**1,330**
Excess cash flow (b) +(a) + (c) + (d)	(667)	(2,135)	(41,071)	(7,571)	4,668	(1,183)

Source: Company, Kotak Institutional Equities estimates

appendix 1

Analyzing financial sector exposure to real estate sector: Refinancing is the main issue

ANALYZING FINANCIAL SECTOR EXPOSURE TO REAL ESTATE SECTOR: REFINANCING IS THE MAIN ISSUE

We believe credit availability to real estate sector has come under strain in the recent past since loan sourcing window from mutual funds (liquid/FMPs) has become limited. Our analysis indicates that 15-20% of real estate borrowings were from mutual funds. We estimate total borrowings of the real estate sector to be at Rs700 bn—Rs350-400 bn from banking sector, Rs178 bn is from housing finance companies and the rest from mutual funds/NBFCs. Real estate companies would need to arrange alternative refinancing from banks/NBFCs, which we believe will be selective. In such a scenario, we would prefer companies with healthy balance sheet and having limited refinancing requirements in the near term. We believe companies like DLF, who have shown capability of launching large number of residential projects, will have better ability to raise finances. IBREL, PHNX and MLIFE are most protected from this credit strain on account of having limited debt liability. Unitech, HDIL and Sobha are at higher risk because of the high refinancing requirements.

Refinancing of existing loans is the main issue

Exhibit 94 shows a detailed analysis of the debt payment schedule of nine companies in the real estate universe. The main issue currently confronting companies is debt to be refinanced in the near term even though leverage ratios may be in the comfort zone (D/E<1X, Debt/EBIDTA<3). Approximately 15-20% of loans taken by real estate companies were from mutual funds (FMPs/liquid funds), a window which has become limited. Amongst companies considered for analysis, total loans outstanding as of September 30, 2008 is around Rs342 bn out of which around Rs100 bn will come for refinancing in the next 12 months. Based on this analysis, we can put these companies under three buckets as described below.

1) **Low refinancing requirement.** This includes companies like IBREL, PHNX, MLIFE and IVR which have net cash on their balance sheet as of end-2QFY09.

2) **Medium refinancing requirement.** DLF and PVKP form part of this bucket. These companies have large number of projects which we believe can be used to raise additional funding to replace existing debt.

3) **High refinancing requirement.** Unitech, Sobha and HDIL have high refinancing requirements.

Exhibit 94: Large short-term debt repayments has created problem in debt servicing
Debt levels and other details as of March 2008 and September 2008 (Rs bn)

	As of Sept 2008						As of Mar 2008			Sales	
					Repayable						
	Secured	Unsecured	Debt	2HFY09	12 months	FY2010	Secured	Unsecured	Debt	FY2008	1HY09
DLF	94.7	52.1	146.7	23.0	40.0	40.0	80.5	42.2	122.6	144.3	75.6
HDIL	29.4	10.1	39.5	5.0	10.0	10.0	19.5	11.7	31.1	23.8	10.5
IBREL	0.7	1.7	2.5	—	—	—	0.0	3.4	3.4	1.4	0.9
Mahindra Lifespaces	—	—	—	—	—	—	2.9	0.0	2.9	1.7	0.8
Orbit	—	—	5.5	1.5	1.8	0.5	3.0	2.3	5.3	7.1	1.6
Parsvnath	—	—	20.3	3.8	4.0	5.6	17.2	1.0	18.2	17.7	5.9
Purvankara	7.3	0.8	8.1	1.5	5.0	4.5	5.8	0.8	6.5	5.7	3.0
Sobha	—	—	19.5	4.6	9.2		14.4	3.2	17.6	14.3	6.5
Unitech	—	—	100.0	26.0	>26		62.3	23.2	85.0	41.4	20.1
Total			**342.0**	**65.4**	**>100**		**205.6**	**87.7**	**292.5**	**257.4**	**124.8**

Source: Company, Kotak Institutional Equities

Direct borrowing of real estate companies from banks is Rs350-400 bn (<2% of total advances)

We describe below key avenues available to real estate companies for raising debt funds (Exhibit 95).

- **Bank borrowings.** We estimate the banking sector's exposure to real estate sector would be Rs350-400 bn (includes lease rental discounting as well). Data available from RBI indicates that outstanding credit to commercial real estate sector was Rs682 bn (out of total outstanding credit of Rs23,149 bn) as of August 2008; however, this includes loans extended to hotels, warehouses, hospitals and educational trusts as well. As of September 2008, the direct exposure to real estate developers of these banks stood at Rs175 bn or 1% of the total advances of Rs17,518 bn. However, we note that this data does not capture SPV level hotel financing and may not include lease rental financing.

- **NBFC/HFCs.** Real estate companies primarily borrow from HDFC and LIC Housing Finance amongst HFCs. As of September 2008, these amounted to approximately Rs178 bn. We note that borrowings from NBFCs would be separate from these.

- **Mutual funds (FMP/Liquid funds).** As of September 2008, total loans advanced to real estate companies are approximately— (1) ~2% of the analyzed FMP AUMs of Rs40 bn out of total AUMs of Rs70 bn and (2) ~2.5% of the analyzed liquid funds AUMs of Rs42 bn out of Rs66 bn. However, the exposure of the non-analyzed FMP and liquid funds AUMs to real estate sector may be higher. Based on debt analysis of listed companies, we estimate proportion of borrowings from mutual funds to be 15-20% or approximately Rs100 bn.

- **Insurance companies.** Large insurance companies (LIC, GIC etc) subscribe to interest bearing Non Convertible Debentures of these companies.

Exhibit 95: Borrowings and sources of finance of real estate companies
Amount in Rs bn

	Amount (Rs bn)		Amount (Rs bn)
Funding		**Sources**	
9 real estate companies considered (A)	350	Banks	350-400
Others~ 100% of (A)	350	HFCs	175
		MFs/NBFCs	175-200
Total	**700**		**700-775**

Source: Kotak Institutional Equities

Exhibit 96 highlights the various borrowing mechanisms available for a real estate developer. There are four broad categories under which real estate companies raise borrowings—(1) lease rental discounting, (2) loans against construction, (3) loans against property and (4) unsecured loans. Lease rental discounting option is the least risky from the lender's perspective while unsecured loans are the riskiest. In almost all cases, the collateral should result in a Loan-to-Value (LTV) of 50% or less.

Exhibit 96: Various options available for debt funding for developers

Mechanism	Description	Risks	Lender's risk perception	Collateral
Lease rental discounting (LRDs)	These are loans taken against properties/assets generating rental income. The maximum amount that can be borrowed is the discounted cash flows of the properties.	Rentals, Lock-in aggreements with tenants	1 (Lowest)	The project asset generating the rentals is the collateral in LRDs. LRDs are less riskier than construction loans.
Loans against construction	These are loans taken by developers for the purpose of construction (not for land acquisition). The lender assesses the project risk to ascertain whether the developer can service interest payments and principal repayments.	Location, execution risk, title of land, repayment risk	2	(1) Secured by pari passu charge by mortgage/charge-cum-hypothecation of the project assets of the borrower. (2) Collateral asset is generally 2-2.5X the borrowed amount or higher. The project cashflows services the loan.
Loans against property (LAP)	These are loans generally taken for working capital financing. Underlying cashflows more riskier.	Repayment risk higher	3	A completed property or land owned by the developer is kept as a collateral which is separate from the project for which the loan has been taken.
Unsecured loans	Loans which are not backed by any collateral securities	Default risk	4 (Highest)	None

Source: Kotak Institutional Equities

Bank financing will be selective depending on balance sheet strength, new launches

Companies having better operating cash flow and healthy balance sheet will find it easier to avail bank financing. Ability to launch and sell projects will determine the operating cash flow pattern over subsequent quarters. We also believe sale of projects is going to depend upon the right location and affordable pricing. Exhibit 97 summarizes the performance of nine companies in our coverage universe on the key parameters—(1) operating cash flow, (2) increase in debt, (3) new launches/project progress, (4) balance sheet comfort and (5) consensus EPS downgrades for FY2009E EPS.

Exhibit 97: Comparison across the key parameters

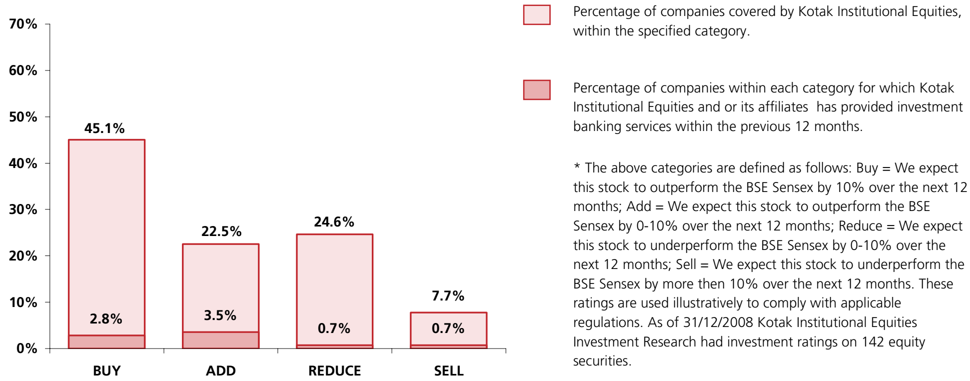
	Operating cash flow	Increase in debt	New launches/ Project progress	Balance sheet comfort	FY2009E EPS Consensus downgrades (%)
DLF	✓	✓	✓	✓✓	(5.4)
HDIL	✓	—	✓	—	(10.3)
IBREL	—	—	✓	✓✓	(61.2)
IVR Prime	—	—	—	✓	(81.3)
MLIFE	—	—	—	✓✓	(32.2)
Phoenix Mills	✓	—	✓	✓✓	0.3
Puravankara	—	✓✓	—	—	(20.6)
Sobha	—	✓	—	—	(18.9)
Unitech	—	✓	—	—	(16.4)

Source: Bloomberg, Kotak Institutional Equities

"I, Puneet Jain, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report."

Kotak Institutional Equities Research coverage universe

Distribution of ratings/investment banking relationships



* The above categories are defined as follows: 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 Sensex by more then 10% over the next 12 months. These ratings are used illustratively to comply with applicable regulations. As of 31/12/2008 Kotak Institutional Equities Investment Research had investment ratings on 142 equity securities.

Source: Kotak Institutional Equities

As of December 31, 2008

Analyst coverage

Companies that the analyst mentioned in this document follow

Covering Analyst: Puneet Jain	
Company name	**Ticker**
DLF Limited	DLF.BO
Housing Development and Infrastructure	HDIL.BO
Indiabulls Real Estates	INRL.BO
IVR Prime Urban Developers	IVR.BO
Mahindra Gesco Developers	MGDL.BO
Phoenix Mills	PHOE.BO
Puravankara Projects Limited	PPRO.BO
Sobha Developers	SOBH.BO
Unitech	UT.BO

Source: Kotak Institutional Equities Research

Kotak Securities company-specific disclosures

Kotak Securities Limited and/or its affiliates were lead managers for the public/right offerings/institutional placements for the following companies: DLF, HDIL, IVR Prime Urban Developers and Puravankara Projects.

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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 Sensex by more than 10% over the next 12 months.

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Coverage view. The coverage view represents each analyst's overall fundamental outlook on the Sector. The coverage view will consist of one of the following designations: Attractive (A), Neutral (N), Cautious (C).

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