



Strategy

Whizdom – A DCF-based decision-support tool

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The prices in this report are based on the market close of January 30, 2012.

RELEASING WHIZDOM

Key results from Whizdom: Recommends to Book profit in 50% of universe

- Book-profit recommendation for 10 companies in the Consumer Products space
- Value holding: Reliance, ONGC, Coal India
- Growth holding: Wipro, Infosys, Divis, Sun Pharma
- Book-profit cases: HUL, ITC, Nestle, Asian Paints
- Rerating: JSW Steel, Reliance Power

Whizdom: A decision-support tool using a DCF valuation framework

- It responds to changing stock prices and analyst estimates; provides timeframes indicating when value of growth could arise
- It calculates the implied growth rate in perpetuity of free cash flow as reflected in the current market price
- Upon these premises, the automated decision-support tool recommends different stock actions for the universe

User-flexibility: Whizdom 'Dashboard'

- Dashboard helps users model their own business assumptions for companies
- Assumptions include cost of capital, hyper growth phase and terminal-year estimates

Whizdom has limitations, depends critically on analyst inputs

- Whizdom critically depends on analyst assumptions of near-term, medium-term and terminal-year financials
- Whizdom is only a guiding tool, it does not capture all parameters that could influence stock performance
- Our analyst ratings may differ from Whizdom's potential stock action; they do differ in a few cases in this analysis

KEY RESULTS FROM WHIZDOM

Key results from Whizdom: Recommends to Book profit in 50% of universe

- Whizdom is currently generating positive results for 45% of the total universe
- Book-profit recommendation for 10 companies in the Consumer Products space
- Nine out of 12 Pharmaceutical companies are being rated as Growth holding
- Sectors like Automobiles and Pharmaceuticals are rated the most positive while Consumers, Utilities and Industrials have been given the highest negative recommendations

Key results from our Whizdom framework

	No. of companies	Positive recommendations				Total	Negative recommendations			Indecisive
		Growth holding	Value holding	Rerating	Undervalued		Book profits	Derating	Total	
Automobiles	8	5	1	0	0	6	2	0	2	0
Cement	6	1	0	0	0	1	5	0	5	0
Construction	4	0	0	0	0	0	4	0	4	0
Consumer Products	12	2	0	0	0	2	10	0	10	0
Diversified	1	0	0	0	0	0	1	0	1	0
Energy	10	2	3	1	0	6	3	1	4	0
Industrials	10	0	1	1	0	2	7	1	8	0
Infrastructure	2	0	0	0	0	—	2	0	2	0
Media	6	2	2	0	0	4	2	0	2	0
Metals	8	1	1	1	0	3	4	1	5	0
Metals & Mining	1	0	1	0	0	1	0	0	0	0
Others	5	1	1	0	0	2	3	0	3	0
Pharmaceuticals	12	9	0	0	0	9	3	0	3	0
Retail	1	1	0	0	0	1	0	0	0	0
Technology	11	3	3	2	1	9	1	1	2	0
Telecom	3	0	0	0	0	0	3	0	3	0
Transportation	1	0	1	0	0	1	0	0	0	0
Utilities	9	2	0	1	0	3	5	1	6	0
Total	110	29	14	6	1	50	55	5	60	0

Source: Kotak Institutional Equities estimates

KEY RESULTS FROM WHIZDOM

Key results from Whizdom: Consumer Products implying higher-than-reasonable growth rate in perpetuity

- Current market prices for nine out of 12 Consumer Products stocks imply a higher-than-reasonable growth rate in perpetuity
- Whizdom generated negative results for the sector (Consumer Products) as ~74% of their total fair value is expected to come post-FY2013E
- Almost 54% of the total fair value is expected to come between FY2011 and FY2013E for the stocks in the Whizdom universe

Consolidated results from our Whizdom framework

	No. of companies	Proportion of CMP (%) (b)			Average growth in perpetuity (%)	
		NG-11	11-13	IVPost13	Reasonable G	Implied>Reasonable G (a)
Automobiles	8	24	3	74	3	1
Cement	6	2	27	71	4	4
Construction	4	(1,836)	1,467	470	5	4
Consumer Products	12	19	7	74	6	9
Diversified	1	(900)	459	541	5	1
Energy	10	(28)	119	9	1	3
Industrials	10	34	18	48	5	8
Infrastructure	2	(49)	88	60		2
Media	6	32	7	61	4	0
Metals	8	(35)	18	117	1	2
Metals & Mining	1	61	13	26	5	0
Others	5	38	5	57	3	1
Pharmaceuticals	12	13	12	75	5	1
Retail	1	12	18	70	5	0
Technology	11	28	13	59	4	1
Telecom	3	(182)	184	97	4	3
Transportation	1	44	16	41	5	0
Utilities	9	(179)	89	189	5	4
Total	110	(23)	54	69		44

Notes:

(a) Number of companies where implied growth rate in perpetuity is greater than analyst estimates of reasonable growth (Reasonable G).

(b) NG-11: Value assuming zero growth in perpetuity from FY2011; 11-13: Value of growth in the next two years;

IVPost13: Value of growth post-FY2013 period implied by current market price.

Source: Kotak Institutional Equities estimates

KEY RESULTS FROM WHIZDOM

Whizdom signals potential action for all stocks

- We present key Whizdom recommendations after screening 111 stocks, excluding Banks and Real Estate stocks

Growth holding: Wipro, Infosys, Maruti and Sun Pharma

Value holding: Reliance, Coal India, ONGC

Rerating: Sterlite, Maharashtra Seamless, Reliance Infra

Derating: Reliance Power, JSW Steel

Book profit: HUL, ITC, Nestle, Asian Paints, Hero Honda

Indecisive: none

Undervalued: Polaris

Results from our Whizdom framework for the BSE-30 Index

Company	Sector	Price	Potential stock action	Whizdom's DCF price	KIE	
		27-Jan-12		(Rs/share)	Rating	TP
Bajaj Auto	Automobiles	1,550	Value holding	1,761	ADD	1,715
Hero Motocorp	Automobiles	1,824	Book profits	1,657	SELL	1,815
Mahindra & Mahindra	Automobiles	665	Growth holding	758	BUY	840
Maruti Suzuki	Automobiles	1,193	Growth holding	1,190	ADD	1,250
Tata Motors	Automobiles	234	Growth holding	245	SELL	225
Hindustan Unilever	Consumer Products	382	Book profits	342	REDUCE	420
ITC	Consumer Products	201	Book profits	196	ADD	230
Jaiprakash Associates	Diversified	66	Book profits	74	BUY	105
Oil & Natural Gas Corporation	Energy	276	Value holding	395	BUY	355
Reliance Industries	Energy	795	Value holding	1,061	BUY	925
Bharat Heavy Electricals	Industrials	244	Book profits	343	REDUCE	230
Larsen & Toubro	Industrials	1,305	Book profits	1,188	REDUCE	1,325
Hindalco Industries	Metals	138	Book profits	156	ADD	150
Jindal Steel and Power	Metals	533	Growth holding	601	REDUCE	530
Sterlite Industries	Metals	113	Rerating	182	BUY	150
Tata Steel	Metals	442	Book profits	576	BUY	490
Coal India	Metals & Mining	336	Value holding	396	ADD	380
Cipla	Pharmaceuticals	341	Book profits	294	SELL	330
Sun Pharmaceuticals	Pharmaceuticals	534	Growth holding	624	ADD	625
Infosys	Technology	2,712	Growth holding	3,203	BUY	3,100
TCS	Technology	1,112	Growth holding	1,250	BUY	1,250
Wipro	Technology	410	Growth holding	441	ADD	460
Bharti Airtel	Telecom	357	Book profits	422	ADD	405
NTPC	Utilities	172	Book profits	187	REDUCE	175
Tata Power	Utilities	103	Growth holding	143	BUY	125

Source: Kotak Institutional Equities estimates

WHIZDOM- THE FRAMEWORK EXPLAINED

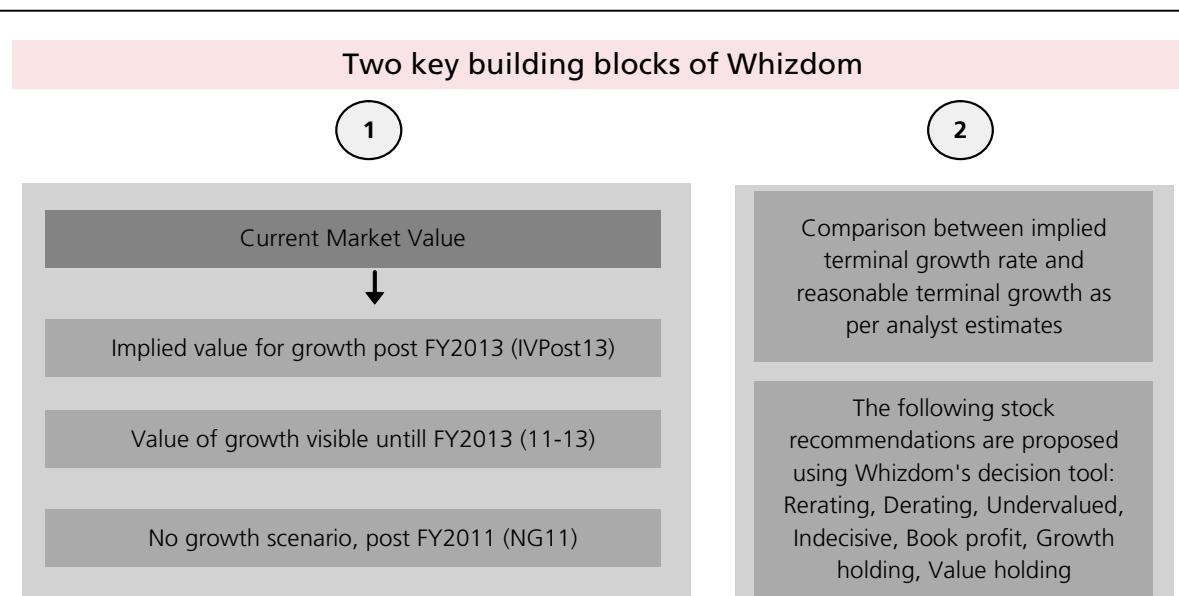
WHIZDOM—THE FRAMEWORK EXPLAINED

Guiding principles

- Whizdom is a decision-support tool which builds primarily on a three-stage DCF valuation model
- It answers two questions regarding the intrinsic value of a company
 - Where does the value of growth reside?
 - Is the implied value of the growth rate in perpetuity reasonable?

Building blocks

- Three key value components: NG11, 11-13, IVP13
- Comparison between implied and reasonable FCF growth rates in perpetuity as defined by our analysts



Source: Kotak Institutional Equities estimates

WHERE DOES VALUE OF GROWTH RESIDE?

Three key value components:

- **NG-11:** Value assuming zero growth rate in perpetuity from FY2011
 - $\{FCF(11)/WACC \text{ less Net Debt}\}/\text{shares outstanding}$
 - Infosys is worth Rs902/share (40% of CMP) based on FY2011 cash flows, assuming zero growth rate in perpetuity
- **11-13:** Value of growth visible in next two years, between FY2011 and FY2013E, NG-13 less NG-11, where
 - NG13 = PV of firm assuming no-growth in perpetuity from FY2013E
 - $[\{FCF(13)/WACC\}/(1+WACC)^2 \text{ less Net Debt}]/\text{shares outstanding}$
 - Value of Rs259/share (10% of CMP) for cash flows in the next two years (FY2011-13E)
- **IVPost13:** Value of growth post-FY2013E period implied by current market price
 - Value which current market price implies for growth beyond FY2013E ($P13 = \text{CMP less NG-11 less 11-13}$)
 - Hence, current market price implies Rs1,552/share (57% of CMP) as value of growth beyond FY2013E

Where does value of the company reside?

Value distribution of growth across time, based on free cash flow analysis

Company Name	Price (Rs/share)	Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
		Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Bajaj Auto	1,550	(0)	3	44	6	49	Value holding
Hero Motocorp	1,824	1	2	68	(17)	49	Book profits
Mahindra & Mahindra	665	(2)	3	38	2	60	Growth holding
Maruti Suzuki	1,193	3	3	51	(13)	63	Growth holding
Tata Motors	234	2	3	(26)	14	112	Growth holding
Hindustan Unilever	382	7	6	30	5	65	Book profits
ITC	201	6	6	24	3	73	Book profits
Jaiprakash Associates	66	7	5	(900)	459	541	Book profits
Oil & Natural Gas Corporat	276	(22)	0	70	92	(62)	Value holding
Reliance Industries	795	(15)	0	29	40	31	Value holding
Bharat Heavy Electricals	244	41	5	33	63	5	Book profits
Larsen & Toubro	1,305	6	5	17	1	82	Book profits
Hindalco Industries	138	(1)	1	(73)	(101)	275	Book profits
Jindal Steel and Power	533	1	1	(68)	33	135	Growth holding
Sterlite Industries	113	(16)	1	(9)	80	29	Rerating
Tata Steel	442	(1)	1	(95)	(21)	216	Book profits
Coal India	336	(1)	5	61	13	26	Value holding
Cipla	341	6	5	10	14	77	Book profits
Sun Pharmaceuticals	534	4	5	18	21	61	Growth holding
Infosys	2,712	4	6	33	10	57	Growth holding
TCS	1,112	5	6	21	12	66	Growth holding
Wipro	410	4	5	22	16	62	Growth holding
Bharti Airtel	357	5	4	(177)	189	88	Book profits
NTPC	172	5	5	(25)	(58)	183	Book profits
Tata Power	103	4	5	(263)	237	126	Growth holding

Source: Kotak Institutional Equities estimates

IS THE IMPLIED VALUE FOR GROWTH IN PERPETUITY REASONABLE?

Whizdom forces recognition of implied growth rate in perpetuity of free cash flow assumed by current market price

- Infosys' current market price implies FCF growth rate in perpetuity of 6% from FY2013E
- The implied growth rate of 4% is well below the reasonable terminal growth rate of 6%

Hyper-growth phase based on analyst estimates of stable terminal-year financials

- Using our KIE Whizdom Dashboard on KINSITE helps understand the sensitivity of fair value to changes in risk premium or implied growth rate in perpetuity
- For example, a 1% increase in risk premium can bring the fair value down from Rs3,204 per share to Rs2,880 per share (down 12%)
- If the growth rate in perpetuity for Infosys is ~1% more than our estimates (of 6%), the upside to the DCF price is ~11%

What growth rate in perpetuity does current market price imply?

Implied growth rate in perpetuity for key stocks

Company Name	Price (Rs/share)	Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
		Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Bajaj Auto	1,550	(0)	3	44	6	49	Value holding
Hero Motocorp	1,824	1	2	68	(17)	49	Book profits
Mahindra & Mahindra	665	(2)	3	38	2	60	Growth holding
Maruti Suzuki	1,193	3	3	51	(13)	63	Growth holding
Tata Motors	234	2	3	(26)	14	112	Growth holding
Hindustan Unilever	382	7	6	30	5	65	Book profits
ITC	201	6	6	24	3	73	Book profits
Jaiprakash Associates	66	7	5	(900)	459	541	Book profits
Oil & Natural Gas Corporat	276	(22)	0	70	92	(62)	Value holding
Reliance Industries	795	(15)	0	29	40	31	Value holding
Bharat Heavy Electricals	244	41	5	33	63	5	Book profits
Larsen & Toubro	1,305	6	5	17	1	82	Book profits
Hindalco Industries	138	(1)	1	(73)	(101)	275	Book profits
Jindal Steel and Power	533	1	1	(68)	33	135	Growth holding
Sterlite Industries	113	(16)	1	(9)	80	29	Re-rating
Tata Steel	442	(1)	1	(95)	(21)	216	Book profits
Coal India	336	(1)	5	61	13	26	Value holding
Cipla	341	6	5	10	14	77	Book profits
Sun Pharmaceuticals	534	4	5	18	21	61	Growth holding
Infosys	2,712	4	6	33	10	57	Growth holding
TCS	1,112	5	6	21	12	66	Growth holding
Wipro	410	4	5	22	16	62	Growth holding
Bharti Airtel	357	5	4	(177)	189	88	Book profits
NTPC	172	5	5	(25)	(58)	183	Book profits
Tata Power	103	4	5	(263)	237	126	Growth holding

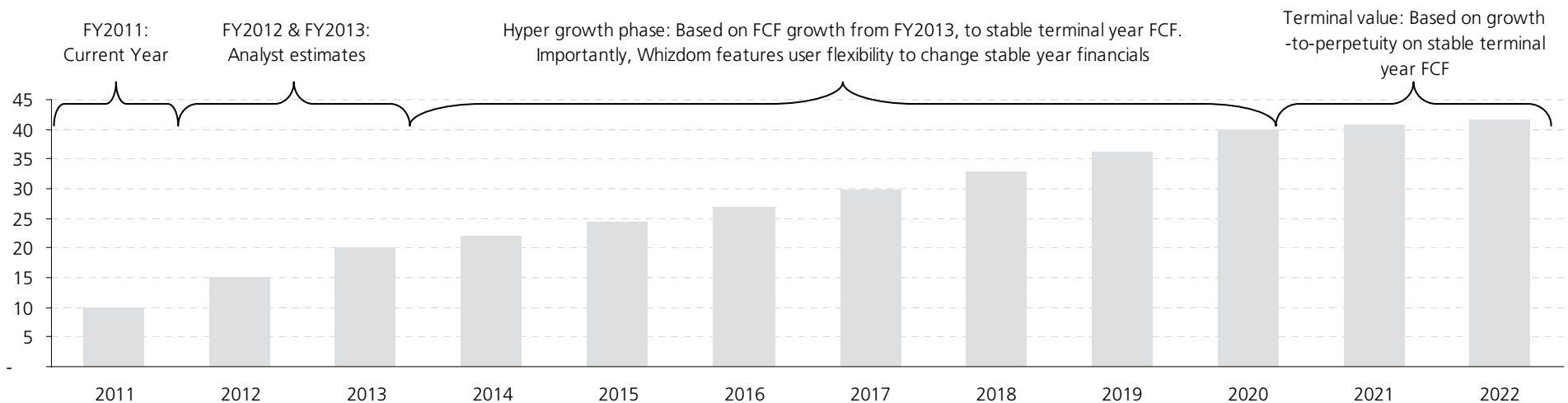
Source: Kotak Institutional Equities estimates

THREE-STAGE DCF FORMULATION

Our DCF methodology

- We employ a three-stage discounted cash flow (DCF) model
 - Stage 1: Analyst estimates for FY2012E and FY2013E, based on their detailed company financial models
 - Stage 2: Hyper-growth phase from FY2013E to stable terminal year
 - Stage 3: Final phase of the model is from the stable terminal year into perpetuity
- Concept of stable terminal-year financials to forecast terminal-year free cash flow
 - We assume linear CAGR in hyper-growth period from FY2013E to terminal year
 - We apply growth rate in perpetuity on the stable terminal-year FCF; we believe it makes the DCF value more reliable

Graphical representation of our DCF methodology



Source: Kotak Institutional Equities estimates

STOCK ACTION USING WHIZDOM'S DECISION TOOL

POTENTIAL VALUE HOLDING CASES

Identifying Value holding stocks: Reliance, ONGC, Coal India

- Implied growth rate in perpetuity is within reasonable limits (usually lower) defined by our analysts
- Significant value captured within horizon period, IVPost13<50%
- No significant value erosion in the next two years, 11-13>0%
- Whizdom clearly distinguishes between Value holding and Growth holding

Whizdom's Value holding cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Bajaj Auto	1,550	1,761	ADD	1,715	(0)	3	44	6	49	Value holding
Coal India	336	396	ADD	380	(1)	5	61	13	26	Value holding
Container Corporation	975	1,261	ADD	1,150	(6)	5	44	16	41	Value holding
Crompton Greaves	134	159	ADD	155	3	5	49	5	46	Value holding
HCL Technologies	429	489	REDUCE	460	2	5	26	31	43	Value holding
Hexaware Technologies	81	86	ADD	100	(3)	4	62	28	10	Value holding
Hindustan Zinc	132	166	ADD	150	(16)	1	57	17	27	Value holding
Jagran Prakashan	95	192	BUY	150	(74)	4	28	29	44	Value holding
Oil & Natural Gas Corporat	276	395	BUY	355	(22)	0	70	92	(62)	Value holding
Oil India	1,202	2,020	BUY	1,720	(43)	2	78	50	(29)	Value holding
Patni Computer Systems	460	464	NR	400	1	3	70	5	26	Value holding
Reliance Industries	795	1,061	BUY	925	(15)	0	29	40	31	Value holding
Sun TV Network	291	446	BUY	400	(346)	5	44	21	36	Value holding

Source: Kotak Institutional Equities estimates

POTENTIAL GROWTH HOLDING CASES

Identifying long-term Growth holding recommendations: Wipro, Infosys, TCS, Sun Pharma, Divis Lab, Maruti

- Implied growth rate in perpetuity is within reasonable limits (usually lower) defined by our analysts
- Significant value of growth lies beyond horizon period, $IV_{Post13} \geq 50\%$
- No significant value erosion in the next two years, $11-13 > -25\%$
- Whizdom distinguishes clearly between Value holding and Growth holding

Whizdom's Growth holding cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Ashok Leyland	27	29	ADD	26	2	3	2	24	74	Growth holding
Bharat Forge	283	333	ADD	315	1	3	24	19	58	Growth holding
Bharat Petroleum	564	779	RS	0	(1)	0	(299)	298	101	Growth holding
Cadila Healthcare	655	806	REDUCE	765	4	5	4	18	78	Growth holding
Carborundum Universal	149	160	REDUCE	155	3	4	32	(9)	77	Growth holding
DB Corp	190	351	BUY	300	(22)	5	27	9	64	Growth holding
Dishman Pharma & chemic	51	52	REDUCE	40	4	4	(158)	59	200	Growth holding
DishTV	61	128	BUY	80	(5)	5	(67)	63	105	Growth holding
Divi's Laboratories	786	979	ADD	935	3	5	23	6	72	Growth holding
GlaxoSmithKline Consumer	2,545	2,595	ADD	2,900	6	6	32	(8)	76	Growth holding
GlaxoSmithkline Pharmace	1,934	1,955	SELL	1,930	5	5	40	(2)	62	Growth holding
Glenmark Pharmaceutical	312	362	BUY	375	3	5	29	(24)	95	Growth holding
GSPL	80	105	REDUCE	93	(4)	0	(30)	75	55	Growth holding
Infosys	2,712	3,203	BUY	3,100	4	6	33	10	57	Growth holding
Jindal Steel and Power	533	601	REDUCE	530	1	1	(68)	33	135	Growth holding
Jubilant Life Sciences	176	199	REDUCE	180	4	4	(49)	28	121	Growth holding
Lupin	472	615	ADD	520	3	5	(7)	17	90	Growth holding
Mahindra & Mahindra	665	758	BUY	840	(2)	3	38	2	60	Growth holding
Marico	149	164	BUY	175	4	5	27	10	64	Growth holding
Maruti Suzuki	1,193	1,190	ADD	1,250	3	3	51	(13)	63	Growth holding

Source: Kotak Institutional Equities estimates

POTENTIAL GROWTH HOLDING CASES (contd.)

Whizdom's Growth holding cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
NHPC	20	27	BUY	29	4	5	(79)	38	142	Growth holding
Ranbaxy Laboratories	451	523	SELL	400	3	5	5	37	59	Growth holding
Shree Cement	2,200	2,162	REDUCE	2,085	3	3	(2)	4	98	Growth holding
Sun Pharmaceuticals	534	624	ADD	625	4	5	18	21	61	Growth holding
Tata Motors	234	245	SELL	225	2	3	(26)	14	112	Growth holding
Tata Power	103	143	BUY	125	4	5	(263)	237	126	Growth holding
TCS	1,112	1,250	BUY	1,250	5	6	21	12	66	Growth holding
Titan Industries	201	225	BUY	210	3	5	12	18	70	Growth holding
Wipro	410	441	ADD	460	4	5	22	16	62	Growth holding

Source: Kotak Institutional Equities estimates

POTENTIAL CASES FOR RERATING

Identifying potential Rerating cases: Sterlite, Maharashtra Seamless

- Implied growth rate in perpetuity is within reasonable limits (usually lower) defined by our analysts
- Low value today, NG-11<25%
- Significant value creation in next two years, 11-13>25% (implies IVP13<50%)

Whizdom's Rerating cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Indian Oil Corporation	281	399	RS	0	(3)	0	(423)	531	(8)	Rerating
Maharashtra Seamless	332	442	BUY	460	0	3	18	57	26	Rerating
Mindtree	427	506	ADD	540	1	3	20	33	47	Rerating
Reliance Infrastructure	515	898	BUY	890	2	5	(745)	939	(94)	Rerating
Sterlite Industries	113	182	BUY	150	(16)	1	(9)	80	29	Rerating
Tech Mahindra	629	666	SELL	600	(4)	4	18	47	35	Rerating

Source: Kotak Institutional Equities estimates

POTENTIAL BOOK PROFIT CASES

Book-profit recommendations: HUL, ITC, Hero Honda, Siemens, Sesa Goa

- Implied growth rate in perpetuity is not reasonable though value erosion is not significant (11-13>-25%)
- Or (a) significant value erosion in next two years (11-13<-25%), (b) significant value post FY2013 (IVPost13>25%), (c) implied growth rate in perpetuity is reasonable
- Or (a) negative value today (NG-11<0), (b) erosion in next two years (11-13<0), (c) implied growth rate in perpetuity is reasonable

Whizdom's Book profit cases

Company Name	Price (Rs/share)	Whizdom's DCF price (Rs/share)	KIE		Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
			Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Aban Offshore	442	672	BUY	635	(7)	0	(63)	(71)	234	Book profits
ABB	805	596	SELL	515	8	5	12	1	88	Book profits
ACC	1,170	1,059	SELL	980	4	3	57	0	43	Book profits
Adani Port and SEZ	138	100	ADD	160	7	(10,000,000)	(45)	87	58	Book profits
Adani Power	79	62	REDUCE	74	8	5	(600)	478	222	Book profits
Ambuja Cements	161	129	SELL	135	6	4	45	7	48	Book profits
Apollo Hospitals	598	659	BUY	650	5	5	(24)	(30)	154	Book profits
Asian Paints	2,988	2,632	SELL	2,500	6	5	19	5	76	Book profits
BGR Energy Systems	226	223	REDUCE	200	12	5	(92)	428	(236)	Book profits
Bharat Heavy Electricals	244	343	REDUCE	230	41	5	33	63	5	Book profits
Bharti Airtel	357	422	ADD	405	5	4	(177)	189	88	Book profits
Biocon	258	422	BUY	380	(15)	5	94	(57)	63	Book profits
Castrol India (a)	475	303	REDUCE	410	7	3	44	(4)	61	Book profits
CESC	250	403	BUY	400	3	5	(88)	(71)	259	Book profits
Cipla	341	294	SELL	330	6	5	10	14	77	Book profits
Colgate-Palmolive (India)	983	920	SELL	900	6	5	22	13	66	Book profits
Dabur India	93	89	REDUCE	105	6	5	(10)	39	71	Book profits
Exide Industries	131	108	SELL	105	6	3	25	(5)	80	Book profits
GAIL (India)	369	467	BUY	485	2	3	3	(35)	132	Book profits
Godrej Consumer Products	435	455	ADD	460	5	4	(35)	75	60	Book profits

Source: Kotak Institutional Equities estimates

POTENTIAL BOOK PROFIT CASES (contd.)

Whizdom's Book profit cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Grasim Industries	2,590	2,630	BUY	2,900	3	4	76	(67)	90	Book profits
Gujarat Pipavav Port	57	44	ADD	63	(42)	(10,000,000)	(88)	101	87	Book profits
Havells India	444	445	ADD	450	5	5	14	22	64	Book profits
Hero Motocorp	1,824	1,657	SELL	1,815	1	2	68	(17)	49	Book profits
Hindalco Industries	138	156	ADD	150	(1)	1	(73)	(101)	275	Book profits
Hindustan Petroleum	284	515	RS	0	3	0	(1,168)	916	352	Book profits
Hindustan Unilever	382	342	REDUCE	420	7	6	30	5	65	Book profits
HT Media	135	213	ADD	160	(113)	2	64	(7)	44	Book profits
IDEA	91	87	ADD	100	6	5	(128)	131	97	Book profits
India Cements	79	70	ADD	90	5	3	(254)	318	36	Book profits
ITC	201	196	ADD	230	6	6	24	3	73	Book profits
IVRCL	46	66	BUY	59	8	5	(252)	102	250	Book profits
Jaiprakash Associates	66	74	BUY	105	7	5	(900)	459	541	Book profits
JSW Energy	55	56	REDUCE	43	6	5	(291)	258	133	Book profits
Jubilant Foodworks	900	728	SELL	750	8	6	14	20	66	Book profits
Lanco Infratech	15	41	BUY	39	6	5	(1,608)	464	1,244	Book profits
Larsen & Toubro	1,305	1,188	REDUCE	1,325	6	5	17	1	82	Book profits
Mahindra Satyam	73	79	REDUCE	80	(17)	4	103	(17)	14	Book profits
Nagarjuna Construction Cc	53	71	BUY	85	9	5	(7,376)	6,021	1,455	Book profits
National Aluminium Co.	56	60	SELL	55	(5)	1	58	(5)	47	Book profits
Nestle India (a)	4,260	3,349	SELL	3,600	8	6	12	1	87	Book profits
NTPC	172	187	REDUCE	175	5	5	(25)	(58)	183	Book profits
Punj Lloyd	50	45	REDUCE	60	7	5	(710)	464	346	Book profits
Reliance Communications	93	62	SELL	60	8	3	(304)	240	164	Book profits
Sadbhav Engineering	127	160	BUY	180	93	5	94	(13)	19	Book profits
Sesa Goa	204	177	REDUCE	190	4	0	(20)	175	(55)	Book profits
Siemens	741	658	SELL	640	7	5	18	14	67	Book profits
Tata Global Beverages	98	109	BUY	110	2	5	136	(96)	60	Book profits
Tata Steel	442	576	BUY	490	(1)	1	(95)	(21)	216	Book profits
Thermax	491	479	REDUCE	440	6	5	61	4	35	Book profits
UltraTech Cement	1,190	1,035	REDUCE	1,220	7	4	(103)	113	90	Book profits
United Phosphorus	144	180	BUY	170	(1)	3	100	(16)	16	Book profits
United Spirits	651	842	BUY	900	7	7	(105)	28	177	Book profits
Voltas	91	95	REDUCE	90	6	5	67	45	(12)	Book profits
Zee Entertainment Enterp	125	159	BUY	160	1	5	67	(36)	69	Book profits

Note: Large negative terminal growth rates for Gujarat Pipavav and Adani Port incorporate zero cash-flows post terminal year in the model.

Source: Kotak Institutional Equities estimates

POTENTIAL DERATING STORIES

Identifying Derating cases: JSW Steel, Reliance Power

- Either
 - Implied growth rate in perpetuity is unreasonable,
 - Negative value today (NG-11<0),
 - Value erosion in next two years (11-13<0)
- Or
 - Implied growth rate in perpetuity is unreasonable,
 - Significant value erosion in next two years (11-13<-25%)

Whizdom's Derating cases

Company Name	Price (Rs/share)	Whizdom's DCF price (Rs/share)	KIE		Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
			Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Bharat Electronics	1,388	1,603	ADD	1,650	19	5	213	(126)	12	Derating
JSW Steel	682	469	REDUCE	610	2	1	(196)	(31)	327	Derating
Mphasis	375	272	SELL	310	7	3	93	(39)	46	Derating
Petronet LNG	161	131	SELL	140	4	3	(43)	(7)	150	Derating
Reliance Power	97	67	SELL	76	7	5	(212)	(16)	328	Derating

Source: Kotak Institutional Equities estimates

INDECISIVE CASES

Indecisive cases: none

- Significant value erosion in next two years (11-13<0%)
- Negligible implied value post FY2013E, IVPost13<25%
- Implied growth rate in perpetuity is within reasonable limits as defined by analysts
- This implies that the market is factoring the decline in near-term free cash but we are still unsure if the stock will perform over the next one year

UNDERVALUED CASES

Undervalued stocks: Polaris Financial Technologies

- Implied growth rate in perpetuity is within reasonable limits as defined by our analysts
- No-growth scenario gives value higher than current market price, NG-11>100%
- No significant value erosion in next two years, 11-13> 0%

Whizdom's Undervalued cases

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Polaris Financial Technolog	139	188	REDUCE	145	(65)	3	107	17	(23)	Undervalued

Source: Kotak Institutional Equities estimates

WHIZDOM—WHERE OUR ANALYSTS DIFFER?

Whizdom's recommendations differ from analyst ratings, primarily due to:

- Analyst concerns about short-term negative factors, expecting them to impact stock performance, thereby going below longer-term fair value
- Analyst expectations that near-term momentum will continue, overshooting longer-term fair value
- Large uncertainties in longer-term estimates

Stocks where our analyst recommendations differ from our Whizdom framework

Company Name	Price (Rs/share)	Whizdom's DCF price (Rs/share)	KIE		Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
			Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Bharat Electronics	1,388	1,603	ADD	1,650	19	5	213	(126)	12	Derating
Bharat Petroleum	564	779	RS	0	(1)	0	(299)	298	101	Growth holding
Cadila Healthcare	655	806	REDUCE	765	4	5	4	18	78	Growth holding
Carborundum Universal	149	160	REDUCE	155	3	4	32	(9)	77	Growth holding
Dishman Pharma & chemic	51	52	REDUCE	40	4	4	(158)	59	200	Growth holding
GlaxoSmithkline Pharmace	1,934	1,955	SELL	1,930	5	5	40	(2)	62	Growth holding
GSPL	80	105	REDUCE	93	(4)	0	(30)	75	55	Growth holding
HCL Technologies	429	489	REDUCE	460	2	5	26	31	43	Value holding
Indian Oil Corporation	281	399	RS	0	(3)	0	(423)	531	(8)	Rerating
Jindal Steel and Power	533	601	REDUCE	530	1	1	(68)	33	135	Growth holding
Jubilant Life Sciences	176	199	REDUCE	180	4	4	(49)	28	121	Growth holding
Patni Computer Systems	460	464	NR	400	1	3	70	5	26	Value holding
Ranbaxy Laboratories	451	523	SELL	400	3	5	5	37	59	Growth holding
Shree Cement	2,200	2,162	REDUCE	2,085	3	3	(2)	4	98	Growth holding
Tata Chemicals	334	369	REDUCE	365	(1)	1	30	32	38	Value holding
Tata Motors	234	245	SELL	225	2	3	(26)	14	112	Growth holding

Source: Kotak Institutional Equities estimates

WHIZDOM'S BENEFITS AND LIMITATIONS

WHAT MAKES WHIZDOM POWERFUL

Fundamental

Whizdom builds primarily on the intrinsic DCF valuation model providing powerful insights into share pricing

User-friendly

Whizdom is parameterized and has powerful features to conduct complex sensitivity analysis

Universal

Whizdom can be used for evaluating stocks across sectors; this widens the utility of the framework

Prioritizes

Determines a pecking order for similar recommendations within and across sectors

Dynamic

Processes real-time share prices and changes in free cash models of our analysts

Automated

Decision rules are programmed to signal unbiased stock action automatically

Alerts analysts

Whizdom provides indicative DCF values and recommendations on a regular basis for analyst review

WHIZDOM HAS LIMITATIONS

Sensitive to assumptions

- Whizdom builds on the estimates of our analysts, in particular their FCF models; these may differ from market expectations
- We model linear changes in hyper-growth phase, from FY2012E to stable terminal year. A sharp change either early or late in the phase will likely imply a different value due to time value of money
- Our adjusted beta could differ from the future beta of the stock; this impacts recommendations

Only a guide

- Several other factors influence stock prices, which may not be captured by Whizdom
- We advocate the use of Whizdom in conjunction with other fundamental and technical tools to confirm its findings

Whizdom's powerful sensitivity modules help overcome some but not all of these limitations

STOCK ACTION SUMMARY

COMPREHENSIVE STOCK ACTION SUMMARY

Key results from our Whizdom framework

Company Name	Price (Rs/share)	Whizdom's DCF price (Rs/share)	KIE		Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
			Rating	TP	Implied	Reasonable G	NG-11 (a)	FY11-FY13	PostFY13	
Aban Offshore	442	672	BUY	635	(7)	0	(63)	(71)	234	Book profits
ABB	805	596	SELL	515	8	5	12	1	88	Book profits
ACC	1,170	1,059	SELL	980	4	3	57	0	43	Book profits
Adani Power	79	62	REDUCE	74	8	5	(600)	478	222	Book profits
Ambuja Cements	161	129	SELL	135	6	4	45	7	48	Book profits
Apollo Hospitals	598	659	BUY	650	5	5	(24)	(30)	154	Book profits
Ashok Leyland	27	29	ADD	26	2	3	2	24	74	Growth holding
Asian Paints	2,988	2,632	SELL	2,500	6	5	19	5	76	Book profits
Bajaj Auto	1,550	1,761	ADD	1,715	(0)	3	44	6	49	Value holding
BGR Energy Systems	226	223	REDUCE	200	12	5	(92)	428	(236)	Book profits
Bharat Electronics	1,388	1,603	ADD	1,650	19	5	213	(126)	12	Derating
Bharat Forge	283	333	ADD	315	1	3	24	19	58	Growth holding
Bharat Heavy Electricals	244	343	REDUCE	230	41	5	33	63	5	Book profits
Bharat Petroleum	564	779	RS	0	(1)	0	(299)	298	101	Growth holding
Bharti Airtel	357	422	ADD	405	5	4	(177)	189	88	Book profits
Biocon	258	422	BUY	380	(15)	5	94	(57)	63	Book profits
Cadila Healthcare	655	806	REDUCE	765	4	5	4	18	78	Growth holding
Carborundum Universal	149	160	REDUCE	155	3	4	32	(9)	77	Growth holding
Castrol India (a)	475	303	REDUCE	410	7	3	44	(4)	61	Book profits
CESC	250	403	BUY	400	3	5	(88)	(71)	259	Book profits
Cipla	341	294	SELL	330	6	5	10	14	77	Book profits
Coal India	336	396	ADD	380	(1)	5	61	13	26	Value holding
Colgate-Palmolive (India)	983	920	SELL	900	6	5	22	13	66	Book profits
Container Corporation	975	1,261	ADD	1,150	(6)	5	44	16	41	Value holding
Crompton Greaves	134	159	ADD	155	3	5	49	5	46	Value holding
Dabur India	93	89	REDUCE	105	6	5	(10)	39	71	Book profits
DB Corp	190	351	BUY	300	(22)	5	27	9	64	Growth holding
Dishman Pharma & chemic	51	52	REDUCE	40	4	4	(158)	59	200	Growth holding
DishTV	61	128	BUY	80	(5)	5	(67)	63	105	Growth holding
Divi's Laboratories	786	979	ADD	935	3	5	23	6	72	Growth holding
Exide Industries	131	108	SELL	105	6	3	25	(5)	80	Book profits
GAIL (India)	369	467	BUY	485	2	3	3	(35)	132	Book profits
GlaxoSmithKline Consumer	2,545	2,595	ADD	2,900	6	6	32	(8)	76	Growth holding
GlaxoSmithKline Pharmace	1,934	1,955	SELL	1,930	5	5	40	(2)	62	Growth holding
Glenmark Pharmaceuticals	312	362	BUY	375	3	5	29	(24)	95	Growth holding
Godrej Consumer Products	435	455	ADD	460	5	4	(35)	75	60	Book profits
Grasim Industries	2,590	2,630	BUY	2,900	3	4	76	(67)	90	Book profits
GSPL	80	105	REDUCE	93	(4)	0	(30)	75	55	Growth holding
Gujarat Pipavav Port	57	44	ADD	63	(42)	(10,000,000)	(88)	101	87	Book profits
Havells India	444	445	ADD	450	5	5	14	22	64	Book profits

Source: Kotak Institutional Equities estimates

COMPREHENSIVE STOCK ACTION SUMMARY (contd.)

Key results from our Whizdom framework

Company Name	Price (Rs/share)	Whizdom's DCF price (Rs/share)	KIE		Growth rate in perpetuity (%)		Proportion of CMP (%)			Recommendation
			Rating	TP	Implied	Reasonable G	NG-11 (a)	FY11-FY13	PostFY13	
HCL Technologies	429	489	REDUCE	460	2	5	26	31	43	Value holding
Hero Motocorp	1,824	1,657	SELL	1,815	1	2	68	(17)	49	Book profits
Hexaware Technologies	81	86	ADD	100	(3)	4	62	28	10	Value holding
Hindalco Industries	138	156	ADD	150	(1)	1	(73)	(101)	275	Book profits
Hindustan Petroleum	284	515	RS	0	3	0	(1,168)	916	352	Book profits
Hindustan Unilever	382	342	REDUCE	420	7	6	30	5	65	Book profits
Hindustan Zinc	132	166	ADD	150	(16)	1	57	17	27	Value holding
HT Media	135	213	ADD	160	(113)	2	64	(7)	44	Book profits
IDEA	91	87	ADD	100	6	5	(128)	131	97	Book profits
India Cements	79	70	ADD	90	5	3	(254)	318	36	Book profits
Indian Oil Corporation	281	399	RS	0	(3)	0	(423)	531	(8)	Rerating
Infosys	2,712	3,203	BUY	3,100	4	6	33	10	57	Growth holding
ITC	201	196	ADD	230	6	6	24	3	73	Book profits
IVRCL	46	66	BUY	59	8	5	(252)	102	250	Book profits
Jagran Prakashan	95	192	BUY	150	(74)	4	28	29	44	Value holding
Jaiprakash Associates	66	74	BUY	105	7	5	(900)	459	541	Book profits
Jindal Steel and Power	533	601	REDUCE	530	1	1	(68)	33	135	Growth holding
JSW Energy	55	56	REDUCE	43	6	5	(291)	258	133	Book profits
JSW Steel	682	469	REDUCE	610	2	1	(196)	(31)	327	Derating
Jubilant Foodworks	900	728	SELL	750	8	6	14	20	66	Book profits
Jubilant Life Sciences	176	199	REDUCE	180	4	4	(49)	28	121	Growth holding
Lanco Infratech	15	41	BUY	39	6	5	(1,608)	464	1,244	Book profits
Larsen & Toubro	1,305	1,188	REDUCE	1,325	6	5	17	1	82	Book profits
Lupin	472	615	ADD	520	3	5	(7)	17	90	Growth holding
Maharashtra Seamless	332	442	BUY	460	0	3	18	57	26	Rerating
Mahindra & Mahindra	665	758	BUY	840	(2)	3	38	2	60	Growth holding
Mahindra Satyam	73	79	REDUCE	80	(17)	4	103	(17)	14	Book profits
Marico	149	164	BUY	175	4	5	27	10	64	Growth holding
Maruti Suzuki	1,193	1,190	ADD	1,250	3	3	51	(13)	63	Growth holding
Mindtree	427	506	ADD	540	1	3	20	33	47	Rerating
Mphasis	375	272	SELL	310	7	3	93	(39)	46	Derating
Mundra Port and SEZ										
Nagarjuna Construction Cc	53	71	BUY	85	9	5	(7,376)	6,021	1,455	Book profits
National Aluminium Co.	56	60	SELL	55	(5)	1	58	(5)	47	Book profits
Nestle India (a)	4,260	3,349	SELL	3,600	8	6	12	1	87	Book profits
NHPC	20	27	BUY	29	4	5	(79)	38	142	Growth holding
NTPC	172	187	REDUCE	175	5	5	(25)	(58)	183	Book profits
Oil & Natural Gas Corporat	276	395	BUY	355	(22)	0	70	92	(62)	Value holding
Oil India	1,202	2,020	BUY	1,720	(43)	2	78	50	(29)	Value holding
Patni Computer Systems	460	464	NR	400	1	3	70	5	26	Value holding

Source: Kotak Institutional Equities estimates

COMPREHENSIVE STOCK ACTION SUMMARY (contd.)

Key results from our Whizdom framework

Company Name	Price	Whizdom's	KIE		Growth rate		Proportion of CMP (%)			Recommendation
	(Rs/share)	DCF price (Rs/share)	Rating	TP	Implied	Reasonable	NG-11 (a)	FY11-FY13	PostFY13	
Petronet LNG	161	131	SELL	140	4	3	(43)	(7)	150	Derating
Polaris Financial Technolog	139	188	REDUCE	145	(65)	3	107	17	(23)	Undervalued
Punj Lloyd	50	45	REDUCE	60	7	5	(710)	464	346	Book profits
Ranbaxy Laboratories	451	523	SELL	400	3	5	5	37	59	Growth holding
Reliance Communications	93	62	SELL	60	8	3	(304)	240	164	Book profits
Reliance Industries	795	1,061	BUY	925	(15)	0	29	40	31	Value holding
Reliance Infrastructure	515	898	BUY	890	2	5	(745)	939	(94)	Re-rating
Reliance Power	97	67	SELL	76	7	5	(212)	(16)	328	Derating
Sadbhav Engineering	127	160	BUY	180	93	5	94	(13)	19	Book profits
Sesa Goa	204	177	REDUCE	190	4	0	(20)	175	(55)	Book profits
Shree Cement	2,200	2,162	REDUCE	2,085	3	3	(2)	4	98	Growth holding
Siemens	741	658	SELL	640	7	5	18	14	67	Book profits
Sterlite Industries	113	182	BUY	150	(16)	1	(9)	80	29	Re-rating
Sun Pharmaceuticals	534	624	ADD	625	4	5	18	21	61	Growth holding
Sun TV Network	291	446	BUY	400	(346)	5	44	21	36	Value holding
Tata Chemicals	334	369	REDUCE	365	(1)	1	30	32	38	Value holding
Tata Global Beverages	98	109	BUY	110	2	5	136	(96)	60	Book profits
Tata Motors	234	245	SELL	225	2	3	(26)	14	112	Growth holding
Tata Power	103	143	BUY	125	4	5	(263)	237	126	Growth holding
Tata Steel	442	576	BUY	490	(1)	1	(95)	(21)	216	Book profits
TCS	1,112	1,250	BUY	1,250	5	6	21	12	66	Growth holding
Tech Mahindra	629	666	SELL	600	(4)	4	18	47	35	Re-rating
Thermax	491	479	REDUCE	440	6	5	61	4	35	Book profits
Titan Industries	201	225	BUY	210	3	5	12	18	70	Growth holding
UltraTech Cement	1,190	1,035	REDUCE	1,220	7	4	(103)	113	90	Book profits
United Phosphorus	144	180	BUY	170	(1)	3	100	(16)	16	Book profits
United Spirits	651	842	BUY	900	7	7	(105)	28	177	Book profits
Voltas	91	95	REDUCE	90	6	5	67	45	(12)	Book profits
Wipro	410	441	ADD	460	4	5	22	16	62	Growth holding
Zee Entertainment Enterp	125	159	BUY	160	1	5	67	(36)	69	Book profits

Source: Kotak Institutional Equities estimates

APPENDIX

THE MATHEMATICS BEHIND WHIZDOM

The building blocks

NG-11 = Value assuming zero growth rate in perpetuity from FY2011; $\{\text{FCF}(11)/\text{WACC} \text{ less Net Debt}\}/\text{shares o/s}$

11-13 = Value of growth visible in next two years, between FY2011 and FY2013E, NG-13 less NG-11, where

NG13 = PV of firm assuming no-growth in perpetuity from FY2013E;

$[\{\text{FCF}(13)/\text{WACC}\}/(1+\text{WACC})^2 \text{ less Net Debt}]/\text{shares o/s}$

IVPost13 = Value which current market price implies for growth beyond FY2013E (P13 = CMP less NG-11 less 11-13)

CMP stands for current market price

Implied growth rate in perpetuity, derived through reverse DCF

G-13 = $\{\text{WACC} \text{ less } (\text{FCF}(13)/\text{Terminal EV})\}/\{1+(\text{FCF}(13)/\text{Terminal EV})\}$, where

Terminal EV = Current EV less FCF(11) less PV of FCF(12) less PV of FCF(13)

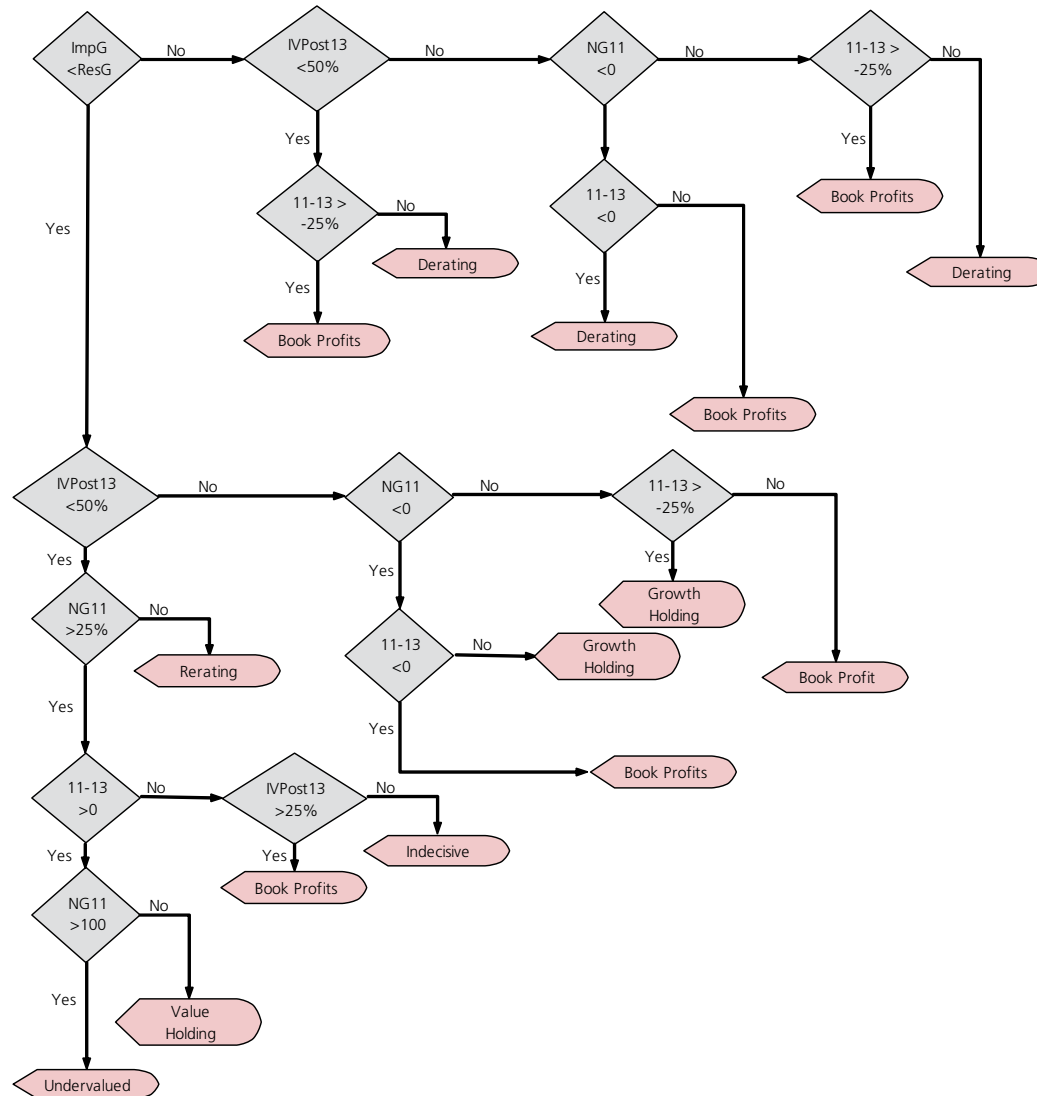
Post hyper-growth phase = Same formula as in G-13 with

Terminal EV = Current EV less FCF(11) less PV of FCF(12) less PV of FCF(13) less PV of hyper-growth phase value

Key assumptions

- We have used normalized (adjusted) beta for each stock and book value of debt and equity while computing WACC
 - Normalized (adjusted) beta = $(0.33 \times \text{preceding 2-yr beta} + 0.67 \times 1)$
- We use normalized FCF(11) for computing NG-11 to adjust for volatile FCF where
 - Normalized FCF(11) = $(\text{FCF}(10)+\text{FCF}(11))/2$
- Most of the stocks in the universe have used a default risk-free rate of 7.5% and equity risk premium of 5.0%

WHIZDOM—THE DECISION TREE

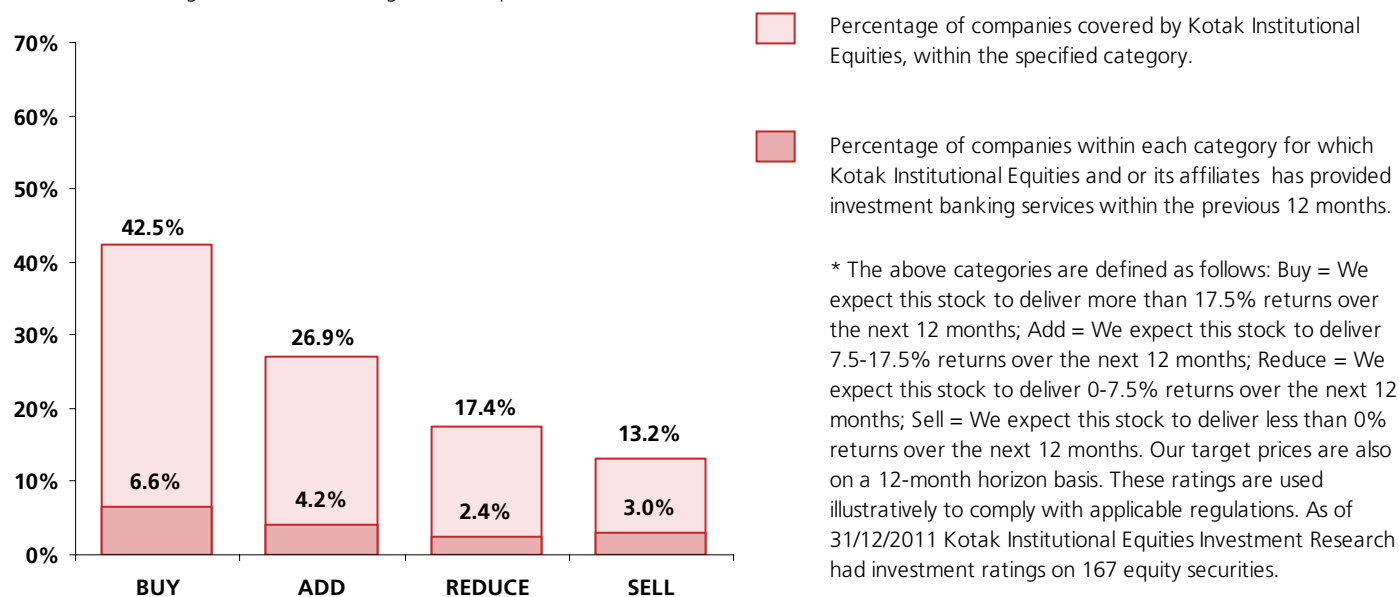


DISCLOSURES

"I, Saifullah Rais, hereby certify that all of the views expressed in this presentation 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 presentation".

Kotak Institutional Equities Research coverage universe

Distribution of ratings/investment banking relationships



Source: Kotak Institutional Equities

As of December 31, 2011

RATINGS AND OTHER DEFINITIONS/IDENTIFIERS

Definitions of ratings

BUY: We expect this stock to outperform the BSE Sensex by 17.5% over the next 12 months.

ADD: We expect this stock to outperform the BSE Sensex by 7.5-17.5% over the next 12 months.

REDUCE: We expect this stock to underperform the BSE Sensex by 0-7.5% over the next 12 months.

SELL: We expect this stock to underperform the BSE Sensex by more than 0% over the next 12 months.

Our target prices are also on a 12-month horizon basis.

Other definitions

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).

Other ratings/identifiers

NR = Not Rated. The investment rating and target price, if any, have been suspended temporarily. Such suspension is in compliance with applicable regulation(s) and/or Kotak Securities policies in circumstances when Kotak Securities or its affiliates is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances.

CS = Coverage Suspended. Kotak Securities has suspended coverage of this company.

NC = Not Covered. Kotak Securities does not cover this company.

RS = Rating Suspended. Kotak Securities Research has suspended the investment rating and price target, if any, for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon.

NA = Not Available or Not Applicable. The information is not available for display or is not applicable.

NM = Not Meaningful. The information is not meaningful and is therefore excluded.

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