

Company In-Depth

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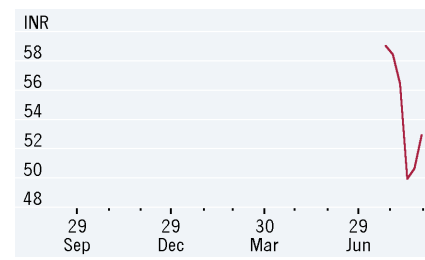
Spice Communications (SPCM.BO)

Initiate at Buy: M&A Prospects Add Flavor to Wireless Growth

- Target Rs70** — Spice's leverage to Indian wireless has, to a large extent, been restored. Moreover, we believe its suitability as an M&A target provides icing on the cake. Ramping up coverage in Punjab and on its weaker Karnataka circle should yield robust EBITDA growth (~45% CAGR over CY06-09E). We rate the stock a Buy (1M) with a target of Rs70 based on a 15% M&A premium to DCF.
- Coverage increase key** — Presence in fast growing markets – Punjab (33% penetration) and Karnataka (22%) – offers potential, especially as Spice moves to augment its market share in the latter (~9%). The recent pick-up in share of net adds in Karnataka bodes well. Reducing capital constraints will help further.
- Tower outsourcing depresses margins, factoring moderate improvement** — About 50% of Spice's cell sites are on independent towers (70% of CY07 BTS adds). Sliding scale pricing, coupled with single tenancy on 80% of the external towers depresses reported EBITDA margin (21.5% in CY07E) by 6%. Increasing tenancy and scale benefits should lead to margin gain of 600bps in CY06-09E.
- Visible upside possibilities** — Access to 900 MHz and its small footprint make it an attractive and probably the only M&A candidate, in our view. New spectrum rules may dilute M&A prospects a bit, but on the flip side provides a chance to enter new circles, though constrained by size and management bandwidth.
- Risks** — Lower than expected tenancy on third-party towers and lower operating leverage in current circles pose risks. Involvement of an intermediate affiliate company for capex lacks adequate clarity and carries transfer pricing risks.

Buy/Medium Risk	1M
Price (06 Sep 07)	Rs54.50
Target price	Rs70.00
Expected share price return	28.4%
Expected dividend yield	0.0%
Expected total return	28.4%
Market Cap	Rs37,601M
	US\$921M

Price Performance (RIC: SPCM.BO, BB: SPCM IN)



See Appendix A-1 for Analyst Certification and important disclosures.

Figure 1. Statistical Abstract

	Revenue (Rs. m)	EBITDA (Rs m)	Net Profit (Rs m)	FD EPS (Rs)	P/E (x)	EV/EBITDA (x)
Jul04-Jun05	6,066	1,665	74	0.13	na	27.9
Jul05-Dec06	10,466	2,353	(1,105)	(2.0)	na	30.2
CY07E	10,442	2,245	(88)	(0.13)	na	20.7
CY08E	14,778	3,668	669	0.97	56.4	12.4
CY09E	18,256	5,051	1,518	2.20	24.9	9.4

Source: Company and Citigroup Investment Research estimates

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Fiscal year end 31-Dec	Jul04-Jun05	Jul05-Dec06	2007E	2008E	2009E
Valuation Ratios					
P/E adjusted (x)	nm	nm	nm	55.8	24.6
EV/EBITDA adjusted (x)	27.6	29.9	20.6	12.3	9.3
P/BV (x)	nm	nm	7.6	6.7	5.3
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0
Per Share Data (Rs)					
EPS adjusted	0.13	-2.00	-0.13	0.97	2.20
EPS reported	0.13	-2.00	-0.13	0.97	2.20
BVPS	-0.40	-4.04	7.12	8.09	10.29
DPS	0.00	0.00	0.00	0.00	0.00
Profit & Loss (RsM)					
Net sales	6,066	10,466	10,442	14,778	18,256
Operating expenses	-5,640	-10,281	-10,026	-13,375	-15,861
EBIT	426	185	417	1,403	2,395
Net interest expense	-350	-1,231	-500	-729	-872
Non-operating/exceptionals	0	-41	0	0	0
Pre-tax profit	76	-1,087	-83	674	1,523
Tax	-2	-18	-5	-5	-5
Extraord./Min.Int./Pref.div.	0	0	0	0	0
Reported net income	74	-1,105	-88	669	1,518
Adjusted earnings	74	-1,105	-88	669	1,518
Adjusted EBITDA	1,665	2,353	2,245	3,668	5,051
Growth Rates (%)					
Sales	13.1	15.0	49.7	41.5	23.5
EBIT adjusted	58.2	-71.0	237.7	236.8	70.7
EBITDA adjusted	10.7	-5.8	43.1	63.4	37.7
EPS adjusted	-132.8	-1,097.4	-90.3	857.2	126.8
Cash Flow (RsM)					
Operating cash flow	1,468	2,108	2,760	4,075	4,990
Depreciation/amortization	1,239	2,168	1,829	2,265	2,656
Net working capital	358	-316	292	269	-4
Investing cash flow	-1,195	-3,345	-4,381	-5,820	-5,211
Capital expenditure	-1,243	-3,416	-4,381	-5,820	-5,211
Acquisitions/disposals	0	7	0	0	0
Financing cash flow	-248	411	3,822	271	128
Borrowings	56	1,105	-2,000	1,000	1,000
Dividends paid	0	0	0	0	0
Change in cash	26	-826	2,201	-1,474	-93
Balance Sheet (RsM)					
Total assets	12,468	13,380	18,139	20,438	23,146
Cash & cash equivalent	2,099	1,273	3,246	1,629	1,588
Accounts receivable	598	545	676	836	909
Net fixed assets	9,001	10,377	12,929	16,484	19,039
Total liabilities	12,468	13,380	13,229	14,859	16,048
Accounts payable	1,925	2,625	0	0	0
Total Debt	10,762	12,079	10,079	11,079	12,079
Shareholders' funds	-219	-1,324	4,910	5,579	7,097
Profitability/Solvency Ratios (%)					
EBITDA margin adjusted	27.4	22.5	21.5	24.8	27.7
ROE adjusted	-28.9	36.1	-4.9	12.8	24.0
ROIC adjusted	5.0	1.0	4.0	10.7	14.9
Net debt to equity	na	na	139.2	169.4	147.8
Total debt to capital	102.1	112.3	67.2	66.5	63.0

For further data queries on Citigroup's full coverage universe please contact CIR Data Services Asia Pacific at CitiResearchDataServices@citigroup.com or +852-2501-2791



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Valuation

TP at Rs70/sh, core business valued at Rs61/sh

We set our 12-month price target for Spice Communications at Rs70 per share giving an expected total return of almost 30%. Our price target is based upon a DCF value of Rs61 plus a 15% M&A premium. We believe DCF is an appropriate method due to the back-ended nature of free cash flows, especially in the context of coverage ramp-up, especially in Karnataka. While new circle roll outs are possible if new spectrum norms are accepted by the Department of Telecom (DoT) (as and when the Defence Department releases spectrum), Spice will remain constrained by its balance sheet size as well as management bandwidth. We do not factor any new rollouts in our long-term DCF model.

We use a WACC of 11.0% at a target debt to total capital of 50.0%, along with long-term terminal growth rate of 4.0% (similar to Bharti). Our DCF is based on explicit forecasts of CY07-16E with a terminal year EBITDA margin at 35.0% (~10% below Bharti and 6% below Idea) and capex/sales of ~8% (in line with Bharti). The Rs61/share value ex-M&A premium represents a CY08E EV/EBITDA of 14.0x and P/CEPS of 14.3x.

Figure 2. DCF valuation

	Dec-07E	Dec-08 E	Dec-09 E	Dec-10 E	Dec-11 E	Dec-12 E	Dec-13 E	Dec-14 E	Dec-15 E	Dec-16 E
Oper. EBIT	417	1,403	2,395	3,110	3,598	3,996	4,348	4,683	4,951	5,306
(Less) Taxes	(5)	(5)	(5)	(5)	(88)	(357)	(845)	(1,133)	(1,518)	(2,120)
Net int. income/(exp)	(500)	(729)	(872)	(820)	(681)	(429)	(121)	243	672	1,119
Marginal Tax Rate	0	0	0	0	0	0	0	0	0	0
Tax shield adjustments	(168)	(245)	(293)	(275)	(229)	(144)	(41)	82	226	376
NOPAT	244	1,153	2,097	2,830	3,282	3,495	3,462	3,632	3,658	3,562
(Add) Depreciation	1,829	2,265	2,656	2,977	3,225	3,431	3,648	3,824	3,974	4,122
(Add) Amortisation	-	-	-	-	-	-	-	-	-	-
(Less) Capex	(4,381)	(5,820)	(5,211)	(4,273)	(3,307)	(2,754)	(2,885)	(2,350)	(1,996)	(1,975)
(Less) Investments	-	-	-	-	-	-	-	-	-	-
(Less) Working Capital	292	269	(4)	25	63	138	136	135	48	(72)
Other adjustments	-	-	-	-	-	-	-	-	-	-
Free Cash Flows	(2,017)	(2,133)	(462)	1,559	3,264	4,309	4,360	5,241	5,684	5,636
Terminal growth rate	4.0%									
WACC	11.0%									
Firm Value	51,696									
Net debt/(cash)	9,451									
Equity Value	42,246									
Equity Value per share	61									

Note: The DCF value is 12-mnth forward

Source: Citigroup Investment Research estimates

Figure 3. WACC Estimation

Risk-free rate (%) - (Rf)	8.0%
Equity risk premium (%) (Rp)	8.0%
Subjective Premium	0.00%
Beta (B)	1.0
Cost of equity	16.0%
Cost of debt	9.0%
Marginal tax rate (%)	34.0%
Target Debt to total capital (%)	50.0%
Long Run Nominal Growth rate (g) (%)	4.0%
WACC	11.0%

Source: Citigroup Investment Research estimates

Figure 4. Valuation Sensitivities

WACC/g	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%
9.5%	71	75	81	88	96	105	118
10.0%	64	68	73	78	85	92	102
10.5%	58	62	66	70	75	82	89
11.0%	53	56	60	61	68	73	79
11.5%	49	52	54	58	61	65	70
12.0%	45	47	50	52	56	59	63
12.5%	42	43	46	48	51	54	57

Source: Citigroup Investment Research

Higher growth justifies higher multiple

On an adjusted basis, Spice's FY09E EV/EBITDA is at a 13% premium to Bharti's. We believe this is justified given higher EBITDA growth rates for Spice over the next three years as the benefit from scale-up (especially in Karnataka) comes through.

Spice has the highest EBITDA CAGR over the next three years in our India telecom universe

Figure 5. Higher Multiple Compared to Bharti Justified Given Higher EBITDA Growth Over Next 3 Years

Rs m	CY06	CY07E	CY08E	CY09E	3-yr CAGR
Spice	1,650 ¹	2,245	3,668	5,051	45.2%
Idea ²	14,637	23,301	32,153	39,126	38.8%
Bharti ²	74,125	114,076	152,001	181,055	34.7%
RCOM ²	57,212	84,700	109,671	128,586	31.0%

² CY2007E refers to FY2008ESource: Citigroup Investment Research, ¹ CIR estimate**15% M&A premium incorporated**

Our target price includes a 15% M&A premium. Media reports (*The Economic Times*) before Spice's listing suggested a potential Idea-Spice merger. Although Spice eventually went ahead with the IPO, we believe that scope for merger/acquisition between Spice and other telcos such as Idea, RCOM and Aircel, still exists given:

Benefits for Spice/TM

- Spice would remain a marginal player even if new spectrum norms are accepted by the DoT making entry into new circles easier for the company. Lack of balance sheet size as well as management bandwidth would constrain Spice's ambitions beyond an additional 1-2 circles.
- Telekom Malaysia (TM) may be happier with a smaller stake in a bigger footprint (Spice + acquirer) than staying with its present 38% stake in the much smaller Spice.

Benefits for acquirer

- Spice's spectrum in the 900MHz spectrum would be a big attraction for any operator given its greater spectral efficiency as compared to 1,800MHz
- Though its market share in Karnataka is disappointing (despite incumbency), there is an opportunity to turn that around with adequate funding support and distribution machinery of a potentially larger entity. Besides, TRAI's new M&A rules of market share cap of 40% and no cap on spectrum are likely to aid an acquisition decision.
- An argument can be made for M&A prospects receding if the new spectrum rules of TRAI are accepted and implemented, as it will enable potential acquirers to get spectrum and rollout greenfield networks. In such a case, we believe the premium to DCF can also be justified by the organic growth prospects, which the new rules would offer Spice.

Figure 6. Peer Valuation Comparison (At target prices)

	EV/EBITDA (x)		PER (x)		P/CEPS (x)		EBITDA CAGR (FY07-010E)	EPS CAGR (FY07-010E)
	FY2008E	FY2009E	FY2008E	FY2009E	FY2008E	FY2009E		
Bharti	15.4x	11.5x	26.5x	20.5x	17.2x	13.1x	34.7%	32.4%
Idea	16.2x	12.2x	40.3x	31.7x	17.4x	13.0x	38.8%	36.7%
RCOM	12.9x	9.8x	23.1x	18.0x	13.2x	10.4x	31.0%	29.6%
Spice	21.8x	14.0x	nm	62.9x	24.2x	14.3x	45.2%	nm
Spice % prem/(disc) to Bharti	42%	22%	nm	nm	41%	9%		

Note: For Spice, the valuations correspond to CY2007 and CY2008

Source: Citigroup Investment Research estimates

Figure 7. Peer Valuation Comparison (At current prices)

	EV/EBITDA(x)		PER (x)		P/CEPS (x)		EBITDA CAGR (FY07-010E)	EPS CAGR (FY07-010E)
	FY2008E	FY2009E	FY2008E	FY2009E	FY2008E	FY2009E		
Bharti	14.9x	11.1x	25.6x	19.8x	16.6x	12.7x	34.7%	32.4%
Idea	15.5x	11.7x	38.6x	30.3x	16.7x	12.5x	38.8%	36.7%
RCOM	13.5x	10.3x	24.1x	18.8x	13.8x	10.9x	31.0%	29.6%
Spice	19.7x	12.8x	nm	55.8x	21.4x	12.7x	45.2%	nm
Spice % prem/(disc) to Bharti	32%	14%	nm	nm	29%	0%		

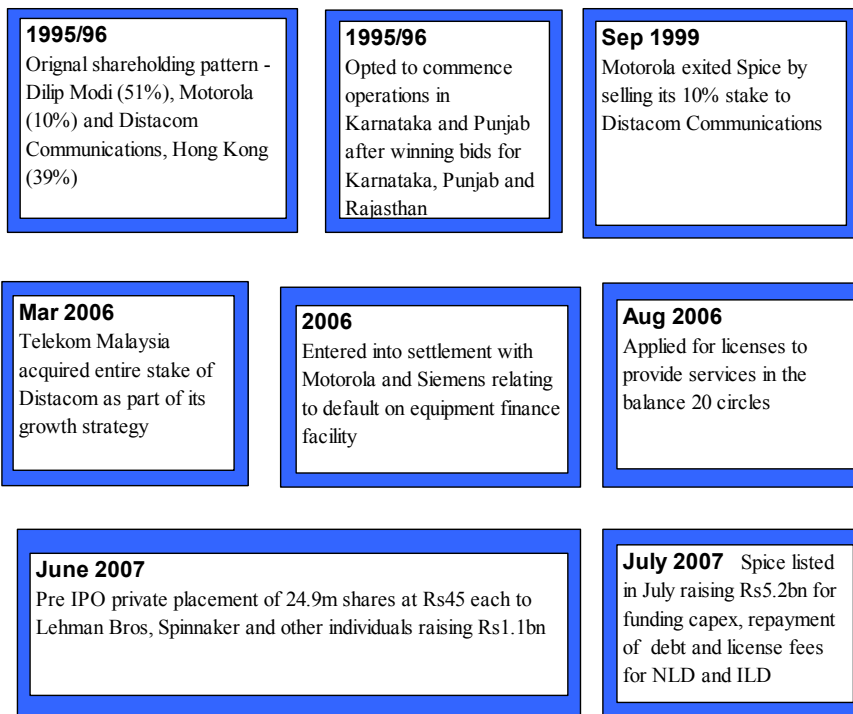
Source: Citigroup Investment Research estimates

Spice – Playing Catch Up

Evolution of Spice

Spice Communications, originally promoted by Dilip Modi, has undergone significant restructuring in its shareholding structure since it commenced operations in 1996.

Figure 8. Flashback



Source: Company and Citigroup Investment Research

Current operations present a study in contrast

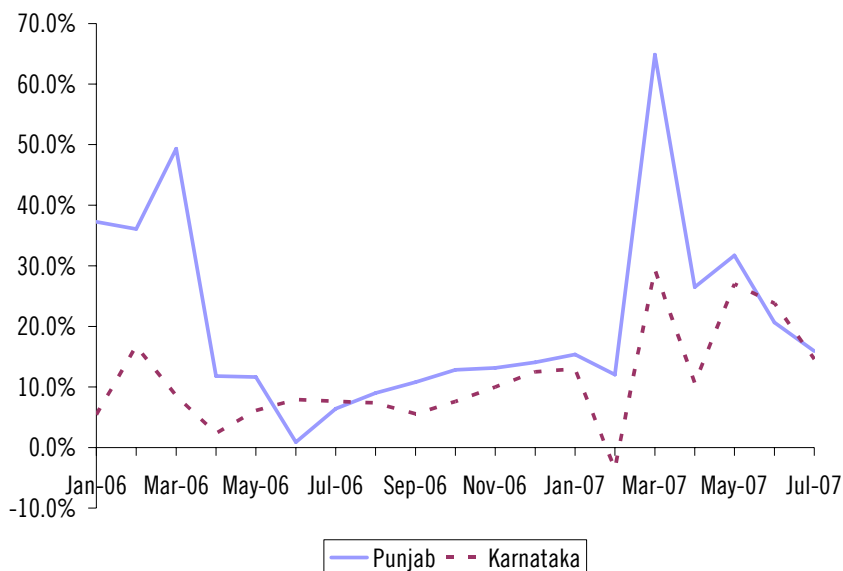
Spice provides GSM services in Punjab and Karnataka circles where it is the incumbent operator. Despite concurrent commencement of operations in these circles, the current market scenarios contrast greatly, with Spice showing strong performance in Punjab, where it is the second largest operator, while it has only a modest market share in Karnataka, where it is the fifth largest operator (out of six operators). Though lack of coverage capex has hampered operations in both circles, operations in the Karnataka circle are more impacted due to lower brand visibility.

Figure 9. Current Status

	Penetration (%)	Spice's market share (%)
Punjab	33.2	23.9
Karnataka	22.1	9.1

Source: Citigroup Investment Research, COAI, AUSPI

Figure 10. Circle Wise Market Share of Net Adds



Source: COAI, AUSPI

Punjab

Spice currently operates in 631 towns covering 58% of the population and is the second largest operator with a subscriber base of 2.2m subscribers as of July 2007. By virtue of being the incumbent operator, it has been allocated 7.8MHz spectrum in the 900 MHz band, though it is eligible for 15 MHz, based on the current subscriber linked spectrum allocation criteria (which might undergo changes post TRAI's recent recommendations).

Figure 11. Financial Overview

(Rs m)	FY04	FY05	FY06	6 months ending Dec 06
Pre-paid	1,235	1,509	1,700	1,117
Post paid	1,256	2,092	2,214	649
VAS	138	167	313	248
Others	1,032	734	780	712
Total	3,661	4,502	5,007	2,726

Source: Company reports and Citigroup Investment Research

Figure 12. Infrastructure Details

	FY04	FY05	FY06	Mar-07
Billable subscribers (000)	583	803	1,164	1,523
Cell sites	319	528	809	1,358
Subs/cell site	1,828	1,521	1,439	1,122
BTS	535	804	1,114	1,690
Subs/BTS	1,090	999	1,045	901

Source: Company data and Citigroup Investment Research

Karnataka

Spice is the fifth largest operator (out of 6 operators) with a subscriber base of 1.1m as of July 2007. It covers just 29% of the population with operations in 245 towns, despite being the incumbent operator. The low market share is primarily related to lack of sufficient funds available to carry out coverage capex along with low visibility in the market.

Figure 13. Financial Overview

(Rs m)	FY2004	FY2005	FY2006	6 months ending Dec 06
Pre-paid	613	495	557	508
Post paid	714	568	502	260
SMS	100	89	104	85
Others	276	411	445	272
Total	1,703	1,563	1,608	1,125

Source: Company data and Citigroup Investment Research

Figure 14. Infrastructure Details

	FY2004	FY2005	FY2006	Mar-07
Billable subscribers (000)	232	181	332	595
Cell sites	206	323	508	1,019
Subs/cell site	1,126	560	654	584
BTS	264	328	587	1,093
Subs/BTS	879	552	566	544

Source: Citigroup Investment Research

Status Update

Entry of Telekom Malaysia

Telekom Malaysia, as part of its strategy to acquire assets in high growth markets to counter the slowing growth in Malaysia, acquired a 49% stake in Spice in March 2006 from Distacom Communications, Hong Kong. The key advantage for Spice of TM's entry is the synergies relating to global procurement by leveraging TM's vendor relationships and its experience in wireless operations throughout the Asia-Pacific region.

Spice's public listing

Spice undertook a pre-IPO private placement of 24.9m shares at Rs45. It listed on the BSE in July 2007 at an issue price of Rs46 per share, with the promoters diluting a 16.4% stake. The total funds raised (Rs6.3bn) are to be utilized to

fund its capex programme (including payment of license fees for NLD and ILD) and repaying long-term debt.

Figure 15. Shareholding Structure (Pre IPO)

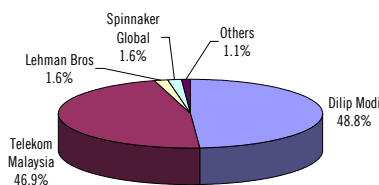
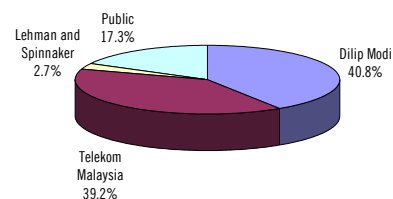


Figure 16. Shareholding Structure (Post IPO)



Source: Company Reports, CIR

Source: Company reports, CIR

Pre-IPO – Inadequate funds

The company’s market share and net additions in the two circles lagged in the past, primarily due to the lack of adequate capex, as its peers surged ahead. The lower infrastructure spend (even after adjusting for outsourced towers) prior to the restructuring resulted in Spice losing its market share to its competitors (see figures 17-18).

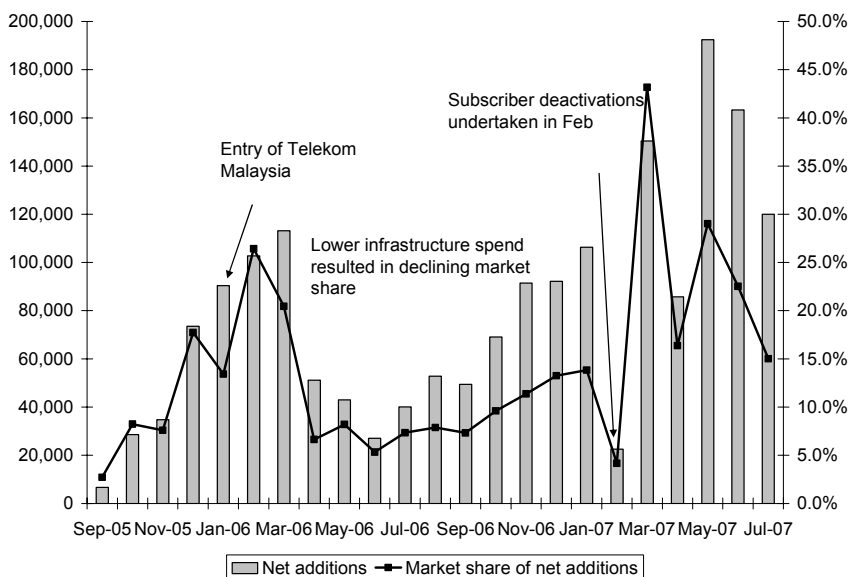
Lack of funds cause of low coverage

Figure 17. Capex/Sales: Underinvestment in the Last 1-2 years...

	FY04	FY05	FY06
Spice	21.7%	17.7%	27.8%
Bharti	51.6%	54.7%	53.3%
Idea	39.9%	67.2%	27.2%

Source: Company data and Citigroup Investment Research

Figure 18. ... Resulted in Volatile Net Additions in the Past



Source: Citigroup Investment Research, COAI, AUSPI

Post IPO – Playing catch-up

Post IPO and with adequate funds, Spice has refocused its energies on the existing circles. Management indicates capex of Rs3.4bn for H2CY07 as compared with Rs4.4bn estimated for entire CY07, highlighting the underinvestment prior to the IPO.

Further, Spice has also applied for licenses to provide services in the rest of the 21 circles, though timing of any launch would be contingent upon spectrum allocation. If TRAI's recent recommendations regarding spectrum allocation are accepted by the DoT, Spice is reasonably eligible for spectrum in new circles, if it wants.

Refer to our note for further details on the impact of TRAI spectrum recommendations - <https://citigroupgeo.com/pdf/SAP08721.pdf>

Figure 19. Spectrum Allocation Queue

Company	Status	Service areas	Application date	Priority
Idea	Licence	2	12/5/2005	1
Maxis Aircel	Licence	7	12/5/2005	1
Vodafone Essar	Licence	6	12/5/2005	1
Maxis Aircel	Licence	7	12/14/2005	2
ByCell	Application	5	1/31/2006	3
Tata Tele	Application	3	6/21/2006	4
Idea	Application	9	6/26/2006	5
Spice	Application	21	8/31/2006	6
Swan	Application	14	3/2/2007	7
Cheetah	Application	2	3/7/2007	8
HFCL	Application	21	5/8/2007	9
Parsvnath	Application	22	8/27/2007	10

Source: DoT, Media reports

KPIs at a discount to peers – result of underinvestment and lack of scale

Spice's key performance indicators (ARPU, MOU and EBITDA margins) are, not surprisingly, at a discount to its larger peers. Lower coverage despite incumbency and underinvestment has resulted in low quality subscribers on the network impacting ARPUs and MoUs. The scale shortcomings vis-à-vis nationwide players as well as passive infrastructure leasing – resulting in tower rental outflows – leads to lower EBITDA margins.

Figure 20. Wireless KPI Comparison

	Jun-06	Sep-06	Dec-06	Mar-07	Jun-07
Blended ARPU (Rs)					
Bharti	441	438	427	406	390
Reliance	379	354	328	377	375
Idea	362	335	322	317	320
Spice (CIR estimate)*	295	286	291	275	262
Blended MOU (min)					
Bharti	441	451	467	475	478
Reliance	491	461	454	541	510
Idea	342	344	369	387	381
Spice (CIR Estimate)*	341	358	368	370	367
ARPM (Rs/Min)					
Bharti	1.01	0.98	0.91	0.86	0.82
Reliance	0.77	0.77	0.72	0.70	0.74
Idea	1.06	0.97	0.87	0.82	0.84
Spice	0.86	0.80	0.79	0.74	0.71
EBITDA Margins %					
Bharti	36.4	36.9	37.6	39.1	40.6
Reliance	36.0	36.1	37.4	38.8	39.7
Idea	33.6	35.1	32.3	33.3	34.7
Spice	22.7	22.0	21.9	22.3	20.8 ¹

¹ High dealer margins to capture market share resulted in margin contraction

* Company reports ARPU/MOU on active subs only which are typically 75% of reported subs

Source: Citigroup Investment Research

Financial Overview

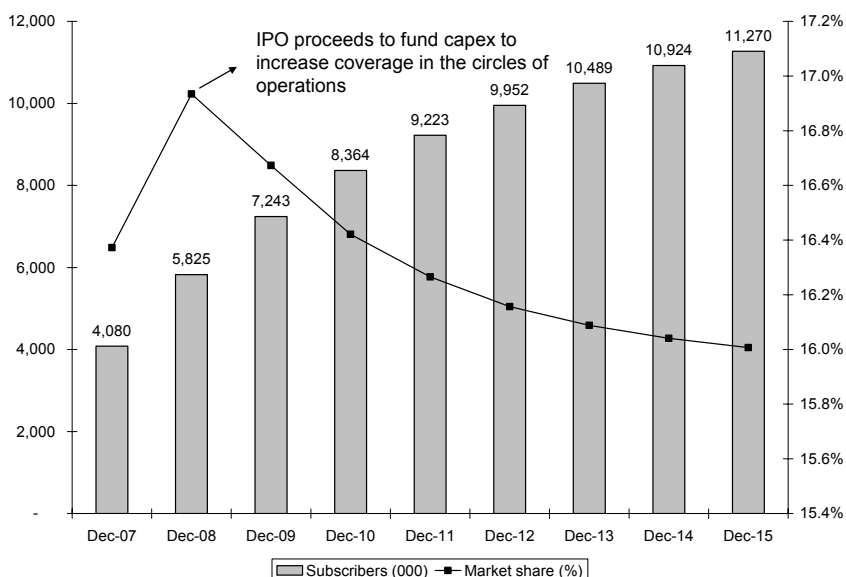
Spice has changed its financial year ending from June to December to align itself with Telekom Malaysia. Our financial forecast for CY07-09E incorporates front-ended growth with Spice trying to catch up with the other operators who achieved higher coverage and subscriber base during Spice's underinvestment. Proceeds from the recent equity issue will be used to increase coverage. The company is also proposing a NLD and ILD rollout from the IPO proceeds, though the roll out capex will be manageable as it is more likely to buy capacity from players such as Railtel, Bharti, RCOM, etc, rather than build a greenfield OFC network.

Key Assumptions

Market share

We believe that Spice's overall market share (in its two circles of operations) will stabilize at ~16%, with an acceleration in CY07-08 as it catches up on the coverage of the larger players. As mentioned previously, though, Spice has applied for licenses for 21 additional circles. Spectrum allocation is contingent upon: 1) notification of TRAI's recent recommendation, and 2) release of 20 MHz of spectrum by the DoT. We have not factored any new rollouts.

Figure 21. Subscriber Forecast



Source: Citigroup Investment Research estimates

Why are EBITDA margins so low?

EBITDA margins at 21% are much lower than at its larger peers like Idea (34.7%) and Bharti (40.6%). The main reasons for this are:

- About 50% of Spice's cell sites are on independent towers, going up to 70% in CY07. For single tenant towers, the capex recovery is about

Rs35,000/month which declines to Rs24,000 with the second tenant. Since 80% of Spice’s external towers are on single tenancy, the high rental outgoing depresses EBITDA margin by an estimated ~6%. Increasing tenancy and scale benefits are the key reasons for projected margin gains of 600bps over CY06-09E.

Figure 22. Tower Lease Contract Details

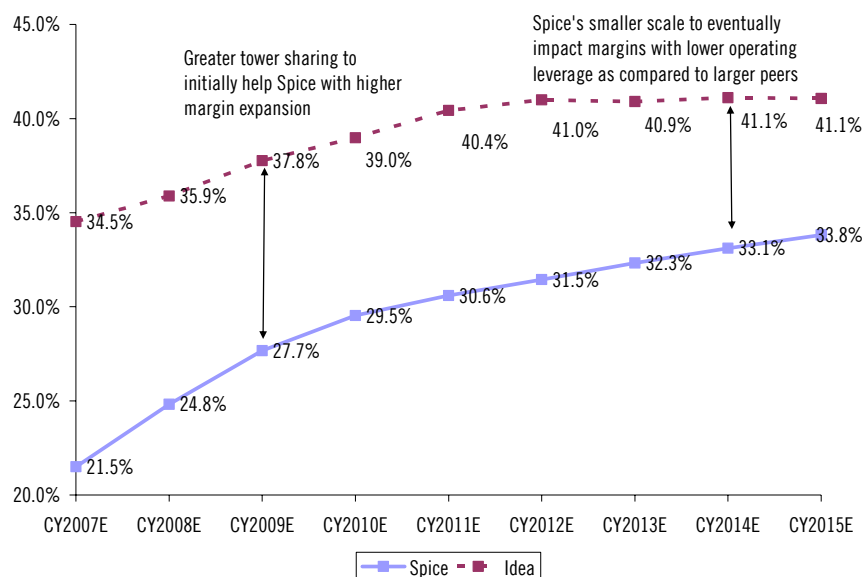
Per tower/per month (Rs)	GBT	RTT
Capex recovery + tower maintenance	60,000	40,000
Rentals & security	-	10,000
Power & fuel	18,000	18,000
Total	78,000	68,000

Source: Citigroup Investment Research

- Larger operators achieve higher economies of scale in terms of network usage and negotiating lower rates for equipment procurement.
- Dealer margins are in the range of 7-8% as compared to 4-5% for larger peers.

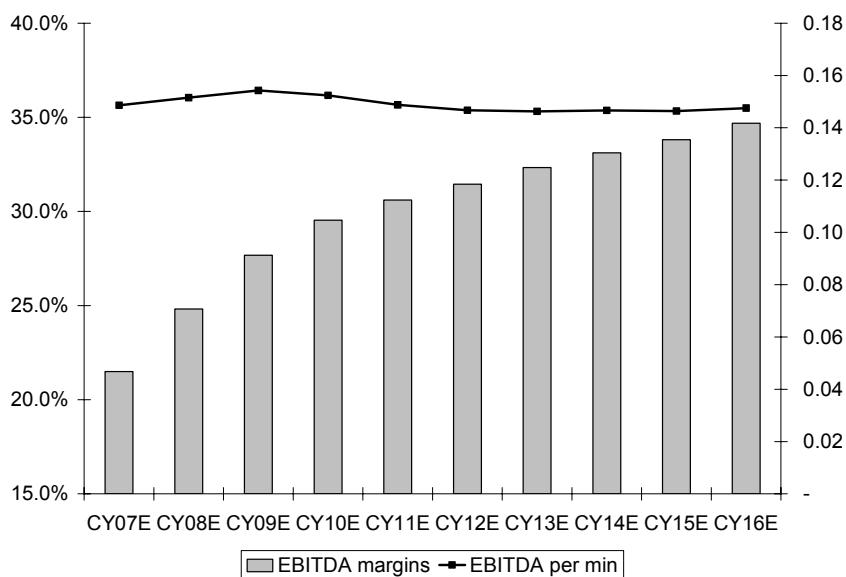
We expect Spice to achieve a stable state EBITDA margin of ~34%, about 700bps lower than its larger peer, Idea. The convergence of margins will largely be on account of operating leverage accruing to Spice as the tenancy on its third party towers increases over time. Lower interconnect charges as traffic shifts to captive NLD networks will also help to an extent. The key risk to our margin assumption is lower-than-anticipated tenancy on external towers and higher channel commissions.

Figure 23. EBITDA Margin Comparison



Source: Citigroup Investment Research

Figure 24. EBITDA - % and Per Min



Source: Citigroup Investment Research

ARPU and Revenue Per Min

We forecast Spice's ARPU to decline from about Rs312 (US\$7) in FY06 to about Rs248 (US\$6) in CY08E with a terminal ARPU of Rs198 (US\$5). We factor in front ended growth in a supply driven market where increasing penetration would increasingly come at lower ARPUs. Also, the intense competitive environment should ensure that the savings related to various cost reduction initiatives related to infrastructure sharing and any reduction in regulatory charges would be passed onto the consumers rather than retained by the operators.

We expect the revenue per min to decline from about Rs0.71 (qtr ending Jun-07) to Rs0.42 by 2016. Indian wireless is transitioning towards fixed-line dynamics of high MOUs with low rev/min as has been mentioned in our previous note <https://www.citigroupgeo.com/pdf/SAP06436.pdf>. However, though the rev/min will continue to decline, the decline should moderate as compared with the past, with improving outgoing/incoming ratio as penetration increases.

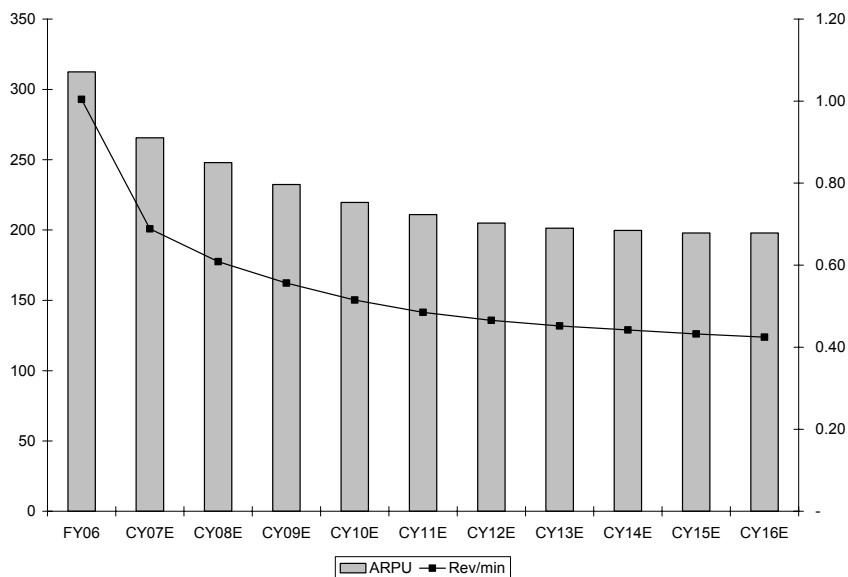
Figure 25. Revenue Per Min – Peer Comparison

	2007E	2008E
Spice	0.69	0.61
Bharti ¹	0.75	0.63
Idea ¹	0.75	0.63
RCOM ¹	0.64	0.55

¹ Relates to FY08 and FY09 respectively

Source: Citigroup Investment Research

Figure 26. Blended ARPU and Revenue Yields



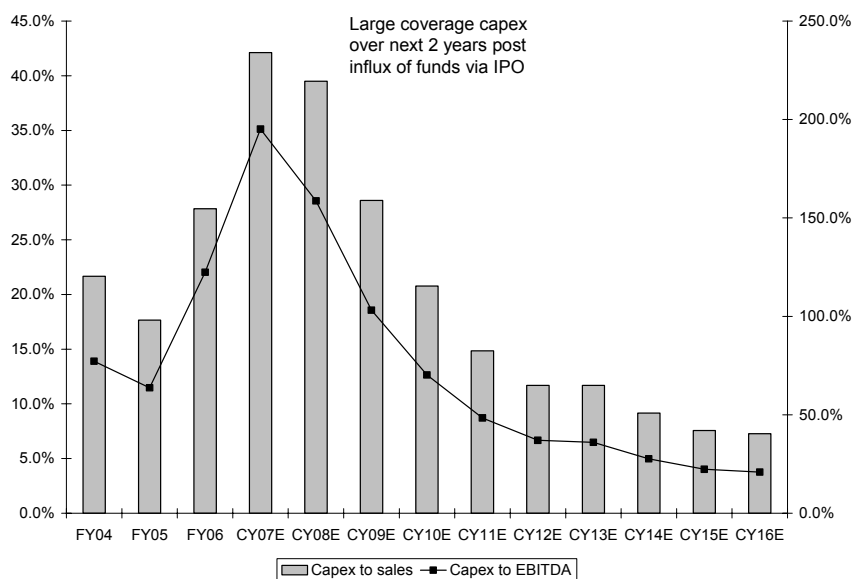
Source: Citigroup Investment Research estimates

Capital expenditure – Catch up

Capital expenditure for CY07-08E will likely be on the higher side as Spice catches up with the other operators with larger coverage. Also, though Spice currently provides services using spectrum in the 900MHz band, allocation of additional spectrum (if at all) will be in the 1,800MHz band, which would moderately increase capex. Spice expects to incur capex of US\$40/sub for the active components only in CY08, with the passive infrastructure capex proposed entirely through towercos.

Terminal capex/sales of 7.3% (CY16E) and Capex/EBITDA of 21.0% are in line with the industry trend.

Figure 27. Capital Expenditure Assumptions



Source: Citigroup Investment Research estimates

Concerns that arrangement with Spice Mobile lacks clarity

Spice Communications entered into a contract with Spice Mobile Pvt. Ltd. (SMPL), a group company, in January 07 under which Spice Mobile will import active infrastructure on behalf of Spice Communications, which would in turn pay fees to Spice Mobile for services rendered. The equipment would be on the books of Spice Mobile for a period of 2 years after which it would be transferred onto Spice Communication's books on a cost plus basis. The exact need for this contract and transfer pricing terms are not very clear at this stage, which raises some concern.

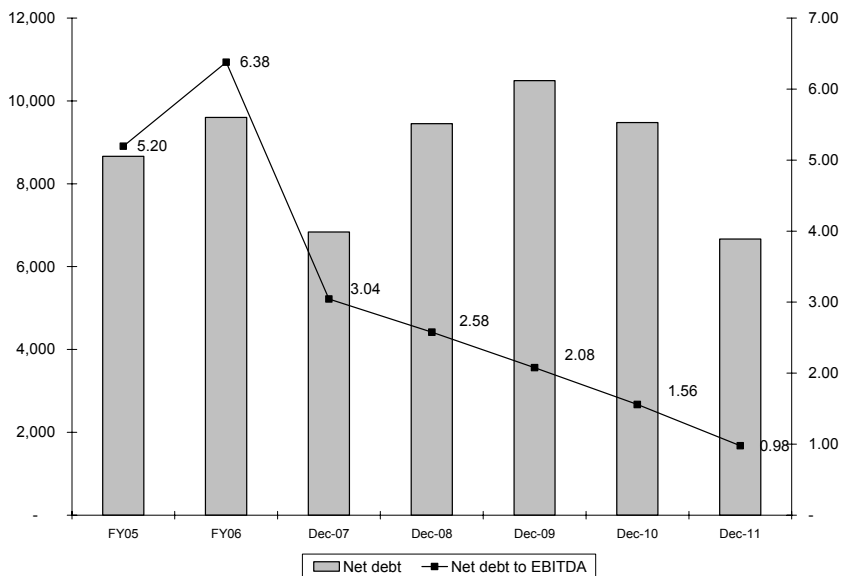
Broad terms of the contract - Spice Communications will have to give 25% of the billed amount as interest free deposit to Spice Mobile. Further, post completion of the stipulated two year period, the balance amount will have to be paid in 4 equal quarterly installments within a year. However the extent of the mark-up in the billed amount over and above the cost of equipments is unclear at this stage. Spice signed the first contract with SMPL with the above terms in Jan-07 with total contract value of Rs1776m.

Though the company is still to decide on the nature of accounting treatment for the above arrangement with Spice Mobile, we assume the entire capex and funding for the capex on active components to be on Spice Communication's books for the time being.

Leverage – Under control post IPO

Spice has defaulted on its debts in the past and has had qualifications from auditors with respect to its ability to continue operations in absence of access to long-term funds. The pre IPO private placement and IPO funds have reduced leverage to more manageable levels (Net Debt/EBITDA of 3x by Dec-07) and alleviated the concerns of the auditors.

Figure 28. Improved Leverage Position Post IPO



Source: Citigroup Investment Research estimates

Key assumptions – Comparison with peers

To summarise our key assumptions for CY07-09E, we compare our forecasts for Spice with its peers that we have under coverage – Bharti, RCOM and Idea. Our assumptions for Spice reflect its stage of rollout and its strengths & weaknesses vis-à-vis integrated and larger players.

Figure 29. Comparison of Assumptions for CY06-09E with RCOM, Bharti and Idea

	FY06/CY05	FY07/CY06	FY08/CY07E	FY09/CY08E	FY10/CY09E
Subs (m)					
Bharti	19.6	37.1	59.9	81.5	100.7
RCOM	17.3	29.0	45.3	61.6	76.8
Idea	7.4	14.0	22.9	32.2	40.8
Spice	2.1	2.5 ¹	4.1	5.8	7.2
Blended ARPU (Rs)					
Bharti	441	412	368	324	288
RCOM	435	391	347	301	266
Idea	395	334	305	271	237
Spice	312	282 ¹	266	248	232
EBITDA % - wireless					
Bharti	36.1%	37.6%	39.2%	41.7%	43.2%
RCOM	30.3%	37.1%	38.9%	40.6%	41.1%
Idea	36.0%	33.5%	34.5%	35.9%	37.8%
Spice	22.8%	22.0% ¹	21.5%	24.8%	27.7%
Wireless Capex (Rs m)					
Bharti	43,048	71,801	101,735	99,285	85,674
RCOM	NA	47,714	91,970	87,204	69,963
Idea	8,079	28,931	42,432	42,121	31,538
Spice	1,842	3,332 ¹	4,381	5,820	5,211
Capex to sales (%) - wireless only					
Bharti	52.5%	50.8%	47.5%	36.1%	27.2%
RCOM	NA	44.5%	59.4%	45.2%	31.7%
Idea	27.2%	66.3%	62.9%	47.0%	30.4%
Spice	27.8%	43.3% ¹	42.0%	39.4%	28.5%
Revenues - wireless (Rs m)					
Bharti	81,981	141,367	214,354	274,947	315,190
RCOM	74,070	107,276	154,728	192,842	220,730
Idea	29,655	43,664	67,496	89,597	103,619
Spice	6,615	7,702 ¹	10,442	14,778	18,256
EBITDA - wireless (Rs m)					
Bharti	29,565	53,210	83,950	114,669	136,286
RCOM	22,411	39,844	60,153	78,341	90,762
Idea	10,674	14,637	23,301	32,153	39,126
Spice	1,506	1,693 ¹	2,245	3,668	5,051

¹ 6 months ended Dec 06, for P&L and capex figures – multiplied by 2

Source: Citigroup Investment Research estimates

Financial Summary Tables

Figure 30. Income Statement (Rs m)

Year ending Dec 31	FY05	FY06	CY07E	CY08E	CY09E
Service revenue	6,019	6,615	10,405	14,740	18,218
Sales of traded goods	47	0	37	38	39
Total revenue	6,066	6,615	10,442	14,778	18,256
Expenditure	(4,401)	(5,109)	(8,197)	(11,110)	(13,205)
Operating costs	(2,149)	(2,378)	(4,252)	(6,006)	(7,173)
Personnel cost	(382)	(407)	(558)	(818)	(1,046)
Revenue sharing	(340)	(358)	(569)	(805)	(995)
Administrative costs	(601)	(810)	(1,096)	(1,182)	(1,461)
Sales and marketing costs	(929)	(1,156)	(1,722)	(2,298)	(2,531)
Loan prepayment and restructuring costs	-	(41)	-	-	-
EBITDA	1,665	1,506	2,245	3,668	5,051
EBITDA margin (%)	27.4%	22.8%	21.5%	24.8%	27.7%
Depreciation	(1,239)	(1,458)	(1,829)	(2,265)	(2,656)
EBIT	426	48	417	1,403	2,395
Finance Costs	(719)	(870)	(997)	(899)	(984)
Other income	369	188	497	171	113
PBT	76	(674)	(83)	674	1,523
FBT/Current tax	(2)	(13)	(5)	(5)	(5)
PAT	74	(687)	(88)	669	1,518
EPS	0.13	(1.25)	(0.13)	0.97	2.20
O/S shares	552	552	690	690	690

Source: Company data and Citigroup Investment Research estimates

Figure 31. Cash Flow Statement (Rs m)

Year ending Dec 31	FY05	FY06	CY07E	CY08E	CY09E
PBT	76	(674)	(83)	674	1,523
Depreciation	1,239	1,458	1,829	2,265	2,656
Other adjustments	512	126	618	724	867
WC Adjustments	(358)	389	292	269	(4)
Cash flow from operations	1,468	1,298	2,654	3,932	5,042
Cash flow from investing					
Inc/(Dec) in capital creditors	82	(118)	-	-	-
Proceeds from sale of assets	0	6	-	-	-
Capex	(1,325)	(1,867)	(4,381)	(5,820)	(5,211)
Int received	48	51	497	171	113
Net cash used in investing	(1,195)	(1,929)	(3,884)	(5,650)	(5,098)
Cash flow from financing					
Borrowings/(Repayments)	52	340	(2,000)	1,000	1,000
Loan origination cost	3	(233)	-	-	-
Issue of shares	-	-	6,322	-	-
Interest paid	(304)	(102)	(997)	(899)	(984)
Net cash used in financing	(248)	5	3,325	101	16
Net increase/(Dec) in cash	26	(626)	2,095	(1,617)	(41)
cash at beginning	2,073	2,099	1,473	3,246	1,629
Cash at the end	2,099	1,473	3,246	1,629	1,588

Source: Company data and Citigroup Investment Research estimates

Figure 32. Balance Sheet (Rs m)

As at Dec 31	FY05	FY06	CY07E	CY08E	CY09E
Net worth	(219)	(906)	4,910	5,579	7,097
Equity capital	5,519	5,519	6,899	6,899	6,899
Share premium			4,943	4,943	4,943
Reserves and surpluses	(5,738)	(6,425)	(6,932)	(6,263)	(4,744)
Borrowings	10,762	11,073	10,079	11,079	12,079
Total liabilities	10,543	10,167	14,989	16,658	19,177
Net fixed assets	8,729	9,088	12,488	16,043	18,598
WIP	272	319	441	441	441
Current assets	3,460	2,498	4,929	3,673	3,826
Inventories	1	-	7	8	9
Debtors	598	505	676	836	909
Loans and advances	763	520	1,000	1,200	1,320
Cash and bank balances	2,099	1,473	3,246	1,629	1,588
Current liabilities & provisions	1,925	1,973	3,150	3,780	3,969
Misc expenditure not written off	8	235	281	281	281
Total Assets	10,543	10,167	14,989	16,658	19,177

Note: Current liabilities netted off from Total Assets

Source: Company data and Citigroup Investment Research estimates

Annexure 1

Figure 33. Wireless peer comparison

Company	RIC	Price	Rating	P/E (x)		Earnings CAGR	P/CEPS (x)		EV/EBITDA (x)		EBITDA CAGR	Div Yield	
				07E/ FY08E	08E /FY09E	06-09E/ FY07-10E	07E/ FY08E	08E /FY09E	07E/ FY08E	08E /FY09E	06-09E/ FY07-10E	07E/ FY08E	08E /FY09E
		5-Sep-07											
AIS	ADVA.BK	Bt91.5	1M	17.2	14.7	9.8%	7.8	7.0	6.9	6.2	6.1%	6.9%	6.8%
Bharti	BRTI.BO	Rs849	1L	25.1	19.4	32.7%	16.4	12.5	14.7	11.0	34.7%	0.6%	1.0%
Ch. Unicom	0762.HK	HK\$14.82	1L	24.3	20.3	16.8%	6.4	5.6	5.7	5.0	9.4%	1.5%	1.8%
Ch. Mobile	0941.HK	HK\$105.6	1L	25.1	18.9	24.0%	13.6	11.5	10.4	8.9	15.0%	1.9%	2.5%
Digi	DSOM.KL	RM19.6	1L	15.4	13.0	14.4%	9.1	8.1	7.1	6.1	11.1%	6.8%	8.1%
FET	4904.TW	NT\$40.55	1L	13.1	10.1	7.1%	6.6	5.5	5.7	4.6	-1.8%	6.9%	7.9%
Globe	GLO.PS	P1370	1L	12.4	11.7	17.4%	5.9	5.4	4.9	4.5	7.2%	4.9%	6.4%
IDEA	IDEA.BO	Rs123.55	1L	38.9	30.6	36.7%	16.8	12.6	15.7	11.8	38.8%	0.0%	0.0%
Indosat	ISAT.JK	Rp7300	1L	20.8	17.5	23.1%	6.0	5.3	6.0	5.4	16.0%	1.8%	2.7%
KTF	032390.KS	W30850	3M	20.2	12.6	16.0%	4.1	3.7	4.3	3.5	4.2%	1.7%	2.2%
LGT	032640.KQ	W9750	2M	11.9	8.8	-8.3%	4.2	3.7	5.0	4.0	9.2%	2.1%	2.8%
MobileOne	MONE.SI	S\$2.13	2L	11.9	11.3	5.4%	7.2	6.9	6.4	6.4	0.0%	6.6%	7.0%
RCOM	RLCM.BO	Rs538.8	1M	24.0	18.7	29.6%	13.7	10.8	13.4	10.2	31.0%	0.2%	0.4%
SKT	017670.KS	W207500	1M	11.3	9.9	9.5%	5.3	4.9	4.7	4.1	3.0%	3.9%	4.5%
SmarTone	0315.HK	HK\$9.45	3M	26.3	23.4	16.4%	5.8	5.9	3.5	3.1	2.4%	3.1%	3.6%
Spice	SPCM.BO	Rs54.5	1M	NM	56.2	NM	21.6	12.8	19.8	12.8	45.2%	0.0%	0.0%
TAC	DTAC.BK	Bt41.75	3M	12.9	9.6	34.5%	6.0	4.9	6.1	5.0	16.0%	2.3%	4.2%
Tata Tele	TTML.BO	Rs31.55	3M	NM	NM	NM	17.4	12.6	17.1	12.7	37.9%	0.0%	0.0%
TWM	3045.TW	NT\$40.55	1L	12.8	9.1	9.5%	8.3	6.1	7.5	5.5	5.1%	2.0%	9.6%
Wtd. Avg				23.6	18.1		12.5	10.3	10.1	8.4		1.9%	2.6%
Median				17.2	13.8		7.2	6.1	6.4	5.5		2.0%	3.2%

Source: Citigroup Investment Research estimates

Spice Communications

Company description

Spice Communications, a pure play regional wireless provider, is the seventh-largest cellular operator in India and provides services in two circles – Punjab and Karnataka – where it is the incumbent operator. It commenced services in 1996 and listed on the Bombay Stock Exchange (BSE) in July 2007. It is majority owned by the Dilip Modi group and Telekom Malaysia.

Investment thesis

We rate Spice Buy/Medium Risk. Continued robust wireless market expansion and presence in fast growing markets – Punjab (33% penetration) and Karnataka (22%) – offers growth potential as it moves to bolster its inadequate market share in the latter (~9%). This is evident from the recent pick-up in Spice's share of net adds. The company's recent IPO has in our view provided sufficient funding flexibility to pursue its growth plans, at least in these two circles as Spice currently does not face any spectrum constraints. We estimate EBITDA CAGR of 45% over CY06-09E, ahead of all listed peers and more than double that of the broader market. In addition, we believe that Spice's spectrum allocation in the more efficient 900 MHz band and smaller footprint offers good M&A potential in the long run. From an industry perspective, we believe that low revenue yields and moderate EBITDA margins leave little room for disruptive pricing.

Risks

Our quantitative risk-rating system assigns a default Speculative Risk rating to Spice due its trading history of less than 12 months. We see a Medium Risk rating as more appropriate due to the higher visibility of Indian wireless growth, strong parentage (Telekom Malaysia) and lower financial leverage post-IPO. Spice accumulated significant losses in the past resulting in negative net worth prior to the IPO. It previously defaulted on payments to vendors and debenture holders due to the lack of adequate funds and has had qualifications from auditors with respect to its ability to continue operations in the absence of access to long-term funds. Going forward, operationally, the risks facing Spice are slightly higher than its more established peers given its smaller scale. Lower-than-expected tenancy in third-party towers and higher capex requirements to increase coverage may depress return parameters. Its equipment sourcing contract with Spice Mobiles Pvt. Ltd, a group company, carries transfer pricing risks as there is lack of clarity on the rationale and cost-plus billing terms. While new circle roll outs are possible if new spectrum norms are accepted by the DoT (as and when the Defence Department releases spectrum), it will be constrained by management bandwidth and may require a fresh equity infusion. These risk factors could impede the stock from reaching our target price.

Appendix A-1

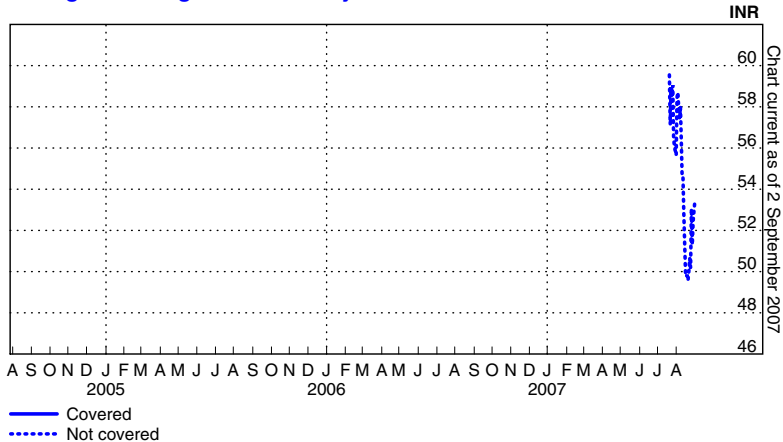
Analyst Certification

We, Rahul Singh and Anand Ramachandran, CFA, research analysts and the authors of this report, hereby certify that all of the views expressed in this research report accurately reflect our personal views about any and all of the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

IMPORTANT DISCLOSURES

Spice Communications (SPCM.BO)

Ratings and Target Price History - Fundamental Research



#	Date	Rating	Target Price	Closing Price
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*Indicates change.

KT Freetel (032390.KS)

Ratings and Target Price History - Fundamental Research

Analyst: Charles Uhm (covered since July 3 2007)



#	Date	Rating	Target Price	Closing Price
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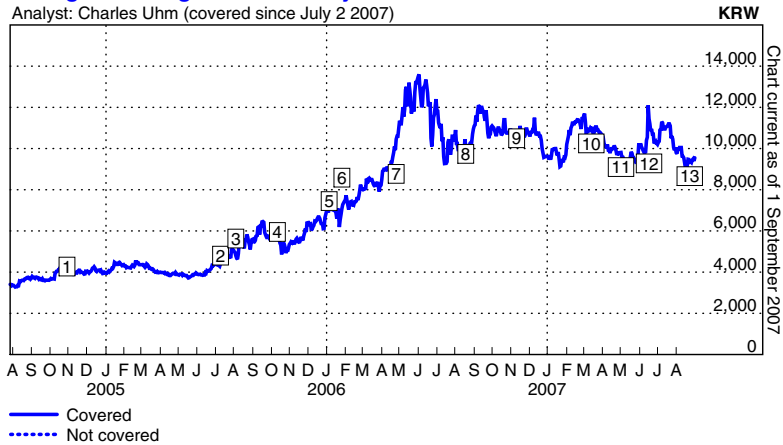
1:	17 Feb 05	*3L	19,500.00	23,100.00
2:	24 Jun 05	*2L	*26,000.00	24,600.00
3:	29 Jul 05	2L	*27,500.00	27,200.00
4:	8 Dec 05	*2M	*26,000.00	23,450.00
5:	26 Jan 06	2M	*27,000.00	23,900.00
6:	18 Aug 06	*3M	*26,000.00	26,500.00
7:	10 Nov 06	3M	*25,000.00	29,900.00
8:	14 Mar 07	3M	*23,000.00	24,700.00
9:	25 Jul 07	3M	*25,000.00	29,400.00

*Indicates change.

LG TeleCom (032640.KQ)

Ratings and Target Price History - Fundamental Research

Analyst: Charles Uhm (covered since July 2 2007)



#	Date	Rating	Target Price	Closing Price
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1:	29 Oct 04	*1M	*5,200.00	4,150.00
2:	11 Jul 05	1M	*6,000.00	4,415.00
3:	4 Aug 05	1M	*6,300.00	4,795.00
4:	12 Oct 05	1M	*7,700.00	5,670.00
5:	5 Jan 06	1M	*9,100.00	7,050.00
6:	26 Jan 06	1M	*10,200.00	7,080.00
7:	26 Apr 06	1M	*14,200.00	10,450.00
8:	18 Aug 06	1M	*13,000.00	10,100.00
9:	10 Nov 06	1M	*12,600.00	10,800.00
10:	14 Mar 07	1M	*12,900.00	10,950.00
11:	2 May 07	*2M	*10,500.00	9,810.00
12:	17 Jun 07	*3M	*10,000.00	11,450.00
13:	23 Aug 07	*2M	*10,600.00	9,340.00

*Indicates change.

SK Telecom (017670.KS)

Ratings and Target Price History - Fundamental Research

Analyst: Charles Uhm (covered since July 2 2007)



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Rahul Singh holds a long position in the shares of Bharti Airtel.

Citigroup Global Markets Inc. or its affiliates beneficially owns 1% or more of any class of common equity securities of Bharti Airtel, China Mobile, IDEA Cellular and Tata Teleservices. This position reflects information available as of the prior business day.

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Spice Communications (SPCM.BO)

7 September 2007

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<i>% of companies in each rating category that are investment banking clients</i>	67%	100%	60%
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<i>% of companies in each rating category that are investment banking clients</i>	100%	0%	0%
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