

INDIA

Reliance Communications

12 January 2007

RCOM IN **Outperform**

Stock price as of 10 Jan 07	Rs	426.90
12-month target	Rs	500.00
Upside/downside	%	+17.1
Valuation	Rs	500.00
- DCF (WACC 12.7%)		

GICS sector	telecommunication services	
Market cap	Rs m	872,846
30-day avg turnover	Rs m	1,006.4
Market cap	US\$m	19,584
Number shares on issue	m	2,045

Investment fundamentals

Year end 31 Mar		2006A	2007E	2008E	2009E
Total revenue	bn	107.7	150.8	209.7	268.8
EBIT	bn	7.8	33.4	52.9	70.4
EBIT Growth	%	nfm	326.0	58.5	33.1
Recurring profit	bn	5.2	30.7	51.4	71.5
Reported profit	bn	4.5	28.4	46.2	63.0
Adjusted profit	bn	4.8	29.0	46.2	63.0
EPS rep	Rs	2.18	13.87	22.61	30.79
EPS rep growth	%	0.0	537.1	63.1	36.2
EPS adj	Rs	2.36	14.16	22.61	30.79
EPS adj growth	%	nfm	500.1	59.7	36.2
PE rep	x	187.1	29.4	18.0	13.2
PE adj	x	172.6	28.8	18.0	13.2
Total DPS	Rs	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	2.4	8.1	9.5	10.6
ROE	%	4.1	18.4	21.1	23.0
EV/EBITDA	x	34.4	14.6	10.1	7.8
Net debt/equity	%	28.0	18.4	3.0	-10.4
Price/book	x	7.1	4.2	3.4	2.7

RCOM IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, January 2007
(all figures in INR unless noted)

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RCOM+Hutch post marriage snapshot

Event

- Investors in Reliance Communications (RCOM IN, Rs427, Outperform, Target Price: Rs500, MCap: US\$19.6bn) have been focusing, almost exclusively in the last month, on the potential acquisition of Hutchison Essar (HEL) and its implications on RCOM, its financials and potential dilution. We have modelled the financials of HEL and the merged financials of RCOM+HEL post acquisition (assuming RCOM acquires 100% of HEL for full cash). We also look at the equity/debt capital raising required, based on ensuing debt equity ratios.

Impact

- For this exercise, we have assumed a potential acquisition of HEL (100% of HEL equity) by RCOM for a consideration of US\$20bn. This is not to say that RCOM will be the eventual winner, or US\$20bn is a fair price for HEL. This is just in line with media reports ascribing US\$20bn as the likely bid value and to work with a number that may not be too far from the acquisition price, if at all.
- We believe there could be significant possibilities/areas of cost savings post the acquisition for the combined entity, especially in the areas of network operating expenses, staff costs, selling and advertising expenses and general and administrative expenses. However, there would be a massive element of goodwill – to the extent of US\$18.94bn – that would likely show up on RCOM's books, which we assume would be written off over a 20-year period.
- Assuming a net debt/equity ratio of 1:1 for the combined entity post acquisition, RCOM would need to raise US\$10.4bn of equity and US\$9.6bn of debt to finance the bid. Assuming a target EV/EBITDA of 13.5x FY08E (in line with our target for Bharti Airtel, BHARTI IN, Rs613, Outperform, Target Price:Rs750), the target price for RCOM works out to Rs496 in 12 months and Rs727 in two years, based on the expanded, diluted equity capital of RCOM.
- At a net debt/equity ratio of 1.5:1, RCOM would need to raise US\$7.45bn of equity and US\$12.5bn of debt. Assuming a target EV/EBITDA of 13.5x FY08E, the target price for RCOM works out to Rs505 in 12 months and Rs762 in 2 years, based on the expanded, diluted equity capital of RCOM.

Earnings revision

- No change.

Price catalyst

- 12-month price target: Rs500.00 based on a DCF methodology.
- Catalyst: 1) Improvement in subscriber additions momentum in coming months; 2) hiving off towers into a separate company with shared ownership, resulting in lower capex and opex; 3) further clarity over GSM expansion.

Action and recommendation

- Strongly reiterate Outperform with a target price of Rs500, especially on the back of an unwarranted 12% correction in stock price in the last two weeks.

Please refer to the important disclosures on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

Bid outcomes – RCOM a winner in two scenarios, loser in one scenario

We have modelled the financials of HEL and the merged financials of RCOM + HEL post an acquisition (assuming RCOM acquires 100% of HEL). We also look at the equity/debt capital raising required, based on ensuing debt/equity ratios.

We have assumed three possible outcomes from a possible acquisition of Hutchison Essar from RCOM's perspective:

Scenario 1 outcome: RCOM fails in its bid to acquire Hutchison Essar – it is business as usual for RCOM and Bharti

- Some other bidder acquires HEL or nothing comes out of the bid process and the entire bid process is scrapped; Hutchison and Essar continue to run the business as usual.
- It will be business as usual for RCOM and Bharti in this scenario.
- We estimate RCOM's revenue to grow at a CAGR of 35.7% and EPS to grow at a CAGR of 135% over the next three years, FY06–09E.
- We estimate RCOM's subscriber base will grow organically to 71.3m in March 2009.
- However, the wireless ARPU is projected to decline (from Rs354 currently) to Rs284 in March 2009, leading to total revenue of Rs268.8bn for FY09E.
- We reiterate our 12-month target price of Rs500 in this scenario.

Scenario 2 outcome: RCOM acquires 100% of Hutchison Essar at a consideration of US\$20bn – a winning combination due to synergy gains

- At a debt/equity ratio of 1:1 (a commonly adopted optimal ratio in the global telecom space) for the combined entity post acquisition, RCOM would need to raise US\$10.4bn of equity and US\$9.6bn of debt to finance the HEL acquisition.
- In FY09E, we estimate the total revenue of the combined entity to increase to Rs456.7bn (CAGR of 37.3% between March FY07E–09E), EBITDA to increase to Rs222.8bn (CAGR of 58.7% between March FY07E–09E), implying an EBITDA margin of 48.8%.
- In the same period, PAT would likely grow to Rs81.9bn (CAGR of 36.8%). We estimate the cash EPS in FY08E and FY09E for the RCOM+HEL consolidated entity to be Rs40.7 and Rs57, respectively, compared to RCOM's stand-alone cash EPS of Rs38.1 and Rs50.2 for the respective years.
- We project the subscriber base of the consolidated entity to be at 125m in March 2009, implying an all-India wireless market share of 38.8%.
- Assuming a target EV/EBITDA of 13.5x FY08E (the same as our target multiple for Bharti), the target price for RCOM works out to Rs501 in 12 months and Rs734 in two years, based on the expanded, diluted equity capital of RCOM.
- If the deal is done with a higher debt/equity ratio of 1.5:1, we estimate the cash EPS in FY08E and FY09E to be Rs42.8 and Rs61, respectively.

Scenario 3 outcome: RCOM acquires 100% of Hutchison Essar at a consideration higher than US\$20bn – a stretch and a value-dilutive buy

In such a scenario, we need to go back to the drawing board and work out the possible impact on RCOM's share price in detail. However, we do believe that a consideration significantly higher than US\$20bn would be a stretch and in all likelihood, value dilutive for RCOM and its shareholders.

For the detailed financials of the combined RCOM + Hutchison Essar entity, please refer to figures 9 and 10.

Fig 1 Acquisition scenarios – resultant impact on financials and valuation of RCOM

Ensuing debt-to-equity ratio for combined entity	1.0	1.5	2.0
Total debt to be raised (in US\$ mn)	9,594	12,549	14,519
Total debt on consolidated entity (in US\$ mn)	14,775	17,730	19,700
Total equity to be raised (in US\$ mn)	10,406	7,451	5,481
Number of shares to be issued	1,097	785	578
Current shares outstanding	2,045	2,045	2,045
Dilution	53.6%	38.4%	28.3%
Combined RCOM+HEL financials – FY08E			
Revenue (in Rs bn)	350	350	350
EBITDA (in Rs bn)	167	167	167
Cash EPS (in Rs)	40.7	42.8	44.5
Combined RCOM+HEL financials – FY09E			
Revenue (in Rs bn)	457	457	457
EBITDA (in Rs bn)	223	223	223
Cash EPS (in Rs)	57.0	61.0	64.1
12-month target price based on 13.5x FY08 EV/EBITDA multiple	501	509	515
24-month target price based on 13.5x FY09 EV/EBITDA multiple	734	768	795

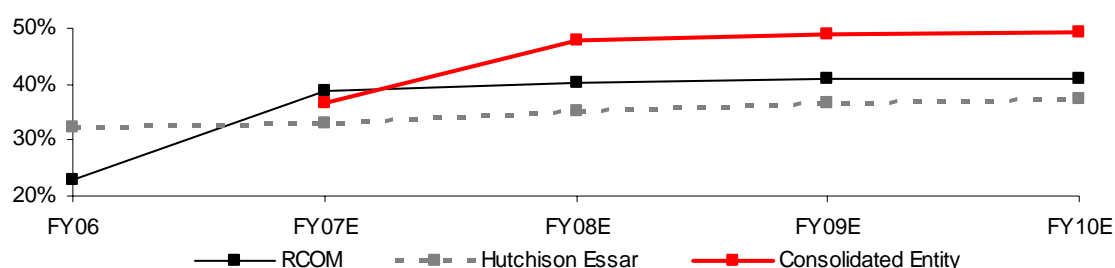
Source: Macquarie Research, January 2007

Key assumptions used for our calculations

We have assumed the following cost savings for the consolidated entity post acquisition:

- **20% cut in the interconnection cost currently incurred by Hutchison Essar**, due to the use of RCOM's national long distance (NLD) and international long distance (ILD) infrastructure. Currently, HEL, being a pure play wireless company, pays out significant interconnection payments to outside NLD/ILD carriers like Bharti. With RCOM being a fully integrated player with in-house NLD, ILD and global cable infrastructure, the combined entity would not need to outsource the NLD/ILD legs of mobile calls. This would obviate the need to pay outside parties and help in capturing the value present in the NLD/ILD legs.
- **80% cut in the employee cost currently being incurred by Hutchison Essar**. With RCOM being a pan-India, integrated telecom company, with wireless services in all 23 circles, it already has an extensive employee base. We believe that the combined entity would be able to slash 80% of the current employee cost paid by HEL annually, on the back of a similar reduction in employee headcount in the HEL part of the business.
- **50% cut in the selling/marketing cost currently being incurred by Hutchison Essar**. This will likely result from a possible consolidation of brands, more focused advertising on mass media, more efficient media buying, cost economies due to a huge increase in subscriber base and absolute size of marketing spends.
- **50% cut in the general & administrative cost currently being incurred by Hutch Essar**, by closing down branch/marketing offices due to overlaps with RCOM's current network of offices, slash corporate office expenses (one instead of two) and cuts in G&A costs.

All of the above cost savings would result in EBITDA margin for the consolidated entity increasing substantially, both relative to RCOM's projected EBITDA margins as also to HEL projected margins.

Fig 2 EBITDA Margin – RCOM, Hutchison Essar and Consolidated RCOM+Hutch Essar

Source: Macquarie Research, January 2007

Potential synergies between RCOM and Hutchison Essar

This acquisition of HEL makes strategic sense for RCOM as Hutch affords RCOM overnight entry into 16 GSM circles and can help it become a market leader in most of the circles. Hutch is market leader in two out of the 16 circles in which it operates, the second biggest operator in four circles, third biggest operator in three circles and the fourth biggest operator in two circles. If the acquisition of Hutch comes through, RCOM would become market leader in 13 out of the 16 circles in which Hutch operates.

Acquisition of Hutchison Essar can also bring in a few cost synergies for RCOM. The consolidated entity can easily save on its employee cost as additional manpower required for RCOM to operate the Hutch network will be minimal. The company can also save on selling and general cost as RCOM can use its existing network to distribute GSM services, making the Hutchison Essar distribution network redundant. Interconnection charges are another area with a good potential for cost savings. Currently Hutchison Essar's long distance calls are carried by Bharti Airtel, in absence of an NLD licence for Hutch. Synergies between RCOM and Hutchison Essar can occur here, as the long distance calls of Hutchison Essar would be carried by RCOM after the acquisition.

RCOM is planning to roll out new GSM operations in 14 circles to create a pan-India GSM business, shifting its focus from CDMA. This acquisition will enable RCOM to reduce the time to market with a pan-India GSM offering, with an overlap of only 2 circles (West Bengal and Kolkata) between Hutch's 16 circles and RCOM's 8-circle GSM business.

Fig 3 Subscriber base of Hutch and RCOM – overlap in only two circles

Circles	Subscribers		
	Hutch	RCOM GSM	RCOM CDMA
Metros			
- Delhi	2,157,136		1,984,072
- Mumbai	2,383,702		2,067,544
- Chennai	634,080		663,369
- Kolkata	1,186,497	299,270	1,057,731
Total	6,361,415	299,270	5,772,716
A' Circle			
- Maharashtra	1,030,112		2,168,551
- Gujarat	3,702,412		1,716,516
- Andhra Pradesh	1,319,310		2,632,382
- Karnataka	1,577,488		1,791,816
- Tamil Nadu	844,386		1,697,504
Total	8,473,708	-	10,006,769
B' Circle			
- Kerala	772,916		1,425,113
- Punjab	1,015,848		727,531
- Haryana	613,327		472,123
- Uttar Pradesh (W)	1,358,858		1,352,102
- Uttar Pradesh (E)	2,455,300		1,854,656
- Rajasthan	1,170,915		1,199,234
- Madhya Pradesh		852,231	1,405,556
- West Bengal and Andaman & Nicobar	1,083,878	518,346	663,580
Total	8,471,042	1,370,577	9,099,895
C' Circle			
- Himachal Pradesh		142,031	73,363
- Bihar		951,261	1,075,231
- Orissa		425,606	311,030
- Assam		319,935	
- North East		132,130	
- Jammu & Kashmir			288
Total	-	1,970,963	1,459,912
Total Wireless Subscribers	23,306,165	3,640,810	26,339,292

Source: Macquarie Research, January 2007

Hutch, RCOM and Bharti – Comparison of key operating and financial metrics

We present below some of the key operating and financial metrics of Bharti, RCOM and HEL.

Bharti is the leading wireless player with total **subscriber base** of 32.0m in December 2006. RCOM has the second largest subscriber base with 30.0m subscribers. RCOM's total combined subscriber base would swell to more than 53m if acquisition of Hutch comes through.

Fig 4 Total subscriber base

Subscriber Base (m)	Mar-06	Jun-06	Sep-06	Dec-06	Mar-07E	Jun-07E	Sep-07E	Dec-07E	Mar-08E
Bharti	19.6	23.5	27.1	32.0	35.6	40.1	44.7	49.5	54.2
Postpaid	3.4	3.6	3.9	4.0	4.1	4.2	4.3	4.4	4.4
Prepaid	16.2	19.5	23.1	28.0	31.3	35.6	40.0	44.5	48.9
RCOM	20.2	22.5	26.0	30.0	34.6	39.2	43.6	47.9	51.7
Postpaid	4.2	4.7	4.9	5.2	5.4	5.7	6.0	6.2	6.4
Prepaid	16.0	17.8	21.1	24.8	29.2	33.5	37.6	41.7	45.2
Hutch Essar	15.4	17.5	20.4	23.3	26.2	29.3	32.9	36.5	39.6
Postpaid	2.9	3.0	3.2	3.4	3.5	3.7	3.8	3.9	4.0
Prepaid	12.5	14.5	17.1	19.9	22.7	25.7	29.1	32.5	35.5

Note: March year ends for Bharti and RCOM; December year end for Hutch Essar

Source: Macquarie Research, January 2007

Hutch ARPU higher than RCOM: The Hutch acquisition would have a significant favourable impact on RCOM ARPU as well. Hutch's ARPU of Rs420 is the second highest in India, behind Bharti (but roughly 20% higher than RCOM) and could certainly help pull up RCOM's consolidated ARPU.

Fig 5 ARPU

ARPU (Rs)	Mar-06	Jun-06	Sep-06	Dec-06E	Mar-07E	Jun-07E	Sep-07E	Dec-07E	Mar-08E
Bharti	442	433	438	432	427	417	410	402	394
RCOM	379	379	354	346	337	326	316	306	296
Hutch Essar	454	433	420	412	404	398	392	385	376

Note: March year ends for Bharti and RCOM; December year end for Hutch Essar

Source: Macquarie Research, January 2007

RCOM's **minutes of use (MOU)** is the highest amongst the three leading players, at 461 minutes per month. Hutch has been a laggard on this parameter in the past, but its MOU has been consistently rising. We expect this trend to continue in the future.

Fig 6 MOU (minutes of use per month)

MoU (per month)	Mar-06	Jun-06	Sep-06	Dec-06E	Mar-07E	Jun-07E	Sep-07E	Dec-07E	Mar-08E
Bharti	431	441	451	455	463	468	472	487	497
RCOM	532	491	461	463	463	466	461	463	468
Hutch Essar	378	392	406	407	414	419	424	433	439

Note: March year ends for Bharti and RCOM; December year ends for Hutch

Source: Macquarie Research, January 2007

Average revenue per minute: Hutch is generating the **highest average revenue per minute** among the three leading players in India. An acquisition of Hutch would give a great boost to RCOM's ARPM, which is one of the lowest in the industry.

Fig 7 Average Revenue per minute

ARPM	Mar-06	Jun-06	Sep-06	Dec-06E	Mar-07E	Jun-07E	Sep-07E	Dec-07E	Mar-08E
Bharti	1.03	1.00	0.97	0.95	0.92	0.89	0.86	0.82	0.79
RCOM	0.71	0.77	0.77	0.75	0.73	0.70	0.69	0.66	0.63
Hutch Essar	1.20	1.10	1.03	1.01	0.98	0.95	0.92	0.89	0.86

Note: March year ends for Bharti and RCOM; December year ends for Hutch

Source: Macquarie Research, January 2007

Bharti is the leading player in the Indian wireless industry, 1H06 (January–June) revenue of Rs72.7bn, approximately 17% higher than RCOM's revenue in the same period. If combined with HEL, RCOM's pro-forma revenue would have been Rs100bn for 1H CY2006.

Fig 8 Quarterly/ half-yearly revenue

Revenues (Rs m)	Mar-06	Jun-06	Sep-06	Dec-06E	Mar-07E	Jun-07E	Sep-07E	Dec-07E	Mar-08E
Bharti	34,113	38,563	43,571	48,842	53,320	57,733	63,209	68,698	77,822
RCOM	29,704	32,501	35,260	39,291	43,342	47,220	50,468	53,903	56,755
Hutch Essar*		40,569		50,890		63,231		76,609	

Note: March year ends for Bharti and RCOM; December year ends for Hutch

* Half yearly revenue

Source: Macquarie Research, January 2007

Fig 9 RCOM+Hutch post acquisition combined income statement – assuming a debt/equity ratio of 1.0 post acquisition, fiscal year-end March

Particulars (Rs m)	FY06	FY07E	FY08E	FY09E	FY10E
Revenues					
Wireless	73,637	203,646	303,218	402,112	514,222
Global Service revenues	51,858	54,541	65,569	76,427	79,314
Broadband & Telephone Service revenues	5,128	11,751	17,104	25,894	38,389
Others	3,213	4,699	5,653	6,012	6,493
Inter-segment eliminations	(26,172)	(32,367)	(41,941)	(53,762)	(63,801)
Total Revenues	107,664	242,270	349,603	456,683	574,617
Operating Expenses					
Access & Interconnection Usage Charges & License Fees	40,400	67,161	90,913	115,716	141,895
(% total revenues)	37.5%	27.7%	26.0%	25.3%	24.7%
Employee Cost	8,390	15,771	15,455	19,551	24,117
(% total revenues)	7.8%	6.5%	4.4%	4.3%	4.2%
Selling & General Cost	34,054	70,905	75,887	98,610	125,554
(% total revenues)	31.6%	29.3%	21.7%	21.6%	21.9%
Total Operating Expense	82,844	153,837	182,255	233,877	291,566
(% total revenues)	76.9%	63.5%	52.1%	51.2%	50.7%
EBITDA	24,820	88,433	167,348	222,806	283,051
<i>EBITDA Margin</i>	23.1%	36.5%	47.9%	48.8%	49.3%
Depreciation & Amortisation	16,990	32,357	84,668	97,253	110,307
EBIT	7,830	56,076	82,680	125,553	172,744
<i>EBIT Margin</i>	7.3%	23.1%	23.6%	27.5%	30.1%
Net Interest Expense/ (Income)	2,679	7,196	29,739	28,403	24,138
Profit Before Taxes (PBT)	5,151	48,880	52,941	97,150	148,607
Income tax expense / (benefit)	327	4,502	9,816	15,250	22,035
Effective Tax Rate (%)	6.3%	9.2%	18.5%	15.7%	14.8%
Profit After Taxes (PAT)	4,824	44,378	43,125	81,900	126,572
<i>PAT margin</i>	4.5%	18.3%	12.3%	17.9%	22.0%
Extraordinary items	(374)	(600)	0	0	0
Net Profit	4,450	43,778	43,125	81,900	126,572
Number of Shares Outstanding	2,045	3,173	3,173	3,173	3,173
EPS	2.18	13.94	13.73	26.07	40.29
Cash EPS	10.67	24.43	40.68	57.03	75.40
YoY Growth					
Revenue		125.0%	44.3%	30.6%	25.8%
Operating Expenses		85.7%	18.5%	28.3%	24.7%
EBITDA		256.3%	89.2%	33.1%	27.0%
EBIT		616.2%	47.4%	51.9%	37.6%
Profit before Taxes		848.9%	8.3%	83.5%	53.0%
Profit after Taxes		819.9%	-2.8%	89.9%	54.5%
Cash EPS		128.9%	66.5%	40.2%	32.2%
Statement has been consolidated from FY07E					
Source: Macquarie Research, January 2007					

Fig 10 RCOM+Hutch post acquisition combined balance sheet, fiscal year-end March

Particulars (Rs m)	FY06	FY07E	FY08E	FY09E	FY10E
Assets					
Current Assets	105,354	216,084	290,121	377,649	447,590
Fixed Assets	214,263	412,941	507,503	615,738	720,417
Goodwill	0	852,396	809,670	766,943	724,217
Other Non-current Assets	121	51,542	58,261	77,609	107,244
Deferred Tax Assets	0	3,091	3,091	3,091	3,091
Total Assets	319,738	1,536,053	1,668,646	1,841,030	2,002,558
Liabilities					
Current Liabilities	109,247	205,803	274,007	348,851	399,699
Total Debt	92,976	664,861	686,125	701,764	685,872
Deferred tax liabilities	0	529	529	529	529
Total Liabilities	202,223	871,192	960,660	1,051,143	1,086,100
Total Shareholder's Equity	117,515	664,861	707,986	789,886	916,458

Statement has been consolidated from FY07E; We have amortised Goodwill created on HEL acquisition over a period of 20 years.

Source: Macquarie Research, January 2007

Hutchison Essar – financial statements (stand-alone entity)

Fig 11 Hutchison Essar - annual income statement, fiscal year-end December

Particulars (Rs m)	CY2005	CY2006E	CY2007E	CY2008E	CY2009E
Total Revenues	57,238	91,511	139,897	187,872	238,821
- Spectrum charges (% total revenues)	1,518 2.7%	2,442 2.7%	3,647 2.6%	4,791 2.6%	6,502 2.7%
- License fees (% total revenues)	4,070 7.1%	6,778 7.4%	9,840 7.0%	13,136 7.0%	16,353 6.8%
- Other Access & Interconnect charges (% total revenues)	12,402 21.7%	17,840 19.5%	25,940 18.5%	33,331 17.7%	41,794 17.5%
- Staffing costs (% total revenues)	3,720 6.5%	5,948 6.5%	8,883 6.4%	11,737 6.2%	14,807 6.2%
- Other operating expenses (% total revenues)	16,993 29.7%	28,456 31.1%	42,286 30.2%	56,362 30.0%	69,855 29.3%
Total operating expenses (% of total revenues)	38,702 67.6%	61,464 67.2%	90,596 64.8%	119,356 63.5%	149,311 62.5%
EBITDA	18,535	30,047	49,301	68,516	89,510
<i>EBITDA Margin</i>	32.4%	32.8%	35.2%	36.5%	37.5%
Depreciation & Amortization	4,564	7,327	11,459	16,124	20,915
EBIT	13,972	22,720	37,842	52,392	68,595
<i>EBIT Margin</i>	24.4%	24.8%	27.1%	27.9%	28.7%
Net Interest Expense/ (Income)	1,954	4,573	6,655	7,958	8,420
Pre-tax profits	12,017	18,148	31,187	44,434	60,176
Income tax expense / (benefit) <i>Effective tax rate</i>	1,803 15.0%	2,722 15.0%	4,678 15.0%	6,665 15.0%	9,026 15.0%
Profit After Taxes	10,215	15,425	26,509	37,769	51,149
<i>PAT Margin</i>	17.8%	16.9%	18.9%	20.1%	21.4%
Minority Interest	4,699	7,096	12,194	17,374	23,529
<i>Minority Share (%)</i>		46.0%	46.0%	46.0%	46.0%
Net Income (attributable to HTIL)	5,516	8,330	14,315	20,395	27,621
YoY Growth					
Revenue		59.9%	52.9%	34.3%	27.1%
Operating Expenses		58.8%	47.4%	31.7%	25.1%
EBITDA		62.1%	64.1%	39.0%	30.6%
EBIT		62.6%	66.6%	38.4%	30.9%
Profit before Taxes		51.0%	71.9%	42.5%	35.4%
Profit after Taxes		51.0%	71.9%	42.5%	35.4%

Source: Macquarie Research, January 2007

Fig 12 Hutchison Essar – annual balance sheet, fiscal year-end December

Particulars (Rs m)	CY2005	CY2006E	CY2007E	CY2008E	CY2009E
Assets					
Current Assets	39,970	43,875	67,074	90,076	114,503
Fixed Assets	44,582	81,231	129,802	182,821	235,668
Goodwill	21,972	20,717	19,463	18,208	16,954
Other Non-current Assets	8,685	51,417	46,285	42,982	39,072
Deferred Tax Assets	3,091	3,091	3,091	3,091	3,091
Total Assets	118,299	200,331	265,714	337,177	409,288
Liabilities					
Current Liability	28,635	42,099	62,052	81,751	102,268
Short term loans	10,434	63,577	82,498	96,493	96,937
Long-term loans	23,569	23,569	23,569	23,569	23,569
Deferred tax liabilities	529	529	529	529	529
Total Liabilities	63,167	129,773	168,647	202,341	223,303
Total Shareholder's Equity	55,132	70,558	97,067	134,836	185,985

Source: Macquarie Research, January 2007

Fig 13 RCOM annual income statement (stand-alone entity), fiscal year-end March

Particulars (Rs m)	FY2006	FY2007E	FY2008E	FY2009E
Revenues				
Wireless	73,637	112,135	163,321	214,240
Global service revenues	51,858	54,541	65,569	76,427
Broadband & Telephone Service revenues	5,128	11,751	17,104	25,894
Others	3,213	4,699	5,653	6,012
Inter-segment eliminations	(26,172)	(32,367)	(41,941)	(53,762)
Total revenues	107,664	150,758	209,706	268,811
Operating expenses				
Access & Interconnection Usage Charges & License Fees	40,400	40,101	56,674	71,124
(% total revenues)	37.5%	26.6%	27.0%	26.5%
Network Operations Costs - (a)		17,649	23,857	29,569
(% total revenues)		11.7%	11.4%	11.0%
Employee Cost - (b)		9,823	13,678	17,204
(% total revenues)		6.5%	6.5%	6.4%
Selling & General Cost - (c)		24,800	30,887	40,859
(% total revenues)	0.0%	16.5%	14.7%	15.2%
Total Service Operating Expenses - (a+b+c)	42,444	52,272	68,423	87,632
(% total revenues)	39.4%	34.7%	32.6%	32.6%
Total operating expense	82,844	92,373	125,097	158,757
(% total revenues)	76.9%	61.3%	59.7%	59.1%
EBITDA	24,820	58,385	84,609	110,054
(% total revenues)	23.1%	38.7%	40.3%	40.9%
Net Interest	(2,679)	(2,623)	(1,498)	1,141
Depreciation	(16,990)	(25,030)	(31,737)	(39,657)
(% total revenues)	15.8%	16.6%	15.1%	14.8%
Profit before taxes (PBT)	5,151	30,733	51,374	71,538
(% total revenues)	4.8%	20.4%	24.5%	26.6%
Income tax expense / (benefit)	327	1,780	5,137	8,585
Effective Tax Rate (%)	6.3%	5.8%	10.0%	12.0%
Profit after taxes (PAT)	4,824	28,953	46,237	62,954
Extraordinary items	(374)	(600)		
Reported net profit	4,450	28,353	46,237	62,954
Adjusted net profit	4,824	28,953	46,237	62,954
(% total revenues)	4.5	19.2	22.0	23.4
Adjusted diluted EPS (Rs)	2.36	14.16	22.61	30.79
YoY growth (%)				
Total revenues		40.0	39.1	28.2
Access & interconnection charges & license fees		(0.7)	41.3	25.5
Network operations			35.2	23.9
Employee costs			39.3	25.8
Selling & general costs			24.5	32.3
Operating expenses		11.5	35.4	26.9
EBITDA		135.2	44.9	30.1
Adjusted net profit after taxes		500.2	59.7	36.2
Adjusted diluted EPS		500.2	59.7	36.2
Key parameters				
RoE (%)	4.1%	18.4%	21.0%	23.0%
RoA (%)	2.4%	6.6%	8.8%	9.7%
Fixed asset turnover (X)	0.50	0.45	0.55	0.62
Total asset turnover (X)	0.51	0.44	0.54	0.59
Book value/share (Rs) - Diluted	57.48	96.10	118.71	149.50
Source: Company data, Macquarie Research, January 2007				

Fig 14 RCOM balance sheet (stand-alone entity), fiscal year-end March

Particulars (Rs m)	FY2006	FY2007E	FY2008E	FY2009E
ASSETS				
Cash and cash equivalents	60,037	109,808	141,090	181,906
Inventories	4,076	4,774	6,271	8,085
Debtors	16,808	24,826	32,607	42,041
Other current assets	765	1,766	2,320	2,991
Loans and Advances	23,668	31,033	40,759	52,551
Total current assets	105,354	172,208	223,047	287,573
Fixed assets				
Gross block	230,531	363,933	449,383	550,545
Less: Depreciation	47,573	73,848	105,585	145,242
Net block	182,958	290,085	343,798	405,303
Capital work-in-progress	31,305	41,624	33,903	27,614
Goodwill		2,237	2,237	2,237
Total fixed assets	214,263	333,946	379,938	435,154
Investments	121	125	125	125
Total assets	319,738	506,280	603,110	722,853
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities	89,956	134,984	174,770	224,174
Provisions	19,291	28,720	37,185	42,927
Total current liabilities	109,247	163,704	211,955	267,100
Secured foreign currency loans	35,079	21,426	21,426	21,426
Secured rupee loans	52,106	47,000	47,000	47,000
Unsecured loans	5,791	77,564	79,907	81,551
Total debt	92,976	145,990	148,333	149,977
Minority interest		99	99	99
Stockholders' equity	117,515	196,487	242,724	305,677
Share capital	10,223	10,223	10,223	10,223
Reserves	107,292	186,264	232,501	295,454
Total liabilities and stockholders' equity	319,738	506,280	603,110	722,853
Ratios				
Net debt/equity	0.28	0.18	0.03	(0.10)
Gross debt/equity	0.79	0.74	0.61	0.49
WC/revenues (%)	(3.62)	5.64	5.29	7.62
Net working capital days <Days of Gross Sales>	(13.20)	20.59	19.31	27.80

Source: Company data, Macquarie Research, January 2007

Fig 15 RCOM cashflow statement (stand-alone entity), fiscal year-end March

Particulars	FY2006	FY2007E	FY2008E	FY2009E
Cashflow from operating activities				
Net profit / (Loss)	4,439	28,351	46,237	62,953
<i>Add:</i>				
Depreciation	16,987	25,030	31,737	39,657
Provision for doubtful debts	746	605		
Interest expense (net)	2,595	2,623	1,498	-1,141
(Profit)/Loss on sale of assets / investments	-673	-634		
Tax expense / (income)	337	-643		
Extraordinary items		300		
Exchange (gain) / loss	620	0		
Increase / (decrease) in working capital	17,304	-3,529	28,693	31,436
Net cash provided by / used in operating activities	42,355	52,103	108,165	132,905
Cashflow from investing activities				
Capex	-39,238	-58,901	-77,729	-94,873
Sale of fixed assets / investments	3,066	276	0	0
Interest expense (net)	-2,595	-2,119	-1,498	1,141
Net cash provided by / used in investing activities	-38,767	-60,744	-79,227	-93,732
Cashflow from financing activities				
Changes in net debt	-12,960	58,411	2,343	1,643
Increase in share capital				
Net cash provided by / used in financing activities	-12,960	58,411	2,343	1,643
Net (decrease) / increase in cash	-9,372	49,770	31,281	40,817
Cash at the beginning of the period	69,409	60,038	109,808	141,090
Cash at the end of the period	60,037	109,808	141,090	181,906
Source: Company data, Macquarie Research, January 2007				

Reliance Communications Limited (RCOM IN, Outperform, Target price: Rs500.00)

Key Performance Indicators					Profit & Loss						
		2006A	2007E	2008E	2009E		2006A	2007E	2008E	2009E	
Wireless Subscribers	m	20.2	32.7	49.0	64.9	Revenue	m	107,664	150,758	209,706	268,811
Subscriber market share	m	21.0	21.2	21.9	22.3	Gross Profit	m	43,524	83,186	115,497	150,913
Gross wireless ARPU		401	360	319	294	Cost of Goods Sold	m	64,140	67,573	94,209	117,897
Wireless ARPM		0.75	0.73	0.64	0.59	EBITDA	m	24,820	58,386	84,610	110,054
Wireless EBITDA per minute		0.23	0.27	0.24	0.23	Depreciation	m	16,990	25,030	31,737	39,657
Total Revenues	m	110,314	149,238	201,512	257,938	Amortisation of Goodwill	m	0	0	0	0
Wireless	m	73,799	111,874	155,395	201,066	Other Amortisation	m	0	0	0	0
Global	m	55,429	54,529	65,253	75,342	EBIT	m	7,830	33,356	52,873	70,397
Broadband & Fixed	m	5,163	11,739	18,596	28,153	Net Interest Income	m	-2,679	-2,623	-1,498	1,141
Others	m	2,763	4,237	4,586	4,964	Associates	m	0	0	0	0
Intersegment eliminations	m	(26,840)	(33,140)	(42,318)	(51,588)	Exceptionals	m	-374	-600	0	0
Revenue Mix						Forex Gains / Losses	m	0	0	0	0
Wireless	%	66.9	75.0	77.1	78.0	Other Pre-Tax Income	m	0	0	0	0
Global	%	50.2	36.5	32.4	29.2	Pre-Tax Profit	m	4,777	30,133	51,375	71,538
Broadband & Fixed	%	4.7	7.9	9.2	10.9	Tax Expense	m	-327	-1,780	-5,137	-8,585
Others	%	2.5	2.8	2.3	1.9	Net Profit	m	4,450	28,353	46,237	62,954
Intersegment eliminations	%	(24.3)	(22.2)	(21.0)	(20.0)	Minority Interests	m	0	0	0	0
EBITDA margin	%	22.4	37.8	38.9	40.3	Reported Earnings	m	4,450	28,353	46,237	62,954
Wireless	%	30.5	37.3	38.1	38.5	Adjusted Earnings	m	4,824	28,951	46,237	62,953
Global (Long distance)	%	11.1	21.0	21.0	21.5	EPS (rep)		2.18	13.87	22.61	30.79
Broadband & Fixed	%	14.7	40.2	42.0	43.0	EPS (adj)		2.36	14.16	22.61	30.79
Others (Net of Intersegment eliminations)	%	19.6	4.9	6.2	3.6	EPS Growth (adj)	%	nmf	500.1	59.7	36.2
Capex	m	67,661	89,141	98,353	67,661	PE (rep)	x	187.1	29.4	18.0	13.2
Wireless	m	44,224	64,110	70,702	44,224	PE (adj)	x	172.6	28.8	18.0	13.2
Global (Long distance)	m	13,800	15,870	17,457	13,800	Total DPS		0.00	0.00	0.00	0.00
Broadband & Fixed	m	4,600	4,600	5,060	4,600	Total Div Yield	%	0.0	0.0	0.0	0.0
						Weighted Average Shares	m	2,045	2,045	2,045	2,045
						Period End Shares	m	2,045	2,045	2,045	2,045
Profit and Loss Ratios					Cashflow Analysis						
		2006A	2007E	2008E	2009E		2006A	2007E	2008E	2009E	
Revenue Growth	%	nmf	40.0	39.1	28.2	EBITDA	m	23,685	55,027	79,472	101,469
EBITDA Growth	%	nmf	135.2	44.9	30.1	Tax Paid	m	0	0	0	0
EBIT Growth	%	nmf	326.0	58.5	33.1	Chgs in Working Cap	m	17,304	-3,529	28,693	31,436
Gross Profit Margin	%	40.4	55.2	55.1	56.1	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	23.1	38.7	40.3	40.9	Other	m	1,366	605	0	0
EBIT Margin	%	7.3	22.1	25.2	26.2	Operating Cashflow	m	42,355	52,103	108,165	132,905
Net Profit Margin	%	4.1	18.8	22.0	23.4	Acquisitions	m	0	0	0	0
Payout Ratio	%	0.0	0.0	0.0	0.0	Capex	m	-39,238	-58,901	-77,729	-94,873
EV/EBITDA	x	34.4	14.6	10.1	7.8	Asset Sales	m	3,066	276	0	0
EV/EBIT	x	109.0	25.6	16.1	12.1	Other	m	-2,595	-2,119	-1,498	1,141
Balance Sheet Ratios						Investing Cashflow	m	-38,767	-60,744	-79,227	-93,732
ROE	%	4.1	18.4	21.1	23.0	Dividend (Ordinary)	m	0	0	0	0
ROA	%	2.4	8.1	9.5	10.6	Equity Raised	m	0	0	0	0
ROIC	%	nmf	20.9	20.4	24.8	Debt Movements	m	-12,960	58,411	2,343	1,643
Net Debt/Equity	%	28.0	18.4	3.0	-10.4	Other	m	0	0	0	0
Interest Cover	x	2.9	12.7	35.3	nmf	Financing Cashflow	m	-12,960	58,411	2,343	1,643
Price/Book	x	7.1	4.2	3.4	2.7	Net Chg in Cash/Debt	m	-9,372	49,770	31,281	40,817
Book Value per Share		57.5	96.1	118.7	149.5						
					Balance Sheet						
		2006A	2007E	2008E	2009E		2006A	2007E	2008E	2009E	
Cash	m	60,037	109,808	141,090	181,906	Cash	m	60,037	109,808	141,090	181,906
Receivables	m	16,808	24,826	32,607	42,041	Receivables	m	16,808	24,826	32,607	42,041
Inventories	m	4,076	4,774	6,271	8,085	Inventories	m	4,076	4,774	6,271	8,085
Investments	m	121	125	125	125	Investments	m	121	125	125	125
Fixed Assets	m	214,263	331,709	377,701	432,917	Fixed Assets	m	214,263	331,709	377,701	432,917
Intangibles	m	0	2,237	2,237	2,237	Intangibles	m	0	2,237	2,237	2,237
Other Assets	m	24,433	32,799	43,079	55,542	Other Assets	m	24,433	32,799	43,079	55,542
Total Assets	m	319,738	506,280	603,110	722,853	Total Assets	m	319,738	506,280	603,110	722,853
Payables	m	89,956	134,984	174,770	224,174	Payables	m	89,956	134,984	174,770	224,174
Short Term Debt	m	0	0	0	0	Short Term Debt	m	0	0	0	0
Long Term Debt	m	92,976	145,990	148,333	149,977	Long Term Debt	m	92,976	145,990	148,333	149,977
Provisions	m	19,291	28,720	37,185	42,927	Provisions	m	19,291	28,720	37,185	42,927
Other Liabilities	m	0	0	0	0	Other Liabilities	m	0	0	0	0
Total Liabilities	m	202,223	309,694	360,288	417,077	Total Liabilities	m	202,223	309,694	360,288	417,077
Shareholders' Funds	m	117,515	196,487	242,724	305,677	Shareholders' Funds	m	117,515	196,487	242,724	305,677
Minority Interests	m	0	99	99	99	Minority Interests	m	0	99	99	99
Other	m	0	0	0	0	Other	m	0	0	0	0
Total S/H Equity	m	117,515	196,586	242,823	305,776	Total S/H Equity	m	117,515	196,586	242,823	305,776
Total Liab & S/H Funds	m	319,738	506,280	603,110	722,853	Total Liab & S/H Funds	m	319,738	506,280	603,110	722,853

All figures in INR unless noted.

Source: Macquarie Research, January 2007

Important disclosures:

Recommendation definitions

Macquarie Australia/New Zealand

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)
 Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)
 Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

Macquarie Asia

Outperform – expected return >+10%
 Neutral – expected return from -10% to +10%
 Underperform – expected return <-10%

Macquarie First South Securities (South Africa)

Outperform – return > 5% in excess of benchmark return
 Neutral – return within 5% of benchmark return
 Underperform – return >5% below benchmark return

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Recommendation proportions

	AU/NZ	Asia	RSA
Outperform	43.12%	58.91%	42.20%
Neutral	44.98%	22.92%	46.80%
Underperform	11.90%	18.17%	11.00%

For quarter ending 31 December 2006

Volatility index definition*

This is calculated from the volatility of historic price movements.

Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low–medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:
 Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
 Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / efpowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

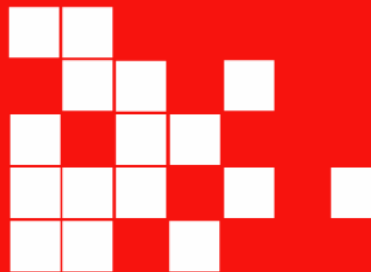
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Banks and Non-Bank Financials

Ismael Pili (Asia, Singapore)	(65) 6231 2840
Nick Lord (China, Hong Kong)	(852) 2823 4774
Christina Fok (China)	(852) 2823 3584
Chris Esson (Hong Kong)	(852) 2823 3567
Seshadri Sen (India)	(9122) 6653 3053
Liny Halim (Indonesia)	(6221) 515 7343
Hideyasu Ban (Japan)	(813) 3512 7858
Kentaro Kogi (Japan)	(813) 3512 7865
Hwashin Lee (Korea)	(822) 3705 4994
Mark Barclay (Korea)	(822) 3705 8658
Young Chung Mok (Korea)	(822) 3705 8668
Chin Seng Tay (Malaysia, S'pore)	(65) 6231 2837
Gilbert Lopez (Philippines)	(632) 857 0898
Chris Hunt (Taiwan)	(8862) 2734 7526
Matthew Smith (Taiwan)	(8862) 2734 7514
Alastair Macdonald (Thailand)	(662) 694 7741

Chemicals/Textiles

Scott Weaver (China, Taiwan)	(8862) 2734 7512
Jal Irani (India)	(9122) 6653 3040
Kitti Nathisuwan (Thailand)	(662) 694 7724

Conglomerates

Peter So (China)	(852) 2823 3586
Gilbert Lopez (Philippines)	(632) 857 0898

Consumer

Ramiz Chelat (Asia)	(852) 2823 3587
Xiaopo Wei (China)	(852) 2823 4741
Unmesh Sharma (India)	(9122) 6653 3042
Sarina Lesmina (Indonesia)	(6221) 515 7339
Duane Sandberg (Japan)	(813) 3512 7867
Christina Lee (Korea)	(822) 3705 8670
Paul Hwang (Korea)	(822) 3705 8678
Woochang Chung (Korea)	(822) 3705 8667
Edward Ong (Malaysia)	(603) 2059 8982
Nadine Javellana (Philippines)	(632) 857 0890
Chris Clayton (Thailand)	(662) 694 7829

Emerging Leaders

Paul Quah (Hong Kong)	(852) 2823 4627
Saurabh Jain (India)	(9122) 6653 3046
Oliver Cox (Japan)	(813) 3512 7871
Robert Burghart (Japan)	(813) 3512 7853
Paul Hwang (Korea)	(822) 3705 8678
Woochang Chung (Korea)	(822) 3705 8667
Nadine Javellana (Philippines)	(632) 857 0890
Jeremy Chen (Taiwan)	(8862) 2734 7521
Scott Weaver (Taiwan)	(8862) 2734 7512

Insurance

Chris Esson (China, Taiwan)	(852) 2823 3567
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Sales

Regional Heads of Sales

Greg Gordon (Asia)	(852) 2823 3509
Peter Slater (Boston)	(1 617) 217 2103
Michelle Paisley (China, Hong Kong)	(852) 2823 3516
Ulrike Pollak-Tsutsumi (Frankfurt)	(49) 69 7593 8747
Daniel Fust (Geneva)	(41) 22 818 7710
Thomas Renz (Geneva)	(41) 22 818 7712
Ajay Bhatia (India)	(9122) 6653 3200
Stuart Smythe (India)	(9122) 6653 3200
Eugene Ha (Korea)	(822) 3705 8643
K.Y. Nam (Korea)	(822) 3705 8607
Derek Wilson (London)(N Asia)	(44) 20 7065 5856
Julien Roux (London)	(44) 20 7065 5887
Lena Yong (Malaysia)	(603) 2059 8888
Ismael Pili (Philippines)	(65) 6231 2840
Greg Norton-Kidd (New York)	(1 212) 231 2527
Luke Sullivan (New York)	(1 212) 231 2507

Media

Ramiz Chelat (Asia)	(852) 2823 3587
Prem Jearajasingam (Malaysia)	(603) 2059 8989

Metals and Mining

Simon Francis (Asia)	(852) 2823 3590
Felix Lam (China, HK, Taiwan)	(852) 2823 3575
Rakesh Arora (India)	(9122) 6653 3054
Adam Worthington (Indonesia)	(6221) 515 7338
Christina Lee (Korea)	(822) 3705 8670

Oil and Gas

David Johnson (Asia)	(852) 2823 4691
Scott Weaver (China, Taiwan)	(8862) 2734 7512
Jal Irani (India)	(9122) 6653 3040
Mark Barclay (Korea)	(822) 3705 8658
Edward Ong (Malaysia)	(603) 2059 8982
Kitti Nathisuwan (Thailand)	(662) 694 7724

Pharmaceuticals

Shubham Majumder (India)	(9122) 6653 3049
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Property

Matt Nacard (Asia)	(852) 2823 4731
Eva Lee (Hong Kong)	(852) 2823 3573
Siddhartha Gupta	(9122) 6653 3048
Takashi Sakai (Japan)	(813) 3512 7884
Francis Eng (Malaysia)	(603) 2059 8986
Gilbert Lopez (Philippines)	(632) 857 0898
Tuck Yin Soong (Singapore)	(65) 6231 2838
Corinne Jian (Taiwan)	(8862) 2734 7529
Monchai Jaturnapinyo (Thailand)	(662) 694 7727

Technology

Suveer Chainani (India)	(9122) 6653 3045
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David Gibson (Japan)	(813) 3512 7880
George Chang (Japan)	(813) 3512 7854
Yoshihiro Shimada (Japan)	(813) 3512 7862
Do Hoon Lee (Korea)	(822) 3705 8641
Michael Bang (Korea)	(822) 3705 8659
Patrick Yau (Singapore)	(65) 6231 2835
Cheryl Hsu (Taiwan)	(8862) 2734 7522
Daniel Chang (Taiwan)	(8862) 2734 7516
Dominic Grant (Taiwan)	(8862) 2734 7528
Jessica Chang (Taiwan)	(8862) 2734 7518
Nicholas Teo (Taiwan)	(8862) 2734 7523
Warren Lau (Taiwan)	(852) 2823 3592

Telecoms

Tim Smart (Asia)	(852) 2823 3565
Jake Lynch (China, Hong Kong)	(852) 2823 3583
Shubham Majumder (India)	(9122) 6653 3049
Richard Moe (Indonesia)	(662) 694 7753
Nathan Ramlar (Japan)	(813) 3512 7875
Joel Kim (Korea)	(822) 3705 8677
Prem Jearajasingam (Malaysia)	(603) 2059 8989
Ramakrishna Maruvada (Singapore)	(65) 6231 2842
Dominic Grant (Taiwan)	(8862) 2734 7528
Richard Moe (Thailand)	(662) 694 7753

Regional Heads of Sales cont'd

Mark Lawrence (New York)	(1 212) 231 2516
Sheila Schroeder (San Francisco)	(1 415) 835 1235
Giles Heyring (Singapore)	(65) 6231 2888
Mark Duncan (Taiwan)	(8862) 2734 7510
Angus Kent (Thailand)	(662) 694 7601
Dominic Henderson (Tokyo)	(813) 3512 7820
Nick Cant (Tokyo)	(813) 3512 7821
Charles Nelson (UK/Europe)	(44) 20 7065 2032
Rob Fabbro (UK/Europe)	(44) 20 7065 2031

Sales Trading

Anthony Wilson (Asia)	(852) 2823 3511
Mona Lee (Hong Kong)	(852) 2823 3519
Stuart Goddard (Europe)	(44) 20 7065 2033
Vijay Gussain (India)	(9122) 6653 3205
Howard Yoon (Korea)	(822) 3705 8601

Transport & Logistics

Anderson Chow (China, Hong Kong)	(852) 2823 4773
Michael Chan (China)	(852) 2823 3595
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Utilities

Sylvia Chan (Asia)	(852) 2823 3579
Adam Worthington (Indonesia)	(6221) 515 7338
Prem Jearajasingam (Malaysia)	(603) 2059 8989

Commodities

Jim Lennon	(4420) 7065 2014
Adam Rowley	(4420) 7065 2013
Bonnie Liu	(4420) 7065 2014
Henry Liu	(4420) 7065 2014

Data Services

Liz Dinh (Asia)	(852) 2823 4762
Brent Borger (Japan)	(813) 3512 7852

Economics

Roland Randall (Asean)	(852) 2823 3572
Bill Belchere (Asia)	(852) 2823 4636
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Paul Cavey (China)	(852) 2823 3570
Daniel McCormack (Int'l)	(612) 8232 2999
Richard Jerram (Japan)	(813) 3512 7855

Quantitative

Martin Emery (Asia)	(852) 2823 3582
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Strategy/Country

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Desh Peramunetilleke (Asia)	(852) 2823 3564
Jake Lynch (China)	(852) 2823 3583
Jal Irani (India)	(9122) 6653 3040
Peter Eadon-Clarke (Japan)	(813) 3512 7850
Eugene Ha (Korea)	(822) 3705 8643
Uday Jayaram (Malaysia)	(603) 2059 8988
Gilbert Lopez (Philippines)	(632) 857 0898
Tuck Yin Soong (Singapore)	(65) 6231 2838
Chris Hunt (Taiwan)	(8862) 2734 7526
Kitti Nathisuwan (Thailand)	(662) 694 7724

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Sales Trading cont'd

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Isaac Huang (Taiwan)	(8862) 2734 7582
Kenichi Ohtaka (Tokyo)	(813) 3512 7830

Index Sales

Margaret Hartmann	(612) 8232 9834
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Alternative Strategies

Convertibles - Roland Sharman	(852) 2823 4628
Depository Receipts - Robert Ansell	(852) 2823 4688
Derivatives - Vipul Shah	(852) 2823 3523
Futures - Tim Smith	(852) 2823 4637
Hedge Fund Sales - Darin Lester	(852) 2823 4736
Structured Products - Andrew Terlich	(852) 2249 3225