Macquarie Research Equities



Bharti Airtel

24 January 2007

INDIA

BHARTI IN	Οι	tperform
Stock price as of 23 Jan 07 12-month target Upside/downside Valuation - DCF (WACC 12.3%)	Rs Rs % Rs	689.15 750.00 +8.8 750.00

GICS sector	telecommunic	ation services
Market cap	Rs bn	1,306
30-day avg turnover	Rs m	108.5
Market cap	US\$m	29,612
Number shares on iss	ue m	1,896

Investment fundamentals

Year end 31 Mar		2006A	2007E	2008E	2009E
Total revenue	bn	116.6	183.8	267.5	345.7
EBIT	bn	27.7	48.3	73.7	97.3
EBIT Growth	%	52.5	74.1	52.7	31.9
Recurring profit	bn	25.6	45.5	68.1	92.5
Reported profit	bn	22.6	39.7	58.6	78.0
Adjusted profit	bn	22.6	39.7	58.6	78.0
EPS rep	Rs	11.99	20.96	30.90	41.17
EPS rep growth	%	50.0	74.7	47.4	33.2
EPS adj	Rs	11.99	20.96	30.90	41.17
EPS adj growth	%	50.2	74.7	47.4	33.2
PE rep	x	57.5	32.9	22.3	16.7
PE adj	x	57.5	32.9	22.3	16.7
Total DPS	Rs	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	14.6	17.3	18.1	18.3
ROE	%	29.5	35.4	36.2	33.9
EV/EBITDA	X	31.0	18.4	12.3	9.3
Net debt/equity	%	48.2	45.9	41.8	26.5
Price/book	X	14.2	9.7	6.7	4.8

BHARTI IN rel SENSEX performance, & rec history



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

Analysts

Shubham Majumder 9122 66533049 shubham.majumder@macquarie.com Ankur Arora

9122 66533050 ankur.arora@macquarie.com

Power punch, one after another!

Event

• **Bharti Airtel** released outstanding 3QFY07 results, beating our and consensus estimates by a significant margin. This is the second straight quarter of positive earnings surprises from the company, led by flawless execution and scale benefits.

Impact

- 3Q results well above our expectations: For 3QFY07, revenue was Rs49.1bn, up 12.8% QoQ and 62.4% YoY (in line with our estimates). PAT in 3Q was Rs12.2bn (up 30%QoQ and 123% YoY), ahead of our estimate of Rs11bn, primarily because of better-than-expected EBITDA margins. In addition, PAT was aided by forex gains of Rs2.19bn due to sharp appreciation in the Indian rupee against the US dollar and the Japanese yen in 3Q.
- Highest-ever EBITDA margin: EBITDA margin for 3Q was at 40.8%, an expansion of 170bp QoQ and 380 bp YoY. The increase was supported by better EBITDA margins from all businesses. This is historically the strongest EBITDA margin registered by Bharti, led by savings in network opex (flat QoQ) and SG&A expenses (down 2.4% QoQ), driven by economies of scale.
- Mobility business revenue grew 13.8% QoQ and 72.8% YoY to Rs37.6bn. ARPU in the quarter stood at Rs427, compared to Rs438 in 2QFY07 and Rs441 in 1QFY07. MoU per month increased to 467 minutes compared to 451 minutes in 2Q, implying increased usage by existing customers even as it adds low MoU/ARPU subscribers. We see continued increase in MoUs.
- Capex in 3Q was Rs19.1bn, down 42% QoQ led by much lower capex in the wireless division. Bharti hived off its portfolio of 34,000 towers into a 100%owned subsidiary, Bharti Infratel. Bharti is entering the Sri Lanka wireless market as the fifth operator (capex not disclosed yet by mgmt).
- Bharti is acquiring the i2i submarine cable link between India Singapore for a consideration of US\$110m, its first submarine cable asset.

Earnings revision

No Change.

Price catalyst

- 12-month price target: Rs750.00 based on a DCF methodology.
- Catalyst: 1) Completion of network expansion in all urban centres in the next 12 months; 2) Sequential EBITDA margin improvements; 3) Significant capex and opex savings from network infrastructure sharing.

Action and recommendation

Bharti is our top pick in the India and Asia telecom sectors. We expect Bharti
to maintain its revenue/subscriber leadership in Indian wireless in the coming
years. We reiterate our strong Outperform rating with a target price of Rs750.

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

Fig 1 Bharti Airtel: 3QFY07 Quarterly Results and Division-wise Snapshot

TIG I BHAIL AILEI. SQL IVI QUALETY	Results all			Shapsho					
Year to Mar (Rs mn)	1QFY06	2QFY06	3QFY06	4QFY06	1QFY07	2QFY07	3QFY07	(% chg YoY)	(% chg QoQ)
Segmental Breakdown of Revenues:	47.404	40.050	04 740	04404	00.444		07 570		
Mobile Broadband & Telephone Service	17,464 3,404	19,052 3,656	21,742 3,854	24,134 4,102	28,411 5,182	33,022 5,244	37,579 5,984	72.8 55.3	13.8 14.1
Long Distance Service	5,209	5,563	6,322	7,463	7,064	8,362	9,306	47.2	11.3
Enterprise Service	1,610	1,708	1,861	2,005	1,969	2,148	2,422	30.1	12.8
Others	(2,514)	(2,888)	(3,522)	(3,590)	(4,063)	(5,205)	(6,162)	75.0	18.4
Revenues									
Services	24,767	26,678	29,851	33,625	38,303	43,301	48,929	63.9	13.0
Indefeasible right to use sales Equipment	103 303	114 299	108 298	110 379	109 151	109 161	109 91	0.9 (69.5)	(43.5)
Total Revenues	25,173	27,091	30,257	34,114	38,563	43,571	49,129	62.4	12.8
Operating Expenses									
Cost of services	11,415	12,443	13,591	15,214	17,126	19,211	21,912	61.2	14.1
(% total revenues)	45.3%	45.9%	44.9%	44.6%	44.4%	44.1%	44.6%	49.4	15.7
 Access charges, license fees & spectrum charges (% total revenues) 	7,292 29.0%	7,644 28.2%	8,581 28.4%	9,416 27.6%	10,007 25.9%	11,076 25.4%	12,816 26.1%	49.4	15.7
- Network operations costs	2,429	2,786	3,080	3,447	4,754	5,228	5,328	73.0	1.9
(% total revenues)	9.6%	10.3%	10.2%	10.1%	12.3%	12.0%	10.8%	70.0	1.5
- Employee costs	1,694	2,013	1,930	2,351	2,365	2,908	3,769	95.3	29.6
(% total revenues)	6.7%	7.4%	6.4%	6.9%	6.1%	6.7%	7.7%		
Costs of equipment sales	319	274	277	281	335	(48)	(48)	(117.3)	-
(% total revenues)	1.3%	1.0%	0.9%	0.8%	0.9%	-0.1%	-0.1%		
Selling, general & administrative expenses	4,032	4,162	5,188	5,836	6,081	7,384	7,210	39.0	(2.4)
(% total revenues)	16.0%	15.4%	17.1%	17.1%	15.8%	16.9%	14.7%	(400.0)	(400.0)
Pre-operating cost	6	6	8	10	9	2	-	(100.0)	(100.0)
(% total revenues)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	52.5	9.5
Total Operating Expense (% total revenues)	15,772 62.7%	16,885 62.3%	19,064 63.0%	21,341 62.6%	23,551 61.1%	26,549 60.9%	29,074 59.2%	52.5	9.0
EBITDA	9,401	10,206	11,193	12,773	15,012	17,022	20,055	79.2	17.8
(% total revenues)	37.3%	37.7%	37.0%	37.4%	38.9%	39.1%	40.8%		
Interest expense	(466)	(911)	(1,433)	(286)	(2,449)	(618)	711	(149.6)	(215.0)
Interest income	317	66	509	(447)	757	30	607	19.3	1,923.3
Depreciation	(3,403)	(3,703)	(4,026)	(4,698)	(4,972)	(5,926)	(7,072)	75.7	19.3
Share of profits in associates / joint ventures	(3)	1	(1)	(2)	-	4	(6)	500.0	
Other income	135	137	152	166	250	320	118	(22.4)	(63.1)
Non operating expenses	(1)	(1)	(8)	(92)	(1)	(51)	(1)	(87.5)	(98.0)
Profit Before Taxes (PBT)	5,980	5,795	6,386	7,414	8,597	10,781	14,412	125.7	33.7
Income tax (expense) / benefit Effective Tax Rate (%)	(815) 14%	(514) 9%	(858) 13%	(549) 7%	(952) 11%	(1,378) 13%	(2,139) 15%	149.3	55.2
(Profit) / loss to minority shareholders	(66)	(72)	(75)	(41)	(96)	(66)	(122)	62.7	84.8
Profit After Taxes (PAT)	5,099	5,209	5,453	6,824	7,549	9,337	12,151	122.8	30.1
(% total revenues)	20.3%	19.2%	18.0%	20.0%	19.6%	21.4%	24.7%		
Diluted EPS	2.70	2.79	2.90	3.61	3.98	4.93	6.41	121.4	30.1
Segmental Breakdown of EBITDA	C 005	6.040	7 000	0.746	10 244	10 170	14.129	70.4	16.0
Mobile Broadband & Telephone Service	6,085 984	6,949 811	7,932 946	8,746 934	10,341 1,193	12,179 1,069	14,129	78.1 70.5	16.0 50.9
Long Distance Service	1,869	2,021	2,130	2,771	2,750	3,367	4,002	87.9	18.9
Enterprise Service	663	694	630	714	936	907	1,092	73.3	20.4
Others	(200)	(269)	(445)	(392)	(208)	(500)	(781)	75.5	56.2
Segment-wise EBITDA Margin (%)									
Mobile Broadhand & Talanhana Sanjiga	34.8%	36.5%	36.5%	36.2%	36.4%	36.9%	37.6%		
Broadband & Telephone Service Long Distance Service	28.9% 35.9%	22.2% 36.3%	24.5% 33.7%	22.8% 37.1%	23.0% 38.9%	20.4% 40.3%	27.0% 43.0%		
Enterprise Service	41.2%	40.6%	33.9%	35.6%	47.5%	40.3%	45.1%		
Capex	9,702	13,568	15,861	24,207	21,495	32,911	19,078	20.3	(42.0)
Mobility	7,008	8,615	8,297	17,674	18,054	27,444	15,597	88.0	(43.2)
Broadband & Telephone Service	1,889	2,683	4,257	4,182	3,962	1,631	1,644	(61.4)	0.8
Long Distance Service	593	1,100	2,533	1,085	1,306	3,232	1,485	(41.4)	(54.1)
Enterprise Services	199	1,175	756	1,264	55	1,682	1,502	98. 7	(10.7)
Others	13	(5)	18	2	(1,882)	(1,078)	(1,150)		
Subscriber Base (m)	10.0		10.0	46.5	00 i	07 í	00.0	05.0	10.5
Wireless Wireline	12.3 0.9	14.1 1.0	16.3 1.2	19.6 1.3	23.1 1.5	27.1 1.6	32.0 1.7	95.8 47.7	18.2 6.5
	0.9	1.0	1.2	1.3	1.5	1.0	1.7	71.1	0.0
ARPU (Rs)	404.0	476.0	470.0	440.0	111 0	420.0	100.0	(0.0)	(0.6)
Wireless Wireline	491.0 1,256.0	476.0 1,203.0	470.0 1,136.0	442.0 1,063.0	441.0 1,202.0	438.0 1,115.0	426.6 1,197.9	(9.2) 5.4	(2.6) 7.4
Average Minutes of Usage Per User									
Average Minutes of Usage Per User Wireless	383.0	388.0	411.0	431.0	441.0	451.0	467.3	13.7	3.6
Wireless Average Revenue Per Minute									
Wireless	383.0 1.28	388.0 1.23	411.0	431.0 1.03	441.0 1.00	451.0 0.97	467.3 0.91	(20.2)	3.6 (6.0)

Wireless business leading the pack in performance

- Wireless business revenues were up 15.9% QoQ and 76% YoY to Rs38.3bn, on a subscriber base of 32m (up 18.2% QoQ).
- Total mobile traffic minutes grew 22% QoQ and 122% YoY to 41.3bn minutes. Mobile ARPU in 3Q was at Rs427, compared to Rs438 in 2QFY07 and Rs470 in 3QFY06. The MoU per month, per user, increased to 467 minutes from 451 minutes last quarter, implying increased usage by existing customers even as it adds low MoU/ARPU subscribers.
- As a result, mobility ARPM (average revenue per minute) declined by 6% to Rs0.91, compared to Rs0.97 in last quarter.
- EBITDA grew 16% QoQ and 78.1% YoY to Rs14.1bn, while EBITDA margin improved 70bp QoQ to 37.6%. The EBITDA margin for the mobile division in 3QFY06 was considerably lower at 36.5%.
- On the issue of subscriber re-verification, Bharti has completed verification of 70% of its prepaid customers. It expects to complete verification of 90% of its prepaid subscriber base by March 2007.

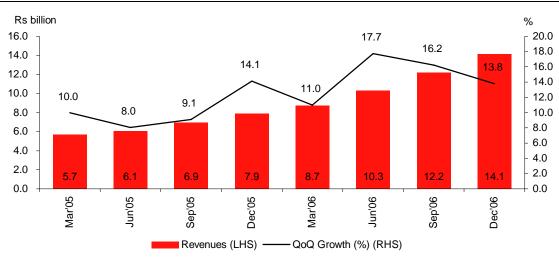


Fig 2 Mobile Revenues: going stronger and stronger

Source: Macquarie Research, January 2007

Broadband and Fixed Line services – higher ARPU driving robust growth

- Wireline revenues grew by 14.1% QoQ and 55.3% to Rs6bn, led by higher ARPU of Rs1,198 for 3QFY07. Higher share of DSL broadband contributed to the better ARPU in the quarter.
- EBITDA margin improved strongly to 27% in 3QFY07 compared to margin of 20.4% in 2QFY07. In the last quarter there were two one-off items. After adjusting for these one-off items, EBITDA margin in 2QFY07 was 23.6%. EBITDA margin in 3QFY07 improved 340bp over the revised EBITDA margins of last quarter.
- Traffic in this division decreased by 1% QoQ to 4.1bn minutes. Stronger ARPU (up 7.4% QoQ), however, compensated for the fall in traffic.
- Bharti's fixed-line network currently covers 94 towns/cities in India, signifying no increase in this quarter.
- Bharti plans to launch the IP-TV service by 4QFY07. This service will ride on the existing copper/ DSL network of Bharti.

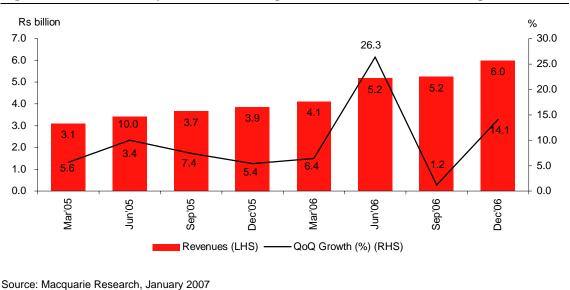


Fig 3 Broadband & telephone revenues – growth back on track with a bang

Long Distance Business – operating leverage improving margins

- Long distance revenues showed a healthy 11.3% QoQ and 47.2% YoY growth to Rs9.3bn, led by higher traffic on both ILD and NLD network of Bharti.
- National long distance traffic grew 22% QoQ to 4.4bn minutes while international long distance traffic grew 20% QoQ to 1.1bn minutes.
- Bharti recorded its highest ever long-distance EBITDA margin this quarter at 43%, an improvement of 270bp QoQ and 930bp YoY. As a result, EBITDA also grew strongly by 18.9% QoQ and 87.9% YoY. We expect Bharti to maintain or improve this margin in future on account of it being a high fixed cost business.

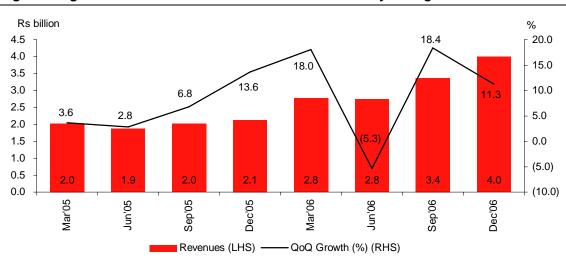


Fig 4 Long distance revenue – continued momentum led by strong access businesses

Source: Macquarie Research, January 2007

Enterprise services – fluctuating performance QoQ but positive trend line

- Enterprise service revenues grew 12.8% QoQ and 30.1% YoY to Rs2.4bn, while EBITDA margin improved by 290bp QoQ to 45.1%.
- Management attributed this fluctuating performance to the turnkey nature of the business, resulting in issues in recognition of income.

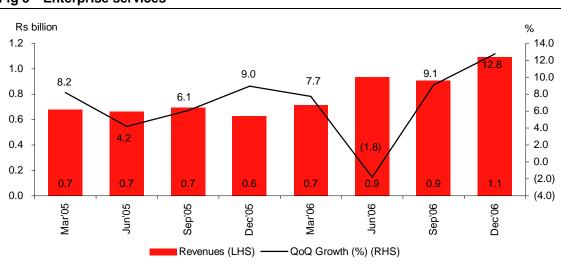


Fig 5 Enterprise services

Source: Macquarie Research, January 2007

Profit margins continue to improve

- EBITDA for 3Q grew by 17.8% QoQ to Rs20bn and EBITDA margin was at 40.8% this is historically the strongest EBITDA margin registered by Bharti, improving on its previous high of 39.1% in last quarter. PAT margin also came in at an all time high of 24.7%, partly aided by forex gains from appreciation of the rupee against the US dollar and the Japanese yen.
- Segment analysis of EBITDA margin reveals strong performance of all segments. EBITDA margin was higher than last quarter in all the segments. The mobility division EBITDA margin improved to 37.6% compared to 36.9% in 2QFY07. The wireline division's EBITDA margin also improved to 27% after a disappointing 2QFY07 (EBITDA margin: 20.4%). The EBITDA margin from long distance and enterprise service also improved to 43% and 45.1%, respectively.

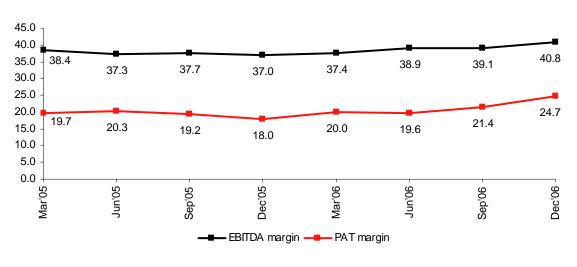
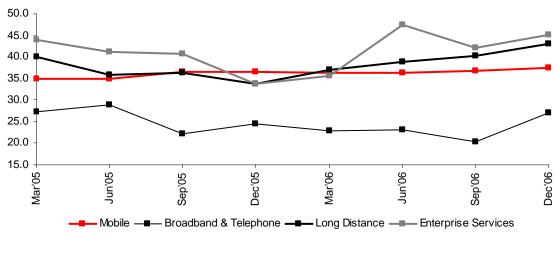


Fig 6 Margins at historic high – potential for continued expansion

Source: Macquarie Research, January 2007

Fig 7 EBITDA margins by segment – all pointing north



Source: Macquarie Research, January 2007

New subsidiary aimed at improving efficiency through tower sharing

- Bharti has hived off its portfolio of 34,000 towers into a subsidiary, Bharti Infratel, with the aim of active tower sharing leading to better capex and opex moderation. We believe this could also be a precursor to a minority stake sale to a strategic/financial partner or a potential listing. Bharti currently shares 23% of its towers with other players on a barter basis. This number is expected to improve with the new subsidiary coming into existence and active tower leasing being pursued (in exchange for lease rentals). Tower sharing could lead to further EBITDA margin expansion for Bharti (compared to what is currently forecast) due to lower network operating expenses, at the same time improving the cost economies of the wireless market as a whole.
- The key thesis behind tower and related infrastructure sharing: Around 60% of total wireless
 network capex is on passive infrastructure (towers, fibre optic networks, security, power, air
 conditioning, and customer support and marketing infrastructure), which is 'technology neutral'.
 Hence, co-location of towers whether GSM or CDMA is possible without any technology
 issues on the passive infrastructure front.

Acquisition of i2i Singapore – India cable link for US\$110m

- Bharti Airtel has decided to acquire the Singapore-India undersea submarine cable link from Network i2i for a consideration of US\$110m. Network i2i is a SingTel-Bharti Group company which is a 50-50% joint venture between Singtel and Bharti Enterprises, the holding company owned by sponsors of Bharti Airtel.
- i2i is an eight fibre system between India and Singapore. It was built in 1999 at a cost significantly
 higher than the current acquisition price. Bharti sees a huge potential in international traffic, not
 only from voice, but also from data and video. With the acquisition of i2i assets, Bharti will likely
 have a fully redundant submarine cable capacity for the first time in its portfolio.

Entry into Sri Lanka - first entry into any market outside India

- Bharti successfully bid for the fifth wireless operator license in Sri Lanka to operate a 2G cum 3G network. Sri Lanka is a four-player market currently, with a total wireless subscriber base of around 4.1m in June 2006 and a penetration rate of little higher than 20%.
- Dialog Telekom, a unit of Malaysia's Telekom Malaysia Group, is the biggest player in the Sri Lankan market, with a subscriber share of around 60%. Celltel Lanka (owned by Millicom – Luxemburg), Hutch and Mobitel Lanka (a unit of incumbent Sri Lanka Telecom) are the other wireless players in Sri Lanka.
- The highly competitive mobile market in Sri Lanka has been growing at a rate of around 60% for the last few years.
- Bharti expects to make a dent in Sri Lanka with its strong business model, aided by a low penetration rate in Sri Lanka, whereby it can replicate a lot of learning gained in the Indian market over the last decade.

Management has not provided any guidance on planned capex for Sri Lanka market yet. We expect to get more clarity on financial implications of this move as the company goes ahead with

Bharti Airtel Limited (BHARTI IN, Outperform, Target price: Rs750.00)

Bharti Airtel Limited	I (BHA										
Quarterly Results		2Q/07A	3Q/07E	4Q/07E	1Q/08E	Profit & Loss		2006A	2007E	2008E	2009E
Revenue	m	43,571	48,693	52,960	57,736	Revenue	m	116,633	183,786	267,475	345,653
Gross Profit	m	24,408	27,363	29,961	32,447	Gross Profit	m	62,819	102,834	151,868	200,540
Cost of Goods Sold	m	19,163	21,330	22,999	25,289	Cost of Goods Sold	m	53,814	80,953	115,608	145,113
EBITDA	m	17,022	19,256	20,987	23,009	EBITDA	m	43,571	72,276	108,125	142,952
Depreciation	m	5,926	6,216	6,856	7,634	Depreciation	m	15,830	23,969	34,376	45,656
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	11,096	13,040	14,131	15,375	EBIT	m	27,741	48,307	73,750	97,296
Net Interest Income	m	-588	-635	-716	-1,532	Net Interest Income	m	-2,651	-3,631	-6,259	-5,444
Associates	m	4	0	0	0	Associates	m	-5	4	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	269	150	150	300	Other Pre-Tax Income	m	488	818	600	600
Pre-Tax Profit	m	10,781	12,555	13,565	14,143	Pre-Tax Profit	m	25,573	45,498	68,091	92,452
Tax Expense	m	-1,378	-1,507	-1,628	-1,839	Tax Expense	m	-2,736	-5,464	-9,122	-13,868
Net Profit	m	9,403	11,048	11,937	12,305	Net Profit	m	22,837	40,033	58,969	78,584
Minority Interests	m	-66	-77	-83	-87	Minority Interests	m	-254	-322	-417	-566
Reported Earnings Adjusted Earnings	m m	9,337 9,338	10,971 10,971	11,854 11,854	12,218 12,218	Reported Earnings Adjusted Earnings	m m	22,583 22,586	39,712 39,712	58,553 58,553	78,019 78,019
EPS (rep)		4.93	5.79	6.26	6.45	EPS (rep)		11.99	20.96	30.90	41.17
EPS (adj)		4.93	5.79	6.26	6.45	EPS (adj)		11.99	20.96	30.90	41.17
EPS Growth yoy (adj)	%	76.9	100.0	73.2	61.9	EPS Growth (adj)	%	50.2	74.7	47.4	33.2
2. 0 010111 yoy (ddj)	/0	70.5	100.0	10.2	51.5	PE (rep)	X	57.5	32.9	22.3	16.7
						PE (adj)	x	57.5	32.9	22.3	16.7
EBITDA Margin	%	39.1	39.5	39.6	39.9	Total DPS		0.00	0.00	0.00	0.00
EBIT Margin	%	25.5	26.8	26.7	26.6	Total Div Yield	%	0.00	0.00	0.00	0.00
Earnings Split	%	23.5	27.6	29.9	20.9	Weighted Average Shares	m	1,883	1,895	1,895	1,895
Revenue Growth	%	60.8	60.9	55.2	49.7	Period End Shares	m	1,889	1,858	1,858	1,858
EBIT Growth	%	70.6	82.0	75.0	53.1			1,000	1,000	1,000	1,000
Profit and Loss Ratios		2006A	2007E	2008E	2009E	Cashflow Analysis		2006A	2007E	2008E	2009E
Revenue Growth	%	45.7	57.6	45.5	29.2	EBITDA	m	41,937	66,303	92,017	123,338
EBITDA Growth	%	47.2	65.9	49.6	32.2	Tax Paid	m	0	0	0	0
EBIT Growth	%	52.5	74.1	52.7	31.9	Chgs in Working Cap	m	16,449	37,066	10,397	14,190
Gross Profit Margin	%	53.9	56.0	56.8	58.0	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	37.4	39.3	40.4	41.4	Other	m	-3,938	-1,553	-3	-8
EBIT Margin	%	23.8	26.3	27.6	28.1	Operating Cashflow	m	54,448	101,815	102,412	137,519
Net Profit Margin	%	19.6	21.8	22.0	22.7	Acquisitions	m	2,441	-1,193	-1,750	-648
Payout Ratio	%	0.0	0.0	0.0	0.0	Capex	m	-63,323	-116,567	-119,666	-128,053
EV/EBITDA	х	31.0	18.4	12.3	9.3	Asset Sales	m	0	0	0	0
EV/EBIT	х	48.7	27.5	18.0	13.7	Other	m	-6	-5	0	0
						Investing Cashflow	m	-60,888	-117,764	-121,416	-128,701
Balance Sheet Ratios	0/	00 F	05.4	00.0	00.0	Dividend (Ordinary)	m	0	0	0	0
ROE	%	29.5	35.4	36.2	33.9	Equity Raised	m	8,445	820	0	0
ROA	%	14.6	17.3	18.1	18.3	Debt Movements	m	-2,431	32,914	32,482	14,526
ROIC	%	23.0	30.9	32.7	30.3	Other	m	0	0	0	0
Net Debt/Equity	%	48.2	45.9	41.8	26.5	Financing Cashflow	m	6,014	33,734	32,482	14,526
Interest Cover Price/Book	x x	10.5 14.2	13.3 9.7	11.8 6.7	17.9 4.8	Net Chg in Cash/Debt	m	-426	17,784	13,478	23,345
Book Value per Share	X	48.6	71.3	102.8	144.8	Not ong in outsidest		420	11,104	10,410	20,040
						Balance Sheet		2006A	2007E	2008E	2009E
						Cash	m	2,661	20,581	34,059	57,404
						Receivables	m	14,249	20,440	36,774	39,210
						Inventories	m	381	780	941	956
						Investments	m	3,029	4,227	5,976	6,624
						Fixed Assets	m	142,397	236,279	321,570	403,967
						Intangibles	m	23,327	23,692	23,692	23,692
						Other Assets	m	31,235	36,550	51,206	55,354
						Total Assets	m	217,279	342,549	474,219	587,207
						Payables	m	39,351	74,306	95,672	109,070
						Short Term Debt	m	12,893	15,343	26,449	29,801
						Long Term Debt	m	34,502	66,787	88,164	99,338
						Provisions	m	0	0	0	0
						Other Liabilities	m	37,690	52,157	71,425	78,471
						Total Liabilities	m	124,436	208,593	281,711	316,681
						Shareholders' Funds	m	91,893	132,469	191,021	269,040
						Minority Interests	m	951	1,487	1,487	1,487
						Other	m	0	0	0	0
						Total S/H Equity	m	92,844	133,956	192,508	270,527
						Total Liab & S/H Funds	m	217,280	342,549	474,219	587,207
All figures in INR unless noted	d.										

All figures in INR unless noted. Source: Macquarie Research, January 2007

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 guarter ending 31 December 2006						

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.

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

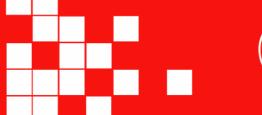
All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Analyst Certification: The views expressed in this research accurately reflect the personal views of the analyst(s) about the subject securities or issuers and no part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views in this research. The analyst principally responsible for the preparation of this research receives compensation based on overall revenues. including investment banking revenues, of Macquarie Bank Ltd ABN 46 008 583 542 (AFSL No.237502)("Macquarie") and its related entities ("the Macquarie group") and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations. Disclaimers: Macquarie Securities (Australia) Ltd; Macquarie Europe Ltd; Macquarie Securities (USA) Inc; Macquarie Securities Ltd; Macquarie Securities (Singapore) Pte Ltd; and Macquarie Securities (New Zealand) Ltd are not authorised deposit-taking institutions for the purposes of the Banking Act 1959 (Commonwealth of Australia), and their obligations do not represent deposits or other liabilities of Macquarie. Macquarie provides a guarantee to the Monetary Authority of Singapore in respect of Macquarie Securities (Singapore) Pte Ltd for up to SGD25m under the Securities and Futures Act (Chapter 289). Macquarie does not otherwise guarantee or provide assurance in respect of the obligations of any of the above mentioned entities. This research has been prepared for the general use of the wholesale clients of the Macquarie group and must not be copied, either in whole or in part, or distributed to any other person. If you are not the intended recipient you must not use or disclose the information in this research in any way. Nothing in this research shall be construed as a solicitation to buy or sell any security or product, or to engage in or refrain from engaging in any transaction. In preparing this research, we did not take into account the investment objectives, financial situation and particular needs of the reader. Before making an investment decision on the basis of this research, the reader needs to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of their particular investment needs, objectives and financial circumstances. There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment. This research is based on information obtained from sources believed to be reliable but we do not make any representation or warranty that it is accurate, complete or up to date. We accept no obligation to correct or update the information or opinions in it. Opinions expressed are subject to change without notice. No member of the Macquarie group accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research. Other Disclaimers: Securities research is issued and distributed by Macquarie Securities (Australia) Ltd (AFSL No. 238947) in Australia, a participating organisation of the Australian Stock Exchange; Macquarie Securities (New Zealand) Ltd in New Zealand, a licensed sharebroker and New Zealand Exchange Firm; Macquarie Europe Ltd in the United Kingdom, which is authorised and regulated by the Financial Services Authority (No. 193905); Macquarie Securities Ltd in Hong Kong, which is licensed and regulated by the Securities and Futures Commission; Macquarie Securities (Japan) Limited in Japan, a member of the Tokyo Stock Exchange, Inc. and Osaka Securities Exchange Co., Ltd and in Singapore, Macquarie Securities (Singapore) Pte Ltd (Company Registration Number: 198702912C), a Capital Markets Services licence holder under the Securities and Futures Act to deal in securities and provide custodial services in Singapore. Pursuant to the Financial Advisers (Amendment) Regulations 2005, Macquarie Securities (Singapore) Pte Ltd is exempt from complying with sections 25, 27 and 36 of the Financial Advisers Act. Economic research is issued and distributed in Australia by Macquarie; in New Zealand by Macquarie Securities (New Zealand) Ltd and in the United Kingdom by Macquarie Europe Ltd. Clients should contact analysts at, and execute transactions through, a Macquarie group entity in their home jurisdiction unless governing law permits otherwise. This research may be distributed in the United States only to major institutional investors and may not be circulated to any other person in the United States. Macquarie Securities (USA) Inc., which is a registered broker-dealer and member of the NASD, accepts responsibility for the content of each research report prepared by one of its non-US affiliates when the research report is distributed in the United States by Macquarie Securities (USA) Inc. All transactions by US investors involving securities discussed in this report must be effected through Macquarie Securities (USA) Inc. The information contained in this email is confidential. If you are not the intended recipient, you must not disclose or use the information in this email in any way. If you received it in error, please tell us immediately by return e-mail and delete the document. We do not guarantee the integrity of any e-mails or attached files and are not responsible for any changes made to them by any other person. Disclosures with respect to the issuers, if any, mentioned in this research are available at www.macquarie.com/research/disclosures. © Macquarie Group

Auckland	Bangkok	Hong Kong	Jakarta	Johannesburg	Kuala Lumpur
Tel: (649) 377 6433	Tel: (662) 694 7999	Tel: (852) 2823 3588	Tel: (62 21) 515 1818	Tel: (27 11) 343 2258	Tel: (60 3) 2059 8833
London	Manila	Melbourne	Mumbai	New York	Perth
Tel: (44 20) 7065 2000	Tel: (63 2) 857 0888	Tel: (613) 9635 8139	Tel: (91 22) 6653 3000	Tel: (1 212) 231 2500	Tel: (618) 9224 0888
Seoul	Shanghai	Singapore	Sydney	Taipei	Tokyo
Tel: (82 2) 3705 8500	Tel: (86 21) 6841 3355	Tel: (65) 6231 1111	Tel: (612) 8232 9555	Tel: (886 2) 2734 7500	Tel: (81 3) 3512 7900

Available to clients on the world wide web at www.macquarie.com/research and through Thomson Financial, Reuters and Bloomberg.

Macquarie Research Equities





Research

Automobiles/Auto Parts

Kurt Sanger (Japan, Asia)	(813) 3512 7859
Liny Halim (Indonesia)	(6221) 515 7343
Toshisuke Hayami (Japan)	(813) 3512 7873
Eunsook Kwak (Korea)	(822) 3705 8644
Francis Eng (Malaysia)	(603) 2059 8986
Banks and Non-Bank Finar	ncials
Ismael Pili (Asia)	(65) 6231 2840
Nick Lord (Asia)	(852) 2823 4774
Christina Fok (China)	(852) 2823 3584
Chris Esson (Hong Kong)	(852) 2823 3567
Seshadri Sen (India) Liny Halim (Indonesia)	(9122) 6653 3053 (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	
Gary Pinge (Asia)	(050) 0000 0557
	(852) 2823 3557
Gilbert Lopez (Philippines)	(852) 2823 3557 (632) 857 0898
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia)	(632) 857 0898 (852) 2823 3587
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (India) Duane Sandberg (Japan) Christina Lee (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8670 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8670 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indinesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea) Woochang Chung (Korea)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8677 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8678
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Paul Hwang (Korea) Woochang Chung (Korea) Nadine Javellana (Philippines)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8677 (603) 2059 8822 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8678 (822) 3705 8678 (822) 3705 8678
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea) Woochang Chung (Korea) Nadine Javellana (Philippines) Jeremy Chen (Taiwan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8667 (632) 857 0890 (8862) 2734 7521
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Paul Hwang (Korea) Woochang Chung (Korea) Nadine Javellana (Philippines)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8677 (603) 2059 8822 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8678 (822) 3705 8678 (822) 3705 8678
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea) Woochang Chung (Korea) Nadine Javellana (Philippines) Jeremy Chen (Taiwan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8667 (632) 857 0890 (8862) 2734 7521
Gilbert Lopez (Philippines) Consumer Ramiz Chelat (Asia) Xiaopo Wei (China) Unmesh Sharma (India) Sarina Lesmina (Indonesia) Duane Sandberg (Japan) Christina Lee (Korea) Paul Hwang (Korea) Woochang Chung (Korea) Edward Ong (Malaysia) Nadine Javellana (Philippines) Chris Clayton (Thailand) Emerging Leaders Paul Quah (Hong Kong) Saurabh Jain (India) Oliver Cox (Japan) Robert Burghart (Japan) Paul Hwang (Korea) Woochang Chung (Korea) Nadine Javellana (Philippines) Jeremy Chen (Taiwan) Scott Weaver (Taiwan)	(632) 857 0898 (852) 2823 3587 (852) 2823 4741 (9122) 6653 3042 (6221) 515 7339 (813) 3512 7867 (822) 3705 8670 (822) 3705 8678 (822) 3705 8667 (603) 2059 8982 (632) 857 0890 (662) 694 7829 (852) 2823 4627 (9122) 6653 3046 (813) 3512 7871 (813) 3512 7853 (822) 3705 8678 (822) 3705 8667 (632) 857 0890 (8862) 2734 7521

Sales

Regional Heads of Sales

(852) 2823 3509 (1 617) 217 2103

(852) 2823 3509
(1 617) 217 2103
(852) 2823 3516
(49) 69 7593 874
(41) 22 818 7710
(41) 22 818 7712
(9122) 6653 3200
(9122) 6653 3200
(822) 3705 8643
(822) 3705 8607
(44) 20 7065 585
(44) 20 7065 588
(603) 2059 8888
(65) 6231 2840
(1 212) 231 2527
(1 212) 231 2507

Media

Media	
Ramiz Chelat (Asia) Prem Jearajasingam (Malaysia)	(852) 2823 3587 (603) 2059 8989
Metals and Mining	
Simon Francis (Asia) Felix Lam (China, HK, Taiwan) Rakesh Arora (India) Adam Worthington (Indonesia) Christina Lee (Korea) Oil and Gas	(852) 2823 3590 (852) 2823 3575 (9122) 6653 3054 (6221) 515 7338 (822) 3705 8670
David Johnson (Asia)	(852) 2823 4691
Scott Weaver (China, Taiwan) Jal Irani (India) Mark Barclay (Korea) Edward Ong (Malaysia) Kitti Nathisuwan (Thailand)	(8862) 2734 7512 (8862) 2734 7512 (9122) 6653 3040 (822) 3705 8658 (603) 2059 8982 (662) 694 7724
Pharmaceuticals	(0100) 6650 2040
Shubham Majumder (India)	(9122) 6653 3049
Property	(
Matt Nacard (Asia) Eva Lee (Hong Kong, China) Siddhartha Gupta Takashi Sakai (Japan) Francis Eng (Malaysia) Gilbert Lopez (Philippines) Tuck Yin Soong (Singapore) Corinne Jian (Taiwan) Monchai Jaturanpinyo (Thailand) Technology Suveer Chainani (India) Damian Thong (Japan) David Gibson (Japan) George Chang (Japan) Yoshihiro Shimada (Japan) Alex Jun (Korea) Do Hoon Lee (Korea) Michael Bang (Korea) Patrick Yau (Singapore) Cheryl Hsu (Taiwan) Daniel Chang (Taiwan) Jessica Chang (Taiwan) Nicholas Teo (Taiwan) Warren Lau (Taiwan)	(852) 2823 4731 (852) 2823 3573 (9122) 6653 3048 (813) 3512 7884 (603) 2059 8986 (632) 857 0898 (65) 6231 2838 (8862) 2734 7529 (662) 694 7727 (813) 3512 7877 (813) 3512 7877 (813) 3512 7880 (813) 3512 7880 (813) 3512 7882 (822) 3705 8653 (822) 3705 8653 (822) 3705 8653 (822) 3705 8659 (65) 6231 2835 (8862) 2734 7522 (8862) 2734 7528 (8862) 2734 7528 (8862) 2734 7528 (8862) 2734 7528
Telecoms	
Tim Smart (Asia) Jake Lynch (China, Hong Kong) Shubham Majumder (India) Richard Moe (Indonesia) Nathan Ramler (Japan) Joel Kim (Korea) Prem Jearajasingam (Malaysia) Ramakrishna Maruvada (Singapore) Dominic Grant (Taiwan) Richard Moe (Thailand)	(852) 2823 3565 (852) 2823 3583 (9122) 6653 3049 (662) 694 7753 (813) 3512 7875 (822) 3705 8677 (603) 2059 8989 (65) 6231 2842 (8862) 2734 7528 (662) 694 7753

Regional Heads of Sales

-	
Mark Lawrence (New York)	(1
Sheila Schroeder (San Francisco)	(1
Giles Heyring (Singapore)	(65
Mark Duncan (Taiwan)	(88
Angus Kent (Thailand)	(66
Dominic Henderson (Tokyo)	(81
Nick Cant (Tokyo)	(81
Charles Nelson (UK/Europe)	(44
Rob Fabbro (UK/Europe)	(44
Sales Trading	

Anthony Wilson (Asia) Mona Lee (Hong Kong) Stuart Goddard (Europe) Vijay Gussain (India) Howard Yoon (Korea)

,	(8862) 2734 7528 (662) 694 7753	
s co	nt'd	;
o)	(1 212) 231 2516 (1 415) 835 1235 (65) 6231 2888 (8862) 2734 7510 (662) 694 7601 (813) 3512 7820 (813) 3512 7821 (44) 20 7065 2032	
	(44) 20 7065 2032 (44) 20 7065 2031 (852) 2823 3511 (852) 2823 3519 (44) 20 7065 2033 (9122) 6653 3205	(

(822) 3705 8601

Transport & Logistics

Anderson Chow (China, Hong Kong) Michael Chan (Asia) Paul Huxford (Asia) Eunsook Kwak (Korea)	(852) 2823 4773 (852) 2823 3595 (65) 6231 2841 (822) 3705 8644
Utilities	
Sylvia Chan (Asia) Adam Worthington (Indonesia) Prem Jearajasingam (Malaysia)	(852) 2823 3579 (6221) 515 7338 (603) 2059 8989
Commodities	
Jim Lennon Adam Rowley Bonnie Liu Henry Liu	(4420) 7065 2014 (4420) 7065 2013 (4420) 7065 2014 (4420) 7065 2014
Data Services	
Liz Dinh (Asia) Brent Borger (Japan)	(852) 2823 4762 (813) 3512 7852
Economics	
Roland Randall (Asean) Bill Belchere (Asia) Eli Polatinsky (Asia) Richard Gibbs (Australia) Paul Cavey (China) Daniel McCormack (Int'I) Richard Jerram (Japan)	(852) 2823 3572 (852) 2823 4636 (852) 2823 4074 (612) 8232 3935 (852) 2823 3570 (612) 8232 2999 (813) 3512 7855
Quantitative	
Martin Emery (Asia) Viking Kwok (Asia) George Platt (Australia)	(852) 2823 3582 (852) 2823 4735 (612) 8232 6539
Strategy/Country	
Tim Rocks (Asia) Desh Peramunetilleke (Asia) Jake Lynch (China) Jal Irani (India) Peter Eadon-Clarke (Japan) Eugene Ha (Korea) Uday Jayaram (Malaysia) Gilbert Lopez (Philippines) Tuck Yin Soong (Singapore) Chris Hunt (Taiwan) Kitti Nathisuwan (Thailand)	(852) 2823 3585 (852) 2823 3564 (852) 2823 3564 (852) 2823 3583 (9122) 6653 304((813) 3512 7850 (822) 3705 8643 (603) 2059 8988 (632) 857 0898 (65) 6231 2838 (8862) 2734 7526 (662) 694 7724
Find our research at	

ur resear

Macquarie:	www.macquarie.com.au/research	
Thomson:	www.thomson.com/financial	
Reuters:	www.rbr.reuters.com	
Bloomberg:	MAC GO	
Email macresearch@macquarie.com for access		

Sales Trading cont'd

Robert Risman (New York) Isaac Huang (Taiwan) Kenichi Ohtaka (Tokyo)	(1 212) 231 2555 (8862) 2734 7582 (813) 3512 7830
Index Sales	
Margaret Hartmann	(612) 8232 9834
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