Macquarie Equities Research

The Asia Specialist

INDIA

WPRO IN	Outp	erform
Price 23 Apr 10	Rs	692.95
12-month target	Rs	800.00
Upside/Downside	%	15.4
Valuation - DCF (WACC 12.5%)	Rs	800.00
GICS sector	Software &	& Services
Market cap	Rsbn	1,017
30-day avg turnover	US\$m	19.7
Market cap	US\$m	22,845
Number shares on is	sue m	1,468

Investment fundamentals

Year end 31 Mar		2009A	2010E	2011E	2012E
Total revenue	bn	256.9	274.8	314.4	364.4
EBITDA	bn	50.4	59.6	65.3	74.7
EBITDA growth	%	26.7	18.2	9.6	14.3
Adjusted profit	bn	38.8	45.6	49.7	53.6
EPS adj	Rs	26.54	31.07	33.73	36.31
EPS adj growth	%	19.7	17.1	8.6	7.6
PER adj	х	26.1	22.3	20.5	19.1
ROA	%	16.9	16.7	15.9	15.5
ROE	%	27.7	27.1	23.9	21.2
EV/EBITDA	х	19.4	16.5	15.1	13.2
Net debt/equity	%	-5.6	-19.6	-30.9	-39.1
P/BV	х	6.7	5.5	4.5	3.7

WPRO IN rel BSE Sensex performance, & rec history



Note: Recommendation timeline - if not a continuous line, then there was no Macquarie coverage at the time or there was an embargo period. Source: FactSet, Macquarie Research, March 2010 (all figures in INR unless noted)

Nitin Mohta 91 22 6653 3050 Atul Soni 91 22 6653 3153	nitin.mohta@macquarie.com atul.soni@macquarie.com
26 April 2010	

Wipro

Margins surprise but guidance muted

Event

 Wipro reported in-line 4Q FY3/10 results. IT services revenues matched our estimates but 60bp QoQ EBIT margin improvement in the segment surprised us positively. On a consolidated basis, revenue was 2% below our estimate but EBITDA matched ours. Net income of Rs12bn was 3% higher than our estimate due to higher forex gains in the quarter. Maintain OP.

Impact

- Deal wins and broad-based recovery highlight of 4Q results so far: Common themes in the 4Q results of all IT vendors were: (1) a return of large deals; and (2) revenue growth momentum being driven by all geographical areas and key verticals.
- No fresh wage hikes but promotions add to margin pressure: Wipro had announced an 8-10% salary hike for selected employees effective February on its last earnings call. The company confirmed this wage hike has been applicable to all its employees (excluding employees who have been with the company for less than a year). Layering in the impact of promotions would hurt margins by ~200bp over and above the 110bp impact we had this quarter due to the wage hike.
- Muted revenue growth forecast... Wipro's 1Q FY3/11E guidance implies 3% volume growth on the back of the 4% volume growth seen this quarter. This is lower than the 4% volume growth that Infosys has guided for the next quarter after delivering 5.2% QoQ revenue growth in 4Q FY3/10. We think investors would like to see increased confidence in volume growth for the year before turning more positive.
- ...offsets positive sentiment on sequential margin improvement: The key positive surprise in the quarter was the 60bp QoQ improvement in 4Q. Management attributed this to: (1) revenue growth from successful execution of past M&A, helping margins, notably Infocrossing; (2) increased share of fixed price projects (now 44.3% vs 42.5% in 3Q); and (3) offshore shift (50.6% revenue share vs 49.7% earlier).

Earnings and target price revision

• No change.

Price catalyst

- 12-month price target: Rs800.00 based on a PER methodology.
- Catalyst: Pick-up in volume growth and large deal wins.

Action and recommendation

 Retain OP; prefer exposure to TCS and Infosys: Good 4Q results from the leading trio reinforce our positive investment thesis. We are comfortable with our 25% US\$ revenue growth forecast for Tata Consultancy (TCS IN, Rs779.80, OP, TP: Rs925.00) and Infosys (INFO IN, Rs2,728.10, OP, TP: Rs2,980.00). We expect revenue momentum for Wipro to be back-end loaded in FY3/11. Hence, we prefer TCS and Infosys to Wipro.

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



4Q FY10 results review and analysis

Fig 1 4Q FY10 results – P&L: YoY growth, QoQ growth

	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	(% chg YoY)	(% chg QoQ)	Mar-10	Deviation (%)
(Amount in Rsm)	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10			4Q FY10	
Revenues									
Total	65,275	63,868	68,937	69,380	69,772	6.9%	0.6%	71,216	-2.0%
Cost of revenues									
Total	(45,365)	(43,247)	(47,522)	(47,766)	(47,764)	5.3%	0.0%	(49,290)	-3.1%
10101	(10,000)	(10,211)	(11,022)	(11,100)	(11,101)	0.070	0.070	(10,200)	0.174
Gross Profit	19,910	20,621	21,415	21,614	22,008	10.5%	1.8%	21,926	0.4%
Gross Profit Margin (%)	30.5%	32.3%	31.1%	31.2%	31.5%			30.8%	2.5%
Operating Expenses									
Selling and marketing expenses	(4,318)	(4,239)	(4,490)	(4,817)	(5,061)	17.2%		(4,872)	3.9%
General and administrative expenses	(3,429)	(3,552)	(3,976)	(3,655)	(3,640)	6.1%	-0.4%	(3,959)	-8.1%
R&D	-	-	-	-	-			-	
Amortization of intangible assets	-	-	-	-	-			-	
Foreign exchange gains/(losses), net	(761)	(1,406)	240	394	57	-107.5%	-85.5%	130	-56.1%
Others, net	-	-	-	-	-			-	
EBITDA	12,326	13,297	15,275	15,521	15,251	23.7%	-1.7%	15,362	-0.7%
EBITDA margin (%)	18.9%	20.8%	22.2%	22.4%	21.9%			21.6%	1.3%
Depreciation and Amortisation included above	(925)	(1,873)	(2,086)	(1,985)	(1,887)	104.0%	-4.9%	(2,136)	-11.7%
Operating income	11,401	11,424	13,189	13,536	13,364	17.2%	-1.3%	13,225	1.1%
Operating margin (%)	17.5%	17.9%	19.1%	19.5%	19.2%			18.6%	3.1%
Other income, net	85	355	681	721	1,612			637	152.9%
Equity in earnings/(losses) of affiliates	35	114	112	128	176	402.9%	37.5%	134	31.0%
Income before income taxes and minority interest	11,521	11,893	13,982	14,385	15,152	31.5%	5.3%	13,997	8.3%
Income taxes	(1,461)	(1,740)	(2,217)	(2,321)	(3,015)	106.4%	29.9%	(2,239)	34.6%
Minority interest	(49)	(49)	(58)	(31)	(46)	-6.1%		(33)	41.3%
Net income	10,011	10,104	11,707	12,033	12,091	20.8%	0.5%	11,725	3.1%
Basic EPS	6.88	6.94	8.04	8.25	8.29	20.5%	0.4%	8.04	3.1%
Diluted EPS	6.85	6.89	7.97	8.19	8.22	20.0%	0.4%	7.97	3.1%

Source: Company data, Macquarie Research, April 2010

Fig 2 IT Services 4Q FY10 – EBIT margins surprise

IT Services Segment	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	(% chg YoY)	(% chg QoQ)	Mar-10	Deviation (%)
(Amount in US\$m, unless noted otherwise)	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10			4Q FY10	
Revenues (US\$)	1,046	1,033	1,065	1,127	1,166	11.5%	3.5%	1,172	-0.5%
Revenues	49,282	48,266	49,981	51,648	52,596	6.7%	1.8%	52,441	0.3%
EBIT	10,270	10,698	11,795	12,181	12,718	23.8%	4.4%	11,852	7.3%
EBIT margin (%)	20.8%	22.2%	23.6%	23.6%	24.2%	16.0%	2.5%	22.6%	7.0%

Source: Company data, Macquarie Research, April 2010

Key financial highlights of the results

- Revenues: Wipro reported US\$ revenue growth of 3.5% QoQ (vs. 5.2% for INFO and 3% at TCS) in the IT services segment. In INR terms, IT services revenue of Rs52.6bn (up 2% QoQ, 7% YoY) was in line with our expectation.
- EBIT and EBIT margin: IT services EBIT of Rs12.72bn (up 4% QoQ and up 23% YoY) was 7% higher than our estimate due to better margins. IT services segment margin expanded to 60bp QoQ to 24.2% vs. 23.6% last quarter. This compares with 150bp QoQ margin dip at INFO and 20bp QoQ margin expansion at TCS.
- **Guidance:** 1Q FY11 US\$ revenue guidance is 1,190–1,215m, implying 3.1% QoQ growth at the mid-point of the guidance (vs 3.9% QoQ, implied by INFO guidance).
- The company announced a bonus issue of two shares for every three shares held.

Fig 3 4Q FY10 results - operating metrics: YoY growth, QoQ growth

Operating metrics	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	(% chg YoY)	(% chg QoQ)
	4Q FY09	1Q FY10	2Q FY10	3Q FY10	4Q FY10		
Employee Metrics							
Total Employees	97,810	98,521	97,891	102,746	108,071	10.5%	5.2
Net addition	845	711	(630)	4,855	5,325	530.2%	9.7
Attrition							
Global IT Services - Voluntary	7.9%	8.4%	10.5%	13.4%	17.1%		
Global IT Services - Involuntary	2.6%	1.9%	3.1%	0.9%	0.5%		
India / Middle East IT Services	7.1%	7.4%	8.9%	10.5%	14.9%		
BPO %- Quarterly	13.0%	14.0%	17.0%	15.0%	17.0%		
BPO % - During Training	5.0%	7.0%	7.0%	6.0%	8.0%		
BPO % - Post Training	8.0%	7.0%	10.0%	9.0%	9.0%		
Utilization Rate							
Global IT Services excl IFOX -Gross	68.4%	70.0%	70.8%	73.2%	72.1%		
Global IT Services excl IFOX -Net	75.4%	77.1%	78.2%	80.7%	79.3%		
Global IT Services excl IFOX-Net Excluding Trainees	76.8%	78.2%	80.5%	84.5%	83.0%		
India / Middle East IT Services	81.7%	78.1%	80.6%	77.7%	79.2%		
BPO (Prod FTEs/Total HC)	68.7%	72.7%	73.9%	70.9%	72.5%		
Client Concentration	0.40/	2.69/	0.70/	2.6%	2.5%		
Fop customer	2.4%	2.6%	2.7%	2.6%			
Top 5	10.8% 19.7%	<u>11.4%</u> 20.6%	11.3% 19.7%	10.8% 19.5%	10.5% 19.3%		
Тор 10	19.7%	20.0%	19.7%	19.5%	19.3%		
Customer size distribution (Trailing 12 months) >\$50M	17	17	16	16	16	-5.9%	0.0
\$20M-\$50M	36	36	35	37	40	-5.9%	
\$10M -\$20M	40	44	48	42	40	0.0%	
\$5M -\$10M	60	59	53	61	70	16.7%	-
\$3M -\$5M	67	63	64	77	60	-10.4%	
\$1M -\$3M	207	194	187	165	180	-13.0%	
Total > \$1M	427	413	403	398	406	-4.9%	
Total Number of active customers	863	830	840	822	845	-2.1%	2.89
Pricing Movement							
Price Realization							
Onsite	11,632	11,787	12,340	12,299	12,254	5.3%	
Offshore	4,405	4,302	4,450	4,345	4,352	-1.2%	0.29
Volume Movement							
Person months available	00.10-		0.1.055				
Onsite	36,102	34,607	34,070	35,505	36,206	0.3%	
Offshore	123,833	126,628	122,581	123,458	132,063	6.6%	
Support	16,467	16,390	16,216	16,309	16,863	2.4%	
Fotal	176,402	177,625	172,867	175,242	185,132	4.9%	5.6
Person months billed	04.000	00.070		00 700	04.000	c	
Onsite	34,296	32,876	32,367	33,730	34,396	0.3%	
Offshore	86,277	91,454	90,093	94,487	99,067	14.8%	
Total	120,573	124,330	122,460	128,217	133,463	10.7%	4.19

Source: Company data, Macquarie Research, April 2010

Key operating details:

- Employee additions: Net employee addition of 5,325 employees in the quarter, vs 3,914 net adds at INFO and 10,775 net adds at TCS.
- Volume growth in the quarter was 4.1% QoQ (vs 5.2% for INFO and 4% for TCS).
- **Pricing** in 4Q remained almost flat QoQ (down 0.4% for Onsite and up 0.2% for offshore). This compares with 0.2% pricing improvement for INFO and flat pricing for TCS.
- Best traction seen in the troubled verticals of telecoms and technology. Strength also seen in the life sciences vertical.
- On reported revenues, infrastructure management posted revenue growth of 4% QoQ.

Fig 4 Valuation comp sheet – Indian IT services

Indian IT Services (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2		RoE (FY10)		PER (x) FY10	EPS FY12	EPS FY11	EPS FY10	Up/Down B side(%)	Farget Price Icy)				Bloomberg Ticker	Company name
TCS TCS IN OP 33,196 780 925 19% 35.1 37.0 42.1 22.2 21.1 Wipro WPRO IN OP 22,084 692 800 16% 31.3 33.7 36.3 22.3 20.5 HCL Tech HCLT IN OP 5,703 388 435 12% 18.2 24.4 28.9 21.3 15.9 Oracle Financial Services OFSS IN NR 4,031 2211 NR NR 101.0 119.3 121.2 21.9 18.5 Mahindra Satyam SCS IN NR 2,388 93 NR NR 10.6 4.4 8.5 8.7 21.0 18.5 Mahindra Satyam SCS IN NR 2,388 93 NR NR 16.2 37.6 13.5 13.2 Mphasis MPHL IN NR 2,109 60.0 3.4 16.6 14.6 Ardocs DO XU S NR 6,552 3	<u>, (, , , , , , , , , , , , , , , , , , </u>	((Large Cap - Indian IT Se
Wipro WPRO IN OP 22,084 692 800 16% 31.3 33.7 36.3 22.3 20.5 HCL Tech HCLT IN OP 5,703 388 435 12% 18.2 24.4 28.9 21.3 15.9 Oracle Financial Services OFSS IN NR 4,031 2211 NR NR 101.0 119.3 121.2 21.9 18.5 Mahindra Satyam SCS IN NR 2,168 93 NR NR 10.6 4.4 8.5 8.7 21.0 Tech Mahindra TECHMIN NR 2,191 824 NR NR 49.0 52.5 57.8 13.5 12.6 Accenture ACN US NR 31.885 44 NR NR 2.6 3.0 3.4 16.6 14.6 Amdocs DOX US NR 6,582 32 NR NR 1.8 2.5 2.9 2.0 16.0 Cognizant	30.6 11.2%	3 3	1 23.3	25.1	134.1	117.1	108.5	9%	2980	7 2727	34,017	OP	INFO IN	Infosys
HCL Tech HCLT IN OP 5,703 388 435 12% 18.2 24.4 28.9 21.3 15.9 Oracle Financial Services OFSS IN NR 4,031 2211 NR NR 101.0 119.3 121.2 21.9 18.5 Mahindra Satyam SCS IN NR 2,368 93 NR NR 10.6 4.4 8.5 8.7 21.0 Tech Mahindra TECHM IN NR 2,191 824 NR NR 51.7 62.3 71.6 15.9 13.2 Mphasis MPHL IN NR 2,191 824 NR NR 51.7 62.3 71.6 15.9 13.2 Mphasis MPHL IN NR 31,895 44 NR NR 2.6 3.0 3.4 16.6 14.6 Amdocs DOX US NR 6,552 32 NR NR 1.8 2.5 2.9 2.2.0 16.0 Convergys	37.6 9.5%	1 3	2 21.1	22.2) 42.1	37.0	35.1	19%	925	5 780	9 33,196	OP	TCS IN	TCS
Oracle Financial Services OFSS IN NR 4.031 2211 NR NR 101.0 119.3 121.2 21.9 18.5 Mahindra Satyam SCS IN NR 2,368 93 NR NR 10.6 4.4 8.5 8.7 21.0 Tech Mahindra TECHM IN NR 2,191 824 NR NR 10.6 4.4 8.5 8.7 21.0 Mphasis MPHL IN NR 2,191 824 NR NR 149.0 52.5 57.8 13.2 12.6 Accenture ACN US NR 31,885 44 NR NR 2.2 2.4 2.6 14.3 13.4 Cag Gemini CAP FP NR 6,089 39 NR NR 1.8 2.5 2.9 2.0 16.0 Cognizant CTSH US NR 16,095 54 NR NR 1.1 1.2 1.3 1.2.4 11.0 Cosc	26.5 8.1%	5 2	3 20.5	22.3	36.3	33.7	31.3	16%	800	692	22,084	OP	WPRO IN	Wipro
Mahindra Satyam SCS IN NR 2,368 93 NR NR 10.6 4.4 8.5 8.7 21.0 Tech Mahindra TECHM IN NR 2,191 824 NR NR 51.7 62.3 71.6 15.9 13.2 Mphasis MPHL IN NR 3,007 659 NR NR 49.0 52.5 57.8 13.5 12.6 Accenture ACN US NR 31,885 44 NR NR 2.6 3.0 3.4 16.6 14.6 Amdocs DOX US NR 6,552 32 NR NR 2.2 2.4 2.6 14.3 13.4 Cap Gemini CAP FP NR 6,089 39 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 16,095 54 NR NR 1.1 1.2 1.3 12.4 11.0 Cogicantat CTS US	20.3 26.1%	9 2	3 15.9	21.3	28.9	24.4	18.2	12%	435	3 388	5,703	OP	HCLT IN	HCL Tech
Tech Mahindra TECHM IN NR 2,191 824 NR NR 51.7 62.3 71.6 15.9 13.2 Mphasis MPHL IN NR 3,007 659 NR NR 49.0 52.5 57.8 13.5 12.6 Accenture ACN US NR 31,885 44 NR NR 2.6 3.0 3.4 16.6 14.6 Amdocs DOX US NR 6,552 32 NR NR 1.8 2.5 2.9 22.0 16.0 Cognizant CAS HUS NR 16,095 54 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 1,649 13 NR NR 1.0 1 12.0 111.7 Logica PLC LOG LN NR 2,344 146 NR NR 1.1 1.2 1.3 12.0 1117.6 Paxys PAX PM NR 2,412 </td <td>23.4 9.5%</td> <td>5 2</td> <td>9 18.5</td> <td>21.9</td> <td>8 121.2</td> <td>119.3</td> <td>101.0</td> <td>NR</td> <td>NR</td> <td>2211</td> <td>4,031</td> <td>NR</td> <td>OFSS IN</td> <td>Oracle Financial Services</td>	23.4 9.5%	5 2	9 18.5	21.9	8 121.2	119.3	101.0	NR	NR	2211	4,031	NR	OFSS IN	Oracle Financial Services
Mphasis MPHL IN NR 3,007 659 NR NR 49.0 52.5 57.8 13.5 12.6 Accenture ACN US NR 31,885 44 NR NR 2.6 3.0 3.4 16.6 14.4 Amdocs DOX US NR 6,552 3.2 NR NR 2.2 2.4 2.6 14.3 13.4 Cap Gemini CAP FP NR 6,089 39 NR NR 1.8 2.5 2.9 22.0 16.0 Copirizant CTSH US NR 16,095 54 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSCUS NR 1,649 13 NR NR 5.0 5.2 5.6 11.0 10.0 10.0 10.0 10.0 10.5 10.6 13.8 11.6 10.0 10.5 10.6 10.6 10.6 10.6 10.6 10.1 120.0 1117.6 <td>26.0 -10.5%</td> <td>0 2</td> <td>7 21.0</td> <td>8.7</td> <td>8.5</td> <td>4.4</td> <td>10.6</td> <td>NR</td> <td>NR</td> <td>3 93</td> <td>2,368</td> <td>NR</td> <td>SCS IN</td> <td>Mahindra Satyam</td>	26.0 -10.5%	0 2	7 21.0	8.7	8.5	4.4	10.6	NR	NR	3 93	2,368	NR	SCS IN	Mahindra Satyam
Accenture ACN US NR 31,885 44 NR NR 2.6 3.0 3.4 16.6 14.6 Amdocs DOX US NR 6,552 32 NR NR 2.2 2.4 2.6 14.3 13.4 Cap Gemini CAP FP NR 6,089 39 NR NR 1.8 2.5 2.9 22.0 16.0 Cognizant CTSH US NR 16,095 54 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 10.5 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 10.1 1220.0 111.76 Paxys PAX PM R 2,412 2 NR NR na na na na BM GS IBM US NR 167,442 129 NR NR 11.3 12.3 13.2 11.4 10.5 <td>63.4 17.7%</td> <td>2 6</td> <td>9 13.2</td> <td>15.9</td> <td>3 71.6</td> <td>62.3</td> <td>51.7</td> <td>NR</td> <td>NR</td> <td>824</td> <td>2,191</td> <td>NR</td> <td>TECHM IN</td> <td>Tech Mahindra</td>	63.4 17.7%	2 6	9 13.2	15.9	3 71.6	62.3	51.7	NR	NR	824	2,191	NR	TECHM IN	Tech Mahindra
Amdocs DOX US NR 6,552 32 NR NR 2.2 2.4 2.6 14.3 13.4 Cap Gemini CAP FP NR 6,089 39 NR NR 1.8 2.5 2.9 22.0 16.0 Cognizant CTSH US NR 16,095 54 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 8,441 55 NR NR 0.1 0.1 0.1 1220.0 1117.6 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 1220.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na na na BM GS IBM US NR 167,442 <td< td=""><td>51.9 8.7%</td><td>65</td><td>5 12.6</td><td>13.5</td><td>5 57.8</td><td>52.5</td><td>49.0</td><td>NR</td><td>NR</td><td>659</td><td>3,007</td><td>NR</td><td>MPHL IN</td><td>Mphasis</td></td<>	51.9 8.7%	65	5 12.6	13.5	5 57.8	52.5	49.0	NR	NR	659	3,007	NR	MPHL IN	Mphasis
Amdocs DOX US NR 6,552 32 NR NR 2.2 2.4 2.6 14.3 13.4 Cap Gemini CAP FP NR 6,089 39 NR NR 1.8 2.5 2.9 22.0 16.0 Cognizant CTSH US NR 16,095 54 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 8,441 55 NR NR 0.1 0.1 0.1 1220.0 1117.6 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 1220.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na na na BM GS IBM US NR 167,442 <td< td=""><td>58.6 13.0%</td><td>6 5</td><td>6 14.6</td><td>16.6</td><td>) 3.4</td><td>3.0</td><td>2.6</td><td>NR</td><td>NR</td><td>5 44</td><td>31,885</td><td>NR</td><td>ACN US</td><td>Accenture</td></td<>	58.6 13.0%	6 5	6 14.6	16.6) 3.4	3.0	2.6	NR	NR	5 44	31,885	NR	ACN US	Accenture
Cognizant CTSH US NR 16,095 54 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 8,441 55 NR NR 5.0 5.2 5.6 11.0 10.5 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 122.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na na na na IBM GS IBM US N 16,412 129 NR NR 11.3 12.3 13.2 11.4 10.5 IBM GS IBM US NR 171 169 NR NR 11.3 12.3 13.4 14.5 14.6 19.1 Educomp EDSL IN NR	10.8 7.3%	4 1	3 13.4	14.3	2.6	2.4	2.2	NR	NR	2 32	6,552	NR	DOX US	Amdocs
Cognizant CTSH US NR 16,095 54 NR NR 2.1 2.4 2.8 25.3 22.8 Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 8,441 55 NR NR 5.0 5.2 5.6 11.0 10.5 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 122.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na na na na IBM GS IBM US N 16,412 129 NR NR 11.3 12.3 13.2 11.4 10.5 IBM GS IBM US NR 171 169 NR NR 11.3 12.3 13.4 14.5 14.6 19.1 Educomp EDSL IN NR	4.4 27.6%	0	0 16.0	22.0	5 2.9	2.5	1.8	NR	NR) 39	6,089	NR	CAP FP	Cap Gemini
Convergys CVG US NR 1,649 13 NR NR 1.1 1.2 1.3 12.4 11.0 CSC CSC US NR 8,441 55 NR NR 5.0 5.2 5.6 11.0 10.5 Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 122.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na na na IBM GS IBM US NR 167,442 129 NR NR 11.3 12.3 13.2 11.4 10.5 Aptech APTR IN NR 171 169 NR NR na na na na na 146.5 24.6 19.1 Educomp EDSL IN NR 1,470 711 NR NR 26.1 35.8 52.1 14.8 10.8 Hexaware HEXW IN	23.2 13.7%	8 2	3 22.8	25.3			2.1	NR	NR	5 54	16,095	NR	CTSH US	•
Logica PLC LOG LN NR 2,344 146 NR NR 0.1 0.1 0.1 122.0 1117.6 Paxys PAX PM NR 2,412 2 NR NR na na <th< td=""><td>-6.6 8.0%</td><td>0 -</td><td>4 11.0</td><td>12.4</td><td>2 1.3</td><td>1.2</td><td>1.1</td><td>NR</td><td>NR</td><td></td><td></td><td>NR</td><td>CVG US</td><td>-</td></th<>	-6.6 8.0%	0 -	4 11.0	12.4	2 1.3	1.2	1.1	NR	NR			NR	CVG US	-
Paxys PAX PM NR 2,412 2 NR NR na	20.3 5.3%	5 2	0 10.5	11.0	2 5.6	5.2	5.0	NR	NR	55	8,441	NR	CSC US	CSC
IBM GS IBM US NR 167,442 129 NR NR 11.3 12.3 13.2 11.4 10.5 Aptech APTR IN NR 171 169 NR NR na	2.0 10.3%	6	0 1117.6	1220.0	0.1	0.1	0.1	NR	NR	146	2,344	NR	LOG LN	Logica PLC
AptechAPTR INNR171169NRNRnananananaEducompEDSL INNR1,470711NRNR29.037.146.524.619.1EveronnESIL INNR127386NRNR26.135.852.114.810.8HexawareHEXW INNR24779NRNR9.38.19.78.49.7MindtreeMTCL INNR553641NRNR50.251.158.012.812.5NIITNIIT INNR23666NRNRnananananaNIIT TechNITEC INNR227178NRNR23.524.428.37.67.3PatniPATNI INNR1,587564NRNR40.242.144.214.013.4PolarisPOL INNR399186NRNR20.522.224.29.18.4	na na	а	a na	na	a na	na	na	NR	NR	2 2	2,412	NR	PAX PM	Paxys
EducompEDSL INNR1,470711NRNR29.037.146.524.619.1EveronnESIL INNR127386NRNR26.135.852.114.810.8HexawareHEXW INNR24779NRNR9.38.19.78.49.7MindtreeMTCL INNR553641NRNR50.251.158.012.812.5NIITNIIT INNR23666NRNRnananananaNIIT TechNITEC INNR227178NRNR23.524.428.37.67.3PatniPATNI INNR1,587564NRNR40.242.144.214.013.4PolarisPOL INNR399186NRNR20.522.224.29.18.4	74.4 8.1%	57	4 10.5	11.4	3 13.2	12.3	11.3	NR	NR	2 129	167,442	NR	IBM US	IBM GS
EveronnESIL INNR127386NRNR26.135.852.114.810.8HexawareHEXW INNR24779NRNR9.38.19.78.49.7MindtreeMTCL INNR553641NRNR50.251.158.012.812.5NIITNIIT INNR23666NRNRnananananaNIIT TechNITEC INNR227178NRNR23.524.428.37.67.3PatniPATNI INNR1,587564NRNR40.242.144.214.013.4PolarisPOL INNR399186NRNR20.522.224.29.18.4	21.7 na	a 2	a na	na	n na	na	na	NR	NR	169	. 171	NR	APTR IN	Aptech
HexawareHEXW INNR24779NRNR9.38.19.78.49.7MindtreeMTCL INNR553641NRNR50.251.158.012.812.5NIITNIIT INNR23666NRNRnananananaNIIT TechNITEC INNR227178NRNR23.524.428.37.67.3PatniPATNI INNR1,587564NRNR40.242.144.214.013.4PolarisPOL INNR399186NRNR20.522.224.29.18.4	37.9 26.7%	1 3	6 19.1	24.6	46.5	37.1	29.0	NR	NR) 711	1,470	NR	EDSL IN	Educomp
MindtreeMTCL INNR553641NRNR50.251.158.012.812.5NIITNIIT INNR23666NRNRnananananaNIIT ChNITEC INNR227178NRNR23.524.428.37.67.3PatniPATNI INNR1,587564NRNR40.242.144.214.013.4PolarisPOL INNR399186NRNR20.522.224.29.18.4	14.3 41.3%	8 1	8 10.8	14.8	52.1	35.8	26.1	NR	NR	7 386	127	NR	ESIL IN	Everonn
NIIT NII IN NR 236 66 NR NR na	17.7 1.9%	7 1	4 9.7	8.4	9.7	8.1	9.3	NR	NR	7 79	247	NR	HEXW IN	Hexaware
NIIT Tech NITEC IN NR 227 178 NR NR 23.5 24.4 28.3 7.6 7.3 Patni PATNI IN NR 1,587 564 NR NR 40.2 42.1 44.2 14.0 13.4 Polaris POL IN NR 399 186 NR NR 20.5 22.2 24.2 9.1 8.4	9.6 7.5%	5	8 12.5	12.8	58.0	51.1	50.2	NR	NR	641	553	NR	MTCL IN	Mindtree
Patni PATNI IN NR 1,587 564 NR NR 40.2 42.1 44.2 14.0 13.4 Polaris POL IN NR 399 186 NR NR 20.5 22.2 24.2 9.1 8.4	na na	а	a na	na	na na	na	na	NR	NR	66	236	NR	NIIT IN	NIIT
Polaris POL IN NR 399 186 NR NR 20.5 22.2 24.2 9.1 8.4	27.7 9.8%	3 2	6 7.3	7.6	28.3	24.4	23.5	NR	NR	7 178	227	NR	NITEC IN	NIIT Tech
	15.7 4.9%	4 1	0 13.4	14.0	44.2	42.1	40.2	NR	NR	7 564	1,587	NR	PATNI IN	Patni
Rolta RLTA IN NR 652 186 NR NR na na na na na	13.5 8.6%	4 1	1 8.4	9.1	24.2	22.2	20.5	NR	NR	9 186	399	NR	POL IN	Polaris
	na na	а	a na	na	na na	na	na	NR	NR	2 186	652	NR	RLTA IN	Rolta
EXL Service EXLS US NR 493 17 NR NR 0.7 0.8 1.0 25.5 21.5	8.3 -26.8%	5	5 21.5	25.5	3 1.0	0.8	0.7	NR	NR	3 17	493	NR	EXLS US	EXL Service
Firstsource FSOL IN NR 287 31 NR NR 2.4 3.2 na 12.7 9.6	2.9 na							NR		7 31	287	NR	FSOL IN	Firstsource
Genpact G US NR 3,916 18 NR NR 0.8 0.9 0.9 22.0 19.1	12.5 -42.5%	1 1	0 19.1	22.0	0.9	0.9	0.8	NR	NR	5 18			G US	
WNS WNS US NR 544 13 NR NR 1.2 1.3 1.5 11.2 9.6	3.9 -34.7%		2 9.6	11.2				NR						

Note: Share price data as of 23 April 2010. Data for Not rated companies are based on Bloomberg consensus estimates. Fiscal year end June for HCLT. Source: Bloomberg, Macquarie Research, April 2010

Quarterly Results		3Q/10A	4Q/10E	1Q/11E	2Q/11E	Profit & Loss		2009A	2010E	2011E	2012E
Revenue	m	69,380	72,632	74,308	76,498	Revenue	m	256.892	274,817	314.396	364,359
Gross Profit	m	21,614	22,082	22,510	22,505	Gross Profit	m	76,711	85,732	92,013	107,943
Cost of Goods Sold	m	47,766	50,550	51,798	53,992	Cost of Goods Sold	m	180,180	189,085	222,383	256,416
BITDA	m	15,521	15,480	15,697	16,007	EBITDA	m	50,394	59,573	65,288	74,654
Depreciation	m	1,985	2,179	2,229	2,295	Depreciation	m	6,948	8,123	9,432	10,931
Amortisation of Goodwill Other Amortisation	m	0 0	0 0	0 0	0 0	Amortisation of Goodwill Other Amortisation	m	0	0 0	0	0
EBIT	m m	13,536	13,301	13,468	13,712	EBIT	m m	43,446	51,450	55,856	63,724
Net Interest Income	m	721	637	708	785	Net Interest Income	m	1,086	2,394	3,295	4,348
Associates	m	128	134	141	144	Associates	m	362	488	595	702
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	0	0	0	0	Other Pre-Tax Income	m	0	0	0	0
Pre-Tax Profit	m	14,385	14,073	14,317	14,641	Pre-Tax Profit	m	44,894	54,333	59,746 -10.056	68,774
Tax Expense Net Profit	m m	-2,321 12,064	-2,252 11,821	-2,362 11,955	-2,460 12,181	Tax Expense Net Profit	m m	-6,035 38,859	-8,530 45,803	-10,056 49,690	-15,130 53,644
Vinority Interests	m	-31	-33	0	0	Minority Interests	m	-99	-171	43,030	00,044
Reported Earnings Adjusted Earnings	m m	12,033 12,033	11,789 11,789	11,955 11,955	12,181 12,181	Reported Earnings Adjusted Earnings	m m	38,760 38,760	45,633 45,633	49,690 49,690	53,644 53,644
EPS (rep)		8.19	8.02	8.12	8.27	EPS (rep)		26.54	31.07	33.73	36.31
EPS (adj)		8.19	8.02	8.12	8.27	EPS (adj)		26.54	31.07	33.73	36.31
EPS Growth yoy (adj)	%	18.2	17.0	17.9	3.8	EPS Growth (adj)	%	19.7	17.1	8.6	7.6
						PE (rep) PE (adj)	x x	9.2 9.2	22.7 22.7	20.8 20.8	19.4 19.4
EBITDA Margin	%	22.4	21.3	21.1	20.9	Total DPS		0.04	0.06	0.06	0.07
EBIT Margin	%	19.5	18.3	18.1	17.9	Total Div Yield	%	0.0	0.0	0.0	0.0
Earnings Split	%	26.4	25.8	24.1	24.5	Weighted Average Shares	m	1,461	1,468	1,473	1,477
Revenue Growth	%	5.3	11.3	16.3	11.0	Period End Shares	m	1,461	1,470	1,475	1,479
EBIT Growth	%	21.7	16.7	17.9	4.0						
Profit and Loss Ratios		2009A	2010E	2011E	2012E	Cashflow Analysis		2009A	2010E	2011E	2012E
Revenue Growth	%	30.1	7.0	14.4	15.9	EBITDA	m	50,394	59,573	65,288	74,654
EBITDA Growth	%	26.7	18.2	9.6	14.3	Tax Paid	m	0	0	0	0
EBIT Growth	% %	28.9 29.9	18.4 31.2	8.6 29.3	14.1 29.6	Chgs in Working Cap Net Interest Paid	m	1,122 0	1,709 0	-2,295 0	-2,302 0
Gross Profit Margin EBITDA Margin	%	29.9 19.6	21.7	29.3	29.6	Other	m m	-7,553	4,710	3,296	4,349
EBIT Margin	%	16.9	18.7	17.8	17.5	Operating Cashflow	m	43,963	65,993	66,289	76,701
Net Profit Margin	%	15.1	16.7	15.8	14.7	Acquisitions	m	-1,030	-23,079	0	0
Payout Ratio	%	0.2	0.2	0.2	0.2	Capex	m	-16,746	-11,203	-15,720	-18,218
EV/EBITDA	х	6.5	16.9	15.3	13.4	Asset Sales	m	358	208	0	0
EV/EBIT	х	7.6	19.5	17.9	15.7	Other	m	-6,765	-5,568	0	0
						Investing Cashflow	m	-24,183	-39,642	-15,720	-18,218
Balance Sheet Ratios				~~~~		Dividend (Ordinary)	m	-6,829	-13,679	-6,856	-6,856
ROE	%	27.7	27.1	23.9	21.2	Equity Raised	m	78	73	0	0
ROA ROIC	% %	16.9 31.3	16.7 30.6	15.9 30.9	15.5 31.3	Debt Movements Other	m	-460 3,952	43,103 -46,211	0	0
Net Debt/Equity	%	-5.6	-19.6	-30.9	-39.1	Financing Cashflow	m m	-3,952 -3,259	-40,211 -16,714	-6,856	-6,856
nterest Cover	х	nmf	nmf	nmf	nmf	_					
Price/Book Book Value per Share	х	2.4 102.8	5.6 126.7	4.5 155.4	3.8 186.6	Net Chg in Cash/Debt	m	17,184	9,017	43,713	51,627
						Free Cashflow	m	27,217	54,789	50,569	58,483
						Balance Sheet		2009A	2010E	2011E	2012E
						Cash	m	65,297	94,464	128,716	165,915
						Receivables	m	60,060	69,533	80,149	91,766
						Inventories Investments	m	8,686	8,249	9,509	10,887
						Fixed Assets	m	338 49,862	0 51,923	0 58,211	0 65,498
						Intangibles	m m	49,862 49,502	51,923	58,211 54,254	65,498 54,254
						Other Assets	m	56,803	46,240	49,170	52,377
						Total Assets	m	290,548	324,664	380,009	440,697
						Payables	m	18,017	47,272	54,840	63,305
						Short Term Debt	m	37,211	35,849	35,849	35,849
						Long Term Debt	m	19,595	21,986	21,986	21,986
						Provisions Other Liphilities	m	0	0	0	0 42 166
						Other Liabilities Total Liabilities	m	65,308	32,789	37,731	43,166
						Shareholders' Funds	m m	140,131 150,182	137,896 186,355	150,406 229,190	164,306 275,978
						Minority Interests	m	235	413	413	413
						Other	m	233			413
						Other		0	0	0	
						Total S/H Equity	m	150,417	186,768	229,603	276,391

Source: Company data, Macquarie Research, April 2010

Macquarie Research

Important disclosures:

Recommendation definitions	Volatility index definition*	Financial definitions
Macquarie - Australia/New Zealand Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return	This is calculated from the volatility of historical price movements. Very high-highest risk – Stock should be	All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging,
Macquarie – Asia/Europe Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%	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	IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests
Macquarie First South - South Africa Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%	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	EPS = adjusted net profit / efpowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit /average total assets
Macquarie - Canada Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return	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.	ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares
Macquarie - USA Outperform (Buy) – return >5% in excess of Russell 3000 index return Neutral (Hold) – return within 5% of Russell 3000 index return Underperform (Sell)– return >5% below Russell 3000 index return	Low – stock should be expected to move up or down at least 15–25% in a year. * Applicable to Australian/NZ/Canada stocks only	All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).
Recommendations – 12 months		
Note: Quant recommendations may differ from Fundamental Analyst recommendations		

Recommendation proportions – For quarter ending 31 December 2009

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	47.94%	60.52%	37.50%	43.42%	65.26%	41.60%	(for US coverage by MCUSA, 3.76% of stocks covered are investment banking clients)
Neutral	35.58%	18.70%	53.13%	49.06%	29.11%	36.80%	(for US coverage by MCUSA, 4.51% of stocks covered are investment banking clients)
Underperform	16.48%	20.79%	9.38%	7.52%	5.63%	21.60%	(for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)

Company Specific Disclosures:

Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/research/disclosures.

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 of Macquarie Group Ltd ABN 94 122 169 279 (AFSL No. 318062) (MGL) and its related entities (the Macquarie Group) and has taken reasonable care to achieve and maintain independence and objectivity in making any recommendations.

General Disclaimers:

Macquarie Securities (Australia) Ltd; Macquarie Capital (Europe) Ltd; Macquarie Capital Markets Canada Ltd; Macquarie Capital Markets North America Ltd; Macquarie Capital (USA) Inc; Macquarie Capital Securities Ltd; Macquarie Capital Securities (Singapore) Pte Ltd; Macquarie Securities (NZ) Ltd; and Macquarie First South Securities (Pty) Limited are not authorized 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 Bank Limited ABN 46 008 583 542 (MBL) or MGL. MBL does not guarantee or otherwise provide assurance in respect of the obligations of any of the above mentioned entities. MGL provides a guarantee to the Monetary Authority of Singapore in respect of the obligations and liabilities of Macquarie Capital Securities (Singapore) Pte Ltd for up to SGD 35 million. 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. 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. MGL has established and implemented a conflicts policy at group level (which may be revised and updated from time to time) (the "Conflicts Policy") pursuant to regulatory requirements (including the FSA Rules) which sets out how we must seek to identify and manage all material conflicts of interest. 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 your investment objectives, financial situation or particular needs. Before making an investment decision on the basis of this research, you need to consider, with or without the assistance of an adviser, whether the advice is appropriate in light of your 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. Clients should contact analysts at, and execute transactions through, a Macquarie Group entity in their home jurisdiction unless governing law permits otherwise.

Country-Specific Disclaimers:

Australia: In Australia, research is issued and distributed by Macquarie Securities (Australia) Ltd (AFSL No. 238947), a participating organisation of the Australian Securities Exchange. New Zealand: In New Zealand, research is issued and distributed by Macquarie Securities (NZ) Ltd, a NZX Firm. Canada: In Canada, research is prepared, approved and distributed by Macquarie Capital Markets Canada Ltd, a participating organisation of the Toronto Stock Exchange, TSX Venture Exchange & Montréal Exchange. Macquarie Capital Markets North America Ltd., which is a registered broker-dealer and member of FINRA, accepts responsibility for the contents of reports issued by Macquarie Capital Markets Canada Ltd in the United States and sent to US persons. Any person wishing to effect transactions in the securities described in the reports issued by Macquarie Capital Markets Canada Ltd should do so with Macquarie Capital Markets North America Ltd. The Research Distribution Policy of Macquarie Capital Markets Canada Ltd is to allow all clients that are entitled to have equal access to our research. United Kingdom: In the United Kingdom, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated by the Financial Services Authority (No. 193905). Hong Kong: In Hong Kong, research is issued and distributed by Macquarie Capital Securities (Japan) Limited, a member of the Tokyo Stock Exchange, Inc., Osaka Securities Exchange Co. Ltd, and Jasdaq Securities Exchange, Inc. (Financial Instruments Firm, Kanto Financial Bureau (kin-sho) No. 231, a member of Japan Securities Dealers Association and Financial Futures Association of Japan). South Africa: In South Africa, research is issued and distributed by Macquarie (Pty) Limited, a member of the JSE Limited. Singapore: In Singapore, research is issued and distributed by Macquarie Capital Securities (Japan). Limited, Singapore, research is issued and distributed by Macquarie Capital Securities (Japan). South Africa: In South Africa, research is

Macquarie Research

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 Capital Securities (Singapore) Pte Ltd is exempt from complying with sections 25, 27 and 36 of the Financial Advisers Act. All Singapore-based recipients of research produced by Macquarie Capital (Europe) Limited, Macquarie Capital Markets Canada Ltd, Macquarie First South Securities (Pty) Limited and Macquarie Capital (USA) Inc. represent and warrant that they are institutional investors as defined in the Securities and Futures Act. **United States**: In the United States, research is issued and distributed by Macquarie Capital (USA) Inc., which is a registered broker-dealer and member of FINRA. Macquarie Capital (USA) Inc, 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 Capital (USA) Inc. Macquarie Capital (USA) Inc. Saffiliate's analysts are not registered as research analysts with FINRA, may not be associated persons of Macquarie Capital (USA) Inc., and therefore may not be subject to FINRA rule restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account. Any persons receiving this report directly from Macquarie Capital (USA) Inc. and wishing to effect a transaction in any security described herein should do so with Macquarie Capital (USA) Inc. Important disclosure information regarding the subject companies covered in this report is available at www.macquarie.com/research/disclosures, or contact your registered representative at 1-888-MAC-STOCK, or write to the Supervisory Analysts, Research Department, Macquarie Securities, 125 W.55th Street, New York, NY 10019.

Auckland	Bangkok	Calgary	Hong Kong	Jakarta	Johannesburg	Kuala Lumpur
Tel: (649) 377 6433	Tel: (662) 694 7999	Tel: (1 403) 218 6650	Tel: (852) 2823 3588	Tel: (62 21) 515 1818	Tel: (2711) 583 2000	Tel: (60 3) 2059 8833
London	Manila	Melbourne	Montreal	Mumbai	Perth	Seoul
Tel: (44 20) 3037 4400	Tel: (63 2) 857 0888	Tel: (613) 9635 8139	Tel: (1 514) 925 2850	Tel: (91 22) 6653 3000	Tel: (618) 9224 0888	Tel: (82 2) 3705 8500
Shanghai	Singapore	Sydney	Taipei	Tokyo	Toronto	New York
Tel: (86 21) 6841 3355	Tel: (65) 6231 1111	Tel: (612) 8232 9555	Tel: (886 2) 2734 7500	Tel: (81 3) 3512 7900	Tel: (1 416) 848 3500	Tel: (1 212) 231 2500

TheMarkets.com.

Macquarie Equities Research



Asia Research

Head of Equity Research

John O'Connell (Global Co – Head)	(612) 8232 7544
David Rickards (Global Co - Head)	(44 20) 3037 4399
Chris Hunt (Asia – Head)	(852) 3922 1119
Tim Smart (Asia – Deputy Head)	(852) 3922 3565
Automobiles/Auto Parts	、 ,
Leah Jiang (China)	(8621) 2412 9020
Clive Wiggins (Japan)	(813) 3512 7856
Dan Lucas (Japan)	(813) 3512 6050
ES Kwak (Korea)	(822) 3705 8644
Linda Huang (Taiwan)	(8862) 2734 7521
Banks and Non-Bank Financ	ials
Ismael Pili (Asia)	(813) 3512 5979
Nick Lord (Asia)	(852) 3922 4774
Sarah Wu (China)	(852) 3922 4068
Jemmy Huang (Hong Kong, Taiwan)	(8862) 2734 7530
Mudit Painuly (India)	(9122) 6653 3044
Suresh Ganapathy (India)	(9122) 6653 3042
Ferry Wong (Indonesia)	(6221) 515 7335
Chan Hwang (Korea)	(822) 3705 8643
Michael Na (Korea)	(822) 2095 7222
Chin Seng Tay (Malaysia, S'pore)	(65) 6231 2837
Nadine Javellana (Philippines)	(632) 857 0890
Matthew Smith (Taiwan)	(8862) 2734 7514
Alastair Macdonald (Thailand)	(662) 694 7741
	(002) 034 7741
Chemicals/Textiles	
Christina Lee (Hong Kong)	(852) 3922 3571
Jal Irani (India)	(9122) 6653 3040
Shawn Park (Korea)	(822) 3705 8669
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Conglomerates	
Gary Pinge (Asia)	(852) 3922 3557
Leah Jiang (China)	(8621) 2412 9020
	(0021) 2412 3020
Consumer	
Con (Dingo (Apio)	
Gary Pinge (Asia)	(852) 3922 3557
Jessie Qian (China, Hong Kong)	(852) 3922 3568
Jessie Qian (China, Hong Kong)	(852) 3922 3568
Jessie Qian (China, Hong Kong) Toby Williams (Japan)	(852) 3922 3568 (813) 3512 7392
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7653 (9122) 6653 3166 (813) 3512 7432
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7475
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7475 (822) 3705 8511
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7433 (822) 3705 8511 (603) 2059 8993 (662) 694 7753
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7475 (822) 3705 8511 (603) 2059 8993 (662) 694 7753 (852) 3922 3567
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7433 (822) 3705 8511 (603) 2059 8993 (662) 694 7753
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan) Media	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 745 (822) 3705 8511 (662) 694 7753 (852) 3922 3567 (813) 3512 7421
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Christopher Cintavey (Japan) Janet Lewis (Japan) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan) Media Jessie Qian (China, Hong Kong)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7475 (822) 3705 8511 (603) 2059 8993 (662) 694 7753 (852) 3922 3567 (813) 3512 7421 (852) 3922 3568
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salaman (Japan) Media Jessie Qian (China, Hong Kong) Shubham Majumder (India)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (813) 3512 7475 (822) 3705 8511 (603) 2059 8993 (662) 694 7753 (852) 3922 3567 (813) 3512 7421 (852) 3922 3568 (9122) 6653 3049
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan) Media Jessie Qian (China, Hong Kong) Shubham Majumder (India) George Hogan (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (822) 3705 8511 (603) 2059 8993 (662) 694 7753 (852) 3922 3567 (813) 3512 7421 (852) 3922 3568 (9122) 6653 3049 (813) 3512 7851
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan) Media Jessie Qian (China, Hong Kong) Shubham Majumder (India) George Hogan (Japan) Prem Jearajasingam (Malaysia)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7475 (822) 3705 8511 (603) 2059 8993 (852) 3922 3567 (813) 3512 7421 (852) 3922 3568 (9122) 6653 3049 (813) 3512 7851 (603) 2059 8989
Jessie Qian (China, Hong Kong) Toby Williams (Japan) HongSuk Na (Korea) Edward Ong (Malaysia) Alex Pomento (Philippines) Linda Huang (Taiwan) Emerging Leaders Jake Lynch (Asia) Minoru Tayama (Japan) Robert Burghart (Japan) Industrials Inderjeetsingh Bhatia (India) Christopher Cintavey (Japan) Janet Lewis (Japan) Chang Han Joo (Korea) Sunaina Dhanuka (Malaysia) David Gambrill (Thailand) Insurance Mark Kellock (Asia) Makarim Salman (Japan) Media Jessie Qian (China, Hong Kong) Shubham Majumder (India) George Hogan (Japan)	(852) 3922 3568 (813) 3512 7392 (822) 3705 8678 (603) 2059 8982 (632) 857 0899 (8862) 2734 7521 (8621) 2412 9007 (813) 3512 6058 (813) 3512 7853 (9122) 6653 3166 (813) 3512 7432 (813) 3512 7432 (813) 3512 7432 (822) 3705 8511 (603) 2059 8993 (662) 694 7753 (852) 3922 3567 (813) 3512 7421 (852) 3922 3568 (9122) 6653 3049 (813) 3512 7851

Oil and Gas

Laban Yu (Asia)	(852) 3922 4691
Christina Lee (Hong Kong)	(852) 3922 3571
Jal Irani (India)	(9122) 6653 3040
Polina Diyachkina (Japan)	(813) 3512 7886
Shawn Park (Korea)	(822) 3705 8669
Edward Ong (Malaysia)	(603) 2059 8982
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Linda Huang (Taiwan)	(8862) 2734 7521
Trevor Buchinski (Thailand)	(662) 694 7829
Pharmaceuticals	
Christina Lee (Hong Kong)	(852) 3922 3571
Abhishek Singhal (India)	(9122) 6653 3052
Naomi Kumagai (Japan)	(813) 3512 7474
Property	(0.0) 0012 1 11 1
	(050) 0000 (50)
Callum Bramah (Asia)	(852) 3922 4731
Eva Lee (China, Hong Kong)	(852) 3922 3573
Hiroshi Okubo (Japan)	(813) 3512 7433
Chang Han Joo (Korea)	(822) 3705 8511
Tuck Yin Soong (Singapore)	(65) 6231 2838
Elaine Cheong (Singapore)	(65) 6231 2839
Corinne Jian (Taiwan)	(8862) 2734 7522
Patti Tomaitrichitr (Thailand)	(662) 694 7727
Resources / Metals and Mini	ng
Andrew Dale (Asia)	(852) 3922 3587
YeeMan Chin (China)	(852) 3922 3562
Graeme Train (China)	(8621) 2412 9035
Christina Lee (Hong Kong)	(852) 3922 3571
Rakesh Arora (India)	(9122) 6653 3054
Adam Worthington (Indonesia)	(65) 6231 2981
Riaz Hyder (Indonesia)	(6221) 2598 8486
Polina Diyachkina (Japan)	(813) 3512 7886
Technology	
Michael Bang (Asia)	(822) 3705 8659
Patrick Yau (Hong Kong)	(852) 3922 1264
Zona Chen (Hong Kong)	(852) 3922 3578
Nitin Mohta (India)	(9122) 6653 3050
Damian Thong (Japan)	(813) 3512 7877
David Gibson (Japan)	(813) 3512 7880
George Chang (Japan)	(813) 3512 7854
Michiko Kakiya (Japan)	(813) 3512 7868
Yukihiro Goto (Japan)	(813) 3512 5984
Daniel Kim (Korea)	(822) 3705 8641
Abraham Leu (Taiwan)	(8862) 2734 7511
Chia-Lin Lu (Taiwan)	(8862) 2734 7526
Daniel Chang (Taiwan)	(8862) 2734 7516
James Chiu (Taiwan)	(8862) 2734 7517
Jeffrey Su (Taiwan)	(8862) 2734 7512
Samson Yu (Taiwan)	(8862) 2734 7532
Telecoms	
Shubham Majumder (Asia)	(9122) 6653 3049
Ramakrishna Maruvada (ASEAN)	(65) 6231 2842
Bin Liu (China)	(852) 3922 3634
Tim Smart (China)	(852) 3922 3565
Riaz Hyder (Indonesia)	(6221) 2598 8486
Nathan Ramler (Japan)	(813) 3512 7875
Prem Jearajasingam (Malaysia)	(603) 2059 8989

Transport & Infrastructure

Anderson Chow ((852) 3922 4773
Jonathan Windha Wei Sim (China,		(852) 3922 5417 (852) 3922 3598
Janet Lewis (Jap		(813) 3512 7475
Chang Han Joo ((822) 3705 8511
ES Kwak (Korea		(822) 3705 8644
Sunaina Dhanuk		(603) 2059 8993
Utilities		
Adam Worthingto	on (Asia)	(65) 6231 2981
Carol Cao (China		(852) 3922 4075
Jeff Evans (India		(9122) 3356 3053
Prem Jearajasing		(603) 2059 8989
Alex Pomento (P	,	(632) 857 0899
Commodities	;	(1100) 0007 1071
Jim Lennon		(4420) 3037 4271
Max Layton Duncan Hobbs		(4420) 3037 4273 (4420) 3037 4497
Bonnie Liu		(8621) 2412 9008
Graeme Train		(8621) 2412 9035
Rakesh Arora		(9122) 6653 3054
Data Service	s	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Andrea Clohessy	(Asia)	(852) 3922 4076
Eric Yeung	()	(852) 3922 4077
Economics		
Richard Jerram ((813) 3512 7855
Rajeev Malik (AS		(65) 6231 2841
Richard Gibbs (A		(612) 8232 3935
Paul Cavey (Chir	1a)	(852) 3922 3570
Quantitative		
Martin Emery (As		(852) 3922 3582
Viking Kwok (Asi		(852) 3922 4735
George Platt (Au		(612) 8232 6539
Patrick Hansen ((813) 3512 7876
Strategy/Cou	-	(0004) 0440 0000
Michael Kurtz (A		(8621) 2412 9002
Daniel McCorma Mark Matthews ((852) 3922 4073 (852) 3922 3585
Rakesh Arora (In		(9122) 6653 3054
Ferry Wong (Inde		(6221) 515 7335
David Gibson (Ja		(813) 3512 7880
Peter Eadon-Cla		(813) 3512 7850
Chan Hwang (Ko	orea)	(822) 3705 8643
Prem Jearajasing	gam (Malaysia)	(603) 2059 8989
Edward Ong (Ma		(603) 2059 8982
Alex Pomento (P		(632) 857 0899
Patrick Yau (Sing		(65) 6231 2835
Daniel Chang (Ta		(8862) 2734 7516
Alastair Macdona	aiu (Thaliand)	(662) 694 7741
Find our rese	earch at	
Macquarie:		ie.com.au/research
Thomson:	www.thomson	
momoon.	www.uioiii50ii	

Macquarie:	www.macquarie.com.au/research
Thomson:	www.thomson.com/financial
Reuters:	www.knowledge.reuters.com
Bloomberg:	MAC GO
Factset:	http://www.factset.com/home.aspx
CapitalIQ	www.capitaliq.com
TheMarkets.com	www.themarkets.com
Email macresearch	m@macquarie.com for access

Sales

Regional Heads of Sales

Chris Gray (ASEAN) Justin Crawford (Asia) Peter Slater (Boston) Jeffrey Shiu (China & Hong Kong) Thomas Renz (Geneva) Andrew Mouat (India) Stanley Dunda (Indonesia) Kenneth Yap (Indonesia) JJ Kim (Korea) Jason Lee (Malaysia) Gino C Rojas (Philippines) Greg Norton-Kidd (New York) Luke Sullivan (New York) Scot Mackie (New York)

Regional Heads of Sales cont'd

Sheila Schroeder (San Francisco) Angus Kent (Thailand) Michael Newman (Tokyo) Charles Nelson (UK/Europe) Rob Fabbro (UK/Europe) Nick Ainsworth (Generalist)

Sales Trading

Adam Zaki (Asia) Mike Keen (Europe) Yat Quan Tan (Hong Kong) Stanley Dunda (Indonesia) Mario Argyrides (Korea) Edward Robinson (London) (1 415) 762 5001 (662) 694 7601 (813) 3512 7920 (44) 20 3037 4832 (44) 20 3037 4865 (852) 3922 2010

(852) 3922 2002 (44) 20 3037 4905

(44) 20 3037 4905 (852) 3922 2028 (6221) 515 1555 (822) 3705 8610 (44) 20 3037 4902

Sales Trading cont'd

Chris Reale (New York)	(1 212) 231 2616
Michael Santos (Philippines)	(632) 857 0813
Matthew Ryan (Singapore)	(65) 6231 2888
Isaac Huang (Taiwan)	(8862) 2734 7582
Dominic Shore (Thailand)	(662) 694 7707
Phil Sellaroli (Tokyo)	(813) 3512 7837
Altermetive Otweteries	

Alternative Strategies

 Convertibles - Roland Sharman
 (852) 3

 Depository Receipts - Robert Ansell
 (852) 3

 Derivatives - Wayne Edelist
 (852) 3

 Futures - Tim Smith
 (852) 3

 Structured Products - Andrew Terlich
 (852) 3

(852) 3922 2095
(852)3922 2094
(852) 3922 2134
(852) 3922 2113
(852) 3922 2013