

TAIWAN

Sino-American Silicon

23 October 2008

5483 TT **Underperform**

Stock price as of 22 Oct 08	NT\$	84.20
12-month target	NT\$	71.00
Upside/downside	%	-18.6
Valuation - PER	NT\$	60.00-80.00

GICS sector	semiconductors & semiconductor equipment
Market cap	NT\$m 19,287
30-day avg turnover	NT\$m 413.9
Market cap	US\$m 591
Number shares on issue	m 221.2

Investment fundamentals

Year end 31 Dec		2007A	2008E	2009E	2010E
Total revenue	m	6,718	9,348	12,782	18,305
Reported profit	m	1,806	2,021	2,204	2,724
Profit bonus exp	m	1,566	2,021	2,204	2,724
Bon exp/rep prof	%	13.3	0.0	0.0	0.0
Adjusted profit	m	1,806	2,021	2,204	2,724
EPS rep	NT\$	8.23	9.31	9.99	12.35
EPS rep growth	%	83.5	13.1	7.3	23.6
EPS bonus exp	NT\$	7.14	9.31	9.99	12.35
EPS bonus growth	%	91.4	30.4	7.3	23.6
PE rep	x	10.6	9.4	8.7	7.1
PE bonus exp	x	12.2	9.4	8.7	7.1
Total DPS	NT\$	5.20	5.51	6.00	7.00
Total div yield	%	6.0	6.3	6.9	8.0
ROA	%	20.5	16.1	16.2	17.9
ROE	%	32.6	34.8	36.4	37.0
EV/EBITDA	x	7.8	7.0	5.7	4.5
Net debt/equity	%	3.8	23.2	25.2	22.0
Price/book	x	3.1	3.5	2.9	2.4

5483 TT rel Taix performance, & rec history



Source: Datastream, Macquarie Research, October 2008 (all figures in NT\$ unless noted)

Analyst

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Slow growth ahead

Event

- SAS released its unaudited 3Q08 brief results at yesterday's GreTai Securities Market conference. We lower our target price to NT\$71 from NT\$112 due to our 2009 earnings revision and PER multiple adjustment to 7x from 11x.

Impact

- MacQ vs. consensus.** We have a more cautious view on its diversified business strategy, especially given the tumultuous financial environment. We are the only broker with an Underperform rating among 12 brokers. Since we downgraded in late-August, the stock is down by 41%. With a disappointing earnings announcement, the ratings and earnings downward revisions are likely to happen in the near-term. For the time being, our 2008–09E EPS is 15–20% below the street consensus.
- Disappointing 3Q08 results.** SAS posted its 3Q08 EPS of NT\$2.46, down 2% QoQ, weaker than our and market expectations, due mainly to the shortfall in GM. We did not get specific reasons for the weak GM, which decreased by 180bp to 28.2% in 3Q vs our estimate of 31.3%. Generally, management indicated the yield, product mix, and customer structure are three keys that will affect GM. Having said that, without strong MEMC (WFR, US\$20.88, Not rated) support, we believe its margins should become more volatile.
- Good but not enough.** While we continue to see SAS deliver good earnings, we expect its YoY growth to slow – from 109% YoY in 2007 to 26% in 2008E and 9% in 2009E. We believe its GM will also have reached a peak in 2007 (31%) and trend down towards 2009. We forecast its 2008 and 2009 GM to be 28.7% and 26.9%, respectively.

Earnings revision

- We maintain our 2008 EPS, but trim our 2009 EPS by 2% to NT\$9.99 to reflect slower growth momentum.

Price catalyst

- 12-month price target: NT\$71.00 based on a PER methodology.
- Catalyst: Weak demand and polysilicon oversupply.

Action and recommendation

- Given the current financial turmoil, management may need to put in more effort and resources into their diversified business strategy. In the long-term, we believe this may be good for the company. However, we are becoming more cautious on its growing non-solar business (30%+), which should drag down its valuations as pure solar names used to enjoy higher PER multiples compared to other sectors. Consequently, we cut our TP to NT\$71 based on a 7x forward PER, at its trough valuations.

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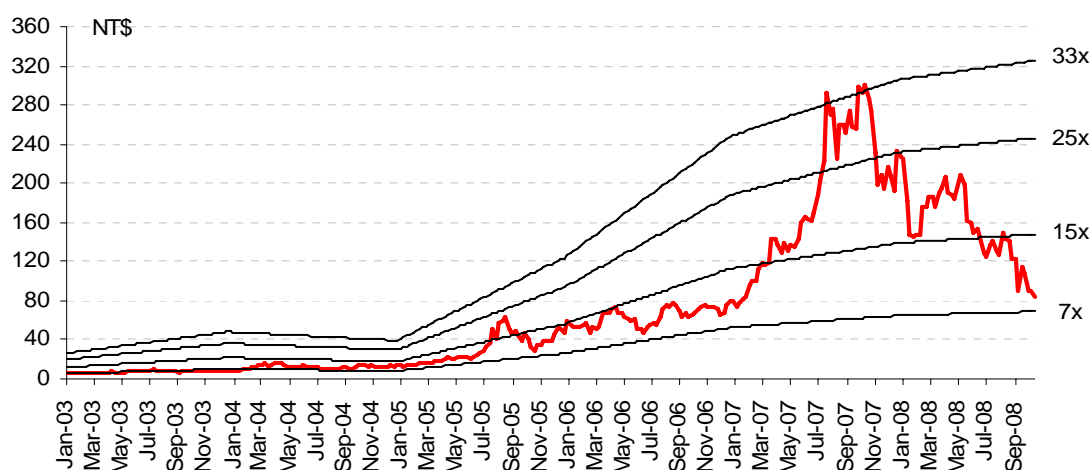
Analysis

Fig 1 Earnings revision

NT\$m	Revised		Original		% diff	
	2008E	2009E	2008E	2009E	2008E	2009E
Sales	9,348	12,782	9,283	12,909	0.7%	-1.0%
Gross Profit	2,686	3,438	2,853	3,472	-5.8%	-1.0%
GM	29%	27%	31%	27%		
Operating profit	2,019	2,462	2,116	2,484	-4.6%	-0.9%
OPM	22%	19%	23%	19%		
Net income	2,021	2,204	2,026	2,241	-0.3%	-1.7%

Source: Company data, Macquarie Research, October 2008

Fig 2 SAS – 12- month forward PER band



Source: TEJ, Macquarie Research, October 2008

Fig 3 Earnings model

	FD basis										
Unit: NT\$ mn	1Q08A	2Q08A	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q9E	2007	2008E	2009E
Net sales	2,130	2,199	2,435	2,585	2,676	2,965	3,374	3,767	6,718	9,348	12,782
Cost of goods sold	1,520	1,538	1,750	1,854	1,874	2,121	2,486	2,864	4,637	6,662	9,344
Gross profits	609	660	686	731	801	844	888	904	2,081	2,686	3,438
Operating expense	145	141	202	179	212	231	256	277	557	667	976
Operating income	465	519	483	552	589	613	633	627	1,524.6	2,019	2,462
Interest income	1	2	1	1	3	6	8	2	16	5	18
Net investment income	41	29	51	35	46	46	48	48	215	157	188
Other non operating income	(66)	55	74	14	(3)	0	(6)	2	123	77	(7)
Interest Exp.	6	13	13	13	16	17	17	18	-21	-44	68
Pretax income	436	593	596	589	619	649	665	660	1,857.5	2,215	2,593
Income tax	50	37	54	53	93	97	100	99	258	-194	389
Net Income	386	556	543	536	526	552	565	561	1,599	2,021	2,204
Margins (%)	1Q08A	2Q08A	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q9E	2007	2008E	2009E
Gross margin	28.6%	30.0%	28.2%	28.3%	30.0%	28.5%	26.3%	24.0%	31.0%	28.7%	26.9%
Operating margin	21.8%	23.6%	19.8%	21.4%	22.0%	20.7%	18.7%	16.6%	22.7%	21.6%	19.3%
Pre-tax margin	20.5%	27.0%	24.5%	22.8%	23.1%	21.9%	19.7%	17.5%	27.6%	23.7%	20.3%
Net margin	18.1%	25.3%	22.3%	20.7%	19.7%	18.6%	16.7%	14.9%	23.8%	21.6%	17.2%
YoY growth (%)	1Q08A	2Q08A	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q9E	2007	2008E	2009E
Sales	55%	43%	35%	28%	26%	35%	39%	46%	58%	39%	37%
Gross profit	50%	31%	22%	20%	32%	28%	30%	24%	80%	29%	28%
Operating income	40%	25%	1%	2%	27%	18%	31%	13%	108%	32%	22%
Pre-tax income	16%	5%	-4%	10%	42%	9%	11%	12%	96%	19%	17%
Net income	29%	19%	8%	1%	36%	-1%	4%	5%	109%	26%	9%
QoQ growth (%)	1Q08A	2Q08A	3Q08E	4Q08E	1Q09E	2Q09E	3Q09E	4Q9E	2007	2008E	2009E
Sales	6%	3%	11%	6%	4%	11%	14%	12%	-	-	-
Gross profit	0%	8%	4%	7%	10%	5%	5%	2%	-	-	-
Operating income	-1%	12%	-7%	14%	7%	4%	3%	-1%	-	-	-
Pre-tax income	-6%	36%	1%	-1%	5%	5%	2%	-1%	-	-	-
Net income	-17%	44%	-2%	-1%	-2%	5%	2%	-1%	-	-	-

Source: Company data, Macquarie Research, October 2008

Sino-American Silicon (5483 TT, Underperform, Target price: NT\$71.00)

Quarterly Results		1Q/08A	2Q/08E	3Q/08E	4Q/08E	Profit & Loss		2007A	2008E	2009E	2010E
Revenue	m	2,130	2,199	2,435	2,585	Revenue	m	6,718	9,348	12,782	18,305
Gross Profit	m	609	660	686	731	Gross Profit	m	2,081	2,686	3,438	4,438
Operating Expenses	m	-145	-141	-202	-179	Operating Expenses	m	-317	-667	-976	-1,366
Operating Income	m	465	519	483	552	Operating Income	m	1,764	2,019	2,462	3,072
Net Non-operating income	m	-28	74	113	37	Net Non-operating income	m	333	196	131	132
Pre-Tax Income	m	436	593	596	589	Pre-Tax Income	m	2,097	2,215	2,593	3,204
Tax Expense	m	-50	-37	-54	-53	Tax Expense	m	-292	-194	-389	-481
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	386	556	543	536	Reported Earnings	m	1,806	2,021	2,204	2,724
Reported Earnings (bonus exp)	m	386	556	543	536	Reported Earnings (bonus exp)	m	1,566	2,021	2,204	2,724
Bonus exp / Reported Earnings	%	0.0	0.0	0.0	0.0	Bonus exp / Reported Earnings	%	13.3	0.0	0.0	0.0
Adjusted Earnings	m	386	556	543	536	Adjusted Earnings	m	1,806	2,021	2,204	2,724
EBITDA	m	598	661	595	674	EBITDA	m	2,142	2,529	3,102	4,005
EPS (rep)	NT\$	1.74	2.65	2.51	2.43	EPS (rep)	NT\$	8.23	9.31	9.99	12.35
EPS pcg growth (rep)	%	31.2	26.4	6.2	-2.0	EPS growth (rep)	%	83.5	13.1	7.3	23.6
EPS (rep bonus exp)	NT\$	1.74	2.65	2.51	2.43	EPS (rep bonus exp)	NT\$	7.14	9.31	9.99	12.35
EPS pcg growth (rep bonus exp)	%	51.3	45.7	22.4	13.0	EPS growth (rep bonus exp)	%	91.4	30.4	7.3	23.6
EPS (adj)	NT\$	1.74	2.65	2.51	2.43	EPS (adj)	NT\$	8.27	9.33	9.99	12.35
EPS pcg growth (adj)	%	31.2	26.4	6.2	-2.0	EPS growth (adj)	%	85.6	12.9	7.0	23.6
Revenue pcg growth	%	55.3	43.5	35.4	28.2	PE (rep)	x	10.6	9.4	8.7	7.1
Operating Income pcg growth	%	39.9	25.3	1.2	2.2	PE (rep bonus adj)	x	12.2	9.4	8.7	7.1
Reported Earnings pcg growth	%	28.7	18.6	7.6	0.6	PE (adj)	x	10.5	9.3	8.7	7.1
Gross Profit Margin	%	28.6	30.0	28.2	28.3	Total DPS	NT\$	5.20	5.51	6.00	7.00
Operating Income Margin	%	21.8	23.6	19.8	21.4	Total Div Yield	%	6.0	6.3	6.9	8.0
Reported Earnings Margin	%	18.1	25.3	22.3	20.7	Weighted Average Shares	m	219.4	217.0	220.6	220.6
EBITDA Margin	%	28.1	30.1	24.4	26.1	Period End Shares	m	214.8	220.6	220.6	220.6
Profit and Loss Ratios		2007A	2008E	2009E	2010E	Cashflow Analysis		2007A	2008E	2009E	2010E
Revenue Growth	%	58.2	39.1	36.7	43.2	Reported Earnings	m	1,806	2,021	2,204	2,724
Gross Profit Growth	%	80.2	29.1	28.0	29.1	Depreciation & Amortisation	m	378	509	641	932
Operating Income Growth	%	99.5	14.4	21.9	24.8	Chgs in Working Cap	m	-396	-134	-602	-789
Reported Earnings Growth	%	103.4	11.9	9.1	23.6	Other	m	-168	943	260	322
EBITDA Growth	%	101.8	18.0	22.7	29.1	Operating Cashflow	m	1,619	3,339	2,503	3,189
Gross Profit Margin	%	31.0	28.7	26.9	24.2	Acquisitions	m	0	0	0	0
Operating Income Margin	%	26.3	21.6	19.3	16.8	Capex	m	-1,256	-993	-1,500	-1,800
Reported Earnings Margin	%	26.9	21.6	17.2	14.9	Asset Sales	m	-134	-2,090	0	0
EBITDA Margin	%	31.9	27.0	24.3	21.9	Other	m	-3	-7	0	0
Payout Ratio	%	62.9	59.0	60.1	56.7	Investing Cashflow	m	-1,393	-3,090	-1,500	-1,800
EV/EBITDA	x	7.8	7.0	5.7	4.5	Dividend (Ordinary)	m	-597	-1,213	-1,213	-1,324
EV/EBIT	x	9.2	8.6	7.1	5.8	Equity Raised	m	0	0	0	0
Balance Sheet Ratios						Debt Movements	m	287	814	98	133
ROE	%	32.6	34.8	36.4	37.0	Other	m	-5	18	0	0
ROA	%	20.5	16.1	16.2	17.9	Financing Cashflow	m	-315	-381	-1,115	-1,191
ROIC	%	31.7	29.0	31.0	31.5	Net Chg in Cash/Debt	m	-90	-132	-112	198
Net Debt/Equity	%	3.8	23.2	25.2	22.0	Free Cashflow	m	362	2,346	1,003	1,389
Interest Cover	x	333.4	51.9	49.7	45.8	FCF per Share	NT\$	1.65	10.81	4.55	6.30
Price/Book	x	3.1	3.5	2.9	2.4	P/FCF	x	52.8	8.1	19.2	13.8
Book Value per Share	NT\$	28.5	24.8	30.0	36.8	Balance Sheet		2007A	2008E	2009E	2010E
						Cash	m	681	549	437	635
						Receivables	m	1,347	1,595	1,982	2,641
						Inventories	m	1,046	989	1,273	1,692
						Investments	m	0	0	0	0
						Fixed Assets	m	3,134	3,595	4,454	5,323
						Intangibles	m	0	0	0	0
						Other Assets	m	4,508	7,633	7,821	8,008
						Total Assets	m	10,718	14,361	15,967	18,299
						Payables	m	754	810	879	1,168
						Short Term Debt	m	917	1,000	2,103	2,423
						Long Term Debt	m	0	818	0	0
						Provisions	m	0	0	0	0
						Other Liabilities	m	2,921	6,257	6,367	6,587
						Total Liabilities	m	4,592	8,884	9,349	10,179
						Total S/H Equity	m	6,125	5,477	6,618	8,119
						Total Liab & S/H Funds	m	10,718	14,361	15,966	18,298

All figures in NT\$ unless noted.

Source: Company data, Macquarie Research, October 2008

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Recommendation definitions	Volatility index definition*	Financial definitions
<p>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)</p> <p>Macquarie – Asia/Europe Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie First South - South Africa Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie – Canada Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>Macquarie – USA Outperform (Buy) – return >5% in excess of benchmark return Neutral (Hold) – return within 5% of benchmark return Underperform (Sell) – return >5% below benchmark return</p> <p>Recommendations – 12 months Note: Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>This is calculated from the volatility of historic price movements.</p> <p>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.</p> <p>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.</p> <p>Medium – stock should be expected to move up or down at least 30–40% in a year.</p> <p>Low–medium – stock should be expected to move up or down at least 25–30% in a year.</p> <p>Low – stock should be expected to move up or down at least 15–25% in a year. * Applicable to Australian/NZ stocks only</p>	<p>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</p> <p>EPS = adjusted net profit / epowa* 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</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>

Recommendation proportions – For quarter ending 30 September 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	43.17%	61.57%	63.08%	53.60%	71.54%	43.00%
Neutral	41.37%	16.43%	30.77%	37.60%	24.61%	48.00%
Underperform	15.47%	22.00%	6.15%	8.80%	3.85%	9.00%

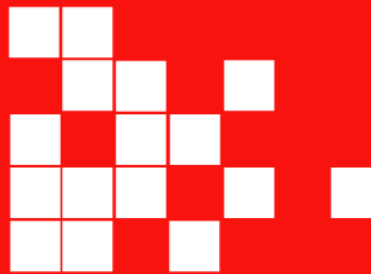
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 Eunsook Kwak (Korea) (822) 3705 8644
 Linda Huang (Taiwan) (8862) 2734 7521

Banks and Non-Bank Financials

Ismael Pili (Asia) (65) 6231 2840
 Nick Lord (Asia, China, Hong Kong) (852) 2823 4774
 Sarah Wu (China) (8621) 2412 9035
 Seshadri Sen (India) (9122) 6653 3053
 Ferry Wong (Indonesia) (6221) 515 7335
 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

Chemicals/Textiles

Scott Weaver (Taiwan) (8862) 2734 7512
 Jal Irani (India) (9122) 6653 3040
 Christina Lee (Korea) (822) 3705 8670
 Sunaina Dhanuka (Malaysia) (603) 2059 8993

Conglomerates

Gary Pinge (Asia) (852) 2823 3557
 Leah Jiang (China) (8621) 2412 9020
 Kenneth Yap (Indonesia) (6221) 515 7343
 Ashwin Sanketh (Singapore) (65) 6231 2830

Consumer

Mohan Singh (Asia) (852) 3901 1111
 Jessie Qian (China, Hong Kong) (852) 2823 3568
 Charles Yan (China) (8621) 2412 9033
 Unmesh Sharma (India) (9122) 6653 3042
 Sarina Lesmina (Indonesia) (6221) 515 7339
 Duane Sandberg (Japan) (813) 3512 7867
 Toby Williams (Japan) (813) 3512 7392
 Heather Kang (Korea) (822) 3705 8677
 HongSuk Na (Korea) (822) 3705 8678
 Edward Ong (Malaysia) (603) 2059 8982
 Alex Pomento (Philippines) (632) 857 0899
 Linda Huang (Taiwan) (8862) 2734 7521

Emerging Leaders

Jake Lynch (Asia) (8621) 2412 9007
 Hiu-Lui Ko (China) (852) 2823 4704
 Minoru Tayama (Japan) (813) 3512 6058
 Robert Burghart (Japan) (813) 3512 7853
 Heather Kang (Korea) (822) 3705 8677
 Scott Weaver (Taiwan) (8862) 2734 7512

Industrials

Bin Liu (China) (8621) 2412 9006
 Inderjeetsingh Bhatia (India) (9122) 6653 3166
 Christopher Cintavey (Japan) (813) 3512 7432
 Janet Lewis (Japan) (813) 3512 7475
 Michael Na (Korea) (822) 2095 7222
 Sunaina Dhanuka (Malaysia) (603) 2059 8993
 David Gambrill (Thailand) (662) 694 7753

Sales

Regional Heads of Sales

Peter Slater (Boston) (1 617) 217 2103
 Michelle Paisley (China, Hong Kong) (852) 2823 3516
 Ulrike Pollak-Tsutsumi (Frankfurt) (49) 69 7593 8747
 Thomas Renz (Geneva) (41) 22 818 7712
 Ajay Bhatia (India) (9122) 6653 3200
 Stuart Smythe (India) (9122) 6653 3200
 Chris Gray (Indonesia) (6221) 515 7304
 K.Y. Nam (Korea) (822) 3705 8607
 Lena Yong (Malaysia) (603) 2059 8888
 Gino C Rojas (Philippines) (632) 857 0761
 Greg Norton-Kidd (New York) (1 212) 231 2527
 Luke Sullivan (New York) (1 212) 231 2507

Insurance

Mark Kellock (Asia) (852) 2823 3567
 Seshadri Sen (Asia, India) (9122) 6653 3053
 Makarim Salman (Japan) (813) 3512 7421

Media

Jessie Qian (China, Hong Kong) (852) 2823 3568
 Shubham Majumder (India) (9122) 6653 3049
 Prem Jearajasingam (Malaysia) (603) 2059 8989
 Alex Pomento (Philippines) (632) 857 0899

Oil and Gas

David Johnson (Asia, China) (852) 2823 4691
 Scott Weaver (Taiwan) (8862) 2734 7512
 Jal Irani (India) (9122) 6653 3040
 Christina Lee (Korea) (822) 3705 8670
 Edward Ong (Malaysia) (603) 2059 8982
 Sunaina Dhanuka (Malaysia) (603) 2059 8993
 Ashwin Sanketh (Singapore) (65) 6231 2830
 Trevor Buchinski (Thailand) (662) 694 7728

Pharmaceuticals

Abhishek Singhal (India) (9122) 6653 3052
 Naomi Kumagai (Japan) (813) 3512 7474
 Christina Lee (Korea) (822) 3705 8670

Property

Matt Nacard (Asia) (852) 2823 4731
 Eva Lee (China, Hong Kong) (852) 2823 3573
 Tata Goeyardi (Hong Kong) (852) 2823 4077
 Unmesh Sharma (India) (9122) 6653 3042
 Chang Han Joo (Japan) (813) 3512 7885
 Hiroshi Okubo (Japan) (813) 3512 7433
 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 Mining

Andrew Dale (Asia) (852) 2823 3587
 YeeMan Chin (China) (852) 2823 3562
 Rakesh Arora (India) (9122) 6653 3054
 Adam Worthington (Indonesia) (6221) 515 7338
 Polina Diyachkina (Japan) (813) 3512 7886
 Christina Lee (Korea) (822) 3705 8670
 Scott Weaver (Taiwan) (8862) 2734 7512

Technology

Warren Lau (Asia) (852) 2823 3592
 Kishore Belai (India) (9122) 6653 3046
 Damian Thong (Japan) (813) 3512 7877
 David Gibson (Japan) (813) 3512 7880
 George Chang (Japan) (813) 3512 7854
 Yoshihiro Shimada (Japan) (813) 3512 7862
 Yukihiko Goto (Japan) (813) 3512 5984
 Do Hoon Lee (Korea) (822) 3705 8641
 Michael Bang (Korea) (822) 3705 8659
 Patrick Yau (Singapore) (65) 6231 2835
 Andy Kung (Taiwan) (8862) 2734 7534
 Chia-Lin Lu (Taiwan) (8862) 2734 7526
 Daniel Chang (Taiwan) (8862) 2734 7516
 James Chiu (Taiwan) (8862) 2734 7517
 Nicholas Teo (Taiwan) (8862) 2734 7523

Telecoms

Tim Smart (Asia, China) (852) 2823 3565
 Shubham Majumder (India) (9122) 6653 3049
 Kenneth Yap (Indonesia) (6221) 515 7343
 Nathan Ramler (Japan) (813) 3512 7875
 Prem Jearajasingam (Malaysia) (603) 2059 8989
 Ramakrishna Maruvada (Philippines, Singapore, Thailand) (65) 6231 2842

Regional Heads of Sales cont'd

Scot Mackie (New York) (1 212) 231 2848
 Sheila Schroeder (San Francisco) (1 415) 835 1235
 Giles Heyring (Singapore) (65) 6231 2888
 Mark Duncan (Taiwan) (8862) 2734 7510
 Angus Kent (Thailand) (662) 694 7601
 Michael Newman (Tokyo) (813) 3512 7920
 Charles Nelson (UK/Europe) (44) 20 7065 2032
 Rob Fabbro (UK/Europe) (44) 20 7065 2031

Sales Trading

Adam Zaki (North Asia) (852) 2823 3528
 Duncan Rutherford (ASEAN, India) (65) 6231 2888
 Mona Lee (Hong Kong) (852) 2823 3519

Transport & Infrastructure

Anderson Chow (Asia, China) (852) 2823 4773
 Jonathan Windham (Asia, China) (852) 2823 5417
 Tim Bacchus (Asia, China) (852) 2823 3586
 Wei Sim (China, Hong Kong) (852) 2823 3598
 Eunsook Kwak (Korea) (822) 3705 8644
 Sunaina Dhanuka (Malaysia) (603) 2059 8993

Utilities

Carol Cao (China, Hong Kong) (852) 2823 4075
 Deepak Jain (India) (9122) 6653 3157
 Adam Worthington (Indonesia) (6221) 515 7338
 Prem Jearajasingam (Malaysia) (603) 2059 8989
 Alex Pomento (Philippines) (632) 857 0899

Commodities

Jim Lennon (4420) 7065 2014
 Adam Rowley (4420) 7065 2013
 Jonathan Butcher (4420) 7065 5938
 Max Layton (4420) 7065 2000
 Bonnie Liu (8621) 2412 9008
 Henry Liu (8621) 2412 9005
 Rakesh Arora (9122) 6653 3054

Data Services

Andrea Clohessy (Asia) (852) 2823 4076

Economics

Bill Belchere (Asia) (852) 2823 4636
 Rajeev Malik (ASEAN, India) (65) 6231 2841
 Richard Gibbs (Australia) (612) 8232 3935
 Paul Cavey (China) (852) 2823 3570
 Richard Jerram (Japan) (813) 3512 7855

Quantitative

Martin Emery (Asia) (852) 2823 3582
 Viking Kwok (Asia) (852) 2823 4735
 George Platt (Australia) (612) 8232 6539
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 Tsumugi Akiba (Japan) (813) 3512 7560

Strategy/Country

Tim Rocks (Asia) (852) 2823 3585
 Daniel McCormack (Asia) (852) 2823 4073
 Desh Peramunetilleke (Asia) (852) 2823 3564
 Mahesh Kedia (Asia) (852) 2823 3576
 Stewart Ferns (Asia) (852) 2823 4068
 Michael Kurtz (China) (8621) 2412 9002
 Seshadri Sen (India) (9122) 6653 3053
 Ferry Wong (Indonesia) (6221) 515 7335
 Chris Hunt (Japan) (813) 3512 7878
 Peter Eadon-Clarke (Japan) (813) 3512 7850
 Eugene Ha (Korea) (822) 3705 8643
 Prem Jearajasingam (Malaysia) (603) 2059 8989
 Edward Ong (Malaysia) (603) 2059 8982
 Alex Pomento (Philippines) (632) 857 0899
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 Daniel Chang (Taiwan) (8862) 2734 7516
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Sales Trading cont'd

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 Brendan Rake (India) (9122) 6653 3204
 Edward Robinson (London) (44) 20 7065 5883
 Robert Risman (New York) (1 212) 231 2555
 Isaac Huang (Taiwan) (8862) 2734 7582
 Jon Omori (Tokyo) (813) 3512 7838

Alternative Strategies

Convertibles - Roland Sharman (852) 2823 4628
 Depository Receipts - Robert Ansell (852) 2823 4688
 Derivatives - Tim Connolly (852) 2249 3380
 Futures - Tim Smith (852) 2823 4637
 Hedge Fund Sales - Darin Lester (852) 2823 4736
 Structured Products - Andrew Terlich (852) 2249 3225