



INDIA

MTCL IN **Outperform**
Price 20 Jul 11 **Rs359.20**

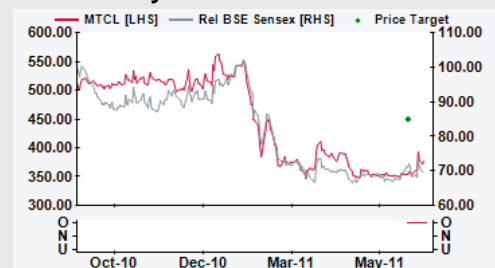
12-month target Rs **450.00**
Upside/Downside % **25.3**
Valuation Rs **450.00**
- PER

GICS sector **Software & Services**
Market cap **Rsm** **14,482**
30-day avg turnover **US\$m** **0.9**
Market cap **US\$m** **325**
Number shares on issue **m** **40.32**

Investment fundamentals

Year end 31 Mar		2011A	2012E	2013E	2014E
Revenue	m	15,091	17,900	21,507	25,281
EBITDA	m	1,778	2,221	3,102	3,672
EBITDA growth	%	-27.6	24.9	39.7	18.4
Adjusted profit	m	1,017	1,559	2,007	2,284
EPS adj	Rs	24.84	38.08	49.02	55.80
EPS adj growth	%	-53.4	53.3	28.7	13.8
PER adj	x	14.5	9.4	7.3	6.4
ROA	%	10.9	13.6	17.8	18.2
ROE	%	14.1	18.3	19.7	18.7
EV/EBITDA	x	8.0	6.4	4.6	3.9
Net debt/equity	%	-5.4	-6.3	-6.2	-6.1
P/BV	x	1.9	1.6	1.3	1.1

MTCL 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, July 2011
(all figures in INR unless noted)

Nitin Mohta
+91 22 6720 4090 nitin.mohta@macquarie.com
Atul Soni
+91 22 6720 4089 atul.soni@macquarie.com

21 July 2011
Macquarie Capital Securities India (Pvt)
Ltd

MindTree

Hitting the milestones on road to recovery

Event

- Mindtree reported 1Q results that beat our street-high forecasts. The company delivered 7.3% QoQ growth in US\$ revenues on back of 6.2% volume growth and price realization of 1.3%. 1Q EPS of Rs8.53 was ~25% higher than our and 33% ahead of the street expectations. The company surprised positively on all counts—revenue growth, margins and below the line items (tax and treasury yield). Reiterate Outperform.

Impact

- **On track to hit the 24% revenue growth in FY12.** After two muted quarters of revenue growth in 3Q and 4Q last fiscal (up 3.5% QoQ & 1.2% QoQ resp.) investors were sceptical of the growth trajectory for the company, In our initiation report *Road to recovery, 21 June 2011* we had argued that worst for the stock is behind us. We expected the growth traction to return in FY12, helping the company to reap margin benefits. The company delivered on both counts—US\$ revenue up 7% QoQ and EBIT margins expanding 20bp QoQ.
- **EBIT margins move up despite wage hikes.** Mindtree had announced a wage hike of 10-12% for its offshore employees and onsite wage hike of 2-4% last quarter. The company had disclosed on its earnings call that the hike would be administered in two batches – with 75% impact in 1Q FY12 and the 25% balance in 2Q FY12. We had anticipated this move to keep margins under pressure, but the company surprised us positively.
- **Product Engineering segment back in growth territory.** The PES revenues declined for the last two quarters as one of the key clients in the segment was ramping down. With 1Q FY12, the company has returned back to growth in this segment. IT services segment reported double-digit sequential growth at 11% for this quarter.
- **1Q Results.** Mindtree reported US\$ revenues of US\$93m (up 7% QoQ, 20% YoY), 1% ahead of our estimate. In rupee terms, the company delivered revenues of Rs4,131m (up 6% QoQ and 19% YoY), EBITDA of Rs460m (up 4% QoQ and 4% YoY) and PAT of Rs345m (up 7% QoQ and 118% YoY). For detailed summary of the results and deviation from our est, see Figure 1.

Earnings and target price revision

- We are raising our FY12/FY13 EPS by 2% / 1% to factor in the beat in 1Q earnings. We retain our target price of Rs450.

Price catalyst

- 12-month price target: Rs450.00 based on a PER methodology.
- Catalyst: Large deal wins

Action and recommendation

- **OP maintained.**

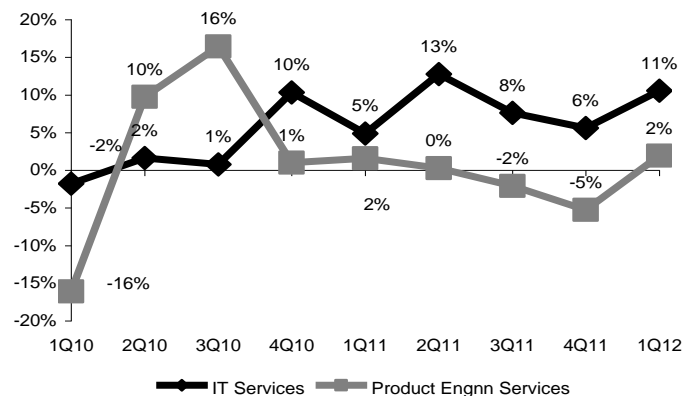
Results Review and Analysis

Fig 1 1Q FY3/12 – Actual vs. Estimates: YoY growth, QoQ growth

(in INR Mn except per share)	Jun-10 Q1 '11	Sep-10 Q2 '11	Dec-10 Q3 '11	Mar-11 Q4 '11	Jun-11 Q1 '12	QoQ (%) QoQ (%)	YoY (%) YoY (%)	Estimates	Deviation (%)
Revenue	3,487	3,844	3,848	3,912	4,131	5.6%	18.5%	4,103	1%
QoQ Growth (%)	1.3%	10.2%	0.1%	1.7%	5.6%			4.9%	
YoY Growth (%)	14.4%	22.0%	15.9%	13.6%	18.5%			17.7%	
Cost of Revenues	2,266	2,559	2,586	2,734	2,793	2.2%	23.3%	2,843	-2%
(As % Of Revenues)	65.0%	66.6%	67.2%	69.9%	67.6%			69.3%	
Gross Profit	1,221	1,285	1,262	1,178	1,338	13.6%	9.6%	1,260	6%
Gross Profit margin (%)	35.0%	33.4%	32.8%	30.1%	32.4%			30.7%	
SG&A	763	858	807	736	878	19.3%	15.0%	800	10%
SG&A as % of revenues	21.9%	22.3%	21.0%	18.8%	21.3%			19.5%	
Provision for bad & Doubtful Debts	17	(21)	6	1	-			15	
Total Operating Expenses	780	837	813	737	878	19.1%	12.5%	815	8%
(As % Of Revenues)	22.4%	21.8%	21.1%	18.8%	21.3%			19.9%	
EBITDA	441	447	449	441	460	4.3%	4.4%	445	3%
EBITDA margin (%)	12.6%	11.6%	11.7%	11.3%	11.1%			10.8%	
Depreciation and Amortization Expense	145	177	206	184	180			186	-3%
(As % Of Revenues)	4.2%	4.6%	5.3%	4.7%	4.4%			4.5%	
EBIT	296	270	243	257	280	8.9%	-5.2%	259	8%
EBIT margin (%)	8.5%	7.0%	6.3%	6.6%	6.8%			6.3%	
Interest including finance charges	0	0	1	2	-			2	
Forex gain/(loss)	(18)	21	79	74	91			55	67%
Other Income / (Expense) - Net	21	22	16	27	31			25	23%
Income Before Income Taxes	299	313	337	356	402	12.9%	34.7%	337	19%
Provision for taxation including FBT	145	94	24	28	73				
Deferred Tax charge/(credit)	(5)	(14)	9	7	(16)				
MAT credit entitlement	-	-	-	-	-				
Total Income tax	140	80	32	35	57			61	-6%
Tax rate (%)	47.0%	25.7%	9.6%	9.8%	14.2%			18.0%	
PAT before Minority Interest & share of profit of as:	158	232	305	321	345			276	25%
Share of profit of associates	-	-	-	-	-			-	
Minority Interest	-	-	-	-	-			-	
Net Income	158	232	305	321	345	7.4%	118.2%	276	25%
Net Income Margin(%)	4.5%	6.0%	7.9%	8.2%	8.4%			6.7%	
Earnings Per Share									
Basic	4.00	5.85	7.66	8.00	8.61			6.91	25%
Diluted	3.86	5.68	7.46	7.81	8.53	9.2%	121.0%	6.75	26%

Source: Company data, Macquarie Research, July 2011

Fig 2 IT Services vs. PES Growth Rates



Source: Company data, Macquarie Research, July 2011

Fig 3 Business breakdown as of 1Q FY12



Source: Company data, Macquarie Research, July 2011

Fig 4 Average currency movement during 1Q FY3/12

	Rs/US\$	Rs/GBP	Rs/Euro	US\$/GBP	US\$/Euro
Average 1QFY11	45.6	68.1	58.1	1.49	1.27
Average 2QFY11	46.5	72.0	60.0	1.55	1.29
Average 3QFY11	44.8	70.8	60.9	1.58	1.35
Average 4QFY11	45.3	72.5	62.0	1.60	1.37
Average 1QFY12	44.7	72.9	64.4	1.63	1.43
Change (%)	-1.3%	0.6%	3.9%	1.9%	4.4%

Source: Macquarie Research, July 2011

Fig 5 Quarter-ending currency rates

	Rs/US\$	Rs/GBP	Rs/Euro	US\$/GBP	US\$/Euro
1QFY11	46.5	69.8	57.0	1.50	1.23
2QFY11	44.9	71.5	61.3	1.59	1.37
3QFY11	44.7	69.7	59.8	1.56	1.33
4QFY11	44.6	71.5	63.4	1.60	1.41
1QFY12	44.7	71.6	64.9	1.61	1.45
Change (%)	0.2%	2.7%	8.5%	3.2%	9.0%

Source: Macquarie Research, July 2011

Fig 6 Valuation comparison – Indian IT services

Company name	Bloomberg Ticker	Rec	Market Cap (US\$ m)	Current Price (Icy)	Target Price (Icy)	Up/Down side(%)	EPS FY12E	EPS FY13 E	PER (x) FY12 E	PER (x) FY13 E	RoE (FY11)	EPS CAGR (FY11-13E)
Macquarie Indian IT Services Coverage Universe												
TCS	TCS IN	OP	49,255	1,132	1,360	20%	53.68	63.8	21.1	17.8	37.6	19.9%
Infosys	INFO IN	OP	35,121	2,752	3,150	14%	133.3	155.2	20.6	17.7	27.1	14.0%
Wipro	WPRO IN	N	21,772	399	425	7%	22.6	25.0	17.7	16.0	26.5	7.4%
HCL Tech	HCLT IN	OP	7,642	500	615	23%	33.9	42.5	14.7	11.8	21.8	32.9%
Mphasis	MPHL IN	UP	2,004	429	380	-11%	38.5	42.8	11.2	10.0	38.7	3.4%
Rolta	RLTA IN	OP	447	125	195	56%	20.8	24.3	6.0	5.1	16.7	15.8%
Hexaware	HEXW IN	OP	487	75	85	13%	6.4	6.7	11.8	11.1	18.2	53.5%
Mindtree	MTCL IN	OP	322	360	450	25%	38.1	4n9.0	9.4	7.3	15.3	40.5%
Persistent	PSYS IN	OP	323	363	450	24%	33.8	40.3	10.7	9.0	15.2	6.7%
Indian IT Services												
3i Infotech	III IN	NR	194	46	NR	NR	12.8	10.3	3.6	4.4	22.5	-8.3%
Aptech	APTR IN	NR	135	124	NR	NR	12.7	na	9.8	na	21.7	na
Educomp	EDSL IN	NR	818	383	NR	NR	47.2	76.2	8.1	5.0	17.6	42.9%
Everonn	EEDU IN	NR	233	550	NR	NR	44.5	59.9	12.4	9.2	17.3	33.1%
Infotech	INFTC IN	NR	343	139	NR	NR	13.4	16.9	10.3	8.2	14.4	15.7%
KPIT Cummins	KPIT IN	NR	372	190	NR	NR	14	17.9	13.6	10.6	19.1	24.0%
Mahindra Satyam	SCS IN	NR	2,330	89	NR	NR	4.8	6.5	18.7	13.7	na	49.7%
NIIT	NIIT IN	NR	207	56	NR	NR	6.5	7.9	8.7	7.2	17.4	22.5%
NIIT Tech	NITEC IN	NR	293	222	NR	NR	29.5	35.1	7.5	6.3	27.5	6.9%
Nucleus Software	NCS IN	NR	56	78	NR	NR	8.5	10.1	9.2	7.8	9.4	4.2%
Oracle Financial Services	OFSS IN	NR	4,010	2150	NR	NR	131.9	155.0	16.3	13.9	22.9	12.5%
Patni	PATNI IN	NR	991	333	NR	NR	38.7	40.3	8.6	8.3	18.3	-1.4%
Polaris	POL IN	NR	387	175	NR	NR	20.5	24.1	8.6	7.3	21.3	10.1%
Tech Mahindra	TECHM IN	NR	2,119	751	NR	NR	59.0	69.3	12.7	10.8	20.7	12.1%
International IT Services												
Accenture	ACN US	NR	43,557	61	NR	NR	3.4	3.8	18.2	16.1	62.2	6.2%
iGate	IGTE US	NR	920	16	NR	NR	1.4	na	11.5	na	23.6	na
Cap Gemini	CAP FP	NR	5,896	38	NR	NR	2.5	3.0	15.0	12.5	6.6	19.9%
Cognizant	CTSH US	NR	22,326	73	NR	NR	2.9	3.4	25.7	21.3	23.5	17.3%
CSC	CSC US	NR	5,758	37	NR	NR	4.7	5.2	7.9	7.2	10.6	4.2%
Logica PLC	LOG LN	NR	1,943	121	NR	NR	14.9	16.2	8.1	7.4	7.8	16.2%
IBM GS	IBM US	NR	222,861	184	NR	NR	13.3	14.8	13.8	12.4	64.9	13.7%
BPO												
EXL Service	EXLS US	NR	681	23	NR	NR	1.3	1.5	18.3	15.5	11.7	18.8%
Firstsource	FSOL IN	NR	177	19	NR	NR	2.9	3.7	6.3	5.1	10.6	26.6%
Genpact	G US	NR	3,931	18	NR	NR	0.8	1.0	21.2	18.3	10.6	14.5%
WNS	WNS US	NR	409	9	NR	NR	1.0	1.1	9.3	8.4	3.7	5.3%

Note: Prices as of 20 July 2011. Data for not rated companies based on Bloomberg consensus estimates. Coverage of IBM was suspended on 28 Sept 2010.

Source: Bloomberg, Macquarie Research, July 2011

MindTree (MTCL IN, Outperform, Target Price: Rs450.00)

Quarterly Results					Profit & Loss						
	1Q/12A	2Q/12E	3Q/12E	4Q/12E		2011A	2012E	2013E	2014E		
Revenue	m	4,131	4,392	4,602	4,775	Revenue	m	15,091	17,900	21,507	25,281
Gross Profit	m	1,338	1,427	1,565	1,576	Gross Profit	m	4,946	5,906	7,511	8,854
Cost of Goods Sold	m	2,793	2,965	3,037	3,199	Cost of Goods Sold	m	10,145	11,994	13,996	16,426
EBITDA	m	460	496	644	621	EBITDA	m	1,778	2,221	3,102	3,672
Depreciation	m	180	179	183	187	Depreciation	m	712	729	778	834
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	280	317	462	434	EBIT	m	1,066	1,493	2,324	2,838
Net Interest Income	m	0	0	0	0	Net Interest Income	m	-4	0	0	0
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Forex Gains / Losses	m	91	59	59	59	Forex Gains / Losses	m	156	269	50	50
Other Pre-Tax Income	m	31	32	31	33	Other Pre-Tax Income	m	86	127	134	158
Pre-Tax Profit	m	402	409	552	526	Pre-Tax Profit	m	1,305	1,888	2,508	3,045
Tax Expense	m	-57	-74	-99	-100	Tax Expense	m	-288	-330	-502	-761
Net Profit	m	345	335	453	426	Net Profit	m	1,017	1,559	2,007	2,284
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	345	335	453	426	Reported Earnings	m	1,017	1,559	2,007	2,284
Adjusted Earnings	m	345	335	453	426	Adjusted Earnings	m	1,017	1,559	2,007	2,284
EPS (rep)		8.43	8.19	11.06	10.40	EPS (rep)		24.84	38.08	49.02	55.80
EPS (adj)		8.43	8.19	11.06	10.40	EPS (adj)		24.84	38.08	49.02	55.80
EPS Growth yoy (adj)	%	118.5	44.1	48.2	32.6	EPS Growth (adj)	%	-53.4	53.3	28.7	13.8
						PE (rep)	x	14.5	9.4	7.3	6.4
						PE (adj)	x	14.5	9.4	7.3	6.4
EBITDA Margin	%	11.1	11.3	14.0	13.0	Total DPS		2.50	2.50	2.50	2.50
EBIT Margin	%	6.8	7.2	10.0	9.1	Total Div Yield	%	0.7	0.7	0.7	0.7
Earnings Split	%	22.1	21.5	29.0	27.3	Weighted Average Shares	m	41	41	41	41
Revenue Growth	%	18.5	14.3	19.6	22.1	Period End Shares	m	41	41	41	41
EBIT Growth	%	-5.2	17.5	89.8	68.6						
Profit and Loss Ratios					Cashflow Analysis						
	2011A	2012E	2013E	2014E		2011A	2012E	2013E	2014E		
Revenue Growth	%	16.4	18.6	20.2	17.5	EBITDA	m	1,778	2,221	3,102	3,672
EBITDA Growth	%	-27.6	24.9	39.7	18.4	Tax Paid	m	-533	-340	-502	-761
EBIT Growth	%	-40.9	40.0	55.7	22.1	Chgs in Working Cap	m	-844	-1,051	-599	-726
Gross Profit Margin	%	32.8	33.0	34.9	35.0	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	11.8	12.4	14.4	14.5	Other	m	32	308	184	208
EBIT Margin	%	7.1	8.3	10.8	11.2	Operating Cashflow	m	433	1,139	2,185	2,392
Net Profit Margin	%	6.7	8.7	9.3	9.0	Acquisitions	m	0	0	0	0
Payout Ratio	%	10.1	6.6	5.1	4.5	Capex	m	-840	-833	-1,075	-1,105
EV/EBITDA	x	8.0	6.4	4.6	3.9	Asset Sales	m	-7,318	-1,702	-898	-1,063
EV/EBIT	x	13.3	9.5	6.1	5.0	Other	m	7,775	1,640	0	0
						Investing Cashflow	m	-383	-895	-1,973	-2,168
Balance Sheet Ratios					Dividend (Ordinary)	m	-151	-102	-102	-102	
ROE	%	14.1	18.3	19.7	18.7	Equity Raised	m	139	25	0	0
ROA	%	10.9	13.6	17.8	18.2	Debt Movements	m	15	-5	0	0
ROIC	%	13.4	16.8	21.5	20.4	Other	m	-2	-1	0	0
Net Debt/Equity	%	-5.4	-6.3	-6.2	-6.1	Financing Cashflow	m	1	-83	-102	-102
Interest Cover	x	296.1	nmf	nmf	nmf	Net Chg in Cash/Debt	m	55	159	110	121
Price/Book	x	1.9	1.6	1.3	1.1	Free Cashflow	m	-407	305	1,110	1,287
Book Value per Share		189.6	225.6	272.2	325.5						
					Balance Sheet						
		2011A	2012E	2013E	2014E		2011A	2012E	2013E	2014E	
Cash	m	459	618	728	850	Cash	m	459	618	728	850
Receivables	m	2,825	3,906	4,600	5,367	Receivables	m	2,825	3,906	4,600	5,367
Inventories	m	0	0	0	0	Inventories	m	0	0	0	0
Investments	m	1,112	1,210	2,107	3,170	Investments	m	1,112	1,210	2,107	3,170
Fixed Assets	m	2,952	3,070	3,367	3,638	Fixed Assets	m	2,952	3,070	3,367	3,638
Intangibles	m	55	52	52	52	Intangibles	m	55	52	52	52
Other Assets	m	2,749	2,983	3,373	3,804	Other Assets	m	2,749	2,983	3,373	3,804
Total Assets	m	10,152	11,838	14,228	16,881	Total Assets	m	10,152	11,838	14,228	16,881
Payables	m	0	0	0	0	Payables	m	0	0	0	0
Short Term Debt	m	0	0	0	0	Short Term Debt	m	0	0	0	0
Long Term Debt	m	41	36	36	36	Long Term Debt	m	41	36	36	36
Provisions	m	406	545	658	767	Provisions	m	406	545	658	767
Other Liabilities	m	1,943	2,021	2,393	2,755	Other Liabilities	m	1,943	2,021	2,393	2,755
Total Liabilities	m	2,390	2,602	3,087	3,559	Total Liabilities	m	2,390	2,602	3,087	3,559
Shareholders' Funds	m	7,762	9,236	11,141	13,322	Shareholders' Funds	m	7,762	9,236	11,141	13,322
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Other	m	0	0	0	0	Other	m	0	0	0	0
Total S/H Equity	m	7,762	9,236	11,141	13,322	Total S/H Equity	m	7,762	9,236	11,141	13,322
Total Liab & S/H Funds	m	10,152	11,838	14,228	16,881	Total Liab & S/H Funds	m	10,152	11,838	14,228	16,881

All figures in INR unless noted.

Source: Company data, Macquarie Research, July 2011

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >3% in excess of benchmark return
Neutral – return within 3% of benchmark return
Underperform – return >3% below benchmark return

Benchmark return is determined by long term nominal GDP growth plus 12 month forward market dividend yield

Macquarie – Asia/Europe

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

Macquarie First South - South Africa

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

Macquarie - Canada

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

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

Volatility index definition*

This is calculated from the volatility of historical price movements.

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

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

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

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

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

* Applicable to Australian/NZ/Canada stocks only

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

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 / 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

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

Recommendation proportions – For quarter ending 30 June 2011

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	50.37%	64.60%	64.62%	45.63%	67.74%	48.02%	(for US coverage by MCUSA, 12.44% of stocks covered are investment banking clients)
Neutral	36.86%	21.22%	29.23%	51.30%	28.50%	38.42%	(for US coverage by MCUSA, 12.95% of stocks covered are investment banking clients)
Underperform	12.77%	14.18%	6.15%	3.07%	3.76%	13.56%	(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/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 and its Taiwan branch; Macquarie Capital Securities (Singapore) Pte Ltd; Macquarie Securities (NZ) Ltd; Macquarie First South Securities (Pty) Limited; Macquarie Capital Securities (India) Pvt Ltd; Macquarie Capital Securities (Malaysia) Sdn Bhd; Macquarie Securities Korea Limited and Macquarie Securities (Thailand) Ltd 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). **Germany:** In Germany, research is issued and distributed by Macquarie Capital (Europe) Ltd, Niederlassung Deutschland, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). **France:** In France, research is issued and distributed by Macquarie Capital (Europe) Ltd, which is authorised and regulated in the United Kingdom by the Financial Services Authority (No. 193905). **Hong Kong & Mainland China:** In Hong Kong, research is issued and distributed by Macquarie Capital Securities Ltd, which is licensed and regulated by the Securities and Futures

Commission. In Mainland China, Macquarie Securities (Australia) Limited Shanghai Representative Office only engages in non-business operational activities excluding issuing and distributing research. Only non-A share research is distributed into Mainland China by Macquarie Capital Securities Ltd. **Japan:** In Japan, research is issued and distributed by Macquarie Capital Securities (Japan) Limited, a member of the Tokyo Stock Exchange, Inc. and Osaka Securities Exchange Co. Ltd (Financial Instruments Firm, Kanto Financial Bureau (kin-sho) No. 231, a member of Japan Securities Dealers Association and Financial Futures Association of Japan). **India:** In India, research is issued and distributed by Macquarie Capital Securities (India) Pvt Ltd., 92, Level 9, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai – 400 051, India, which is a SEBI registered Stock Broker having membership with National Stock Exchange of India Limited (INB231246738) and Bombay Stock Exchange Limited (INB011246734). **Malaysia:** In Malaysia, research is issued and distributed by Macquarie Capital Securities (Malaysia) Sdn. Bhd. (Company registration number: 463469-W) which is a Participating Organisation of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission. **Taiwan:** Information on securities/instruments that are traded in Taiwan is distributed by Macquarie Capital Securities Ltd, Taiwan Branch, which is licensed and regulated by the Financial Supervisory Commission. No portion of the report may be reproduced or quoted by the press or any other person without authorisation from Macquarie. Nothing in this research shall be construed as a solicitation to buy or sell any security or product. **Thailand:** In Thailand, research is issued and distributed by Macquarie Securities (Thailand) Ltd, a licensed securities company that is authorized by the Ministry of Finance, regulated by the Securities and Exchange Commission of Thailand and is an exchange member no. 28 of the Stock Exchange of Thailand. The Thai Institute of Directors Association has disclosed the Corporate Governance Report of Thai Listed Companies made pursuant to the policy of the Securities and Exchange Commission of Thailand. Macquarie Securities (Thailand) Ltd does not endorse the result of the Corporate Governance Report of Thai Listed Companies but this Report can be accessed at: <http://www.thai-iod.com/en/publications.asp?type=4>. **South Korea:** In South Korea, unless otherwise stated, research is prepared, issued and distributed by Macquarie Securities Korea Limited, which is regulated by the Financial Supervisory Services. Information on analysts in MSKL is disclosed at <http://dis.kofia.or.kr/fs/dis2/fundMgr/DISFundMgrAnalystPop.jsp?companyCd2=A03053&pageDiv=02>. **South Africa:** In South Africa, research is issued and distributed by Macquarie First South Securities (Pty) Limited, a member of the JSE Limited. **Singapore:** In Singapore, research is issued and distributed by Macquarie Capital Securities (Singapore) Pte Ltd (Company Registration Number: 198702912C), a Capital Markets Services license 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.'s affiliate'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.

© Macquarie Group

Auckland Tel: (649) 377 6433	Bangkok Tel: (662) 694 7999	Calgary Tel: (1 403) 218 6650	Denver Tel: (303) 952 2800	Frankfurt Tel: (069) 509 578 000	Geneva Tel: (41) 22 818 7777	Hong Kong Tel: (852) 2823 3588
Jakarta Tel: (62 21) 515 1818	Johannesburg Tel: (2711) 583 2000	Kuala Lumpur Tel: (60 3) 2059 8833	London Tel: (44 20) 3037 2000	Manila Tel: (63 2) 857 0888	Melbourne Tel: (613) 9635 8139	Montreal Tel: (1 514) 925 2850
Mumbai Tel: (91 22) 6653 3000	Munich Tel: (089) 2444 31800	New York Tel: (1 212) 231 2500	Paris Tel: (33 1) 7842 3823	Perth Tel: (618) 9224 0888	Seoul Tel: (82 2) 3705 8500	Shanghai Tel: (86 21) 6841 3355
Singapore Tel: (65) 6601 1111	Sydney Tel: (612) 8232 9555	Taipei Tel: (886 2) 2734 7500	Tokyo Tel: (81 3) 3512 7900	Toronto Tel: (1 416) 848 3500		

Available to clients on the world wide web at www.macquarieresearch.com and through Thomson Financial, FactSet, Reuters, Bloomberg, CapitalIQ and TheMarkets.com.

Asia Research

Head of Equity Research

John O'Connell (Global Co – Head)	(612) 8232 7544
David Rickards (Global Co – Head)	(612) 8237 1159
Chris Hunt (Asia – Head)	(852) 3922 1119
Tim Smart (Asia – Deputy Head)	(852) 3922 3565

Automobiles/Auto Parts

Leah Jiang (China)	(8621) 2412 9020
Amit Mishra (India)	(9122) 6720 4084
Clive Wiggins (Japan)	(813) 3512 7856
Dan Lucas (Japan)	(813) 3512 6050
Michael Sohn (Korea)	(82 2) 3705 8644

Banks and Non-Bank Financials

Ismael Pili (Asia, Hong Kong)	(852) 3922 4774
Victor Wang (China)	(852) 3922 1479
Alastair Macdonald (Japan)	(813) 3512 7476
Mudit Painuly (India)	(9122) 6720 4083
Suresh Ganapathy (India)	(9122) 6720 4078
Chan Hwang (Korea)	(822) 3705 8643
Alex Pomento (Philippines)	(632) 857 0899
Matthew Smith (Malaysia, Singapore)	(65) 6601 0981
Jemmy Huang (Taiwan)	(8862) 2734 7530
Passakorn Linmaneechote (Thailand)	(662) 694 7728

Conglomerates

Janet Lewis (Hong Kong)	(852) 3922 5417
Alex Pomento (Philippines)	(632) 857 0899

Consumer and Gaming

Gary Ping (Asia)	(852) 3922 3557
Linda Huang (China, Hong Kong)	(852) 3922 4068
Toby Williams (Japan)	(813) 3512 7392
Lyll Taylor (Indonesia)	(6221) 2598 8489
HongSuk Na (Korea)	(822) 3705 8678
Amit Mishra (India)	(9122) 6720 4084
Alex Pomento (Philippines)	(632) 857 0899
Somesh Agarwal (Singapore)	(65) 6601 0840
Brandon Chen (Taiwan)	(8862) 2734 7518
Best Waiyanont (Thailand)	(662) 694 7993

Emerging Leaders

Jake Lynch (China, Asia)	(8621) 2412 9007
Nathan Hsu (China, Hong Kong)	(852) 3922 4625
Saiyi He (Hong Kong)	(852) 3922 3585
Robert Burghart (Japan)	(813) 3512 7853
Makoto Egami (Japan)	(813) 3512 7879

Industrials

Janet Lewis (Asia)	(852) 3922 5417
Inderjeetsingh Bhatia (India)	(9122) 6720 4087
Juwon Lee (Korea)	(822) 3705 8661
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
David Gambrell (Thailand)	(662) 694 7753

Insurance

Scott Russell (Asia, China)	(852) 3922 3567
Chung Jun Yun (Korea)	(822) 2095 7222

Media and Internet

Jiong Shao (China, Hong Kong)	(852) 3922 3566
Steve Zhang (China, Hong Kong)	(852) 3922 3578
Nitin Mohta (India)	(9122) 6720 4090
Prem Jearajasingam (Malaysia)	(603) 2059 8989
Alex Pomento (Philippines)	(632) 857 0899

Asia Sales

Regional Heads of Sales

Robin Black (Asia)	(852) 3922 2074
Chris Gray (ASEAN)	(65) 6601 0288
Peter Slater (Boston)	(1 617) 598 2502
Jeffrey Shiu (China & Hong Kong)	(852) 3922 2061
Thomas Renz (Geneva)	(41 22) 818 7712
Andrew Mouat (India)	(9122) 6720 4100
Kenneth Yap (Indonesia)	(6221) 515 1555
JJ Kim (Korea)	(822) 3705 8799
Jason Lee (Malaysia)	(603) 2059 8888
Chris Gould (Malaysia)	(603) 2059 8888
Gino C Rojas (Philippines)	(632) 857 0861
Greg Norton-Kidd (New York)	(1 212) 231 2527
Luke Sullivan (New York)	(1 212) 231 2507
Eric Roles (New York)	(1 212) 231 2559
Sheila Schroeder (San Francisco)	(1 415) 762 5001

Oil, Gas and Petrochemicals

James Hubbard (Asia)	(852) 3922 1226
Jal Irani (India)	(9122) 6720 4080
Polina Diyachkina (Japan)	(813) 3512 7886
Shawn Park (Korea)	(822) 3705 8669
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Trevor Buchinski (Thailand)	(662) 694 7829

Pharmaceuticals and Healthcare

Jonathan Hsu (Hong Kong)	(852) 3922 4625
Abhishek Singhal (India)	(9122) 6720 4086
Eunice Bu (Korea)	(822) 2095 7223
Chinnarat Boonmahanark (Thailand)	(662) 694 7985

Property

Callum Bramah (Asia)	(852) 3922 4731
Unmesh Sharma (India)	(9122) 6720 4092
Felicia Barus (Indonesia)	(6221) 2598 8480
Hiroshi Okubo (Japan)	(813) 3512 7433
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Alex Pomento (Philippines)	(632) 857 0899
Tuck Yin Soong (Singapore)	(65) 6601 0838
Elaine Cheong (Singapore)	(65) 6601 0839
Corinne Jian (Taiwan)	(8862) 2734 7522
Brandon Chen (Taiwan)	(8862) 2734 7518
Patti Tomaitrichitr (Thailand)	(662) 694 7727

Resources / Metals and Mining

Andrew Dale (Asia)	(852) 3922 3587
Graeme Train (China)	(8621) 2412 9035
Pelen Ji (China, Hong Kong)	(852) 3922 4741
Christina Lee (Hong Kong)	(852) 3922 3571
Rakesh Arora (India)	(9122) 6720 4093
Adam Worthington (Indonesia)	(852) 3922 4626
Polina Diyachkina (Japan)	(813) 3512 7886
Chak Reungsinpinya (Thailand)	(662) 694 7982

Technology

Jeffrey Su (Asia, Taiwan)	(8862) 2734 7512
Lisa Soh (China, Taiwan)	(852) 3922 1401
Nitin Mohta (India)	(9122) 6720 4090
Damian Thong (Japan)	(813) 3512 7877
David Gibson (Japan)	(813) 3512 7880
George Chang (Japan)	(813) 3512 7854
Jeff Loff (Japan)	(813) 3512 7851
Michiko Kakiya (Japan)	(813) 3512 7868
Yukihiro Goto (Japan)	(813) 3512 5984
Daniel Kim (Korea)	(822) 3705 8641
Benjamin Ban (Korea)	(822) 3705 8659
Andrew Chang (Taiwan)	(8862) 2734 7526
Daniel Chang (Taiwan)	(8862) 2734 7516
Jimmy Hsu (Taiwan)	(8862) 2734 7533
Kylie Huang (Taiwan)	(8862) 2734 7528

Telecoms

Lisa Soh (China, Hong Kong)	(852) 3922 1401
Riaz Hyder (Indonesia)	(6221) 2598 8486
Nathan Ramlar (Japan)	(813) 3512 7875
Prem Jearajasingam (Malaysia, Singapore)	(603) 2059 8989
Alex Pomento (Philippines)	(632) 857 0899
Joseph Quinn (Taiwan)	(8862) 2734 7519
Best Waiyanont (Thailand)	(662) 694 7993

Regional Heads of Sales cont'd

Miki Edelman (Taiwan)	(8862) 2734 7580
Angus Kent (Thailand)	(662) 694 7601
Michael Newman (Tokyo)	(813) 3512 7920
Angus Innes (UK/Europe)	(44) 20 3037 4841
Rob Fabbro (UK/Europe)	(44) 20 3037 4865
Sean Alexander (Generalist)	(852) 3922 2101

Regional Head of Distribution

Justin Crawford (Asia)	(852) 3922 2065
------------------------	-----------------

Sales Trading

Adam Zaki (Asia)	(852) 3922 2002
Yat Quan Tan (Hong Kong)	(852) 3922 2028
Phil Sellaroli (Japan)	(813) 3512 7837
Grace Lee (Korea)	(822) 3705 8601
Matthew Ryan (Singapore)	(65) 6601 0288

Transport & Infrastructure

Janet Lewis (Asia, Japan)	(852) 3922 5417
Nicholas Cunningham (Japan)	(813) 3512 6044
Sunaina Dhanuka (Malaysia)	(603) 2059 8993

Utilities & Renewables

Adam Worthington (Asia)	(852) 3922 4626
Jeff Evans (India)	(9122) 6720 4081
Prem Jearajasingam (Malaysia)	(603) 2059 8989
Alex Pomento (Philippines)	(632) 857 0899

Commodities

Jim Lennon	(4420) 3037 4271
Max Layton	(4420) 3037 4273
Duncan Hobbs	(4420) 3037 4497
Graeme Train	(8621) 2412 9035
Rakesh Arora	(9122) 6720 4093

Data Services

Andrea Dailly (Asia)	(852) 3922 4076
Eric Yeung	(852) 3922 4077

Economics

Richard Gibbs (Australia)	(612) 8232 3935
Paul Cavey (China)	(852) 3922 3570
Renee Chen (Hong Kong, Taiwan)	(852) 3922 3597

Quantitative / CPG

Gurvinder Brar (Global)	(4420) 3037 4036
Viking Kwok (Asia)	(852) 3922 4735
Burke Lau (Asia)	(852) 3922 5494
Patrick Hansen (Japan)	(813) 3512 7876
Ayumu Kuroda (Japan)	(813) 3512 7569
Simon Rigney (Japan)	(813) 3512 7872

Strategy/Country

Michael Kurtz (Asia)	(852) 3922 1403
Peter Eadon-Clarke (Asia, Japan)	(813) 3512 7850
Jiong Shao (China, Hong Kong)	(852) 3922 3566
Rakesh Arora (India)	(9122) 6720 4093
Nicolaos Oentung (Indonesia)	(6121) 2598 8366
David Gibson (Japan)	(813) 3512 7880
Chan Hwang (Korea)	(822) 3705 8643
Kieran Calder (Malaysia)	(603) 2059 8992
Yeonzon Yeow (Malaysia)	(603) 2059 8982
Alex Pomento (Philippines)	(632) 857 0899
Conrad Werner (Singapore)	(65) 6601 0182
Daniel Chang (Taiwan)	(8862) 2734 7516
David Gambrell (Thailand)	(662) 694 7753

Find our research at

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@macquarie.com for access	

Sales Trading cont'd

Mike Keen (Europe)	(44) 20 3037 4905
Chris Reale (New York)	(1 212) 231 2555
Marc Rosa (New York)	(1 212) 231 2555
Stanley Dunda (Indonesia)	(6221) 515 1555
Kenneth Cheung (Malaysia)	(603) 2059 8888
Michael Santos (Philippines)	(632) 857 0813
Isaac Huang (Taiwan)	(8862) 2734 7582
Dominic Shore (Thailand)	(662) 694 7707

Alternative Strategies

Convertibles - Roland Sharman	(852) 3922 2095
Depository Receipts - Seung-Jin Lee	(65) 6601 0203
Derivatives - Mark Holland	(852) 3922 2081
Structured Products - Andrew Terlich	(852) 3922 2013