



INDIA

ONMB IN Outperform

Price 29 Apr 10 Rs386.65

12-month target Rs 700.00

Upside/Downside % 81.0

Valuation Rs 700.00

- DCF (WACC 12.5%, beta 1.0, ERP 7.5%, RFR 7.5%, TGR 5.0%)

GICS sector Software & Services

Market cap Rsm 22,596

30-day avg turnover US\$m 2.5

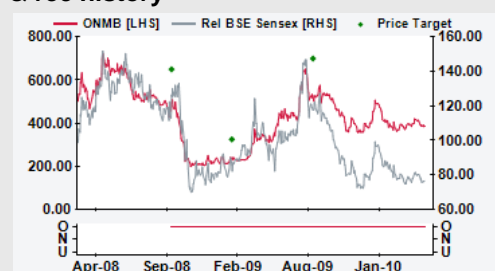
Market cap US\$m 508

Number shares on issue m 58.44

Investment fundamentals

Year end 31 Mar		2009A	2010E	2011E	2012E
Total revenue	m	4,064	5,476	8,027	11,037
EBIT	m	834	800	1,430	2,245
EBIT growth	%	5.2	-4.1	78.7	57.0
Recurring profit	m	1,151	977	1,623	2,406
Reported profit	m	852	649	1,145	1,697
Adjusted profit	m	852	649	1,145	1,697
EPS rep	Rs	14.22	10.18	17.97	26.63
EPS rep growth	%	23.2	-28.4	76.5	48.2
EPS adj	Rs	14.22	10.18	17.97	26.63
EPS adj growth	%	19.7	-28.4	76.5	48.2
PER rep	x	27.2	38.0	21.5	14.5
PER adj	x	27.2	38.0	21.5	14.5
Total DPS	Rs	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	9.2	8.2	12.9	16.9
ROE	%	13.0	8.9	13.9	17.6
EV/EBITDA	x	16.4	15.6	9.7	6.7
Net debt/equity	%	-40.2	-41.1	-29.5	-25.2
P/BV	x	3.3	3.2	2.8	2.4

ONMB 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, April 2010

(all figures in INR unless noted)

Shubham Majumder

91 22 6653 3049 shubham.majumder@macquarie.com

Kislaya Singh

91 22 6653 3164 kislaya.singh@macquarie.com

3 May 2010

OnMobile Global

Continued investments lead to margin disappointment even as top line jumps

Event

- OnMobile's (ONMB) 4Q FY3/10 results surprised positively on domestic business revenues after a gap of four quarters while margins disappointed as management chose to continue with roll-outs and investment in new international deals even at the cost of short-term margins. Our investment opinions are under review.

Impact

- Domestic business grows strongly, international revenue in line:** Domestic revenue at Rs940m (+16.4% YoY, +25.2% QoQ) surprised strongly (24.6% above expectation) and broke out of the range seen over four quarters. This trend matches the strong VAS revenue growth delivered by Bharti Airtel in 4Q results with 7.5% QoQ growth. International revenue at Rs287m (+21.6% YoY, +3.4% QoQ) was 4.7% below expectation because of the deferment of roll-out by one quarter in a big account but the extent of the miss was only Rs14m, which is not material.
- Margin disappointment led by investments in overseas telco accounts:** EBITDA margin of 17.8% (-220bp QoQ, -1570bp YoY; Macq estimate: 19.5%) was affected by continued investments in recent international deals. Core business EBITDA margin excluding new international deals was 25.6% (-200bp QoQ). The content fee was higher than the estimate at Rs276m (+47.5% YoY, +25.8% QoQ), on higher contribution of media segment in 4Q.
- Investments in International business to continue:** Management indicated it will keep up with investment in new international accounts – even though they need a long time to contribute meaningful revenues – so as to capture big accounts while the window of opportunity is open.
- Launch of new products, signing of new deals:** OnMobile launched RBT in Ecuador (Telefonica) and Egypt (Vodafone) in 4Q and won a new deal for RBT roll-out for a large operator in Western Europe. Several applications for the iPhone were launched and the company extended its phonebook application to the new Android platform and OnMobile phone back-up on BlackBerry devices.

Earnings and target price revision

- Our investment opinions are under review. Full-year EPS in FY3/10A: Rs7.20.

Price catalyst

- 12-month price target: Rs700.00 based on a DCF methodology.
- Catalyst: Revenue contribution from Telefonica deal starting in FY3/11E.

Action and recommendation

- Under review: OnMobile only for long-term investors; expensive on 1-year earnings.** Positive traction on execution in Telefonica's markets is a positive, while equity dilution concern is an overhang in the next 2-3 quarters until we get more clarity on the mode, size and end use of funds. Based on EPS of Rs7.20 in FY3/10A, we find ONMB expensive on a 1-year view.

Analysis

4Q FY3/10 results review and analysis – Actuals vs Macq expectations

Fig 1 4Q FY3/10 results – OnMobile quarterly P&L; YoY & QoQ growth and deviation from Macq 4Q estimates

Amount in Rs. Million, except ratios	4QFY09	1QFY10	2QFY10	3QFY10A	4QFY10E	(% chg YoY)	(% chg QoQ)	4QFY10E	
	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10				Deviation (%)
Revenues									
Telecom Value Added Services	1,043.1	986.5	1,012.2	1,027.9	1,204.1	15.4%	17.1%	1,055.3	14.1%
Domestic	807.0	769.5	738.9	750.4	939.5	16.4%	25.2%	754.1	24.6%
International	236.1	217.0	273.3	277.5	287.0	21.6%	3.4%	301.3	-4.7%
(% of Telecom VAS revenues)	22.6	22.0	27.0	27.0	23.8			28.5	
	-	-	-	-	-			-	
Other Services	110.1	85.9	52.0	126.8	24.7	-77.6%	-80.5%	114.1	-78.4%
Total Revenue	1,153.2	1,072.4	1,064.2	1,154.7	1,228.8	6.6%	6.4%	1,169.4	5.1%
Operating Expenses									
Cost of Sales & Services	245.5	298.2	306.8	334.0	386.4	57.4%	15.7%	350.8	10.1%
(% of total revenues)	21.3	27.8	28.8	28.9	31.4			30.0	
Content fee & royalty	186.9	204.4	206.3	219.1	275.7	47.5%	25.8%	228.0	20.9%
(% of Total Revenue)	16.2	19.1	19.4	19.0	22.4			19.5	
Other sales & services expenditure	58.6	93.8	100.5	114.9	110.7	88.9%	-3.7%	122.8	-9.8%
Manpower costs	337.5	345.3	365.8	376.9	386.9	14.6%	2.7%	380.1	1.8%
(% of total revenues)	29.3	32.2	34.4	32.6	31.5			32.5	
Administration and other expenses	184.4	184.9	281.0	213.1	236.3	28.1%	10.9%	210.5	12.3%
(% of total revenues)	16.0	17.2	26.4	18.5	19.2			18.0	
Total Operating Expenses	767.4	828.4	953.6	924.0	1,009.6	31.6%	9.3%	941.4	7.2%
(% of total revenues)	66.5	77.2	89.6	80.0	82.2			80.5	
EBITDA	385.8	244.0	110.6	230.7	219.2	-43.2%	-5.0%	228.0	-3.9%
EBITDA Margin	33.5	22.8	10.4	20.0	17.8			19.5	
y-o-y growth, %	1.3	0.2	(0.6)	(0.4)	(0.4)			(0.4)	
Depreciation	123.8	133.1	82.2	113.1	112.3	-9.3%	-0.7%	126.2	-11.0%
EBIT	262.0	110.9	28.4	117.6	106.9	-59.2%	-9.1%	101.8	5.0%
EBIT Margin	22.7	10.3	2.7	10.2	8.7			8.7	
Finance charges	0.0	0.0	0.8	0.9	1.0			0.0	
Other income	66.5	49.1	69.0	53.4	56.9	-14.4%	6.6%	45.6	24.8%
Profit Before Taxes (PBT)	328.5	160.0	96.6	170.1	162.8	-50.4%	-4.3%	147.4	10.4%
Taxation									
Provision for taxation	88.2	70.8	14.4	44.1	60.5	-31.4%	37.2%	41.3	46.6%
Current tax	60.2	83.0	23.6	18.6	50.8				
(% of PBT)	18.3	51.9	24.4	10.9	31.2				
Deferred tax	26.0	(12.4)	3.3	25.5	9.7				
(% of PBT)	7.9	-7.8	3.4	15.0	6.0				
Fringe benefit tax	2.0	0.2	(2.3)	0.0	0.0				
(% of total manpower costs)	0.6	0.1	-0.6	0.0	0.0				
Excess Provision in earlier years	0.0	0.0	(10.2)	0.0	0.0				
Provision for taxation as % of PBT	26.8	44.3	14.9	25.9	37.2				
Profit After Tax	240.3	89.2	82.2	126.0	102.3	-57.4%	-18.8%	106.1	-3.6%
PAT Margin (%)	20.8	8.3	7.0	10.4	9.0			5.2	
Adjusted Earnings Per Share (Rs.)									
Basic	4.2	1.5	1.3	2.3	1.9	-54.3%	-17.4%	1.8	3.1%
Diluted	4.0	1.4	1.7	2.2	1.9	-52.6%	-13.6%	1.7	14.1%

Source: Company data, Macquarie Research, April 2010

Financial statements

Fig 2 Consolidated Income Statement

Consolidated Income Statement , Fiscal Year-end March				
<i>Amount in Rs. Million, except ratios</i>				
Particulars	FY2007	FY2008	FY2009	FY2010A
	Mar-07	Mar-08	Mar-09	Mar-10
Revenues				
Telecom Value Added Services	1,280.6	2,459.1	3,724.8	4,253.1
<i>y-o-y growth, %</i>	63.2%	92.0%	51.5%	14.2%
Other Services	49.1	159.0	338.7	290.9
<i>y-o-y growth, %</i>	18.7%	223.8%	113.0%	-14.1%
Total Revenue	1,329.7	2,618.1	4,063.5	4,544.0
<i>y-o-y growth, %</i>	61%	97%	55%	12%
Operating Expenses				
Cost of Sales & Services	237.2	388.3	777.5	1,325.4
Manpower costs	270.5	642.0	1,203.6	1,474.9
<i>y-o-y growth, %</i>	135.4%	137.4%	87.5%	22.5%
<i>(% of total revenues)</i>	20.3	24.5	29.6	32.5
Administration and other expenses	212.1	539.6	808.7	915.3
<i>y-o-y growth, %</i>	81.1%	154.4%	49.9%	13.2%
<i>(% of total revenues)</i>	16.0	20.6	19.9	20.1
Total Operating Expenses	719.8	1,569.8	2,789.8	3,715.6
EBITDA	609.9	1,048.3	1,273.7	828.4
<i>EBITDA Margin</i>	45.9%	40.0%	31.3%	18.2%
<i>y-o-y growth, %</i>	29.4%	71.9%	21.5%	-35.0%
<i>q-o-q growth, %</i>				
Depreciation	142.9	256.0	439.7	440.7
EBIT	467.0	792.3	834.0	387.7
<i>EBIT Margin</i>	35.1%	30.3%	20.5%	8.5%
<i>y-o-y growth, %</i>	20.9%	69.7%	5.3%	-53.5%
Finance charges	0.2	17.0	0.5	2.7
Other income	43.4	74.7	317.7	228.4
<i>y-o-y growth, %</i>	3882.4%	72.1%	325.4%	-28.1%
Profit Before Taxes (PBT)	510.2	850.0	1,151.2	613.4
<i>y-o-y growth, %</i>		66.6%	35.4%	-46.7%
Taxation				
Provision for taxation	167.6	246.9	299.3	192.6
<i>Provision for taxation as % of PBT</i>	32.8%	29.1%	26.0%	31.4%
Profit After Taxes (PAT) and minority interest	337.1	603.0	851.9	423.5
<i>PAT Margin (%)</i>	25.4%	23.0%	21.0%	9.3%
Adjusted Earnings Per Share (Rs.)				
Basic	12.4	12.5	14.7	7.4
Diluted	6.7	11.5	14.2	7.2

Source: Company data, Macquarie Research, April 2010

Fig 3 Consolidated Balance Sheet

Consolidated Balance Sheet, Fiscal Year-end March				
<i>Amount in Rs. Million, except ratios</i>				
Particulars	FY2007	FY2008	FY2009	FY2010A
	Mar-07	Mar-08	Mar-09	Mar-10
Assets				
Current Assets				
Project Work in Progress	0.0	10.6	-	5.9
Sundry debtors	539.3	989.7	1,445.2	1,689.5
Cash and bank balances	211.6	1459	2855	1883
Other current assets	5.4	12.5	22.4	25.0
Loans and advances	479.1	947	1686	2120
Total Current Assets	1,235.3	3,419.1	6,008.4	5,723.3
Fixed Assets				
Gross Block	580.6	1,335.2	2,536.3	5,228.3
Less : Accumulated depreciation	288.4	539.9	1,560.8	1,933.5
Net Block	292.2	795.3	975.5	3,294.8
Add: Capital Work in Progress	42.9	113.4	71.5	92.1
Total Fixed Assets	335.1	908.7	1,047.0	3,386.9
Investments	1,018.2	3,193.7	86.7	677.1
Deferred tax Assets	0.0	-	1.0	1.0
Goodwill on Consolidation	204.8	1,367.9	2,107.8	2,107.8
Total Assets	2,793.4	8,889.4	9,250.9	11,896.1
Liabilities and Shareholders' Equity				
Current Liabilities				
Sundry creditors				
for capital items- due to Holding company	73.3	66.8	85.3	-
for capital items- due to others	42.0	37.5	89.2	151.3
for expenses	129.2	543.2	670.6	880.9
Deferred revenue	1.1	11.7	60.8	73.3
Credit balance in bank account	0.0	0.0	0.0	0.0
Other liabilities	52.4	1,080.0	116.1	225.5
Income Tax	376.7	594.1	849.3	1,001.0
Fringe Benefit Tax (Net)	3.3	0.2	0.0	0.0
Employee Benefits	10.1	49.9	99.5	92.7
Other Provisions	34.9	77.2	47.1	106.0
Total current Liabilities	722.8	2,460.6	2,018.0	2,530.6
Debt				
Secured Loans	0.0	0.0	42.7	84.8
UnSecured Loans	0.0	0.0	3.7	2.1
Total Debt	-	0.0	46.4	86.9
Other Long Term Liabilities				
Deferred Tax Liability	29.9	39.3	68.2	93.7
Due to Earstwhile shareholders of ITfinity Solutions	0.0	0.0	0.0	0.0
Deferred Payment Liability	0.0	278.6	128.6	128.6
Stock Options Outstanding Account	0.0	1.4	0.3	0.3
Minority interest	13.9	0.0	0.0	0.0
Total Other Long Term Liabilities	43.7	319.3	197.0	222.5
Shareholders' Funds				
Share Capital	36.5	574.1	578.3	585.2
Reserves and Surplus	1,990.2	5,535.5	6,411.2	6,810.4
Total Shareholders' Funds	2,026.8	6,109.5	6,989.5	7,395.5
Total liabilities and stockholders' equity	2,793.3	8,889.4	9,250.9	10,235.6

Source: Company data, Macquarie Research, April 2010

OnMobile Global (ONMB IN, Outperform, Target Price: Rs700.00)

Quarterly Results						Profit & Loss					
		1Q/10A	2Q/10E	3Q/10E	4Q/10E		2009A	2010E	2011E	2012E	
Revenue	m	1,072	1,157	1,396	1,851	Revenue	m	4,064	5,476	8,027	11,037
Gross Profit	m	774	833	1,012	1,342	Gross Profit	m	3,286	3,961	5,940	8,278
Cost of Goods Sold	m	298	324	384	509	Cost of Goods Sold	m	778	1,515	2,087	2,759
EBITDA	m	244	272	370	546	EBITDA	m	1,274	1,432	2,293	3,346
Depreciation	m	133	145	165	189	Depreciation	m	440	632	863	1,100
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	111	127	205	358	EBIT	m	834	800	1,430	2,245
Net Interest Income	m	49	44	44	39	Net Interest Income	m	317	177	193	161
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	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	160	171	249	397	Pre-Tax Profit	m	1,151	977	1,623	2,406
Tax Expense	m	-71	-54	-78	-125	Tax Expense	m	-299	-328	-479	-709
Net Profit	m	89	117	171	272	Net Profit	m	852	649	1,145	1,697
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	89	117	171	272	Reported Earnings	m	852	649	1,145	1,697
Adjusted Earnings	m	89	117	171	272	Adjusted Earnings	m	852	649	1,145	1,697
EPS (rep)		1.40	1.84	2.68	4.27	EPS (rep)		14.22	10.18	17.97	26.63
EPS (adj)		1.40	1.84	2.68	4.27	EPS (adj)		14.22	10.18	17.97	26.63
EPS Growth yoy (adj)	%	-44.9	-40.0	-41.9	6.5	EPS Growth (adj)	%	19.7	-28.4	76.5	48.2
						PE (rep)	x	27.2	38.0	21.5	14.5
						PE (adj)	x	27.2	38.0	21.5	14.5
EBITDA Margin	%	22.8	23.5	26.5	29.5	Total DPS		0.00	0.00	0.00	0.00
EBIT Margin	%	10.3	11.0	14.7	19.3	Total Div Yield	%	0.0	0.0	0.0	0.0
Earnings Split	%	13.8	18.1	26.3	41.9	Weighted Average Shares	m	60	64	64	64
Revenue Growth	%	37.8	18.7	20.6	60.5	Period End Shares	m	60	64	64	64
EBIT Growth	%	-5.3	-23.5	-29.1	36.5						
Profit and Loss Ratios						Cashflow Analysis					
		2009A	2010E	2011E	2012E		2009A	2010E	2011E	2012E	
Revenue Growth	%	55.2	34.8	46.6	37.5	EBITDA	m	1,358	1,432	2,293	3,346
EBITDA Growth	%	21.5	12.4	60.1	45.9	Tax Paid	m	-417	-328	-479	-709
EBIT Growth	%	5.2	-4.1	78.7	57.0	Chgs in Working Cap	m	-540	71	-946	-1,089
Gross Profit Margin	%	80.9	72.3	74.0	75.0	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	31.3	26.1	28.6	30.3	Other	m	36	0	0	0
EBIT Margin	%	20.5	14.6	17.8	20.3	Operating Cashflow	m	437	1,174	868	1,547
Net Profit Margin	%	21.0	11.8	14.3	15.4	Acquisitions	m	-734	0	0	0
Payout Ratio	%	0.0	0.0	0.0	0.0	Capex	m	-572	-1,095	-1,605	-1,656
EV/EBITDA	x	16.4	15.6	9.7	6.7	Asset Sales	m	3,122	0	0	0
EV/EBIT	x	25.0	27.9	15.6	9.9	Other	m	-25	177	193	161
Balance Sheet Ratios						Investing Cashflow	m	1,791	-919	-1,412	-1,495
ROE	%	13.0	8.9	13.9	17.6	Dividend (Ordinary)	m	0	0	0	0
ROA	%	9.2	8.2	12.9	16.9	Equity Raised	m	-5	0	0	0
ROIC	%	13.3	12.7	22.4	25.6	Debt Movements	m	1	46	0	0
Net Debt/Equity	%	-40.2	-41.1	-29.5	-25.2	Other	m	-941	72	0	0
Interest Cover	x	nmf	nmf	nmf	nmf	Financing Cashflow	m	-945	118	0	0
Price/Book	x	3.3	3.2	2.8	2.4	Net Chg in Cash/Debt	m	1,284	374	-544	52
Book Value per Share		116.6	119.9	137.9	164.5	Free Cashflow	m	-135	79	-737	-108
						Balance Sheet					
		2009A	2010E	2011E	2012E		2009A	2010E	2011E	2012E	
						Cash	m	2,855	3,136	2,592	2,645
						Receivables	m	1,445	1,641	2,405	3,307
						Inventories	m	0	7	10	14
						Investments	m	87	87	87	87
						Fixed Assets	m	1,047	1,439	2,182	2,737
						Intangibles	m	2,108	2,108	2,108	2,108
						Other Assets	m	1,709	1,797	2,624	3,599
						Total Assets	m	9,251	10,215	12,008	14,497
						Payables	m	845	1,110	1,579	2,164
						Short Term Debt	m	0	0	0	0
						Long Term Debt	m	46	0	0	0
						Provisions	m	47	90	128	171
						Other Liabilities	m	1,323	1,377	1,518	1,682
						Total Liabilities	m	2,261	2,577	3,225	4,017
						Shareholders' Funds	m	6,989	7,638	8,783	10,480
						Minority Interests	m	0	0	0	0
						Other	m	0	0	0	0
						Total S/H Equity	m	6,989	7,638	8,783	10,480
						Total Liab & S/H Funds	m	9,251	10,215	12,008	14,497

All figures in INR unless noted.

Source: Company data, Macquarie Research, May 2010

Important disclosures:

Recommendation 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

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

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

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

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 31 March 2010

	AU/NZ	Asia	RSA	USA	CA	EUR	
Outperform	50.55%	62.20%	42.25%	42.39%	62.16%	46.74%	(for US coverage by MCUSA, 6.53% of stocks covered are investment banking clients)
Neutral	36.63%	19.02%	47.89%	50.35%	31.89%	34.78%	(for US coverage by MCUSA, 9.62% of stocks covered are investment banking clients)
Underperform	12.82%	18.78%	9.86%	7.27%	5.95%	18.48%	(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 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; 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:** In Hong Kong, research is issued and distributed by Macquarie Capital Securities Ltd, which is licensed and regulated by the Securities and Futures Commission. **Japan:** In Japan, 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). **India:** In India, research is issued and distributed by Macquarie Capital Securities (India) Pvt Ltd, 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. **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 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	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 4400	Manila Tel: (63 2) 857 0888	Melbourne Tel: (613) 9635 8139	Montreal Tel: (1 514) 925 2850	Mumbai Tel: (91 22) 6653 3000	Perth Tel: (618) 9224 0888	Seoul Tel: (82 2) 3705 8500
Shanghai Tel: (86 21) 6841 3355	Singapore Tel: (65) 6231 1111	Sydney Tel: (612) 8232 9555	Taipei Tel: (886 2) 2734 7500	Tokyo Tel: (81 3) 3512 7900	Toronto Tel: (1 416) 848 3500	New York Tel: (1 212) 231 2500

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)	(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 Financials

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

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 Ping (Asia)	(852) 3922 3557
Leah Jiang (China)	(8621) 2412 9020

Consumer

Gary Ping (Asia)	(852) 3922 3557
Jessie Qian (China, Hong Kong)	(852) 3922 3568
Toby Williams (Japan)	(813) 3512 7392
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
Minoru Tayama (Japan)	(813) 3512 6058
Robert Burghart (Japan)	(813) 3512 7853

Industrials

Inderjeetsingh Bhatia (India)	(9122) 6653 3166
Christopher Cintavey (Japan)	(813) 3512 7432
Janet Lewis (Japan)	(813) 3512 7475
Chang Han Joo (Korea)	(822) 3705 8511
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
David Gambrell (Thailand)	(662) 694 7753

Insurance

Mark Kellock (Asia)	(852) 3922 3567
Makarim Salman (Japan)	(813) 3512 7421

Media

Jessie Qian (China, Hong Kong)	(852) 3922 3568
Shubham Majumder (India)	(9122) 6653 3049
George Hogan (Japan)	(813) 3512 7851
Prem Jearajasingam (Malaysia)	(603) 2059 8989
Alex Pomento (Philippines)	(632) 857 0899

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

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 Mining

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 (Asia)	(852) 3922 4773
Jonathan Windham (Asia)	(852) 3922 5417
Wei Sim (China, Hong Kong)	(852) 3922 3598
Janet Lewis (Japan)	(813) 3512 7475
Chang Han Joo (Korea)	(822) 3705 8511
ES Kwak (Korea)	(822) 3705 8644
Sunaina Dhanuka (Malaysia)	(603) 2059 8993

Utilities

Adam Worthington (Asia)	(65) 6231 2981
Carol Cao (China, Hong Kong)	(852) 3922 4075
Jeff Evans (India)	(9122) 3356 3053
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
Bonnie Liu	(8621) 2412 9008
Graeme Train	(8621) 2412 9035
Rakesh Arora	(9122) 6653 3054

Data Services

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

Economics

Richard Jerram (Asia)	(813) 3512 7855
Rajeev Malik (ASEAN, India)	(65) 6231 2841
Richard Gibbs (Australia)	(612) 8232 3935
Paul Cavey (China)	(852) 3922 3570

Quantitative

Martin Emery (Asia)	(852) 3922 3582
Viking Kwok (Asia)	(852) 3922 4735
George Platt (Australia)	(612) 8232 6539
Patrick Hansen (Japan)	(813) 3512 7876

Strategy/Country

Michael Kurtz (Asia)	(8621) 2412 9002
Daniel McCormack (Asia)	(852) 3922 4073
Mark Matthews (Asia)	(852) 3922 3585
Rakesh Arora (India)	(9122) 6653 3054
Ferry Wong (Indonesia)	(6221) 515 7335
David Gibson (Japan)	(813) 3512 7880
Peter Eadon-Clarke (Japan)	(813) 3512 7850
Chan Hwang (Korea)	(822) 3705 8643
Prem Jearajasingam (Malaysia)	(603) 2059 8989
Edward Ong (Malaysia)	(603) 2059 8982
Alex Pomento (Philippines)	(632) 857 0899
Patrick Yau (Singapore)	(65) 6231 2835
Daniel Chang (Taiwan)	(8862) 2734 7516
Alastair Macdonald (Thailand)	(662) 694 7741

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

Regional Heads of Sales

Chris Gray (ASEAN)	(65) 6231 2888
Justin Crawford (Asia)	(852) 3922 2065
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) 6653 3200
Stanley Dunda (Indonesia)	(6221) 515 1555
Kenneth Yap (Indonesia)	(6221) 515 1555
JJ Kim (Korea)	(822) 3705 8799
Jason Lee (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
Scot Mackie (New York)	(1 212) 231 2848

Regional Heads of Sales cont'd

Sheila Schroeder (San Francisco)	(1 415) 762 5001
Angus Kent (Thailand)	(662) 694 7601
Michael Newman (Tokyo)	(813) 3512 7920
Charles Nelson (UK/Europe)	(44) 20 3037 4832
Rob Fabbro (UK/Europe)	(44) 20 3037 4865
Nick Ainsworth (Generalist)	(852) 3922 2010

Sales Trading

Adam Zaki (Asia)	(852) 3922 2002
Mike Keen (Europe)	(44) 20 3037 4905
Yat Quan Tan (Hong Kong)	(852) 3922 2028
Stanley Dunda (Indonesia)	(6221) 515 1555
Mario Argyrides (Korea)	(822) 3705 8610
Edward Robinson (London)	(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

Alternative Strategies

Convertibles - Roland Sharman	(852) 3922 2095
Depository Receipts - Robert Ansell	(852) 3922 2094
Derivatives - Wayne Edelist	(852) 3922 2134
Futures - Tim Smith	(852) 3922 2113
Structured Products - Andrew Terlich	(852) 3922 2013