Macquarie **Equities Research**





The Global Oil & Gas Specialist

INDIA		
HPCL IN	Out	perform
Price 26 May 10	Rs	s338.80
12-month target	Rs	445.00
Upside/Downside	%	31.3
Valuation - RNAV	Rs	445.00
GICS sector		Energy
Market cap	Rsm	114,727
30-day avg turnover	US\$m	15.7
Market cap	US\$m	2,405
Number shares on iss	sue m	338.6

Investment fundamentals

Year end 31 Mar		2010A	2011E	2012E	2013E
Total revenue	bn	1,125.2	1,423.9	1,490.4	1,602.1
EBIT	bn	25.6	20.1	26.5	27.3
EBIT growth	%	16.3	-21.6	31.6	3.2
Recurring profit	bn	24.2	25.9	28.9	31.4
Reported profit	bn	14.7	15.8	17.6	19.1
EPS rep	Rs	43.43	46.47	51.92	56.43
EPS rep growth	%	94.4	7.0	11.7	8.7
PER rep	Х	7.8	7.3	6.5	6.0
Total DPS	Rs	14.08	15.03	16.80	18.26
Total div yield	%	4.2	4.4	5.0	5.4
ROA	%	5.1	3.9	4.9	4.8
ROE	%	12.6	12.4	12.8	12.7
EV/EBITDA	Х	9.4	10.9	8.9	8.5
Net debt/equity	%	200.8	174.3	150.8	127.6
P/BV	Х	0.9	0.9	0.8	0.7

HPCL 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, May 2010 (all figures in INR unless noted)

Jal Irani
91 22 6653 3040 Jal.Irani@macquarie.com
Abhishek Agarwal
91 22 6653 3057
Abhishek.Agarwal-MSG@macquarie.com

27 May 2010

Hindustan Petroleum

Back in the black

Event

HPCL's Rs7.6bn 4QFY10 PAT is mildly below forecast. Government's (GOI) substantial cash reimbursement of Rs30bn enabled HPCL to swing back into the black. Sharp 24% MoM oil price drop has also enabled diesel margins to turn positive, enhancing likelihood of sector reforms. We feel HPCL presents compelling value (even under the prevalent worst-case scenario), in addition to multiple triggers. We re-affirm our OP rating and TP of Rs445/sh.

Impact

- Cash support assists 4Q PAT turnaround. 4Q is always volatile as the GOI balances cash reimbursement to allow a bare minimum PAT of Rs 10-15bn.
 Cash compensation was two-fold; the upstream companies compensated Rs13.5bn and GoI's Rs30.3bn (in addition to Rs25bn during 9mFY10).
 Consequently, HPCL had to bear Rs13.2bn of the under-recoveries (Figs 2, 3).
- GRMs much improved due to robust auto-fuel cracks: With gasoline and diesel cracks averaging in excess of US\$8.5/bbl, GRMs for even a simple refiner like HPCL averaged US\$3.3/bbl during 4Q, compared to a loss during 3Q. Refinery production was also up 5.7% QoQ as the Vizag refinery ramped up after a shutdown in the last quarter.
- Back in the black. A sharp 24% MoM oil price drop has turned diesel margins to positive at Rs1.2/lt from a negative Rs 1.5/lt. Diesel is its largest product. Gasoline margins have also sharply gained by Rs 3.3/lt, but remain mildly –ve at Rs0.2/lt. Presently, crude oil break-even for diesel and gasoline stands at US\$74.5bbl and US\$69.3/bbl respectively. Kerosene and LPG margins remain –ve at Rs 18.1/l and Rs 213/cyl respectively despite improvements.

Earnings and target price revision

Minor adjustments to PAT; +1% in FY11E and -2% in FY12E

Price catalyst

- 12-month price target: Rs445.00 based on a RNAV methodology.
- Catalyst: Implementation of Kirit Parikh committee recommendations; progress of shifting of Mumbai refinery, and consequent land sale.

Action and recommendation

- Compelling valuations... We believe HPCL presents deep value at a valuation of 0.9x PBV and 7.0x FY11E PER, with one of India's highest dividend yield's of 4.4%. This is under the prevalent worst-case scenario of controlled pricing.
- ...with multiple triggers. Given the sharp recent fall in oil prices and the government's recent gas price reforms, the probability of downstream oil sector reforms has improved. We believe HPCL's earnings could nearly double if oil product prices are freed. Furthermore, if HPCL's proposal of shifting Mumbai refinery and consequent land sale is accepted by the government, the stock price could rise significantly.

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

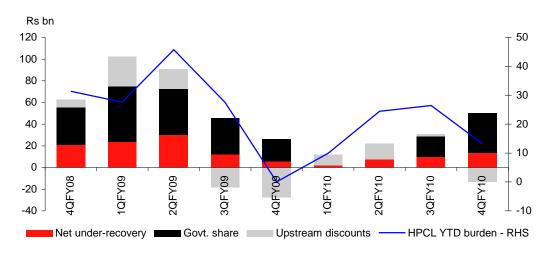
Fig 1 Key financials of 4QFY10 results

(Rsmn)	4QFY10	4QFY09	YoY (%)	3QFY10	QoQ (%)			
Net Sales	315,584	251,542	25.5%	278,742	13.2%			
Expenditure	-300,074	-197,168	52.2%	-275,198	9.0%			
EBITDA	15,510	54,374	-71.5%	3,544	337.6%			
Depreciation	-3,175	-2,545	24.8%	-3,007	5.6%			
Other Income	2,079	4,263	-51.2%	2,250	-7.6%			
EBIT	14,414	56,092	-74.3%	2,787	417.2%			
Interest	-1,640	-3,779	-56.6%	-2,202	-25.5%			
PBT	12,811	52,313	-75.5%	585	2089.9%			
PBT (excl. exceptional items)	12,774	52,313	-75.6%	585	2083.6%			
Tax	-5,236	-2,659	96.9%	-271	1832.1%			
PAT (recurring)	7,538	49,654	-84.8%	314	2300.6%			
PAT (reported)	7,575	51,040	-85.2%	314	2312.4%			
Source: Company data, Macquarie Research, May 2010								

Fig 2 Gross under-recovery of Rs36.9bn for 4QFY10

Under-recovery (Rs bn)	1QFY10	2QFY10	3QFY10	4QFY10
on auto-fuels (gasoline/diesel)	1.74	7.62	9.63	13.49
on cooking-fuels (kerosene/LPG)	9.90	14.53	20.97	23.43
Gross under-recovery	11.64	22.15	30.60	36.92
Sharing				
by upstream (discounts on crude/LPG)	1.74	7.62	9.63	13.49
by Gol (oil bonds/cash)	0.00	0.00	18.97	36.66
by HPCL (net under-recovery)	9.90	14.53	2.00	-13.23
by HPCL (YTD burden)	9.90	24.43	26.43	13.20
Upstream YTD (% of total)	14.9%	27.7%	29.5%	32.1%
Govt YTD (% of total)	0.0%	0.0%	29.5%	54.9%
Downstream YTD (% of total)	85.1%	72.3%	41.1%	13.0%
Source: Company data, Macquarie Research	, May 2010			

Fig 3 Gol cash reimbursement a relief; Rs13.2bn under-recovery burden for FY10

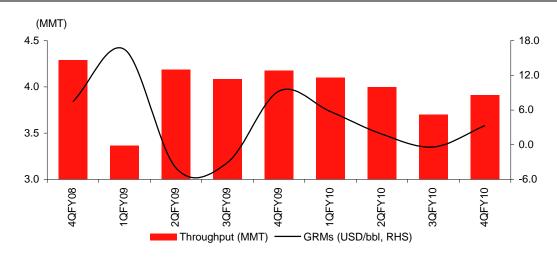


Source: Company data, Macquarie Research, May 2010

Fig 4 Key operating parameters announced in 4QFY10 results

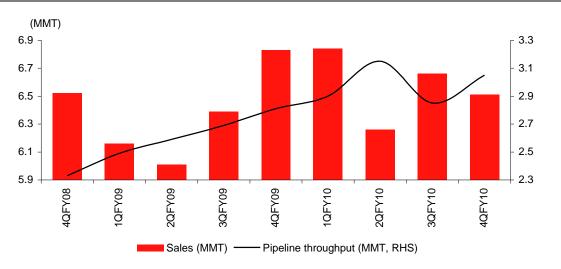
	4QFY10	4QFY09	YoY (%)	3QFY10	QoQ (%)			
Refinery Throughput (MMT)	3.9	4.2	-6.3%	3.7	5.7%			
GRMs (USD/bbl, RHS)	3.3	9.3	-64.2%	-0.4	NM			
Sales (MMT)	6.5	6.8	-4.7%	6.7	-2.3%			
Pipeline throughput (MMT)	3.1	2.8	8.5%	2.9	7.0%			
Source: Company data, Macquarie Research, May 2010								

Fig 5 GRMs moving upwards; Refinery throughput increasing post Q3 shutdowns



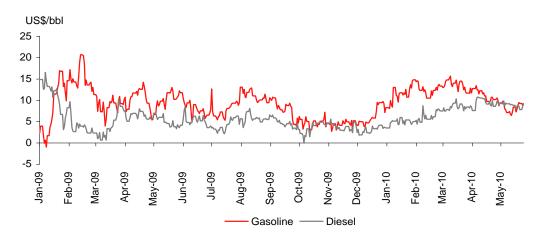
Source: Company data, Macquarie Research, May 2010

Fig 6 Sales down 2.3% QoQ; Pipeline throughput increased 7% QoQ



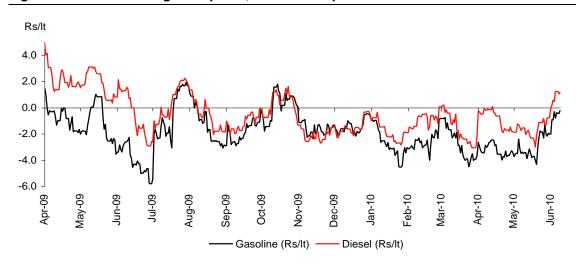
Source: Company data, Macquarie Research, May 2010

Fig 7 Gasoline and Diesel cracks are ~ US\$9/bbl



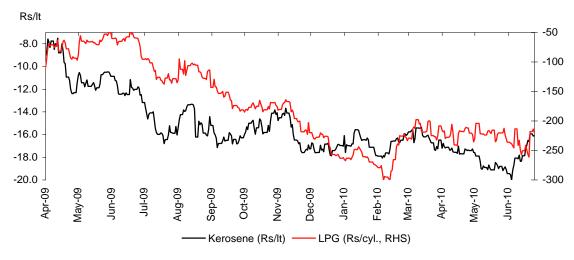
Source: Company data, Macquarie Research, May 2010

Fig 8 Gasoline -ve margins improve, diesel turns positive



Source: Company data, Macquarie Research, May 2010

Fig 9 Cooking fuel retail margins remain sharply -ve, despite sharp improvements



Source: Company data, Macquarie Research, May 2010

Hindustan Petroleum (HPCL IN, Outperform, Target Price: Rs445.00)

Hindustan Petroleum (HPC	L IN, (orm, Ta	arget Pi		445.00)					
Quarterly Results		4Q/10A	1Q/11E	2Q/11E	3Q/11E	Profit & Loss		2010A	2011E	2012E	2013E
Revenue	m	292,544	384,454	341,737	370,215	Revenue	m	1,125,169	1,423,903	1,490,382	1,602,132
Gross Profit	m	21,719	21,238	18,878	20,451	Gross Profit	m	83,534	78,658	90,466	94,691
Cost of Goods Sold	m	270,825	363,216	322,859	349,764	Cost of Goods Sold	m	1,041,634	1,345,244	1,399,916	1,507,441
EBITDA	m	9,919	8,895	7,906	8,565	EBITDA	m	38,148	32,944	40,233	42,014
Depreciation	m	3,251	3,467	3,082	3,339	Depreciation	m	12,505	12,842	13,782	14,722
Amortisation of Goodwill Other Amortisation	m m	0	0	0	0	Amortisation of Goodwill Other Amortisation	m m	0	0	0	0
EBIT	m	6,667	5,428	4,824	5,227	EBIT	m	25,643	20,102	26,451	27,292
Net Interest Income	m	-2,424	-2,560	-2,276	-2,465	Net Interest Income	m	-9,321	-9,482	-13,423	-12,524
Associates	m	_,	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	10	0	0	0	Exceptionals	m	10	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	2,037	4,117	3,659	3,964	Other Pre-Tax Income	m	7,835	15,247	15,872	16,644
Pre-Tax Profit	m	6,290	6,984	6,208	6,726	Pre-Tax Profit	m	24,166	25,867	28,900	31,412
Tax Expense	m	-2,455	-2,730	-2,427	-2,629	Tax Expense	m	-9,443	-10,112	-11,298	-12,280
Net Profit Minority Interests	m m	3,835 0	4,254 0	3,781 0	4,096 0	Net Profit Minority Interests	m m	14,723 1	15,755 0	17,602 0	19,132 0
Reported Earnings Adjusted Earnings	m m	3,835 3,826	4,254 4,254	3,781 3,781	4,096 4,096	Reported Earnings Adjusted Earnings	m m	14,724 14,714	15,755 15,755	17,602 17,602	19,132 19,132
EPS (rep)		11.31	12.55	11.15	12.08	EPS (rep)		43.43	46.47	51.92	56.43
EPS (adj)		11.28	12.55	11.15	12.08	EPS (adj)		43.40	46.47	51.92	56.43
EPS Growth yoy (adj)	%	92.9	7.1	11.7	16.0	EPS Growth (adj)	%	92.9	7.1	11.7	8.7
· · · · · · · · · · · · · · · · ·						PE (rep)	Х	7.3	7.3	6.5	6.0
						PE (adj)	Х	7.3	7.3	6.5	6.0
EBITDA Margin	%	3.4	2.3	2.3	2.3	Total DPS	0.	14.08	15.03	16.80	18.26
EBIT Margin	%	2.3	1.4	1.4	1.4	Total Div Yield	%	4.4	4.4	5.0	5.4
Earnings Split	%	26.0	27.0	24.0	26.0	Weighted Average Shares	m	339	339	339	339
Revenue Growth EBIT Growth	% %	-12.8 16.3	26.6 -21.6	32.1 -18.2	37.1 -15.1	Period End Shares	m	339	339	339	339
						O-abilian Anabasia		00404	00445	20405	00405
Profit and Loss Ratios		2010A	2011E	2012E	2013E	Cashflow Analysis		2010A	2011E	2012E	2013E
Revenue Growth	%	-12.8	26.6	4.7	7.5	EBITDA	m	38,148	32,944	40,233	42,014
EBITDA Growth	%	16.6	-13.6	22.1	4.4	Tax Paid	m	-9,443	-10,112	-11,298	-12,280
EBIT Growth	%	16.3	-21.6	31.6	3.2	Chgs in Working Cap	m	-7,796	10,522	7,514	9,007
Gross Profit Margin	%	7.4	5.5	6.1	5.9	Net Interest Paid	m	-9,321	-9,482	-13,423	-12,524
EBITDA Margin	% %	3.4 2.3	2.3	2.7 1.8	2.6 1.7	Other Operating Cashflow	m	2,838 14,425	3,037 26,909	3,393 26,419	3,688 29,905
EBIT Margin Net Profit Margin	% %	2.3 1.3	1.4 1.1	1.8	1.7	Acquisitions	m m	14,423	20,909	20,419	29,903
Payout Ratio	%	32.4	32.3	32.3	32.3	Capex	m	-33,500	-23,500	-23,500	-23,500
EV/EBITDA	X	9.2	10.9	8.9	8.5	Asset Sales	m	0	0	0	0
EV/EBIT	X	13.7	17.8	13.6	13.1	Other	m	7,835	15,247	15,872	16,644
						Investing Cashflow	m	-25,665	-8,253	-7,628	-6,856
Balance Sheet Ratios						Dividend (Ordinary)	m	-4,772	-5,097	-5,694	-6,189
ROE	%	12.6	12.4	12.8	12.7	Equity Raised	m	-0	-0	-0	-0
ROA	%	5.1	3.9	4.9	4.8	Debt Movements	m	10,000	0	0	0
ROIC Net Debt/Equity	% %	4.6 200.8	3.4 174.3	4.4 150.8	4.6 127.6	Other Financing Cashflow	m m	-1 5,226	-0 -5,097	0 -5,694	-0 -6,189
Interest Cover Price/Book	X X	2.8 0.9	2.1 0.9	2.0 0.8	2.2 0.7	Net Chg in Cash/Debt	m	-5,975	13,560	13,097	16,860
Book Value per Share	^	358.1	389.6	424.7	462.9						
						Free Cashflow	m	-19,075	3,409	2,919	6,405
						Balance Sheet		2010A	2011E	2012E	2013E
						Cash Receivables	m m	6,787 24,431	20,347 27,849	33,444 28,990	50,305 30,400
								00.504	400.050		440.004
						Inventories Investments	m m	88,564 128,274	100,952 128,274	105,088 128,274	110,201 128,274
						Fixed Assets	m	212,164	222,822	232,541	241,319
						Intangibles	m	0	0	0	0
						Other Assets	m	45,310	35,310	25,310	15,310
						Total Assets	m	505,530	535,554	553,647	575,809
						Payables	m	52,376	68,704	71,495	77,026
						Short Term Debt	m	35,737	35,737	35,737	35,737
						Long Term Debt Provisions	m m	214,875 12,371	214,875 12,371	214,875 12,371	214,875 12,371
						Other Liabilities	m	68,736	71,773	75,166	78,854
						Total Liabilities	m	384,094	403,459	409,644	418,862
						Shareholders' Funds	m	121,422	132,081	143,989	156,932
						Minority Interests	m	25	25	25	25
						Other	m	-11	-11	-11	-11
						Total S/H Equity	m	121,437	132,096	144,004	156,947
						Total Liab & S/H Funds	m	505,530	535,554	553,647	575,809
All figures in INR unless noted.											

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 / efpowa*

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit /average total assets

ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares

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

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 brokerdealer 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). 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. 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, 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	Bangkok	Calgary	Hong Kong	Jakarta	Johannesburg Tel: (2711) 583 2000	Kuala Lumpur
Tel: (649) 377 6433	Tel: (662) 694 7999	Tel: (1 403) 218 6650	Tel: (852) 2823 3588	Tel: (62 21) 515 1818		Tel: (60 3) 2059 8833
London	Manila	Melbourne	Montreal	Mumbai	Perth Tel: (618) 9224 0888	Seoul
Tel: (44 20) 3037 4400	Tel: (63 2) 857 0888	Tel: (613) 9635 8139	Tel: (1 514) 925 2850	Tel: (91 22) 6653 3000		Tel: (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, CapitallQ and TheMarkets.com.

Macquarie **Equities Research**





Asia Research

Head	of Equity	Research
------	-----------	----------

Automobiles/Auto Doute	
Tim Smart (Asia – Deputy Head)	(852) 3922 3565
Chris Hunt (Asia – Head)	(852) 3922 1119
David Rickards (Global Co – Head)	(44 20) 3037 4399
John O'Connell (Global Co – Head)	(612) 8232 7544

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
OL 1 1 7 411	

Chemicals/Textiles

Christina Lee (Hong Kong)	(852) 3922 3571
Jal Irani (India)	(9122) 6653 3040
Shawn Park (Korea)	(822) 3705 8669
Sunaina Dhanuka (Malaysia)	(603) 2059 8993

Conglomerates

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

Consumer and Gaming

Gary Pinge (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
la diretula la	

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 Gambrill (Thailand)	(662) 694 7753

Insurance Mark Kallack (Asia)

Makarim Salman (Japan)	(813) 3512 7421
Media	
Jessie Qian (China, Hong Kong)	(852) 3922 3568

Jessie Qian (China, Hong Kong) Shubham Majumder (India)

(9122) 6653 3049 George Hogan (Japan) Prem Jearajasingam (Malaysia) Alex Pomento (Philippines) (813) 3512 7851 (603) 2059 8989 (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

(852) 3922 3587
(852) 3922 3562
(8621) 2412 9035
(852) 3922 3571
(9122) 6653 3054
(65) 6231 2981
(6221) 2598 8486
(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
Jimmy Hsu (Taiwan)	(8862) 2734 7533

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
Datrick 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

MAC GO Bloomberg:

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

Regional meads 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
Charles Nelson (UK/Europe) Rob Fabbro (UK/Europe)	(44) 20 3037 4832 (44) 20 3037 4865

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