Macquarie Research **Equities**





INDIA

TTRAT IN

Tata Motors

27 March 2008

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12-m Upsi Valu	k price as of 26 Mar 08 nonth target de/downside ation no f Parts	Rs Rs % Rs	679.40 837.00 +23.2 837.00
GICS	Sector	С	apital goods

GICS sector		capital goods
Market cap	Rs m	261,829
30-day avg turnover	US\$m	3.2
Market cap	US\$m	6,525
Number shares on issue	m	385.4

Investment fundamentals

Year end 31 Mar		2007A	2008E	2009E	2010E
Total revenue EBIT EBIT Growth Reported profit Adjusted profit	bn bn % bn bn	267.8 20.3 26.7 19.1 18.0	291.1 20.0 -1.2 17.5 17.5	342.3 24.1 20.1 20.6 20.6	414.9 31.3 30.0 27.2 27.2
EPS rep EPS rep growth EPS adj EPS adj growth PE rep PE adj	Rs % Rs % x	49.98 25.2 47.00 28.3 13.6 14.5	45.77 -8.4 45.77 -2.6 14.8 14.8	53.68 17.3 53.68 17.3 12.7 12.7	70.98 32.2 70.98 32.2 9.6 9.6
Total DPS Total div yield	Rs %	15.00 2.2	16.00 2.4	17.00 2.5	18.00 2.6
ROA ROE EV/EBITDA Net debt/equity Price/book	% X % X	11.5 29.0 11.4 46.3 3.8	9.8 23.7 11.1 59.6 3.3	10.5 24.0 8.8 57.8 2.8	12.2 26.7 6.9 48.6 2.3

TTMT IN rel SENSEX performance, & rec history



Source: Datastream, Macquarie Research, March 2008 (all figures in INR unless noted)

Analysts

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Jaguar Land Rover: Finally done!

Event

 Tata Motors (TTMT) has announced the takeover of the Jaguar Land Rover (JLR) brands from Ford Motor.

Impact

- Ahead of estimates at US\$2.3bn: Tata Motors takes over JLR in an all cash deal of US\$2.3bn, ahead of estimates of US\$2bn. Further, TTMT has acquired a 100% stake entirely on its balance sheet. The pension liability will be settled directly by Ford at a cost of US\$600m.
- Financing structure: Tata Motors intends to finance the acquisition through a 15-month bridge loan of US\$3bn to be raised from a syndicate of banks. This will later be replaced with a mix of long-term debt and equity. Finance is likely to be raised by a sale in investments/ subsidiaries and an equity dilution. We estimate that the potential EPS dilution for FY09 on various assumptions could be in the range of 20–29% (see sensitivity table).
- Details on R&D expenses and financials awaited: Jaguar Land Rover had R&D expenditure of around US\$800m in FY06. Although this was charged to Ford, a royalty in excess of US\$330m was paid. As the dynamics would impact cashflows, further clarity is awaited. JLR's 2007 financials are yet to be released.
- Transition phase: Ford is to provide car financing over the next 12 months during which period Tata Motors will tie up with other banks. Long term arrangements for at least 2–3 years have been made for engines and various components.

Earnings revision

No change.

Price catalyst

- 12-month price target: Rs837.00 based on a Sum of Parts methodology.
- Catalyst: Pick up in sales, listing of subsidiaries.

Action and recommendation

- Game plan unclear: There are very few product/distribution synergies between Tata Motors and the JLR brands. Although the access to technology is positive over the longer term, the benefits are unlikely to be felt in the near to medium term.
- Turnaround an issue: JLR made a combined loss of around US\$80m in 2006. With stringent conditions imposed by the unions and outsourcing unlikely, a turnaround will be difficult and long drawn out.
- We view the acquisition as negative, particularly in view of the acquisition cost which was 15% above our estimates. We await further clarity from management in an expected conference call.

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.

Analysis

Acquisition price: higher than estimated

 The acquisition cost of US\$2.3bn was about 15% ahead of our estimate of US\$2bn. This seems to imply an EV/EBITDA multiple of 9–10x FY06 earnings. Further, TTMT has acquired a 100% stake entirely on its balance sheet.

Financing structure: two stages

Tata Motors intends to fund the acquisition in two distinct phases. In the first phase it will raise a
bridge loan and in the second it will replace the bridge loan with a mix of long term debt and
equity.

Stage 1

- Stage 1 would be initially funded by a 15-month bridge loan of US\$3bn, which would lead to a
 debt:equity ratio of 1.35x and 1.5x on a consolidated and standalone basis respectively.
- A foreign currency loan is likely with an expected interest rate of 5–6% (Libor plus 250bp).

Stage II

- Bridge loan would be retired.
- Financing would be raised through equity/ long term debt.

Options for raising equity

- New equity instruments/FCCBs could be issued.
- Stake in investments/ subsidiaries could be sold.
- We value Tata Motors subsidiaries and investment at US\$2.6bn, however, given the nature of the subsidiaries we would expect closer to US\$500m to be raised from various stake sales over a twoyear period. The stake sale would impact the consolidated EPS, of which the subsidiaries form about 15% of the total value.

Fig 1 Subsidiaries and investments

Particulars	Tata Motors Holding	Value US\$bn	Stake sale likely?
Daewoo	100%	0.8	No
Telcon	60%	1.0	No
Tata Tech	85%	0.1	Yes
HVAL	100%	0.2	Yes
HVTL	100%	0.1	Yes
TMLFSL	100%	0.2	Yes
Total subsidiaries		2.4	
Tata Sons	3%	0.5	No
Tata Steel	4%	0.4	Yes
Total investments		0.9	
Total subsidiaries/ associates		3.2	
Discount to fair value		0.6	20% holding company discount
Fair value for Tata Motors		2.6	<u> </u>
Source: Company, Macquarie Rese	arch, March 2008		

Impact on EPS of the capital structure; assuming JLR is at a no profit no loss situation

With very few details available, a sensitivity analysis to the capital structure and cost of debt reflects that standalone EPS would be impacted by 20–29%. This includes an equity dilution at the current market price of Tata Motors and a debt amount of US\$3bn.

Fig 2 FY09E - Standalone EPS impact analysis

		Interest rate			
		5%	6%	7%	
	25%	-27.7%	-28.4%	-29.2%	
Dalut	50%	-25.7%	-27.4%	-29.1%	
Debt	75%	-23.3%	-26.1%	-28.9%	
	100%	-20.4%	-24.5%	-28.6%	

27 March 2008 2

Fig 3 FY09E - Consolidated EPS impact analysis

		Interest rate			
		5%	6%	7%	
D .1.	25%	-27.2%	-27.8%	-28.5%	
	50%	-24.6%	-26.0%	-27.5%	
Debt	75%	-21.5%	-23.9%	-26.3%	
	100%	-17.8%	-21.3%	-24.9%	
Source: Company, Macquarie Research	h, March 2008				

R&D expenses, royalty: A key area of concern

- Whilst no details have been provided, the IPR arrangements remain an area of concern. Total
 expenditure on R&D was about US\$800m in FY06. This was reimbursed by Ford USA to JLR;
 instead royalties of US\$330m were charged to JLR.
- The impact on the profitability and cashflows would be substantial given that R&D expenses formed 6.3% of sales in CY06.

Fig 4 R&D and royalty expenses

US\$m	Land Ro	Land Rover		nr	JLR*	
	2006A	2005A	2006A	2005A	2006A	2005A
R&D expenses	407.4	507.8	370.8	387.4	778.2	895.2
Royalty	251.6	339.6	82.2	140.6	333.8	480.2
% of sales						
R&D expenses	4.3%	5.6%	13.0%	12.6%	6.3%	7.4%
Royalty	2.6%	3.7%	2.9%	4.6%	2.7%	4.0%
* Macquarie.						
Source: Company, Macqua	rie Research, March 2	8008				

CY06 financials

Jaguar Land Rover's financials are not yet available for the latest year and the CY06 numbers were restated. We believe the operational financials may have remained the same, but the interest costs (loans were from Ford group companies) and dividend income may have been different. On the whole we believe the restated P&L would not be vastly different.

Fig 5 Profit & loss statement

US\$m	Land R	over	Jagı	ıar	JLR*		
	2006A	2005A	2006A	2005A	2006A	2005A	
Turnover	9,579	9,057	2,856	3,073	12,435	12,129	
Cost of sales	-8,709	-8,080	-3,158	-3,868	-11,868	-11,948	
- pre exceptional	-8,577	-8,080	-3,076	-3,495	-11,653	-11,574	
- exceptional item	-132		-83	-373	-215	-373	
Gross profit	870	977	-302	-795	567	182	
Distribution cost	-464	-416	-122	-122	-587	-538	
Administrative expenses	-214	-199	-157	-167	-371	-366	
Depreciation	398	422	31	28	429	451	
EBITDA excluding exceptional	722	784	-469	-683	253	102	
Operating profit	191	362	-582	-1,084	-391	-722	
- pre exceptional	323	362	-499	-711	-176	-349	
- exceptional item	-132		-83	-373	-215	-373	
Income from fixed asset investments	104	29	23	98	127	127	
Net interest payable	-164	-224	-29	-120	-193	-343	
Other finance income	65	25	72	36	138	60	
PBT	197	192	-516	-1,070	-319	-878	
Tax	95	211	145	168	240	379	
PAT	293	403	-371	-902	-78	-499	
* Macquarie. Source: Company, Macquarie Research	March 2008						

27 March 2008 3

Tata Motors	TTMT IN.	Outperform.	Target price: Rs837.00)
Tata Motors	(Outperiorii,	raiget price. Nacoriou

Tata Motors (TTMT IN	N, Out _l	perform,	Target p	rice: Rs	337.00)						
Quarterly Results		3Q/08A	4Q/08E	1Q/09E	2Q/09E	Profit & Loss		2007A	2008E	2009E	2010E
Revenue	m	72,780	72,780	85,564	85,564	Revenue	m	267,823	291,119	342,257	414,910
Gross Profit	m	14,994	14,994	17,848	17,848	Gross Profit	m	56,169	59,975	71,391	86,787
Cost of Goods Sold	m	57,786	57,786	67,716	67,716	Cost of Goods Sold	m	211,654	231,145	270,866	328,123
EBITDA	m	6,896	6,896	8,689	8,689	EBITDA	m	26,997	27,584	34,756	44,677
Depreciation	m	1,883	1,883	2,670	2,670	Depreciation	m	6,713	7,534	10,679	13,384
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	5,012	5,012	6,019	6,019	EBIT	m	20,284	20,050	24,077	31,293
Net Interest Income	m	-875	-875	-1,050	-1,050	Net Interest Income	m	-3,131	-3,500	-4,200	-4,400
Associates	m	0	0	0 0	0	Associates	m	0 1,531	0 0	0 0	0
Exceptionals Forex Gains / Losses	m m	0	0	0	0	Exceptionals Forex Gains / Losses	m m	1,551	0	0	0
Other Pre-Tax Income	m	1,782	1,782	1,974	1,974	Other Pre-Tax Income	m	7,048	7,129	7,895	9,834
Pre-Tax Profit	m	5,920	5,920	6,943	6,943	Pre-Tax Profit	m	25,732	23,679	27,772	36,727
Tax Expense	m	-1,539	-1,539	-1,805	-1,805	Tax Expense	m	-6,597	-6,157	-7,221	-9,549
Net Profit	m	4,381	4,381	5,138	5,138	Net Profit	m	19,135	17,523	20,551	27,178
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings Adjusted Earnings	m m	4,381 4,381	4,381 4,381	5,138 5,138	5,138 5,138	Reported Earnings Adjusted Earnings	m m	19,135 17,996	17,523 17,523	20,551 20,551	27,178 27,178
EPS (rep)		11.44	11.44	13.42	13.42	EPS (rep)		49.98	45.77	53.68	70.98
EPS (adj)		11.44	11.44	13.42	13.42	EPS (adj)		47.00	45.77	53.68	70.98
EPS Growth yoy (adj)	%	-2.6	-2.6	17.3	17.3	EPS Growth (adj)	%	28.3	-2.6	17.3	32.2
						PE (rep)	Х	13.6	14.8	12.7	9.6
						PE (adj)	х	14.5	14.8	12.7	9.6
EBITDA Margin	%	9.5	9.5	10.2	10.2	Total DPS	0/	15.00	16.00	17.00	18.00
EBIT Margin	% %	6.9 25.0	6.9 25.0	7.0 25.0	7.0 25.0	Total Div Yield	% m	2.2	2.4	2.5	2.6 383
Earnings Split		25.0	25.0		25.0	Weighted Average Shares	m	383	383	383	383
Revenue Growth EBIT Growth	% %	8.7 -1.2	8.7 -1.2	17.6 20.1	17.6 20.1	Period End Shares	m	383	383	383	383
	70										
Profit and Loss Ratios		2007A	2008E	2009E	2010E	Cashflow Analysis		2007A	2008E	2009E	2010E
Revenue Growth	%	32.8	8.7	17.6	21.2	EBITDA	m	26,997	27,584	34,756	44,677
EBITDA Growth	%	23.0	2.2	26.0	28.5	Tax Paid	m	1,693	-6,157	-7,221	-9,549
EBIT Growth	%	26.7	-1.2	20.1	30.0	Chgs in Working Cap	m	-4,520	-5,901	-3,021	-6,720
Gross Profit Margin	%	21.0	20.6	20.9	20.9	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	10.1	9.5	10.2	10.8	Other	m	-2,082	6,715	7,517	8,940
EBIT Margin	%	7.6	6.9	7.0	7.5	Operating Cashflow	m	22,089	22,241	32,031	37,348
Net Profit Margin	%	7.1	6.0	6.0 31.7	6.6	Acquisitions	m	-8,309	20,000	20,000	20,000
Payout Ratio EV/EBITDA	%	31.9 11.4	35.0 11.1	8.8	25.4 6.9	Capex Asset Sales	m m	-24,612 2,382	-30,000 0	-30,000 0	-30,000 0
EV/EBIT	X X	15.2	15.3	12.8	9.8	Other	m	2,382	2,618	3,090	3,657
LV/LBI1	^	13.2	13.3	12.0	3.0	Investing Cashflow	m	-28,051	-27,382	-26,910	-26,343
Balance Sheet Ratios						Dividend (Ordinary)	m	-5,667	-6,763	-7,030	-7,469
ROE	%	29.0	23.7	24.0	26.7	Equity Raised	m	0,007	0,703	0 0	0,403
ROA	%	11.5	9.8	10.5	12.2	Debt Movements	m	12,435	18,850	-705	2,000
ROIC	%	20.5	14.8	14.1	15.9	Other	m	-3,732	-3,500	-4,200	-4,400
Net Debt/Equity	%	46.3	59.6	57.8	48.6	Financing Cashflow	m	3,036	8,587	-11,935	-9,869
Interest Cover	x	6.5	5.7	5.7	7.1						
Price/Book Book Value per Share	Х	3.8 179.4	3.3 206.8	2.8 241.0	2.3 291.3	Net Chg in Cash/Debt	m	-2,927	3,446	-6,814	1,136
						Balance Sheet		2007A	2008E	2009E	2010E
						Coch					
						Cash	m	8,268	11,713	4,899	6,035
						Receivables Inventories	m	7,822	11,072	13,015	17,094
							m	25,010	29,545 80,705	34,312	42,900
						Investments	m m	85,030 63,046		82,798 105.733	85,101
						Fixed Assets	m m	63,946 0	86,412 0	105,733 0	122,349
						Intangibles Other Assets	m m	160	160	160	160
						Total Assets	m m	190,235	219,608	240,918	273,639
						Payables	m	37,097	34,657	40,438	48,688
						Short Term Debt	m	37,097	34,037 0	40,436	40,000
						Long Term Debt	m	40,091	58,941	58,236	60,236
						Provisions	m	13,643	13,830	14,469	14,909
						Other Liabilities	m	30,706	32,989	35,502	38,265
						Total Liabilities	m	121,537	140,417	148,646	162,098
						Shareholders' Funds	m	68,698	79,190	92,272	111,541
						Minority Interests	m	00,030	0	0	0
						Other	m	0	0	0	0
						Total S/H Equity	m	68,698	79,190	92,272	111,541
						Total Liab & S/H Funds	m	190,235	219,608	240,918	273,639
All figures in IND unlane and it								•	•	•	•
All figures in INR unless noted. Source: Macquarie Research,		008									
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27 March 2008 4

5

Important disclosures:

Recommendation definitions

Macquarie - Australia/New Zealand

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)
Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)
Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

Macquarie - Asia

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 benchmark return

Neutral (Hold) – return within 5% of benchmark return Underperform (Sell)– return >5% below benchmark return

Recommendations - 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition*

This is calculated from the volatility of historic 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 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 December 2007

	AU/NZ	Asia	RSA	USA	CA
Outperform	46.39%	67.98%	73.08%	47.06%	70.00%
Neutral	41.24%	16.78%	21.15%	41.18%	26.92%
Underperform	12.37%	15.24%	5.77%	11.76%	3.08%

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Scott Weaver (Taiwan)	(8862) 2734 7512
Jal Irani (India)	(9122) 6653 3040
Christina Lee (Korea)	(822) 3705 8670
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Conglomerates	
Gary Pinge (Asia)	(852) 2823 3557
Leah Jiang (China)	(8621) 2412 9020
Kenneth Yap (Indonesia)	(6221) 515 7343
Ashwin Sanketh (Singapore)	(65) 6231 2830
Consumer	
Nicolas Wang (China)	(8621) 2412 9018
Jessie Qian (China, Hong Kong)	(852) 2823 3568
Unmesh Sharma (India)	(9122) 6653 3042
Sarina Lesmina (Indonesia)	(6221) 515 7339
Duane Sandberg (Japan) Heather Kang (Korea)	(813) 3512 7867 (822) 3705 8677
HongSuk Na (Korea)	(822) 3705 8678
Woochang Chung (Korea)	(822) 3705 8667
Edward Ong (Malaysia)	(603) 2059 8982
Alex Pomento (Philippines)	(632) 857 0899
Linda Huang (Taiwan)	(8862) 2734 7539
Custom Products	
Patrick Hansen (Japan)	(813) 3512 7876
Tsumugi Akiba (Japan)	(813) 3512 7560
Emerging Leaders	
Hiu-Lui Ko (China)	(852) 2823 4704
Madhur Rao (India)	(9122) 6653 3047
Robert Burghart (Japan)	(813) 3512 7853
Heather Kang (Korea)	(822) 3705 8677
Woochang Chung (Korea)	(822) 3705 8667
Nadine Javellana (Philippines) Scott Weaver (Taiwan)	(632) 857 0890 (8862) 2734 7512
Industrials	(5552) 21011012
Bin Liu (China)	(8621) 2412 9006
Inderjeetsingh Bhatia (India)	(9122) 6653 3166
Christopher Cintavey (Japan)	(813) 3512 7432
Janet Lewis (Japan)	(813) 3512 7475
Daniel Yang (Korea)	(822) 3705 8658
Sunaina Dhanuka (Malaysia)	(603) 2059 8993
Incurance	

Media
Jessie Qian (China, Hong H
Shubham Majumder (India
Prem Jearajasingam (Mala
Alex Pomento (Philippines)

Kong) (852) 2823 3568 (9122) 6653 3049 (603) 2059 8989 lavsia) (632) 857 0899 **Metals and Mining**

(852) 2823 3590 Simon Francis (Asia, China) (852) 2823 3575 Laban Yu (China) YeeMan Chin (China) (852) 2823 3562 Rakesh Arora (India) . (9122) 6653 3054 Adam Worthington (Indonesia) (6221) 515 7338 (813) 3512 7886 Polina Divachkina (Japan) Christina Lee (Korea) (822) 3705 8670 Amornrat Cheevavichawalkul (Thai) (662) 694 7829 Oil and Gas

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

Pharmaceuticals (9122) 6653 3049 Shubham Majumder (India) Naomi Kumagai (Japan) Christina Lee (Korea) (813) 3512 7474 (822) 3705 8670 **Property**

Matt Nacard (Asia) (852) 2823 4731 Eva Lee (China, Hong Kong) (852) 2823 3573 (852) 2823 4077 Corinne Jian (China) (813) 3512 7885 Chang Han Joo (Japan) Hiroshi Okubo (Japan) (813) 3512 7433 Tuck Yin Soong (Singapore) (65) 6231 2838 Elaine Cheong (Singapore) (65) 6231 2839 Patti Tomaitrichitr (Thailand) (662) 694 7727

Technology Warren Lau (Asia) (852) 2823 3592 Andrew Lin (China, Hong Kong) (852) 2823 3563 Suveer Chainani (India) (9122) 6653 3045 Damian Thong (Japan) (813) 3512 7877 David Gibson (Japan) (813) 3512 7880 George Chang (Japan) Yoshihiro Shimada (Japan) (813) 3512 7854 (813) 3512 7862 Do Hoon Lee (Korea) (822) 3705 8641 Michael Bang (Korea) (822) 3705 8659 Patrick Yau (Singapore) (65) 6231 2835 (8862) 2734 7534 Andy Kung (Taiwan) (8862) 2734 7526 Chia-Lin Lu (Taiwan) (8862) 2734 7516 Daniel Chang (Taiwan) James Chiu (Taiwan) (8862) 2734 7517 Nicholas Teo (Taiwan) (8862) 2734 7523

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

Transport & Infrastructure

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

Carol Cao (China, Hong Kong) (852) 2823 4075 Adam Worthington (Indonesia) (6221) 515 7338 Prem Jearajasingam (Malaysia) Dante Tinga (Philippines) (603) 2059 8989 (632) 857 0815 Commodities

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

Data Services Andrea Clohessy (Asia) (852) 2823 4076 (852) 2823 3593

Henry Hon (Asia) Max Choi (Asia) (852) 2823 5479 **Economics**

Roland Randall (Asean) (852) 2823 3572 Bill Belchere (Asia) (852) 2823 4636 (852) 2823 4074 Eli Polatinsky (Asia) Richard Gibbs (Australia) (612) 8232 3935 Paul Cavey (China) (852) 2823 3570 Richard Jerram (Japan) (813) 3512 7855 Quantitative

Martin Emery (Asia) (852) 2823 3582 Viking Kwok (Asia)
George Platt (Australia) (852) 2823 4735 (612) 8232 6539 Raelene de Souza (Australia)

(612) 8232 8388 Strategy/Country Tim Rocks (Asia) Daniel McCormack (Asia) (852) 2823 3585 (852) 2823 4073

(852) 2823 3564 Desh Peramunetilleke (Asia) Stewart Ferns (Asia) (852) 2823 4068 Jake Lynch (China) (8621) 2412 9007 (9122) 6653 3053 Seshadri Sen (India) (6221) 515 7343 Kenneth Yap (Indonesia) Chris Hunt (Japan) (813) 3512 7878 Peter Eadon-Clarke (Japan) (813) 3512 7850 (822) 3705 8643 (603) 2059 8988 Eugene Ha (Korea) Uday Javaram (Malaysia) Edward Ong (Malaysia) (603) 2059 8982 Alex Pomento (Philippines) (632) 857 0899 Tuck Yin Soong (ASEAN, Singapore) (65) 6231 2838 (662) 694 7741 Alastair Macdonald (Thailand)

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Sales

Insurance

Regional Heads of Sales

Makarim Salman (Japan)

Peter Slater (Boston) (1 617) 217 2103 Michelle Paisley (China, Hong Kong) (852) 2823 3516 Ulrike Pollak-Tsutsumi (Frankfurt) (49) 69 7593 8747 Thomas Renz (Geneva) (41) 22 818 7712 Ajay Bhatia (India) (9122) 6653 3200 Stuart Smythe (India) (9122) 6653 3200 Chris Gray (Indonesia) (6221) 515 7304 K.Y. Nam (Korea) (822) 3705 8607 (44) 20 7065 5856 (44) 20 7065 5887 Derek Wilson (London) (N Asia) Julien Roux (London) Lena Yong (Malaysia) (603) 2059 8888 Ismael Pili (Philippines) (65) 6231 2840 Greg Norton-Kidd (New York) (1 212) 231 2527 Luke Sullivan (New York) (1 212) 231 2507

(813) 3512 7421

Regional Heads of Sales cont'd

Mark Lawrence (New York) Sheila Schroeder (San Francisco) (1 212) 231 2516 (1 415) 835 1235 Giles Heyring (Singapore) (65) 6231 2888 Mark Duncan (Taiwan) (8862) 2734 7510 Angus Kent (Thailand) (662) 694 7601 (813) 3512 7820 Dominic Henderson (Tokyo) Nick Cant (Tokyo) (813) 3512 7821 Charles Nelson (ÚK/Europe) (44) 20 7065 2032 Rob Fabbro (UK/Europe) (44) 20 7065 2031

Sales Trading

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

Sales Trading cont'd

Stuart Goddard (Europe) (44) 20 7065 2033 (9122) 6653 3204 Brendan Rake (India) Edward Robinson (London) (44) 20 7065 5883 Robert Risman (New York) (1 212) 231 2555 Isaac Huang (Taiwan) (8862) 2734 7582 (813) 3512 7838 Jon Omori (Tokyo)

Alternative Strategies

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