



03 Aug 2017 13:14:36 ET | 11 pages

 Pharmaceuticals
 Asia | India

Lupin (LUPN.BO)

Expectations and Estimates Being Reset, Focus on Execution

- Vulnerable products falling away, US launches are key** — We are not surprised by Lupin's EBITDA margin cut (to 21-23%) though the faster than expected erosion in gGlumetza revenues meant that the quantum is higher than we expected. Encouragingly, baseline US revenues grew QoQ and the company did not witness any price erosion outside the metformin franchise. A more calibrated approach towards R&D and interesting pipeline opportunities could drive strong growth in FY19, subject to improved execution on the latter front. We revise estimates and cut TP to Rs1,170 from Rs1,350 while maintaining our Buy rating.
- US base business holds up well** — Lupin indicated that decline in gGlumetza and gFortamet (to a lesser extent) accounted for the entire QoQ drop in US revenues. Revenues from other products actually grew QoQ and pricing was flat during the quarter. Overall, the company expects single-digit price erosion in the US in FY18 and double-digit decline in revenues, mostly led by gGlumetza.
- Margin guidance cut, appears achievable now** — Lupin's revised FY18 EBITDA margin guidance of 21-23% (vs. 26-28% earlier) is lower than our estimate of 24%, primarily due to sharper erosion in gGlumetza sales. We believe this is a more realistic range as the India business recovers over the rest of the year and the company recalibrates its R&D strategy: focus resources on fewer areas, bring in external funding of certain projects, likely c.10+% lower spend YoY.
- Delivery on key US launches is key to FY19 growth** — Lupin has several interesting products in its pipeline and better execution on getting the bigger ones approved is key to growth in FY19. The management highlighted some key opportunities viz. a) Levothyroxine, Fosrenol & Tamiflu in the near term; b) certain FTFs (Ranexa, Solodyn, Moxeza) and two mesalamine products (Apriso, Lialda) over next year. Renvela, Renagel, Welchol: late but should still be good products.

Revise TP to 1,170 — We cut FY18/19/20E EPS by 18%/10%/10% on the back of lower US sales and margins as well as a stronger INR. This leads to our lower TP - based on 20xSept'18E EPS.

Statistical Abstract

Year to	Net Profit	Diluted EPS	EPS growth	P/E	P/B	ROE	Yield
31 Mar	(RsM)	(Rs)	(%)	(x)	(x)	(%)	(%)
2016A	22,955	50.78	-4.5	19.6	4.1	23.1	0.8
2017A	26,702	59.07	16.3	16.8	3.3	21.8	0.8
2018E	21,820	48.27	-18.3	20.6	2.9	15.2	0.8
2019E	30,725	67.97	40.8	14.6	2.5	18.5	0.8
2020E	37,754	83.51	22.9	11.9	2.1	19.2	0.8

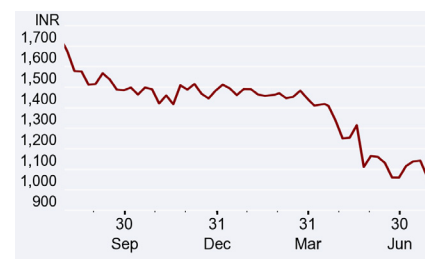
Source: Powered by dataCentral

- Target Price Change
- Estimate Change

Buy	1
Price (03 Aug 17 15:57)	Rs994.90
Target price	Rs1,170.00
	from Rs1,350.00
Expected share price return	17.6%
Expected dividend yield	0.8%
Expected total return	18.4%
Market Cap	Rs449,444M
	US\$7,063M

Price Performance

(RIC: LUPN.BO, BB: LPC IN)



Prashant Nair, CFA^{AC}

 +91-22-6175-9855
 prashant.nair@citi.com

Vivek Agrawal

 +91-22-6175-9875
 vivek1.agrawal@citi.com

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

Citi Research is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Certain products (not inconsistent with the author's published research) are available only on Citi's portals.

LUPN.BO: Fiscal year end 31-Mar						Price: Rs994.90; TP: Rs1,170.00; Market Cap: Rs449,444m; Recomm: Buy					
Profit & Loss (Rsm)	2016	2017	2018E	2019E	2020E	Valuation ratios	2016	2017	2018E	2019E	2020E
Sales revenue	142,106	174,943	171,501	198,728	221,854	PE (x)	19.6	16.8	20.6	14.6	11.9
Cost of sales	-55,747	-67,048	-68,454	-76,861	-83,026	PB (x)	4.1	3.3	2.9	2.5	2.1
Gross profit	86,359	107,896	103,047	121,867	138,828	EV/EBITDA (x)	12.8	11.1	13.1	9.7	7.8
Gross Margin (%)	60.8	61.7	60.1	61.3	62.6	FCF yield (%)	-13.7	2.4	5.6	5.7	7.2
EBITDA (Adj)	37,555	46,490	38,350	50,074	59,128	Dividend yield (%)	0.8	0.8	0.8	0.8	0.8
EBITDA Margin (Adj) (%)	26.4	26.6	22.4	25.2	26.7	Payout ratio (%)	15	13	16	11	9
Depreciation	-4,635	-9,122	-9,609	-10,291	-11,124	ROE (%)	22.9	20.9	15.2	18.5	19.2
Amortisation	0	0	0	0	0	Cashflow (Rsm)	2016	2017	2018E	2019E	2020E
EBIT (Adj)	32,920	37,368	28,741	39,783	48,005	EBITDA	37,555	46,490	38,350	50,074	59,128
EBIT Margin (Adj) (%)	23.2	21.4	16.8	20.0	21.6	Working capital	-31,537	-455	2,945	-6,915	-5,383
Net interest	-447	-1,525	-1,767	-1,422	-1,077	Other	-9,688	-10,279	-5,165	-7,648	-9,186
Associates	0	0	0	0	0	Operating cashflow	-3,669	35,756	36,130	35,512	44,560
Non-op/Except	1,877	-494	2,105	2,590	3,395	Capex	-57,746	-24,759	-11,107	-10,100	-12,100
Pre-tax profit	34,350	35,349	29,079	40,951	50,322	Net acq/disposals	0	0	0	0	0
Tax	-11,535	-9,785	-7,270	-10,238	-12,581	Other	0	0	0	0	0
Extraord./Min.Int./Pref.div.	-88	11	11	12	13	Investing cashflow	-57,746	-24,759	-11,107	-10,100	-12,100
Reported net profit	22,727	25,575	21,820	30,725	37,754	Dividends paid	-4,055	-4,057	-4,057	-4,057	-4,057
Net Margin (%)	16.0	14.6	12.7	15.5	17.0	Financing cashflow	58,126	6,123	-20,825	-20,480	-20,135
Core NPAT	22,955	26,702	21,820	30,725	37,754	Net change in cash	-3,289	17,120	4,198	4,932	12,325
Per share data	2016	2017	2018E	2019E	2020E	Free cashflow to s/holders	-61,415	10,997	25,023	25,412	32,460
Reported EPS (Rs)	50.27	56.57	48.27	67.97	83.51	Segment Revenue Break Up	2016	2017	2018E	2019E	2020E
Core EPS (Rs)	50.78	59.07	48.27	67.97	83.51	Formulations (Rs m)	2016	2017	2018E	2019E	2020E
DPS (Rs)	7.50	7.50	7.50	7.50	7.50	India Branded Formulations	33,916	38,157	41,973	49,108	56,474
CFPS (Rs)	-8.12	79.09	79.92	78.55	98.57	US Generics	56,415	79,553	66,565	81,566	91,702
FCFPS (Rs)	-135.85	24.33	55.35	56.21	71.80	US Branded	3,013	3,074	2,982	2,982	2,982
BVPS (Rs)	244.38	300.29	339.81	399.14	474.11	Japan	13,646	15,528	19,963	21,154	22,440
Wtd avg ord shares (m)	452	452	452	452	452	Europe	4,278	4,706	5,176	5,694	6,263
Wtd avg diluted shares (m)	452	452	452	452	452	South Africa	3,998	4,998	5,247	6,034	6,940
Growth rates	2016	2017	2018E	2019E	2020E	Other Emerging Markets	9,697	13,799	14,489	16,663	19,162
Sales revenue (%)	11.3	23.1	-2.0	15.9	11.6	API (Rs m)	12,074	11,383	11,383	11,383	11,383
EBIT (Adj) (%)	3.4	13.5	-23.1	38.4	20.7						
Core NPAT (%)	-4.5	16.3	-18.3	40.8	22.9						
Core EPS (%)	-4.5	16.3	-18.3	40.8	22.9						
Balance Sheet (Rsm)	2016	2017	2018E	2019E	2020E						
Cash & cash equiv.	8,399	28,135	32,333	37,266	49,591						
Accounts receivables	45,498	51,883	51,099	57,856	63,593						
Inventory	31,787	36,423	36,774	42,649	47,638						
Net fixed & other tangibles	86,379	108,560	110,058	109,867	110,843						
Goodwill & intangibles	29,644	23,100	23,100	23,100	23,100						
Financial & other assets	21,864	12,895	12,911	12,929	12,948						
Total assets	223,572	260,996	266,276	283,665	307,712						
Accounts payable	29,079	32,867	33,148	38,280	43,056						
Short-term debt	68,534	76,097	61,097	46,097	31,097						
Long-term debt	3,241	8,830	8,830	8,830	8,830						
Provisions & other liab	12,553	7,882	10,128	10,731	11,318						
Total liabilities	113,407	125,676	113,203	103,938	94,300						
Shareholders' equity	109,844	134,975	152,738	179,406	213,103						
Minority interests	321	345	334	322	309						
Total equity	110,165	135,321	153,072	179,728	213,412						
Net debt (Adj)	63,376	56,792	37,594	17,661	-9,664						
Net debt to equity (Adj) (%)	57.5	42.0	24.6	9.8	-4.5						

For definitions of the items in this table, please click [here](#).

Bull/Bear: Lupin (LUPN.BO)

Bull/Bear: Lupin (LUPN.BO)

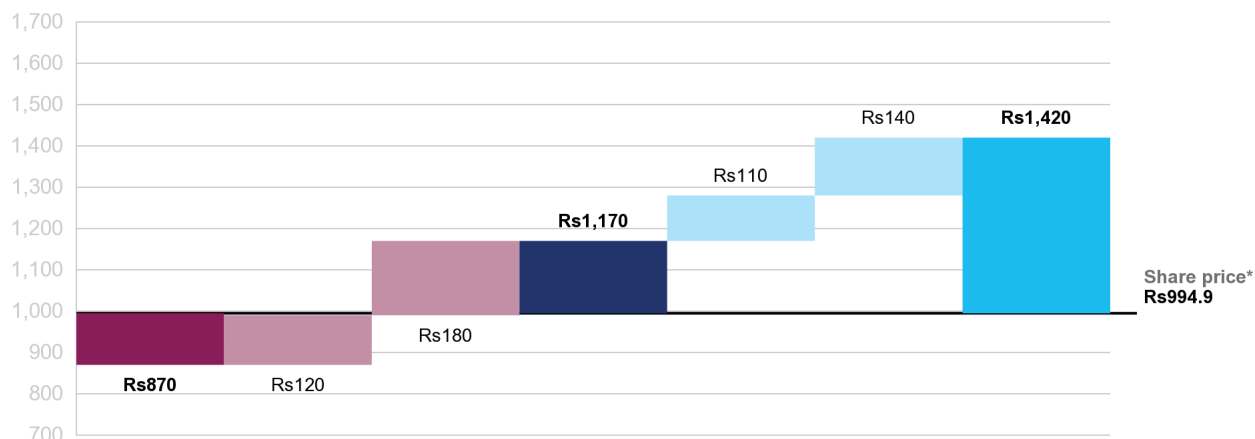


Rs1,170 target price

18% expected share price return

Buy rating

56pp Bull/Bear Spread



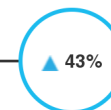
Sharp erosion in US base business

Delay in key approvals



Strong pick up in complex generic filings

Strong Recovery in US generics



Share price* Rs994.9

Source: Citi Research

*Share price as of 3 Aug 2017 Aug 2017 15:57



Rs1,420

- Strong recovery in US generics in FY19. Approvals of multiple high value products, no major surprise on pricing front
- Good progress on complex generics (Respiratory, complex injectables etc) or specialty front, leading to a higher multiple (22x)



Rs1,170

- FY18 revenue decline in low single digit (c.2% yoy). US generics decline by c12% yoy.
- EBITDA margins in FY19 improve by c250-300 bps (approval of certain high value products in US, recovery in India formulations on the base of GST impact in FY18)



Rs870

- c15% erosion in US base business, higher than expected erosion in Glumetza / Fortamet.
- Critical products get delayed further

Figure 1. Lupin – 1QFY18 Consolidated Income Statement (Rs m, %)

	1QFY17	1QFY18	% Ch YoY	4QFY17	% Ch QoQ
Net Sales	43,136	38,068	(11.7)	41,619	(8.5)
Other Operating Income	1,259	628	(50.1)	914	(31.4)
Total Revenues	44,394	38,696	(12.8)	42,533	(9.0)
Raw material cost	12,719	12,326	(3.1)	11,851	4.0
as a % sales	28.7	31.9	320 bps	27.9	399 bps
Staff cost	7,059	7,180	1.7	7,078	1.4
as a % sales	15.9	18.6	265 bps	16.6	191 bps
Other expenditure	11,535	11,505	(0.3)	12,552	(8.3)
as a % sales	26.0	29.7	375 bps	29.5	22 bps
Total expenditure	31,313	31,011	(1.0)	31,480	(1.5)
EBITDA	13,081	7,685	(41.3)	11,053	(30.5)
EBITDA Margins (%)	29.5	19.9	-961 bps	26.0	-613 bps
Depreciation	2,027	2,605	28.5	2,674	(2.6)
Interest	320	440	37.6	406	8.3
Other Income	826	320	(61.3)	453	(29.5)
PBT	11,560	4,959	(57.1)	8,426	(41.1)
Tax	2,734	1,368	(50.0)	1,367	0.1
Effective Tax Rate (%)	23.7	27.6	393 bps	16.2	1136 bps
Minority Interest	6	11	71.0	18	(40.4)
Recurring PAT	8,820	3,581	(59.4)	6,393	(44.0)
EO expense/(income) items	-	-		3,239	
Reported PAT	8,820	3,581	(59.4)	3,802	(5.8)

Source: Citi Research

Figure 2. Lupin – 1QFY18 Revenue Breakdown (Rs m)

	1QFY17	1QFY18	% Ch YoY	4QFY17	% Ch QoQ
Formulations	40,267	35,275	(12.4)	38,804	(9.1)
% of Total Sales	93.3	92.7		93.2	
North America	21,886	16,018	(26.8)	19,007	(15.7)
India	9,313	9,324	0.1	8,788	6.1
Asia Pacific	5,416	5,989	10.6	6,118	(2.1)
EMEA	2,194	2,259	3.0	3,012	(25.0)
LATAM	1,089	1,269	16.5	1,269	-
ROW	369	416	12.7	610	(31.8)
APIs	2,869	2,793	(2.6)	2,815	(0.8)
% of Total Sales	6.7	7.3		6.8	
Total	43,136	38,068	(11.7)	41,619	(8.5)

Source: Citi Research

Figure 3. Earnings Revision

EPS	FY18E	FY19E	FY20E
New	48.3	68.0	83.5
Old	58.8	75.7	92.5
Change (%)	-18%	-10%	-10%

Source: Citi Research

Lupin

Company description

Lupin produces a wide range of generic & branded formulations and APIs for the developed and developing markets. Its products reach over 70 countries in the world. The company has emerged as one of the leading Indian participants in the US (ranked fifth by prescriptions) and Japan (ranked sixth) and is among the fastest-growing companies in India.

Investment strategy

We rate Lupin shares as Buy with a target price of Rs1,170. It stands out among its peers, given a healthy geographic mix (80%+ sales from India, the US and Japan), differentiated products and robust financial metrics. It has made good progress in its efforts to move up the value chain in terms of product (from APIs to formulations) and markets (from less regulated to regulated markets), and we believe it is now entering a high-growth phase, with multiple drivers: 1) Big product rollout in the US, including niche/PIV opportunities; 2) Growth in emerging markets (including India and Japan); and 3) margin improvement by back-ending sourcing to India from Japan, and rising US sales. Robust growth and healthy capital efficiency support our positive view.

Valuation

We value Lupin at Rs1,170, based on 20x Sept'18E EPS. Our target multiple is derived from 1) a 13x P/E for the US generics business, set at a 15-20% discount to mid-sized US generics players given the high risk to a couple of in-market products; 2) a 28x P/E for the India business, ascribing a 20-25% premium to the 12M forward consensus-based P/E for Alkem, a close pure-India comparable, to reflect its market leadership and good growth; and 3) 18x for Others businesses (ex. India and the US, including APIs). The 18x is in-line with the 16-19x P/E range for emerging-market peers such as Aspen Pharma, Adcock Ingram, and Gedeon Richter. We then apply a +5% adjustment factor to account for the company's relatively healthy profitability/RoI.

Risks

Key risks that could impede the stock from achieving our target price include: 1) Rising competitive intensity in its US business, given faster pace of approvals for the industry; 2) Delay in approval of products especially from the niche portfolio in the US; and 3) Inability to effectively scale up the Japanese operations would hurt one of the longer-term growth drivers.

Appendix A-1

Analyst Certification

The research analysts primarily responsible for the preparation and content of this research report are either (i) designated by “AC” in the author block or (ii) listed in bold alongside content which is attributable to that analyst. If multiple AC analysts are designated in the author block, each analyst is certifying with respect to the entire research report other than (a) content attributable to another AC certifying analyst listed in bold alongside the content and (b) views expressed solely with respect to a specific issuer which are attributable to another AC certifying analyst identified in the price charts or rating history tables for that issuer shown below. Each of these analysts certify, with respect to the sections of the report for which they are responsible: (1) that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc. and its affiliates; and (2) no part of the research analyst’s compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Lupin (LUPN.BO)

Ratings and Target Price History Fundamental Research

Analyst: Prashant Nair, CFA



Date	Rating	Target Price	Closing Price
1 31-Jul-14 22:22:04	1	*1,650.00	1,182.05
2 28-Jan-15 07:04:49	1	*2,020.00	1,513.35
3 13-Aug-15 19:53:45	1	*2,270.00	1,757.00
4 24-Sep-15 18:24:09	1	*2,550.00	1,989.45
5 27-Oct-15 17:42:15	1	*2,360.00	1,945.65
6 24-Feb-16 04:33:01	1	*2,130.00	1,762.15
7 19-May-16 21:28:11	1	*1,930.00	1,655.80
8 27-Oct-16 07:43:51	1	*1,970.00	1,485.00
9 09-Feb-17 12:58:13	1	*1,890.00	1,495.35
10 24-May-17 17:12:07	1	*1,630.00	1,227.65
11 13-Jul-17 08:52:17	1	*1,480.00	1,141.90
12 21-Jul-17 07:19:42	1	*1,350.00	1,142.85

*Indicates Change

Rating/target price changes above reflect Eastern Time

Citigroup Global Markets Inc. or its affiliates has received compensation for investment banking services provided within the past 12 months from Lupin.

Citigroup Global Markets Inc. or an affiliate received compensation for products and services other than investment banking services from Lupin in the past 12 months.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as investment banking client(s): Lupin.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, securities-related: Lupin.

Citigroup Global Markets Inc. currently has, or had within the past 12 months, the following as clients, and the services provided were non-investment-banking, non-securities-related: Lupin.

Disclosure for investors in the Republic of Turkey: Under Capital Markets Law of Turkey (Law No: 6362), the investment information, comments and advices given herein are not part of investment advisory activity. Investment advisory services are provided by authorized institutions to persons and entities privately by considering their risk and return preferences. Whereas the comments and advices included herein are of general nature. Therefore, they may not fit to your financial situation and risk and return preferences. For this reason, making an investment decision only by relying on the information given herein may not give rise to results that fit your expectations. Furthermore, Citi Research is a division of Citigroup Global Markets Inc. (the “Firm”), which does and seeks to do business with companies and/or trades on securities covered in this research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report.

Analysts’ compensation is determined by Citi Research management and Citigroup’s senior management and is based upon activities and services intended to benefit the investor clients of Citigroup Global Markets Inc. and its affiliates (the “Firm”). Compensation is not linked to specific transactions or recommendations. Like all Firm employees, analysts receive compensation that is impacted by overall Firm profitability which includes investment banking, sales and trading, and principal trading revenues. One factor in equity research analyst compensation is arranging corporate access events between institutional clients and the management teams of covered companies. Typically, company management is more likely to participate when the analyst has a positive view of the company.

For securities recommended in the Product in which the Firm is not a market maker, the Firm is a liquidity provider in the issuers’ financial instruments and may act as principal in connection with such transactions. The Firm is a regular issuer of traded financial instruments linked to securities that may have been recommended in the Product. The Firm regularly trades in the securities of the issuer(s) discussed in the Product. The Firm may engage in securities

transactions in a manner inconsistent with the Product and, with respect to securities covered by the Product, will buy or sell from customers on a principal basis.

For important disclosures (including copies of historical disclosures) regarding the companies that are the subject of this Citi Research product ("the Product"), please contact Citi Research, 388 Greenwich Street, 28th Floor, New York, NY, 10013, Attention: Legal/Compliance [E6WYB6412478]. In addition, the same important disclosures, with the exception of the Valuation and Risk assessments and historical disclosures, are contained on the Firm's disclosure website at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures. Valuation and Risk assessments can be found in the text of the most recent research note/report regarding the subject company. Pursuant to the Market Abuse Regulation a history of all Citi Research recommendations published during the preceding 12-month period can be accessed via Citi Velocity (<https://www.citivelocity.com/cv2>) or your standard distribution portal. Historical disclosures (for up to the past three years) will be provided upon request.

Citi Research Equity Ratings Distribution

Data current as of 30 Jun 2017	12 Month Rating			Catalyst Watch		
	Buy	Hold	Sell	Buy	Hold	Sell
Citi Research Global Fundamental Coverage	47%	39%	13%	2%	97%	1%
<i>% of companies in each rating category that are investment banking clients</i>	64%	64%	58%	57%	64%	51%

Guide to Citi Research Fundamental Research Investment Ratings:

Citi Research stock recommendations include an investment rating and an optional risk rating to highlight high risk stocks.

Risk rating takes into account both price volatility and fundamental criteria. Stocks will either have no risk rating or a High risk rating assigned.

Investment Ratings: Citi Research investment ratings are Buy, Neutral and Sell. Our ratings are a function of analyst expectations of expected total return ("ETR") and risk. ETR is the sum of the forecast price appreciation (or depreciation) plus the dividend yield for a stock within the next 12 months. The Investment rating definitions are: Buy (1) ETR of 15% or more or 25% or more for High risk stocks; and Sell (3) for negative ETR. Any covered stock not assigned a Buy or a Sell is a Neutral (2). For stocks rated Neutral (2), if an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of Citi Research management not to assign a target price and, thus, not derive an ETR. Analysts may place covered stocks "Under Review" in response to exceptional circumstances (e.g. lack of information critical to the analyst's thesis) affecting the company and / or trading in the company's securities (e.g. trading suspension). As soon as practically possible, the analyst will publish a note re-establishing a rating and investment thesis. To satisfy regulatory requirements, we correspond Under Review and Neutral to Hold in our ratings distribution table for our 12-month fundamental rating system. However, we reiterate that we do not consider Under Review to be a recommendation. Investment ratings are determined by the ranges described above at the time of initiation of coverage, a change in investment and/or risk rating, or a change in target price (subject to limited management discretion). At other times, the expected total returns may fall outside of these ranges because of market price movements and/or other short-term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by Research Management. Your decision to buy or sell a security should be based upon your personal investment objectives and should be made only after evaluating the stock's expected performance and risk.

Prior to May 1, 2014 Citi Research may have also assigned a three-month relative call (or rating) to a stock to highlight expected out-performance (most preferred) or under-performance (least preferred) versus the geographic and industry sector over a 3 month period. The relative call may have highlighted a specific near-term catalyst or event impacting the company or the market that was anticipated to have a short-term price impact on the equity securities of the company. Absent any specific catalyst the analyst(s) may have indicated the most and least preferred stocks in the universe of stocks under consideration, explaining the basis for this short-term view. This three-month view may have been different from and did not affect a stock's fundamental equity rating, which reflected a longer-term total absolute return expectation.

Catalyst Watch Upside/Downside calls:

Citi Research may also include a Catalyst Watch Upside or Downside call to highlight specific near-term catalysts or events impacting the company or the market that are expected to influence the share price over a specified period of 30 or 90 days. A Catalyst Watch Upside (Downside) call indicates that the analyst expects the share price to rise (fall) in absolute terms over the specified period. A Catalyst Watch Upside/Downside call will automatically expire at the end of the specified 30/90 day period; the analyst may also close a Catalyst Watch call prior to the end of the specified period in a published research note. A Catalyst Watch Upside or Downside call may be different from and does not affect a stock's fundamental equity rating, which reflects a longer-term total absolute return expectation. For purposes of FINRA ratings-distribution-disclosure rules, a Catalyst Watch Upside call corresponds to a buy recommendation and a Catalyst Watch Downside call corresponds to a sell recommendation. Any stock not assigned to a Catalyst Watch Upside or Catalyst Watch Downside call is considered Catalyst Watch Non-Rated (CWNR). For purposes of FINRA ratings-distribution-disclosure rules, we correspond CWNR to Hold in our ratings distribution table for our Catalyst Watch Upside/Downside rating system. However, we reiterate that we do not consider CWNR to be a recommendation. For all Catalyst Watch Upside/Downside calls, risk exists that the catalyst(s) and associated share-price movement will not materialize as expected.

NON-US RESEARCH ANALYST DISCLOSURES

Non-US research analysts who have prepared this report (i.e., all research analysts listed below other than those identified as employed by Citigroup Global Markets Inc.) are not registered/qualified as research analysts with FINRA. Such research analysts may not be associated persons of the member organization and therefore may not be subject to the FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The legal entities employing the authors of this report are listed below:

Citigroup Global Markets India Private Limited

Prashant Nair, CFA; Vivek Agrawal

OTHER DISCLOSURES

Any price(s) of instruments mentioned in recommendations are as of the prior day's market close on the primary market for the instrument, unless otherwise stated.

The completion and first dissemination of any recommendations made within this research report are as of the Eastern date-time displayed at the top of the Product. If the Product references views of other analysts then please refer to the price chart or rating history table for the date/time of completion and first dissemination with respect to that view.

European regulations require that where a recommendation differs from any of the author's previous recommendations concerning the same financial instrument or issuer that has been published during the preceding 12-month period that the change(s) and the date of that previous recommendation are indicated. For fundamental coverage please refer to the price chart or rating change history within this disclosure appendix or the issuer disclosure summary at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

European regulations require that a firm must establish, implement and make available a policy for managing conflicts of interest arising as a result of publication or distribution of investment research. The policy applicable to Citi Research's Products can be found at https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

The proportion of all Citi Research fundamental research recommendations that were the equivalent to "Buy", "Hold", "Sell" at the end of each quarter over the prior 12 months (with the % of these that had received investment firm services from Citi in the prior 12 months shown in brackets) is as follows: Q2 2017 Buy 32% (70%), Hold 45% (63%), Sell 24% (57%); Q1 2017 Buy 32% (70%), Hold 45% (63%), Sell 24% (56%); Q4 2016 Buy 31% (71%), Hold 45% (64%), Sell 24% (58%); Q3 2016 Buy 32% (68%), Hold 44% (64%), Sell 24% (61%).

Citigroup Global Markets India Private Limited and/or its affiliates may have, from time to time, actual or beneficial ownership of 1% or more in the debt securities of the subject issuer.

Citi Research generally disseminates its research to the Firm's global institutional and retail clients via both proprietary (e.g., Citi Velocity and Citi Personal Wealth Management) and non-proprietary electronic distribution platforms. Certain research may be disseminated only via the Firm's proprietary distribution platforms; however such research will not contain changes to earnings forecasts, target price, investment or risk rating or investment thesis or be otherwise inconsistent with the author's previously published research. Certain research is made available only to institutional investors to satisfy regulatory requirements. Individual Citi Research analysts may also opt to circulate published research to one or more clients by email; such email distribution is discretionary and is done only after the research has been disseminated. The level and types of services provided by Citi Research analysts to clients may vary depending on various factors such as the client's individual preferences as to the frequency and manner of receiving communications from analysts, the client's risk profile and investment focus and perspective (e.g. market-wide, sector specific, long term, short-term etc.), the size and scope of the overall client relationship with the Firm and legal and regulatory constraints.

Pursuant to Comissão de Valores Mobiliários Rule 483, Citi is required to disclose whether a Citi related company or business has a commercial relationship with the subject company. Considering that Citi operates multiple businesses in more than 100 countries around the world, it is likely that Citi has a commercial relationship with the subject company.

Securities recommended, offered, or sold by the Firm: (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including Citibank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security. Any decision to purchase securities mentioned in the Product must take into account existing public information on such security or any registered prospectus. Although information has been obtained from and is based upon sources that the Firm believes to be reliable, we do not guarantee its accuracy and it may be incomplete and condensed. Note, however, that the Firm has taken all reasonable steps to determine the accuracy and completeness of the disclosures made in the Important Disclosures section of the Product. The Firm's research department has received assistance from the subject company(ies) referred to in this Product including, but not limited to, discussions with management of the subject company(ies). Firm policy prohibits research analysts from sending draft research to subject companies. However, it should be presumed that the author of the Product has had discussions with the subject company to ensure factual accuracy prior to publication. All opinions, projections and estimates constitute the judgment of the author as of the date of the Product and these, plus any other information contained in the Product, are subject to change without notice. Prices and availability of financial instruments also are subject to change without notice. Notwithstanding other departments within the Firm advising the companies discussed in this Product, information obtained in such role is not used in the preparation of the Product. Although Citi Research does not set a predetermined frequency for publication, if the Product is a fundamental equity or credit research report, it is the intention of Citi Research to provide research coverage of the covered issuers, including in response to news affecting the issuer. For non-fundamental research reports, Citi Research may not provide regular updates to the views, recommendations and facts included in the reports. Notwithstanding that Citi Research maintains coverage on, makes recommendations concerning or discusses issuers, Citi Research may be periodically restricted from referencing certain issuers due to legal or policy reasons. Citi Research may provide different research products and services to different classes of customers (for example, based upon long-term or short-term investment horizons) that may lead to differing conclusions or recommendations that could impact the price of a security contrary to the recommendations in the alternative research product, provided that each is consistent with the rating system for each respective product.

Investing in non-U.S. securities, including ADRs, may entail certain risks. The securities of non-U.S. issuers may not be registered with, nor be subject to the reporting requirements of the U.S. Securities and Exchange Commission. There may be limited information available on foreign securities. Foreign companies are generally not subject to uniform audit and reporting standards, practices and requirements comparable to those in the U.S. Securities of some foreign companies may be less liquid and their prices more volatile than securities of comparable U.S. companies. In addition, exchange rate movements may have an adverse effect on the value of an investment in a foreign stock and its corresponding dividend payment for U.S. investors. Net dividends to ADR investors are estimated, using withholding tax rates conventions, deemed accurate, but investors are urged to consult their tax advisor for exact dividend computations. Investors who have received the Product from the Firm may be prohibited in certain states or other jurisdictions from purchasing securities mentioned in the Product from the Firm. Please ask your Financial Consultant for additional details. Citigroup Global Markets Inc. takes responsibility for the Product in the United States. Any orders by US investors resulting from the information contained in the Product may be placed only through Citigroup Global Markets Inc.

Important Disclosures for Bell Potter Customers: Bell Potter is making this Product available to its clients pursuant to an agreement with Citigroup Global Markets Australia Pty Limited. Neither Citigroup Global Markets Australia Pty Limited nor any of its affiliates has made any determination as to the suitability of the information provided herein and clients should consult with their Bell Potter financial advisor before making any investment decision.

The Citigroup legal entity that takes responsibility for the production of the Product is the legal entity which the first named author is employed by. The Product is made available in **Australia** through Citigroup Global Markets Australia Pty Limited. (ABN 64 003 114 832 and AFSL No. 240992), participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. Citigroup Global Markets Australia Pty Limited is not an Authorised Deposit-Taking Institution under the Banking Act 1959, nor is it regulated by the Australian Prudential Regulation Authority. The Product is made available in Australia to Private Banking wholesale clients through Citigroup Pty Limited (ABN 88 004 325 080 and AFSL 238098). Citigroup Pty Limited provides all financial product advice to Australian Private Banking wholesale clients through bankers and relationship managers. If there is any doubt about the suitability of investments held in Citigroup Private Bank accounts, investors should contact the Citigroup Private Bank in Australia. Citigroup companies may compensate affiliates and their representatives for providing products and services to clients. The Product is made available in **Brazil** by Citigroup Global Markets Brasil - CCTVM SA, which is regulated by CVM - Comissão de Valores Mobiliários ("CVM"), BACEN - Brazilian Central Bank, APIMEC - Associação dos Analistas e Profissionais de Investimento do Mercado de Capitais and ANBIMA - Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais. Av. Paulista, 1111 - 14º andar (parte) - CEP: 01311920 - São Paulo - SP. If the Product is being made available in certain provinces of **Canada** by Citigroup Global Markets (Canada) Inc. ("CGM Canada"), CGM Canada has approved the Product. Citigroup Place, 123 Front Street West, Suite 1100, Toronto, Ontario M5J 2M3. This product is available in **Chile** through Banchile Corredores de Bolsa S.A., an indirect subsidiary of Citigroup Inc., which is regulated by the Superintendencia de Valores y Seguros. Agustinas 975, piso 2, Santiago, Chile. The Product is distributed in **Germany** by Citigroup Global Markets Deutschland AG ("CGMD"), which is regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin). CGMD, Reuterweg 16, 60323 Frankfurt am Main. Research which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is issued in **Hong Kong** by, or on behalf of, Citigroup Global Markets Asia Limited which takes full responsibility for its content. Citigroup Global Markets Asia Ltd. is regulated by Hong Kong Securities and Futures Commission. If the Research is made available through Citibank, N.A., Hong Kong Branch, for its clients in Citi Private Bank, it is made available by Citibank N.A., Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is regulated by the Hong Kong Monetary Authority. Please contact your Private Banker in Citibank N.A., Hong Kong, Branch if you have any queries on or any matters arising from or in connection with this document. The Product is made available in **India** by Citigroup Global Markets India Private Limited (CGM), which is regulated by the Securities and Exchange Board of India (SEBI), as a Research Analyst (SEBI Registration No. INH00000438). CGM is also actively involved in the business of merchant banking, stock brokerage, and depository participant, in India, and is registered with SEBI in this regard. CGM's registered office is at 1202, 12th Floor, FIFC, G Block, Bandra Kurla Complex, Bandra East, Mumbai - 400051. CGM's Corporate Identity Number is U99999MH2000PTC126657, and its contact details are: Tel:+9102261759999 Fax:+9102261759961. The Product is made available in **Indonesia** through PT Citigroup Securities Indonesia. 5/F, Citibank Tower, Bapindo Plaza, Jl. Jend. Sudirman Kav. 54-55, Jakarta 12190. Neither this Product nor any copy hereof may be distributed in Indonesia or to any Indonesian citizens wherever they are domiciled or to Indonesian residents except in compliance with applicable capital market laws and regulations. This Product is not an offer of securities in Indonesia. The securities referred to in this Product have not been registered with the Capital Market and Financial Institutions Supervisory Agency (BAPEPAM-LK) pursuant to relevant capital market laws and regulations, and may not be offered or sold within the territory of the Republic of Indonesia or to Indonesian citizens through a public offering or in circumstances which constitute an offer within the meaning of the Indonesian capital market laws and regulations. The Product is made available in **Israel** through Citibank NA, regulated by the Bank of Israel and the Israeli Securities Authority. Citibank, N.A., Platinum Building, 21 Ha'arba'ah St, Tel Aviv, Israel. The Product is made available in **Italy** by Citigroup Global Markets Limited, which is authorised by the PRA and regulated by the FCA and the PRA. Via dei Mercanti, 12, Milan, 20121, Italy. The Product is made available in **Japan** by Citigroup Global Markets Japan Inc. ("CGMJ"), which is regulated by Financial Services Agency, Securities and Exchange Surveillance Commission, Japan Securities Dealers Association, Tokyo Stock Exchange and Osaka Securities Exchange. Shin-Marunouchi Building, 1-5-1 Marunouchi, Chiyoda-ku, Tokyo 100-6520 Japan. If the Product was distributed by SMBC Nikko Securities Inc. it is being so distributed under license. In the event that an error is found in a CGMJ research report, a revised version will be posted on the Firm's Citi Velocity website. If you have questions regarding Citi Velocity, please call (81 3) 6270-3019 for help. The Product is made available in **Korea** by Citigroup Global Markets Korea Securities Ltd., which is regulated by the Financial Services Commission, the Financial Supervisory Service and the Korea Financial Investment Association (KOFIA). Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. KOFIA makes available registration information of research analysts on its website. Please visit the following website if you wish to find KOFIA registration information on research analysts of Citigroup Global Markets Korea Securities Ltd. <http://dis.kofia.or.kr/websquare/index.jsp?w2xPath=/wq/fundMgr/DISfundMgrAnalystList.xml&divisionId=MDIS03002002000000&serviceId=SDIS030020020000>. The Product is made available in Korea by Citibank Korea Inc., which is regulated by the Financial Services Commission and the Financial Supervisory Service. Address is Citibank Building, 39 Da-dong, Jung-gu, Seoul 100-180, Korea. The Product is made available in **Malaysia** by Citigroup Global Markets Malaysia Sdn Bhd (Company No. 460819-D) ("CGMM") to its clients and CGMM takes responsibility for its contents. CGMM is regulated by the Securities Commission of Malaysia. Please contact CGMM at Level 43 Menara Citibank, 165 Jalan Ampang, 50450 Kuala Lumpur, Malaysia in respect of any matters arising from, or in connection with, the Product. The Product is made available in **Mexico** by Acciones y Valores Banamex, S.A. De C. V., Casa de Bolsa, Integrante del Grupo Financiero Banamex ("Accival") which is a wholly owned subsidiary of Citigroup Inc. and is regulated by Comisión Nacional Bancaria y de Valores. Reforma 398, Col. Juárez, 06600 Mexico, D.F. In **New Zealand** the Product is made available to 'wholesale clients' only as defined by s5C(1) of the Financial Advisers Act 2008 ('FAA') through Citigroup Global Markets Australia Pty Ltd (ABN 64 003 114 832 and AFSL No. 240992), an overseas financial adviser as defined by the FAA, participant of the ASX Group and regulated by the Australian Securities & Investments Commission. Citigroup Centre, 2 Park Street, Sydney, NSW 2000. The Product is made available in **Pakistan** by Citibank N.A. Pakistan branch, which is regulated by the State Bank of Pakistan and Securities Exchange Commission, Pakistan. AWT Plaza, 1.1. Chundrigar Road, P.O. Box 4889, Karachi-74200. The Product is made available in the **Philippines** through Citicorp Financial Services and Insurance Brokerage Philippines, Inc., which is regulated by the Philippines Securities and Exchange Commission. 20th Floor Citibank Square Bldg. The Product is made available in the Philippines through Citibank NA Philippines branch, Citibank Tower, 8741 Paseo De Roxas, Makati City, Manila. Citibank NA Philippines NA is regulated by The Bangko Sentral ng Pilipinas. The Product is made available in **Poland** by Dom Maklerski Banku Handlowego SA an indirect subsidiary of Citigroup Inc., which is regulated by Komisja Nadzoru Finansowego. Dom Maklerski Banku Handlowego S.A. ul.Senatorska 16, 00-923 Warszawa. The Product is made available in the **Russian Federation** through AO Citibank, which is licensed to carry out banking activities in the Russian Federation in accordance with the general banking license issued by the Central Bank of the Russian Federation and brokerage activities in accordance with the license issued by the Federal Service for

Financial Markets. Neither the Product nor any information contained in the Product shall be considered as advertising the securities mentioned in this report within the territory of the Russian Federation or outside the Russian Federation. The Product does not constitute an appraisal within the meaning of the Federal Law of the Russian Federation of 29 July 1998 No. 135-FZ (as amended) On Appraisal Activities in the Russian Federation. 8-10 Gasheka Street, 125047 Moscow. The Product is made available in **Singapore** through Citigroup Global Markets Singapore Pte. Ltd. ("CGMSPL"), a capital markets services license holder, and regulated by Monetary Authority of Singapore. Please contact CGMSPL at 8 Marina View, 21st Floor Asia Square Tower 1, Singapore 018960, in respect of any matters arising from, or in connection with, the analysis of this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). The Product is made available by The Citigroup Private Bank in Singapore through Citibank, N.A., Singapore Branch, a licensed bank in Singapore that is regulated by Monetary Authority of Singapore. Please contact your Private Banker in Citibank N.A., Singapore Branch if you have any queries on or any matters arising from or in connection with this document. This report is intended for recipients who are accredited, expert and institutional investors as defined under the Securities and Futures Act (Cap. 289). This report is distributed in Singapore by Citibank Singapore Ltd ("CSL") to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this report. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this report. This report is intended for recipients who are accredited investors as defined under the Securities and Futures Act (Cap. 289). Citigroup Global Markets (Pty) Ltd. is incorporated in the **Republic of South Africa** (company registration number 2000/025866/07) and its registered office is at 145 West Street, Sandton, 2196, Saxonwold. Citigroup Global Markets (Pty) Ltd. is regulated by JSE Securities Exchange South Africa, South African Reserve Bank and the Financial Services Board. The investments and services contained herein are not available to private customers in South Africa. The Product is made available in the **Republic of China** through Citigroup Global Markets Taiwan Securities Company Ltd. ("CGMTS"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan and/or through Citibank Securities (Taiwan) Company Limited ("CSTL"), 14 and 15F, No. 1, Songzhi Road, Taipei 110, Taiwan, subject to the respective license scope of each entity and the applicable laws and regulations in the Republic of China. CGMTS and CSTL are both regulated by the Securities and Futures Bureau of the Financial Supervisory Commission of Taiwan, the Republic of China. No portion of the Product may be reproduced or quoted in the Republic of China by the press or any third parties [without the written authorization of CGMTS and CSTL]. If the Product covers securities which are not allowed to be offered or traded in the Republic of China, neither the Product nor any information contained in the Product shall be considered as advertising the securities or making recommendation of the securities in the Republic of China. The Product is for informational purposes only and is not intended as an offer or solicitation for the purchase or sale of a security or financial products. Any decision to purchase securities or financial products mentioned in the Product must take into account existing public information on such security or the financial products or any registered prospectus. The Product is made available in **Thailand** through Citicorp Securities (Thailand) Ltd., which is regulated by the Securities and Exchange Commission of Thailand. 399 Interchange 21 Building, 18th Floor, Sukhumvit Road, Klongtoey Nua, Wattana, Bangkok 10110, Thailand. The Product is made available in **Turkey** through Citibank AS which is regulated by Capital Markets Board. Tekfen Tower, Eski Buyukdere Caddesi # 209 Kat 2B, 23294 Levent, Istanbul, Turkey. In the **U.A.E.**, these materials (the "Materials") are communicated by Citigroup Global Markets Limited, DIFC branch ("CGML"), an entity registered in the Dubai International Financial Center ("DIFC") and licensed and regulated by the Dubai Financial Services Authority ("DFSA") to Professional Clients and Market Counterparties only and should not be relied upon or distributed to Retail Clients. A distribution of the different Citi Research ratings distribution, in percentage terms for Investments in each sector covered is made available on request. Financial products and/or services to which the Materials relate will only be made available to Professional Clients and Market Counterparties. The Product is made available in **United Kingdom** by Citigroup Global Markets Limited, which is authorised by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA. This material may relate to investments or services of a person outside of the UK or to other matters which are not authorised by the PRA nor regulated by the FCA and the PRA and further details as to where this may be the case are available upon request in respect of this material. Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB. The Product is made available in **United States** by Citigroup Global Markets Inc, which is a member of FINRA and registered with the US Securities and Exchange Commission. 388 Greenwich Street, New York, NY 10013. Unless specified to the contrary, within EU Member States, the Product is made available by Citigroup Global Markets Limited, which is authorised by the PRA and regulated by the FCA and the PRA. The Product is not to be construed as providing investment services in any jurisdiction where the provision of such services would not be permitted. Subject to the nature and contents of the Product, the investments described therein are subject to fluctuations in price and/or value and investors may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Certain investments contained in the Product may have tax implications for private customers whereby levels and basis of taxation may be subject to change. If in doubt, investors should seek advice from a tax adviser. The Product does not purport to identify the nature of the specific market or other risks associated with a particular transaction. Advice in the Product is general and should not be construed as personal advice given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. Prior to acquiring any financial product, it is the client's responsibility to obtain the relevant offer document for the product and consider it before making a decision as to whether to purchase the product. Citi Research product may source data from dataCentral. dataCentral is a Citi Research proprietary database, which includes the Firm's estimates, data from company reports and feeds from Thomson Reuters. The printed and printable version of the research report may not include all the information (e.g., certain financial summary information and comparable company data) that is linked to the online version available on the Firm's proprietary electronic distribution platforms.

© 2017 Citigroup Global Markets Inc. Citi Research is a division of Citigroup Global Markets Inc. Citi and Citi with Arc Design are trademarks and service marks of Citigroup Inc. and its affiliates and are used and registered throughout the world. All rights reserved. The research data in this report is not intended to be used for the purpose of (a) determining the price or amounts due in respect of one or more financial products or instruments and/or (b) measuring or comparing the performance of a financial product or a portfolio of financial instruments, and any such use is strictly prohibited without the prior written consent of Citi Research. Any unauthorized use, duplication, redistribution or disclosure of this report (the "Product"), including, but not limited to, redistribution of the Product by electronic mail, posting of the Product on a website or page, and/or providing to a third party a link to the Product, is prohibited by law and will result in prosecution. The information contained in the Product is intended solely for the recipient and may not be further distributed by the recipient to any third party. Where included in this report, MSCI sourced information is the exclusive property of Morgan Stanley Capital International Inc. (MSCI). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim

Lupin (LUPN.BO)

3 August 2017

Citi Research

all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI, Morgan Stanley Capital International and the MSCI indexes are services marks of MSCI and its affiliates. The Firm accepts no liability whatsoever for the actions of third parties. The Product may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the Product refers to website material of the Firm, the Firm has not reviewed the linked site. Equally, except to the extent to which the Product refers to website material of the Firm, the Firm takes no responsibility for, and makes no representations or warranties whatsoever as to, the data and information contained therein. Such address or hyperlink (including addresses or hyperlinks to website material of the Firm) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this document. Accessing such website or following such link through the Product or the website of the Firm shall be at your own risk and the Firm shall have no liability arising out of, or in connection with, any such referenced website.

ADDITIONAL INFORMATION IS AVAILABLE UPON REQUEST
