

**Vivek Maheshwari**

vivek.maheshwari@clsa.com  
+91 22 6650 5053

**Bhavesh Pravin Shah**

+91 22 6650 5009

**Jithin John**

+91 22 6650 5067

3 September 2018

**India****Consumer**

## The other side of greed is fear

### Reverse DCF and peer comparison to see extent of euphoria in staples

While consumer staples in India have always been a structural story and hence, stocks always command a premium, the extent of PE expansion recently has probably surprised the most bullish of investors. Our reverse DCF analysis suggests that the 10-year implied growth rate in most cases is at a much higher pace than the past decade, and on a higher base. Also, on the most probable 10-year growth rates, terminal growth is 1-3ppts higher than our comfort level. Comparing valuations with other Indian plays, the Nifty, regional & global names suggests Indian consumer staples are among the most highly valued in the world, and in some cases, even higher than next-gen technology companies like Amazon and Alibaba.

### Reverse DCF under two scenarios to arrive at current stock prices

- ❑ In scenario no.1 our key assumptions are: terminal growth of 6%-7% depending on current categories, market dynamics & premiumisation, a cost of equity of 11.5%-12%, Capex equal to 1-2.5x depreciation & no major upside from working capital by year 10.
- ❑ On the above assumptions in scenario no.1, the implied growth rate for most companies is around 20%, well above the past 10-year growth rate reported by respective companies (organically).
- ❑ In scenario no.2, we forecast growth for next 10-years based on our best estimates, & implied terminal growth rates are at levels which appear aggressive in most cases.

### PE re-ratings contributed significantly to past five-year stock returns

- ❑ Consumer sector PE multiples are near all-time highs in most cases as our coverage (ex-ITC) today trades at a 55x PE compared with 34x 5-years back & 24x 10-years ago.
- ❑ Interestingly, we would note that of the total stock returns, re-ratings have contributed as much half of overall returns in a few cases, while earnings growth has contributed the rest.
- ❑ There are of course exceptions, like ITC and GSK, where their PEs are more palatable, consequent to concern over growth potential, but in most other cases, PE has expanded to highest-ever levels.

### Comparison to the Nifty and peers

- ❑ The FMCG PE premium to Nifty is close to an all-time high at c.160%. Note the average over the past 10 years is c.110%, while the lowest premium was 20%.
- ❑ The PE premium is also close to a high for other India plays like Maruti Suzuki (automobile), Zee (media), L&T (infrastructure), and Titan (discretionary consumption).
- ❑ The PE premium is also close to all-time highs for Indian subsidiaries (HUL, Nestle & Colgate) vs parents, and Indian market cap to parent market cap is also at its best.
- ❑ Interestingly, Indian staples today are trading at a decent premium to next-gen technology stocks like Amazon, Alibaba and Tencent.

### The rationale for this valuation

- ❑ Our investor interactions highlight rising concern regarding sector multiples. However, there are reasons why stocks are trading at these levels, in our understanding.
- ❑ No.1: With rising global uncertainty (trade wars), India is relatively better placed and hence, investor interest in India remains high and the consumer sector is a beneficiary.
- ❑ No.2: Indian staples are also a play on an uncertainty of the election outcome—it also becomes a direct play as a rural beneficiary.
- ❑ No.3: There is acute investor focus on high corporate governance, healthy cash generation, strong balance sheets and the domestic nature of business.
- ❑ No.4: There is improvement in the growth profiles of companies after a few quarters of pain due to issues like demonetisation, rural stress the GST roll-out.
- ❑ The price performance of stocks, however, reflects that wherever there is higher visibility for earnings or the recent trend has been strong, the valuation premium has expanded compared to cases where the growth trajectory has been weak.

We would like to thank Evalueserve for its help in preparing our research reports. Bhavik Mehta (IT); Kamal Verma (Banking & Financial Services); Kushal Shah (Midcaps), Mihir Manohar (Capital Goods, Utilities, Power); and Suraj Yadav (Cement, Oil & Gas) provide research support services to CLSA.

We have explicit forecasts for the next 10 years in our framework

Net cash balance sheets will stay

We assume an Rf of 7.9%, ERP of 5.5% and a beta between 0.6-0.8

Two approaches to determine implied growth for the stocks

In approach no.1, we freeze the terminal growth rate & derive implicit FCF and revenue growths rate for next 10 years

In approach no.2, we derive the terminal growth rate based on our explicit growth forecast for the next 10 years

### Broad framework for reverse DCF for our two scenarios

- ❑ We use 10 year explicit forecasts, from FY18-28 and assume terminal cash flows from thereafter.
- ❑ The companies in our coverage are already net cash with an exception of Godrej Consumer and Emami, which are also likely to turn net cash soon. Since the cash generation remains quite strong, we have assumed that all the companies will remain net cash even in the terminal year.
- ❑ For calculation of COE (same as WACC with net cash balance sheet), we take risk free rate (Rf) at 7.9% and equity risk premium (ERP) at 5.5%. The beta for our coverage is around 0.6-0.8x and we have broadly taken 11.5-12% as WACC or COE (with some simplified assumptions to arrive at this – however, actual beta would also have given broadly similar results).

Figure 1

Cost of equity (or WACC) assumed for our coverage	
ITC	12.0%
Dabur	12.0%
Colgate	11.5%
GCPL	12.0%
Marico	11.5%
HUL	11.5%
GSK Cons	11.5%
Emami	12.0%
Nestle	11.5%
Britannia	12.0%

Source: CLSA

- ❑ We take two approaches to decide what the stock prices are factoring-in: a) approach no.1 locks-in terminal growth and we arrive at explicit growth for next 10Y; b) approach no.2 forecasts 10Y growth and then deduce implied terminal growth. In both the scenarios, our objective is to see how reasonable is the implied growth rates. *(more details below)*

#### Approach no.1:

- ❑ We freeze the terminal growth and derive what the implicit assumption is on FCF growth for the next 10 years.
- ❑ From FCF, we try to deduce the implied sales growth by building-up the tax rate & margin evolution. We however make fairly simplified assumptions for capex and depreciation and also assume that cash generation from core working capital for negative working capital companies would taper-off gradually and by terminal year would become nil.
- ❑ We assume terminal growth rate at 6-7% for our coverage which has to be viewed in the context of: a) high inflation in India, which is also reflected in high cost of capital; b) volume growth led by increase in per-capita and conversion from unorganised sector; c) portfolio premiumisation.

#### Approach no.2:

- ❑ We forecast the growth in FCF for the next 10 years which appears most reasonable to us based on likely growth in revenues, margin evolution, changes in tax rate and changes in capex and working capital.
- ❑ We take last five and ten year revenue growth as a reference point but have tweaked assumptions on a case by case basis and then arrive at the implied terminal growth to reach to derive the current stock price.

The terminal growth rate builds in 4%-5% inflation and 1%-3% real growth from volume & mix changes

Cash generation from working capital for MNCs would go down from current levels

While the cash required for working capital funding for Indian firms will go down, MNCs would still have higher efficiency

Based on our best estimates, we forecast terminal growth at 6%-7% which implies real growth of 1%-3% in the terminal year

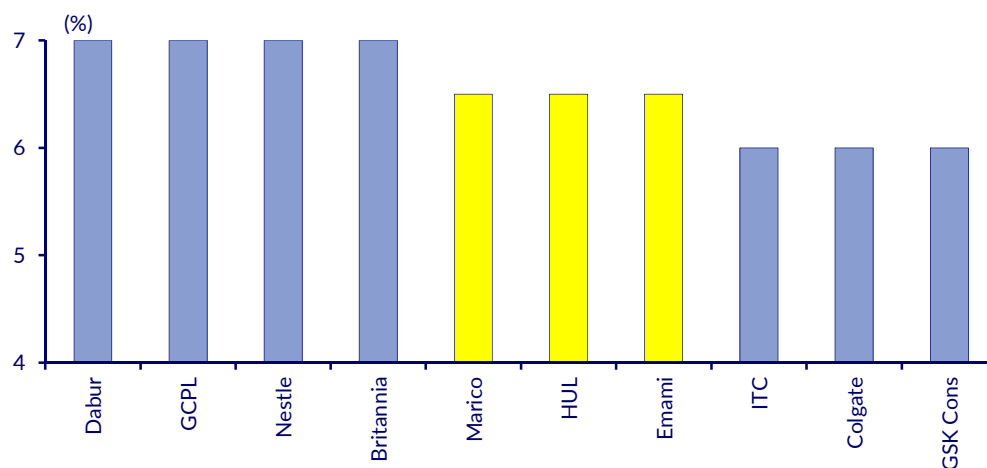
ITC's business mix has been changing as FMCG revenue growth has been faster

### Approach no.1: Implied 10-year target is stiff in most cases

- ❑ Under this approach, we freeze the terminal growth and derive what the implicit assumption is on FCF growth for the next 10 years.
- ❑ For terminal growth calculation, our implied assumption for inflation after 10Y is around 4-5% (which is also reflected in higher cost of equity or risk-free rate in India) and the rest comes from volumes and premiumisation. For example, a 7% terminal growth implies around 4-5% from inflation and the rest comes from volumes and mix improvement.
- ❑ We take first year depreciation as the base for future forecast and assume it to grow at a pace similar to revenue growth and Capex is assumed to be at a multiple of depreciation broadly in-line with the history. From terminal year, we assume capex to be similar to depreciation.
- ❑ We assume working capital to generate cash for next 10Y albeit at a pace slower than past trend and in the terminal year, we assume nil cash generation from working capital for companies with negative working capital like HUL, Nestle, Colgate. This is on an assumption that the salience of modern trade and e-commerce would rise over the longer-term and the terms would not be as attractive as is the case with general trade, currently.
- ❑ For companies with positive working capital, like ITC, Dabur, Marico, Godrej Consumer etc., we assume efficiencies in India business and hence, working capital intensity would gradually come down in 10Y. However, these companies would still have positive working capital due to issues like higher intensity outside India or non-FMCG business in case of ITC.

Figure 2

### Our terminal growth assumptions



Source: CLSA

### ITC (ITC IN): 10-year revenue Cagr at 14% with smart margin expansion

- ❑ ITC's business mix has been changing as FMCG revenue growth has been faster and we expect this to continue over the next 10Y. The change should be even more pronounced on earnings as FMCG business should report improvement in profitability and cigarette should also see margin expansion.
- ❑ We forecast a terminal growth rate of 6% - with inflation of 4-5%, which would require real growth of 1-2%. While cigarette volumes would start to decline at some point, revenue growth should still be positive in cigarettes led

While on relative PE ITC is attractive, the asking rate is still high on reverse DCF which is achievable in a modest tax hike environment

Absolute size could be a challenge for the company along with higher soap & dets portfolio salience

The under-penetrated Indian packaged food market leaves ample room for long-term growth, but implied growth is still quite high

Terminal growth at 7% on hopes of continued business momentum

by strong pricing power, further aided by FMCG (conversion from unbranded packaged foods, market share gains, new launches) & other businesses.

- ❑ On our terminal growth assumption, 10Y FCF needs to grow at 16% Cagr to justify the stock price. We assume 7.5ppts margin expansion over the next decade based on our back-of-the-envelope calculation which assumes margin expansion in cigarettes, FMCG generating margins broadly in-line with peers and stable margins for others.
- ❑ We also reduce capex & working capital intensity gradually over the next 10Y as business mix changes, implied Ebitda and revenue growth comes to 14-16%.

#### **Hind Unilever (HUVR IN): 10-year revenue Cagr at 22% and size is a concern**

- ❑ We build-in 6.5% terminal growth rate for HUL although we acknowledge that the ask rate is high on an absolute basis and expect portfolio skew in favour of slow growth categories including soaps & detergents. In personal care and foods, however growth rates should be strong. Premiumisation and new product launches from parent's stable should also contribute to growth.
- ❑ On the above terminal growth assumption, HUL would be required to grow its FCF at 22% Cagr over FY18-28 to justify the current stock price.
- ❑ We forecast tax rates to normalise from current ~30% to 34% by FY28, in a gradual manner; our capex to depreciation is at 2.2x (or 2-3%) of revenues for the next 10Y. Working capital should generate cash for next 10Y albeit at a slower pace and there should be no cash generation in the terminal year.
- ❑ We forecast current margins to expand from ~21% in FY18 to ~24% by FY28 i.e. 30bps expansion p.a.
- ❑ This would require Ebitda growth of 24% for next 10Y which in turn translates into revenue Cagr of 22% over FY18-28.
- ❑ Reported growth for last 10Y was a modest 6% Cagr although management is much more growth oriented now than earlier times.

#### **Nestle India (NEST IN): Implied revenue growth at 19% - packaged advantage**

- ❑ We freeze terminal growth at 7%, which is at the upper-end of our forecasts for the coverage companies due to attractiveness of packaged foods market in India which makes it a multi-decade story. Nestle should also introduce new products from the parent's stable in India, helping continued long-term growth.
- ❑ On these assumptions, Nestle would need to grow at 20% Cagr in FCF to justify the current stock price. We assume capex at 1.9x of depreciation for next decade, similar to the previous one and assume it to be same as depreciation from terminal year.
- ❑ We forecast that current margins will expand from ~24% in CY18 to ~28% by CY28 i.e. 40bps expansion p.a.
- ❑ For this FCF generation, required 10Y Ebitda growth comes to 21% which in turn translates into revenue Cagr of 19% over CY18-28.
- ❑ We note that in the past 10Y, Nestle's reported revenue growth has been 11% - issues like GST and Maggi ban has impacted this number, we highlight.

#### **Godrej Cons (GCPL IN): Implied revenue growth at 23% - innovation is the key**

- ❑ We forecast terminal growth rate of 7% as Godrej Consumer has been fairly innovative and has launched disruptive products in its core categories and even in some cases, created completely new formats. Elevated growth rates

Tax rate adding to required growth rates

Rising consumer preference for herbal/natural products should help Dabur over the long term

A rise in the tax rate would be a concern

Conversion opportunity in biscuits and new product launches

assume that past trend on portfolio expansion would continue. Exposure to the markets of Africa and Indonesia should help although growth may get negatively (or positively) impacted depending on the currency movements.

- ❑ This would require GCPL to grow its FCF by 23% Cagr over FY18-28 to justify the current stock price (since GCPL currently has net debt, if we take FCFE, the Cagr is 32% assuming debt repayments in the initial years).
- ❑ From a core working capital of 17 days currently, we build-in slight improvement to 10 days by terminal year, giving it a benefit of doubt although the current cycle itself is efficient.
- ❑ We assume capex to stay at around 1.5x of depreciation (which implies 1.5-2.5% of revenues) for the next decade on an estimated basis and some trend from the – our assumptions do not account for any potential acquisition.
- ❑ We expect current margins to expand from ~20% in FY18 to ~23% by FY28 i.e. 30bps expansion p.a.
- ❑ This would require Ebitda growth of 24% for next 10Y which in turn translates into revenue Cagr of 23% over FY18-28.
- ❑ We forecast tax rate to normalise from current ~22% to 34% by FY28 which is adding ~3ppts to required growth rate annually i.e. if the tax rate stays constant, required revenue growth rate comes down to ~20% cf. 23% now.

#### **Dabur (DABUR IN): Implied revenue growth at 23% - Ayurveda power**

- ❑ For Dabur, we estimate terminal growth rate of 7% which implies real growth of 2-3% which assumes continuing consumer preference for herbal and natural products and expansion into packaged foods segment where presence is currently restricted to juices and very small culinary products.
- ❑ This would require Dabur to grow at its FCF by 24% Cagr over FY18-28 to justify current stock price.
- ❑ From a core working capital of 67 days currently, we build-in an improvement to 10 days (even better in India) by terminal year, giving it a benefit of doubt.
- ❑ We assume capex to stay at around 1.6x of depreciation (which implies 1-2% of revenues) for the next decade broadly similar to past and assume it to be same as depreciation from terminal year.
- ❑ We expect current margins to expand from ~21% in FY18 to ~23% by FY28 i.e. 20bps expansion p.a. – an aggressive expansion into foods however may cast doubts on margin expansion, although we expect the personal care growth to continue and hence, margin expansion is possible.
- ❑ This would require Ebitda growth of 24% for next 10Y which in turn translates into revenue Cagr of 23% over FY18-28.
- ❑ We forecast tax rate to normalise from current ~20% to 34% by FY28 which is adding 2.5ppts to required growth rate annually i.e. if the tax rate stays constant, required revenue growth rate comes down to ~21% cf. 23% now.

#### **Britannia (BRIT IN): Implied revenue growth: 21% - move to centre of plate**

- ❑ For Britannia, we estimate terminal growth rate of 7%, at the higher-end for our coverage due to opportunity in packaged foods market, management's aim to get into newer categories to participate in the broader packaged foods market, further opportunity to gain from unorganized and loose segment in biscuits along with premiumisation.
- ❑ This would require Britannia to grow its FCF by 25% Cagr over FY18-28 to justify current stock price.

Portfolio related worry in case of Marico as the hair oil opportunity would be capped at some point

- ❑ We assume capex at 2x of depreciation for next decade, similar to the previous one and assume it to be same as depreciation from terminal year. We also assume working capital stays strong as the current trend is, but no cash generation from the terminal year.
- ❑ We assume current margins to expand from ~14.5% in FY18 to ~20% by FY28 i.e. 60bps expansion p.a – highest expansion within pure staples (ex-tobacco) across our coverage universe but this is underpinned on portfolio premiumisation along with scale benefits, although downside could come from choice of categories as commodity-like foods categories have lower margins.
- ❑ This would imply an Ebitda growth of 25% for next 10Y which in turn translates into revenue Cagr of 21% over FY18-28.

#### Marico (MRCO IN): Implied revenue growth at 20% - beyond hair is the key

- ❑ We build-in terminal growth at 6.5%, while implies real growth rate of 1.5%-2.5%. The asking rate is clearly high since Marico's Parachute may go ex-growth by the end of the decade.
- ❑ However, current investments in segments like foods, hair serums, premium hair nourishment and even VAHO & Saffola should help. Of course, management effort would be required to rapidly grow into newer categories.
- ❑ At this terminal growth, Marico would need to grow its FCF by 24% Cagr over FY18-28 to justify current stock price.
- ❑ From a core working capital of 59 days currently, we build-in an improvement to 7 days (even better in India) by terminal year, giving it a benefit of doubt.
- ❑ We also assume capex to stay at around 1x of depreciation (which implies 1-1.5% of revenues).
- ❑ We forecast tax rates to normalise from current ~26% to 34% by FY28 which would raise required growth rates.
- ❑ We expect moderate margins expansion from ~18% in FY18 to ~20% by FY28 i.e. 20bps expansion p.a. We believe margin gains from male grooming and premium hair nourishment segment will be partially offset by foods and hence, margin gains may be capped.
- ❑ This would require Ebitda growth of 21% which in turn translates into revenue Cagr of 20% over FY18-28.

#### Emami (HMN IN): Implied revenue growth at 21% - new categories needed

- ❑ For Emami, we estimate terminal growth rate of 6.5% which is at the mid-end of our forecast across coverage universe.
- ❑ Aggressive and successful launches should help to extend it to a higher level, the visibility of which is low today. In fact, our 6.5% growth already assumes successful foray beyond the current core categories today.
- ❑ This would require Emami to grow its FCF by 20% Cagr over FY18-28 to justify current stock price.
- ❑ From a core working capital of 16 days currently, we build-in an improvement to 7 days by terminal year, giving it a benefit of doubt. We assume capex at around 2x of depreciation broadly similar to the past, although acquisitions have distorted past trend.
- ❑ Despite a very high base, we forecast a moderate margin expansion from ~27% in FY18 to ~29% by FY28 i.e. 20bps expansion p.a.

New launches can push up the visibility



Needs focus to increase per-capita and drive foray into new categories

A potential acquisition by a strong, focused player could change fortunes

- ❑ This would require Ebitda growth of 22% for next 10Y which in turn translates into revenue Cagr of 21% over FY18-28.
- ❑ We forecast tax rate to normalise from current ~22% to 34% by FY28 which is adding ~2ppts to required growth rate annually i.e. if the tax rate stays constant, required revenue growth rate comes down to ~19% cf. 21% now.

#### Colgate (CLGT IN): Implied revenue growth at 11% - attractive but. . .

- ❑ For Colgate, we estimate terminal growth rate of 6% which is at the lower-end of our forecast across our coverage universe due to high penetration for toothpaste, although there is enough room for higher per-capita consumption.
- ❑ Terminal growth assumption can be higher than 6% if the company adopts an aggressive strategy to improve per-capita, expand beyond oral by leveraging other brands from parent's portfolio.
- ❑ This would require Colgate to grow its FCF by 14% Cagr over FY18-28 to justify current stock price.
- ❑ We assume capex to stay at 2.4x depreciation as was the average for last decade and expect it to stay in-line with depreciation from terminal year.
- ❑ While working capital has been generating cash, we forecast it to hit zero by FY28 in the terminal year.
- ❑ Despite strong profitability now, we assume margins expansion from ~26% in FY18 to ~30% by FY28 i.e. 30bps expansion p.a. led by premiumisation.
- ❑ This would require Ebitda growth of 12% for next 10Y which in turn translates into revenue Cagr of 11%.

#### GSK Consumers (SKB IN): Implied revenue growth at 17% - deal based

- ❑ For GSK, we estimate terminal growth rate of 6% which is at the lower-end of our forecast across our coverage universe due to the uncertainty on the category potential.
- ❑ While we believe GSK's core brands, Horlicks and Boost are under-leveraged, current management has not really shown an aggression to expand beyond the core malted food drinks category.
- ❑ The terminal growth rate however may have an upside if the company is acquired by a growth hungry player, in which case, there is a possibility of taking up terminal growth to up to 7%. We note that strategic review by the parent is underway which may result in sale of the Indian entity.
- ❑ On the terminal growth rate of 6%, GSK would need to grow its FCF by 14% Cagr over FY18-28 to justify current stock price.
- ❑ We assume capex at 1.5x to depreciation in the explicit forecast period and assume this to be same as depreciation by terminal year. We also forecast lower cash generation from working capital in next 10Y, which goes down to nil by terminal year.
- ❑ We expect margins expansion from ~21% in FY14 to ~24% by FY28 i.e. 30bps expansion p.a.
- ❑ This would require Ebitda growth of 18% for next 10Y which in turn translates into revenue Cagr of 17% over FY18-28.

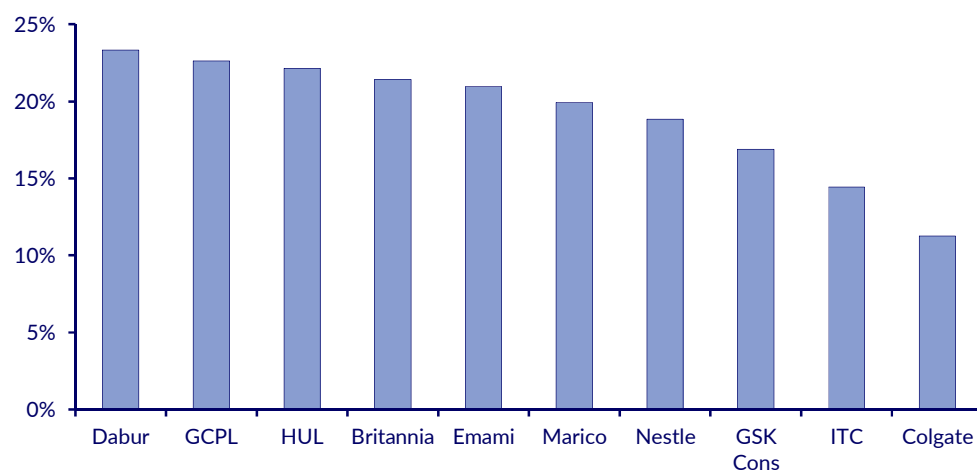
Stocks building in strong growth rates

We forecast margin expansion to give the benefit of the doubt to most firms despite the fact current margins are close to all-time high

Stocks building in strong growth rates in Ebitda

Figure 3

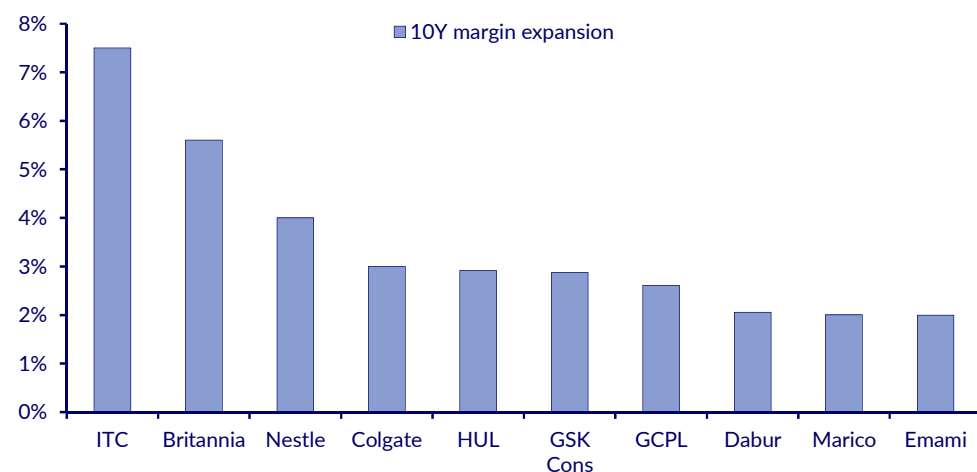
#### Required 10-year revenue Cagr to justify current stock prices



Source: CLSA

Figure 4

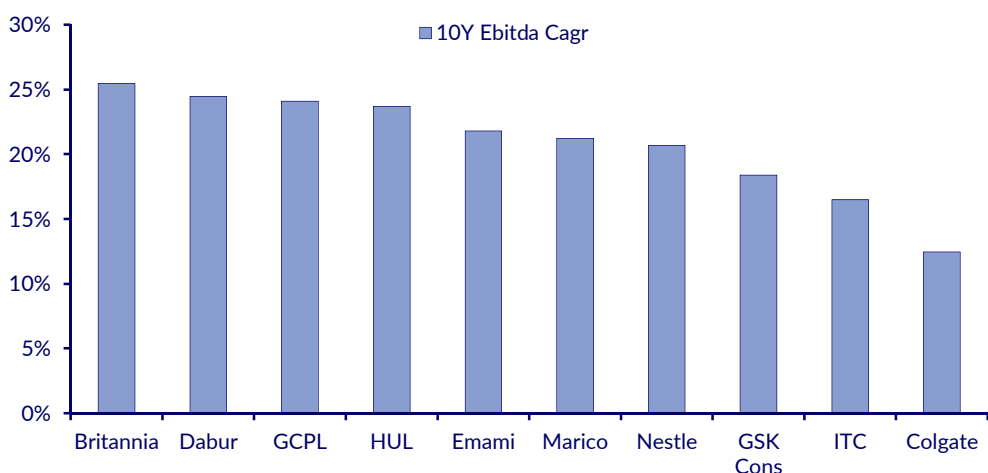
#### Forecast margin expansion over next the 10 years



Source: CLSA

Figure 5

#### Required 10-year Ebitda Cagr to justify current stock prices



Source: CLSA



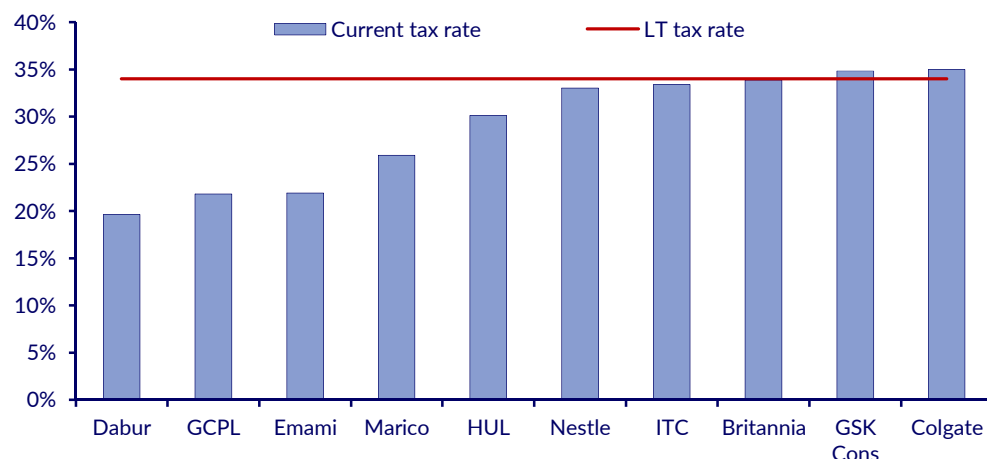
Companies like Dabur, GCPL, Marico require higher growth rates if we build for tax rate normalisation

The growth rate required for the next 10 years is higher in most cases than the past decade although the numbers are slightly impacted due to GST and IndAS changes; acquisitions bolstered growth rates in some cases, like GCPL and Emami

Current stock prices for most names build-in a strong growth trajectory for the next 10 years

Figure 6

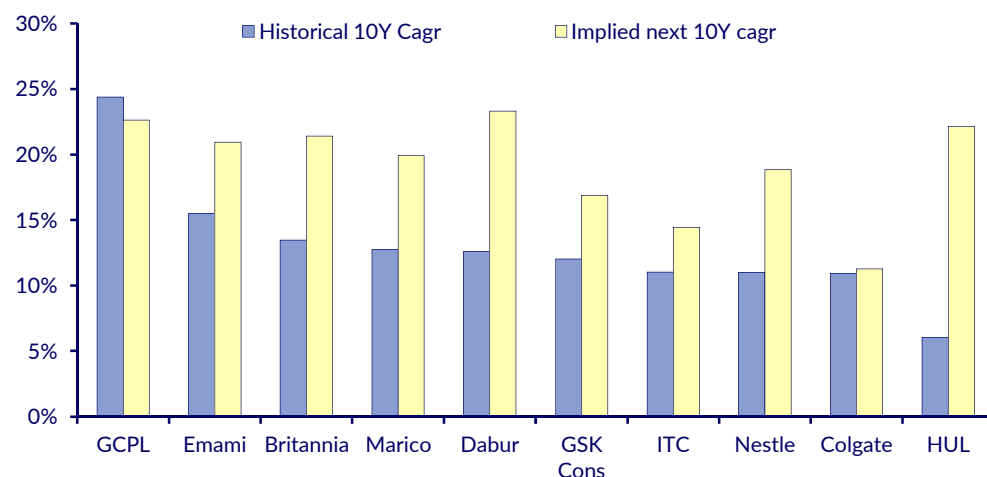
#### Current tax rate for the companies under our coverage



Source: CLSA

Figure 7

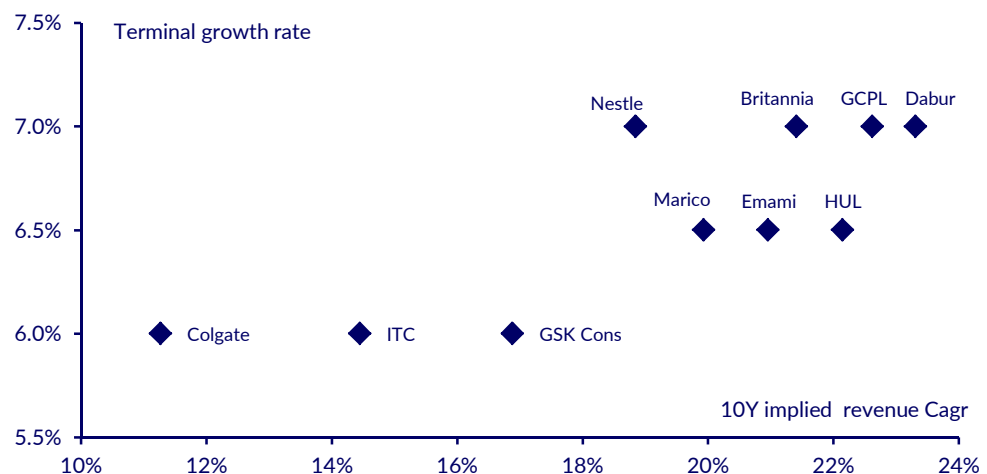
#### Implied next 10-year growth rate versus reported 10-year growth in revenues



Source: CLSA

Figure 8

#### Assumed terminal growth rate versus 10-year implied revenue Cagr



Source: CLSA

All base assumptions of approach no.1, except the explicit terminal growth rates, remain the same for approach no.2 as well

We forecast the highest revenue growth rates for Nestle and Britannia, building in the under-penetration of packaged foods and conversion from the un-organised segment

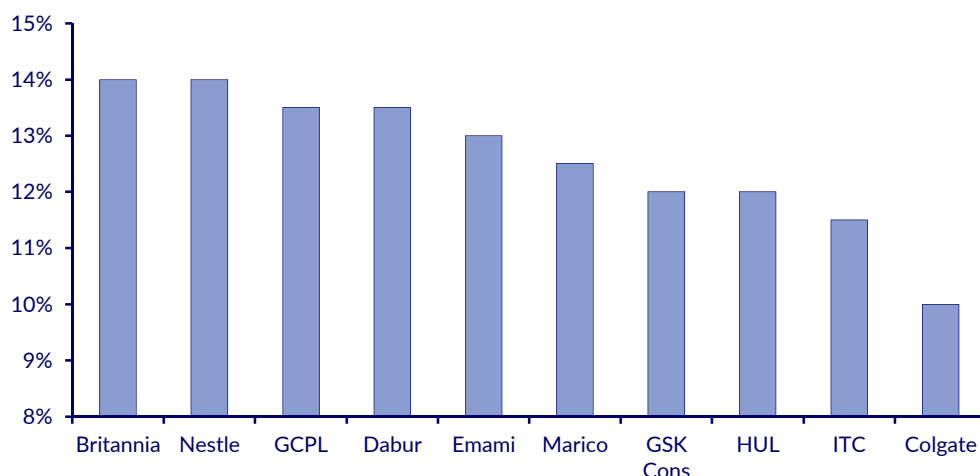
Required terminal growth rates are 8%-10% for most which suggest stocks are expensive

### Approach no.2: Implied terminal growth in FY28 comes to 9%+ for most

- ❑ Under this approach, we forecast the growth in FCF for the next 10 years which appear most probable to us based on likely growth in revenues, margin evolution, changes in tax rate and changes in capex and working capital.
- ❑ Our broad assumptions on margin expansion, working capital, capex intensity are similar to approach no.1.
- ❑ We take last five and ten year revenue growth as the base but tweak assumptions on a case by case basis.
- ❑ Once all the assumptions for next 10Y are in place, we arrive at the implied terminal growth to reach to the current stock price, based on the forecasted FCF growth rates.
- ❑ We build-in 10-14% explicit growth forecasts for companies.

Figure 9

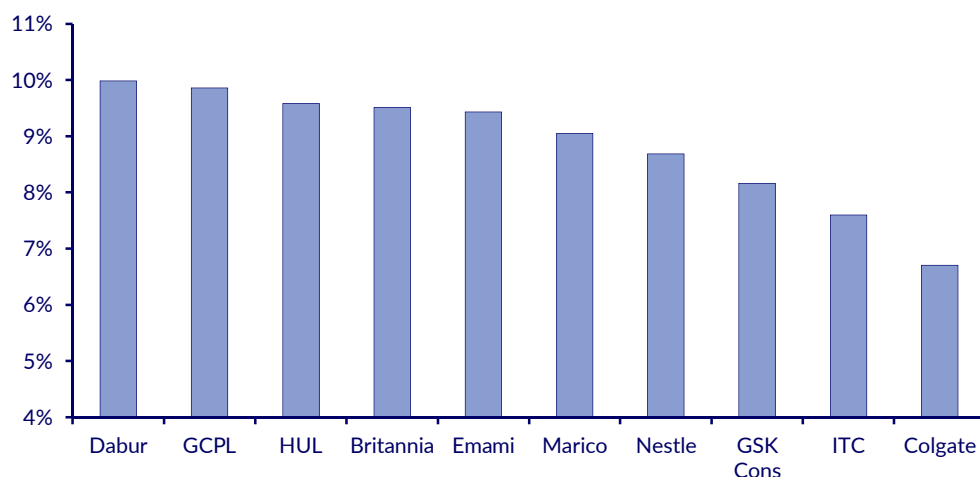
#### 10-year explicit revenue growth forecasts



Source: CLSA

Figure 10

#### Required terminal growth rates to support current stock prices



Source: CLSA

The FMCG sector has significantly re-rated in the past decade and is currently trading at peak multiples

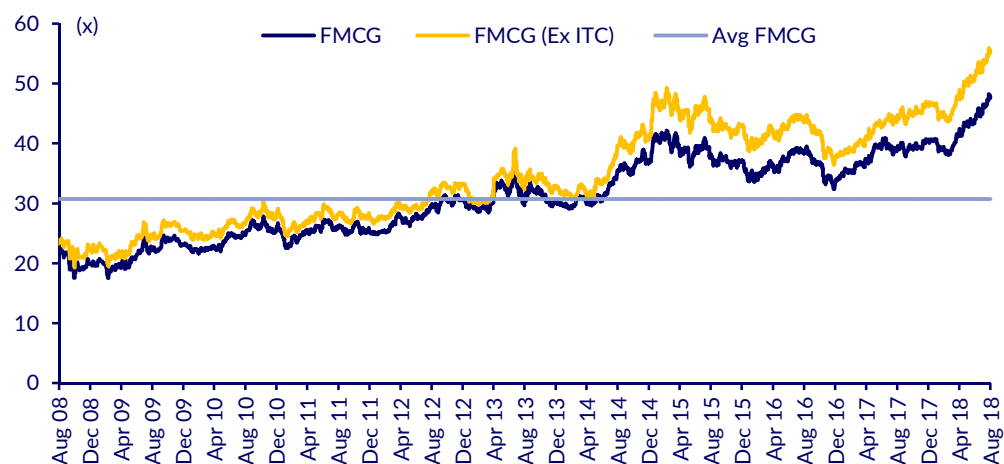
Multiples for most of the companies under our coverage are near 10-year highs

PE expansion has played a significant role in high stock price Cagr over 5 years

### Indian staples are close to an all-time peak compared to their history

Figure 11

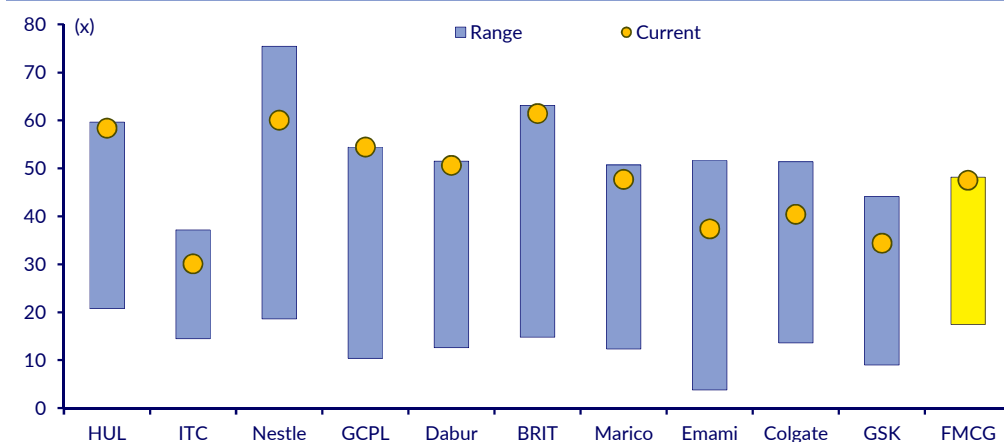
#### One-year forward price-to-earnings of FMCG sector<sup>(1)</sup>



<sup>(1)</sup>Weighted average of HUL, ITC, Nestle, GCPL, Dabur, Britannia, Marico, Emami, Colgate and GSK. Source: Bloomberg, CLSA

Figure 12

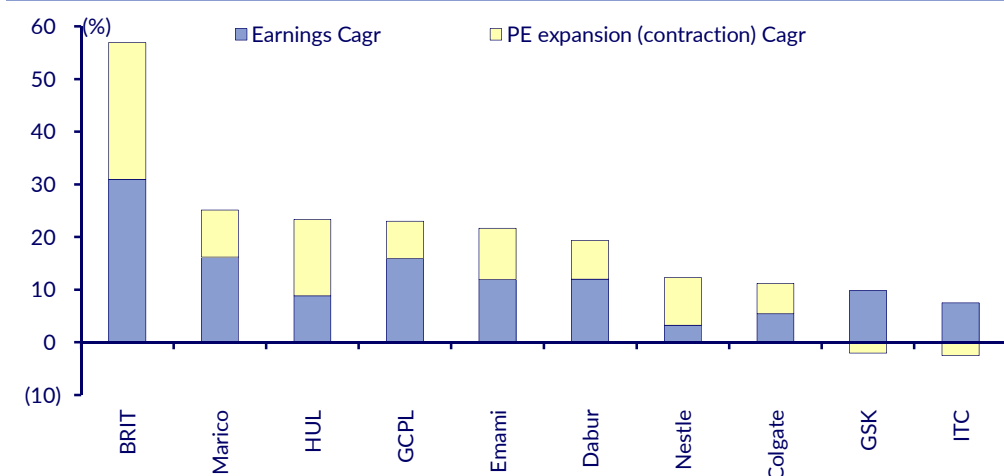
#### One-year forward price-to-earnings range and current multiples



Source: Bloomberg, CLSA

Figure 13

#### Contribution of Earnings and PE expansion in stock price Cagr over FY13-18



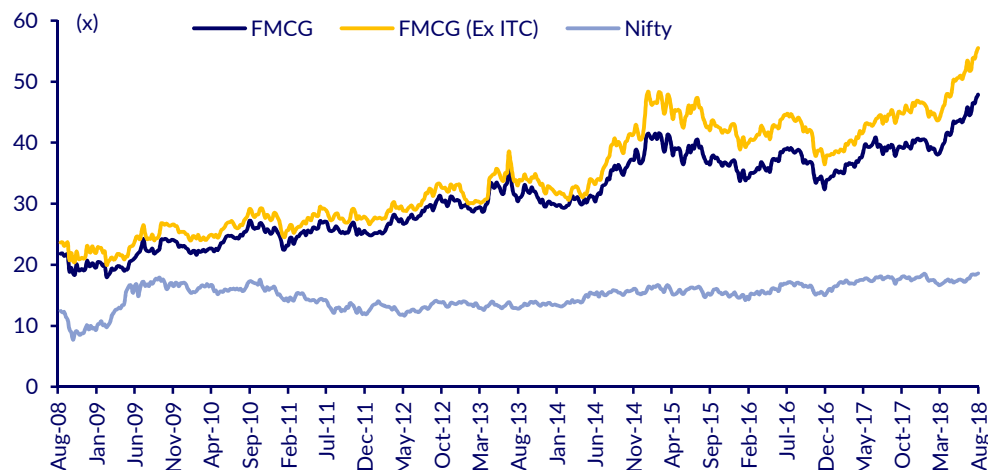
Source: Bloomberg, CLSA

FMCG staples are trading at c.160% premium to the Nifty which is close to an all-time high

### Indian staples are at a significant premium to the Nifty

Figure 14

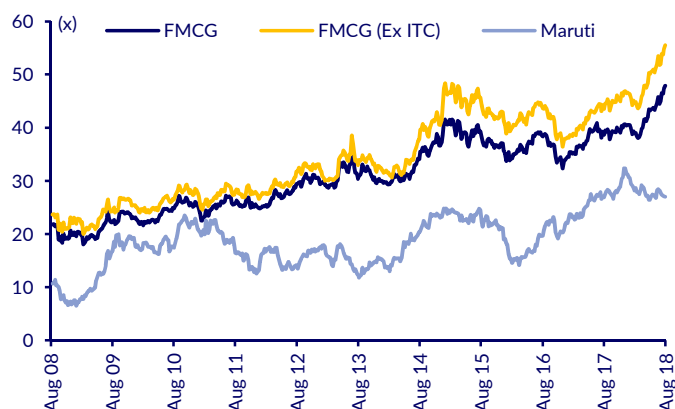
**FMCG staples one-year forward PE versus Nifty one-year forward PE <sup>(1)</sup>**



(1)Weighted average of HUL, ITC, Nestle, GCPL, Dabur, Britannia, Marico, Emami, Colgate and GSK. Source: Bloomberg, CLSA

Figure 15

**FMCG Index versus Maruti**



Source: Bloomberg, CLSA

Figure 16

**FMCG Index versus Zee**

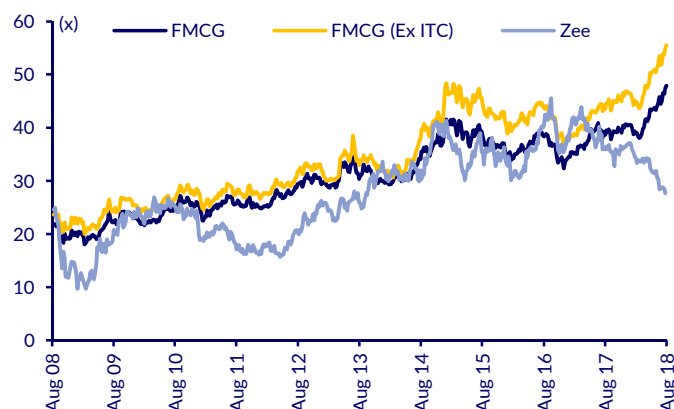
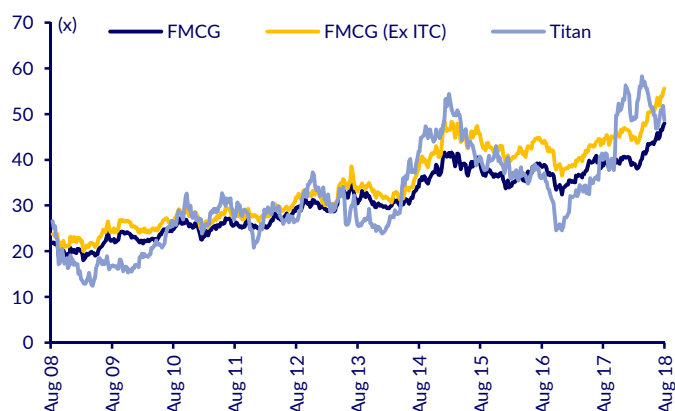


Figure 17

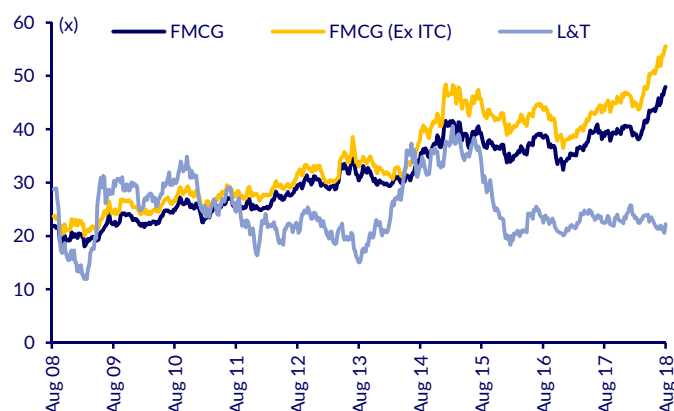
**FMCG Index versus Titan**



Source: Bloomberg, CLSA

Figure 18

**FMCG Index versus L&T**



## Indian subsidiaries are trading at a significant premiums to parents

Figure 19

### Market cap of HUL as a % of market cap of Unilever Plc



Source: Bloomberg, CLSA

Figure 20

### One-year forward PEs of HUL vs Unilever Plc

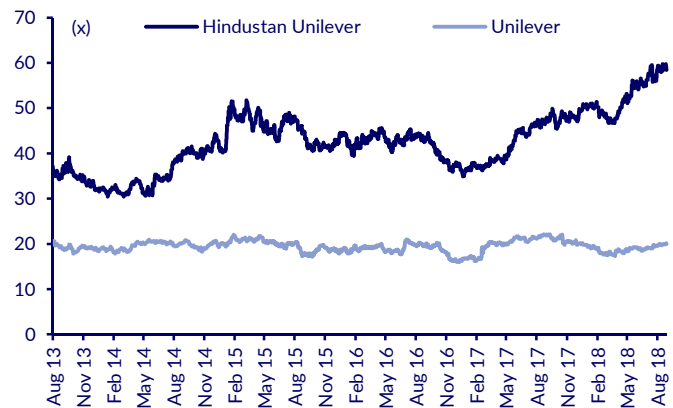
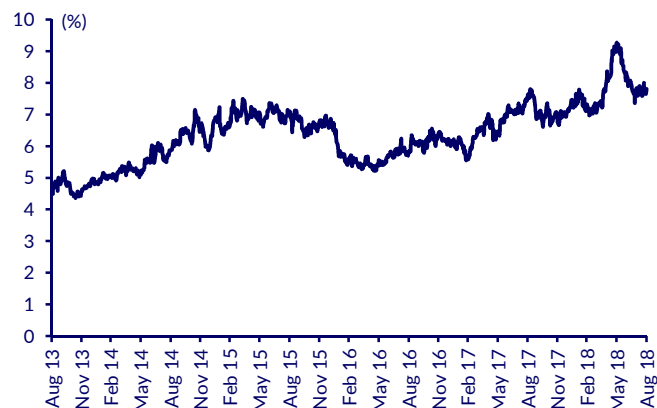


Figure 21

### Market cap of Colgate India as a % of market cap of Colgate US



Source: Bloomberg, CLSA

Figure 22

### One-year forward PEs of Colgate India vs Colgate US

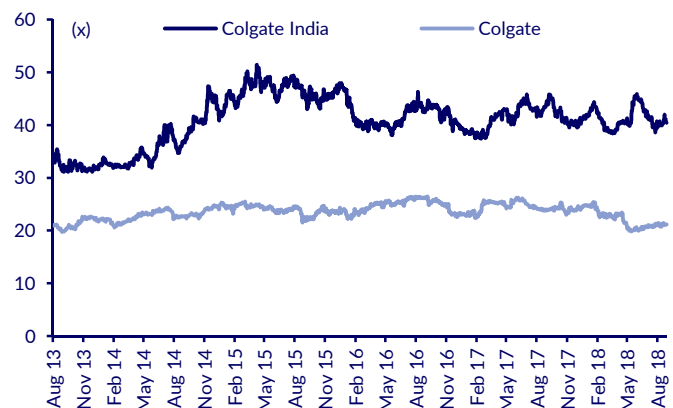


Figure 23

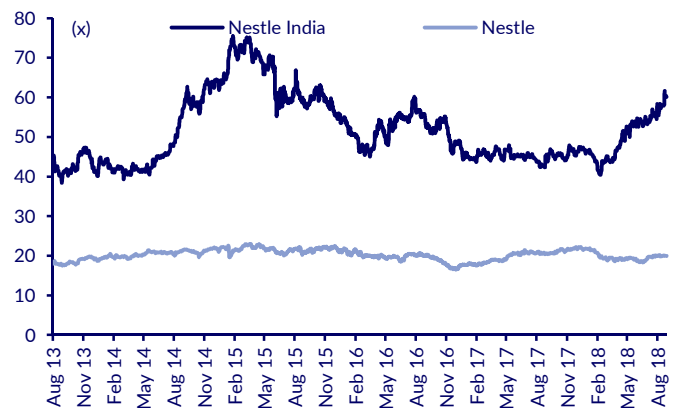
### Market cap of Nestle India as a % of market cap of Nestle SA



Source: Bloomberg, CLSA

Figure 24

### One-year forward PEs of Nestle India vs Nestle SA



Indian consumer staples are trading at a significant premium to emerging market peers across multiple valuation metrics

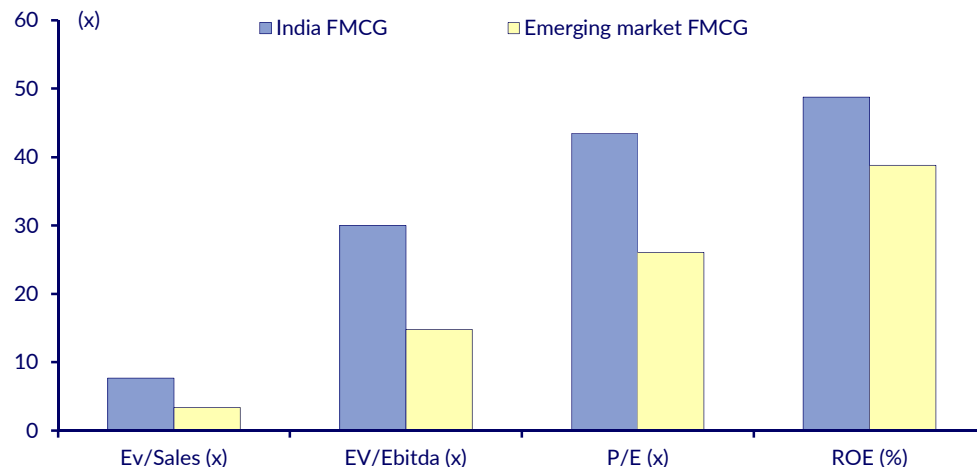
Unilever Indonesia has seen a de-rating in multiples recently while HUL has seen a re-rating

Nestle India is at a premium compared to Nestle Malaysia

### Indian staples are more expensive than regional staple companies

Figure 25

#### 2019CL valuation metrics of Indian and emerging market FMCG companies



Source: Bloomberg, CLSA

Figure 26

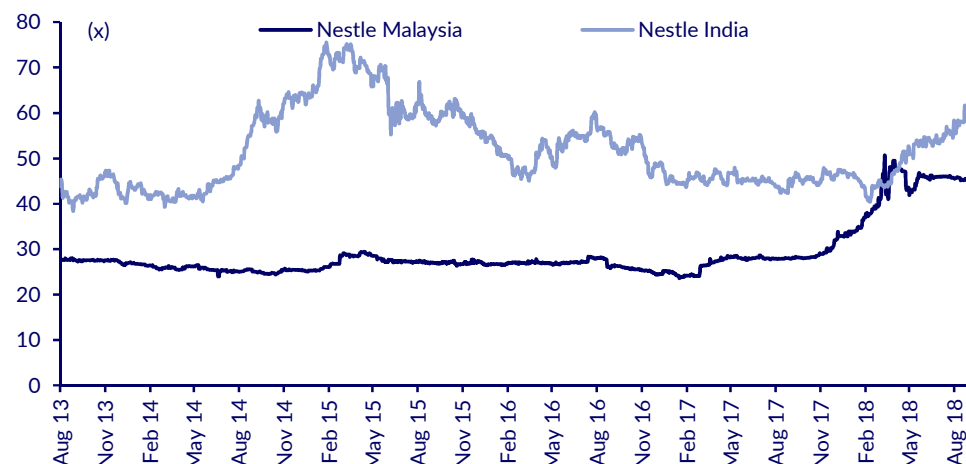
#### One-year forward PEs of HUL versus Unilever Indonesia



Source: Bloomberg, CLSA

Figure 27

#### One-year forward PEs of Nestle India versus Nestle Malaysia



Source: Bloomberg, CLSA



Indian FMCG staples under coverage (excluding ITC) trades at a 66% premium to FAANG stocks...

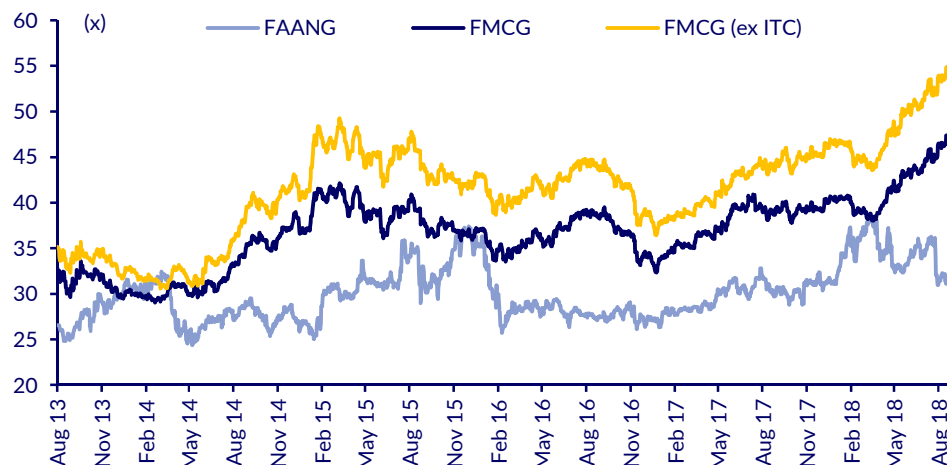
... and 95% premium to Chinese technology stocks including Baidu, Tencent, Alibaba and Ctrip

Among the comparison set, Netflix and Amazon are the only companies trading at a premium to Indian FMCG staples under our coverage (ex-tobacco)

## Indian staples are more expensive than next-gen ecommerce plays too

Figure 28

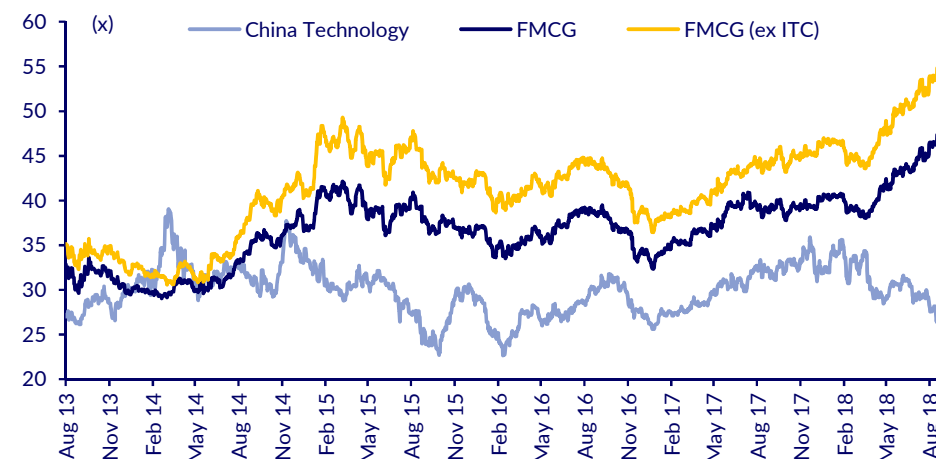
### FMCG staples<sup>(1)</sup> one-year forward PE versus FAANG<sup>(2)</sup> one-year forward PE



(1) Weighted average of HUL, ITC, Nestle, GCPL, Dabur, Britannia, Marico, Emami, Colgate and GSK. (2) Weighted average of Facebook, Amazon, Apple, Netflix and Google (Alphabet). Source: Bloomberg, CLSA

Figure 29

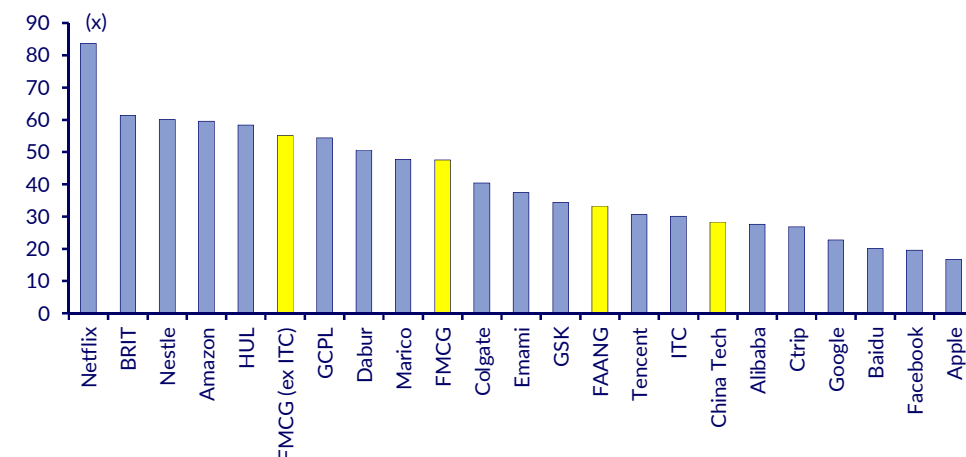
### FMCG staples<sup>(1)</sup> one-year forward PE versus China Technology<sup>(2)</sup> one-year forward PE



Source: (1) Weighted average of HUL, ITC, Nestle, GCPL, Dabur, Britannia, Marico, Emami, Colgate and GSK. (2) Weighted average of Baidu, Tencent, Alibaba and Ctrip. Source: Bloomberg, CLSA

Figure 30

### One year forward PE ratios of FMCG and next-gen tech companies across geographies



Source: Bloomberg, CLSA

## Valuation matrix covering Indian, regional, global consumer and tech stocks

Figure 31

## Valuation Summary

Company	Mkt-cap (US\$bn)	Ev/Sales (x)			EV/Ebitda (x)			P/E (x)			ROE (%)		
		CY18	CY19	CY20	CY18	CY19	CY20	CY18	CY19	CY20	CY18	CY19	CY20
Hindustan Unilever	54	9.7	8.7	7.8	43.5	37.3	33.3	62.0	53.2	47.6	84.4	92.4	93.9
ITC	55	7.9	7.2	6.6	21.0	18.6	16.4	31.3	27.9	25.3	23.1	24.3	25.3
Godrej Consumer	14	9.0	8.0	7.1	41.2	35.1	30.4	56.1	47.9	41.1	25.9	26.3	26.7
Dabur	12	9.5	8.4	7.4	44.0	37.5	32.2	52.9	45.1	38.7	27.0	28.1	28.4
Nestle India	15	9.6	8.5	7.5	41.1	35.2	30.1	68.0	57.7	49.4	45.1	47.7	50.4
Britannia Industries	11	7.1	6.1	5.3	43.9	36.2	29.7	65.5	54.3	44.5	32.6	32.2	32.1
Marico	7	6.5	5.8	5.1	35.5	29.6	25.8	50.1	42.0	36.5	35.5	38.0	39.7
Emami	4	8.9	7.8	6.8	30.4	25.8	21.9	43.2	38.4	31.3	26.4	29.6	32.8
Colgate Palmolive	4	6.9	6.2	5.5	24.9	22.0	19.4	41.8	36.9	32.7	48.6	51.2	54.2
GSK Consumer	4	6.3	5.6	4.9	29.1	25.1	20.4	40.7	36.2	30.6	22.4	22.8	22.6
<b>India FMCG</b>	<b>181</b>	<b>8.7</b>	<b>7.7</b>	<b>6.9</b>	<b>34.9</b>	<b>30.0</b>	<b>26.2</b>	<b>50.5</b>	<b>43.5</b>	<b>38.2</b>	<b>45.5</b>	<b>48.8</b>	<b>50.0</b>
Unilever Plc	169	3.3	3.2	3.1	15.2	14.3	13.2	21.0	19.5	17.8	48.5	54.9	69.5
Nestle SA	256	3.0	2.9	2.8	14.7	13.8	12.9	21.3	20.0	18.5	19.4	21.4	23.8
P&G	208	3.4	3.3	3.3	13.8	13.4	13.4	18.2	17.3	16.6	20.1	22.1	25.6
Kraft Heinz	71	3.9	3.8	3.8	13.3	12.6	12.2	15.6	15.0	14.4	6.8	6.9	6.9
Danone	55	2.4	2.3	2.2	12.8	11.8	10.8	20.1	18.1	16.3	14.8	15.4	15.7
Kao Corp	38	2.7	2.6	2.5	14.8	13.6	12.7	27.8	25.9	24.1	18.7	19.0	18.8
<b>Global FMCG</b>	<b>796</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>14.3</b>	<b>13.5</b>	<b>12.9</b>	<b>20.1</b>	<b>18.9</b>	<b>17.6</b>	<b>24.3</b>	<b>26.9</b>	<b>31.6</b>
Unilever Indonesia	23	7.7	7.1	6.8	31.6	29.2	27.5	43.8	41.8	39.4	137.2	134.5	137.7
Shiseido	28	2.8	2.6	2.4	18.7	15.8	13.7	40.9	33.1	27.8	17.5	18.7	18.7
Unicharm Corp	20	3.2	3.0	2.8	16.8	15.2	13.6	36.5	33.0	29.7	15.4	15.7	15.8
Gudang Garam	10	1.6	1.4	1.3	11.1	9.9	9.2	16.7	14.9	13.6	19.0	19.2	19.4
Japan Tobacco	53	2.8	2.7	2.7	9.1	8.4	7.8	15.0	13.9	12.9	14.4	16.3	17.0
Want Want China	10	2.9	2.8	2.6	11.5	10.6	9.3	22.8	21.0	19.3	22.9	22.3	21.6
Tingyi	10	1.1	1.1	1.0	9.6	8.5	7.6	31.6	26.8	23.5	12.8	14.4	14.9
Vietnam Dairy Products	10	4.0	3.7	3.2	16.1	14.9	12.9	22.1	20.3	18.6	42.0	41.3	43.8
Nestle (Malaysia)	8	6.3	6.0	5.7	32.1	30.1	28.4	47.8	44.3	41.6	107.8	111.8	114.0
<b>Emerging market FMCG</b>	<b>172</b>	<b>3.6</b>	<b>3.4</b>	<b>3.2</b>	<b>16.3</b>	<b>14.8</b>	<b>13.5</b>	<b>29.1</b>	<b>26.0</b>	<b>23.6</b>	<b>38.2</b>	<b>38.8</b>	<b>39.8</b>
Facebook	513	8.5	6.8	5.6	13.9	11.3	9.4	20.9	18.3	17.5	25.0	22.8	21.5
Amazon.Com	977	4.2	3.5	2.9	30.6	22.7	17.6	73.7	52.4	38.5	21.7	23.5	22.6
Apple	1,087	3.6	3.5	3.4	12.2	11.9	11.7	18.5	17.4	16.9	47.8	59.4	63.6
Netflix	162	10.5	8.4	6.9	81.2	56.6	38.3	113.8	76.2	48.3	26.7	30.1	33.8
Alphabet	867	7.0	5.8	5.2	14.9	11.8	9.6	23.5	21.0	17.8	17.4	16.7	15.7
Microsoft Corp	859	6.6	6.0	5.3	15.2	13.1	10.8	26.1	22.7	19.5	38.7	33.7	40.9
<b>US tech companies</b>	<b>4,463</b>	<b>5.8</b>	<b>5.0</b>	<b>4.4</b>	<b>20.0</b>	<b>16.0</b>	<b>13.1</b>	<b>36.7</b>	<b>29.0</b>	<b>23.5</b>	<b>31.0</b>	<b>33.0</b>	<b>35.0</b>
Baidu	79	4.6	3.8	3.2	17.3	14.0	10.8	3.2	2.8	2.3	17.3	15.7	15.8
Tencent Holdings	434	8.9	6.7	5.3	22.9	17.9	13.7	39.7	30.7	24.3	27.3	27.2	27.0
Alibaba	453	7.6	5.5	4.2	22.4	16.0	11.6	4.4	3.2	2.4	16.6	20.2	22.3
Jd.Com	45	0.6	0.5	0.4	59.3	28.0	16.3	10.9	4.9	3.0	0.7	5.6	11.6
Ctrip.Com	21	4.6	3.7	3.0	34.6	21.4	13.2	4.3	3.1	2.2	4.4	6.4	8.4
58.Com	11	5.5	4.6	3.9	26.8	17.0	11.7	4.4	3.1	2.4	9.8	13.2	14.9
Netease	26	2.1	1.7	1.4	15.7	11.7	9.2	2.7	2.2	1.8	16.0	17.1	16.9
<b>China tech companies</b>	<b>1,067</b>	<b>7.4</b>	<b>5.5</b>	<b>4.3</b>	<b>23.9</b>	<b>17.1</b>	<b>12.6</b>	<b>18.9</b>	<b>14.4</b>	<b>11.3</b>	<b>20.0</b>	<b>21.7</b>	<b>22.8</b>

For companies like HUL, ITC, Dabur, Marico, Britannia etc. CY18 refers to FY19, CY19 refers to FY20 and CY20 refers to FY21. Source: Bloomberg



### Research subscriptions

To change your report distribution requirements, please contact your CLSA sales representative or email us at [cib@clsa.com](mailto:cib@clsa.com). You can also fine-tune your Research Alert email preferences at [https://www.clsa.com/member/tools/email\\_alert/](https://www.clsa.com/member/tools/email_alert/).

### Companies mentioned

58.com (WUBA US - US\$76.08 - BUY)  
 Alibaba (BABA US - US\$175.01 - BUY)  
 Alphabet (N-R)  
 Amazon (N-R)  
 Apple (N-R)  
 Baidu (BIDU US - US\$224.25 - BUY)  
 Britannia Industries (BRIT IS - RS6,736.8 - O-PF)  
 Colgate (N-R)  
 Colgate India (CLGT IB - RS1,168.3 - SELL)  
 Ctrip (CTRP US - US\$39.15 - O-PF)  
 Dabur (DABUR IS - RS478.8 - BUY)  
 Danone (N-R)  
 Emami (HMN IS - RS564.6 - BUY)  
 Facebook (N-R)  
 Godrej Consumer (GCPL IB - RS1,447.2 - O-PF)  
 GSK Consumer (SKB IS - RS7,705.4 - BUY)  
 Gudang Garam (GGRM IJ - RP73,000 - BUY)  
 Hindustan Unilever (HUVR IB - RS1,780.6 - O-PF)  
 ITC (ITC IB - RS319.1 - BUY)  
 Japan Tobacco (2914 JP - ¥2,922 - BUY)  
 JD.com (JD US - US\$31.00 - O-PF)  
 Jubilant Food (JUBI IN - RS1,549.0 - BUY)  
 Kao (4452 JP - ¥8,625 - BUY)  
 Kraft Heinz (N-R)  
 L&T Infrastructure (N-R)  
 Larsen & Toubro (LT IB - RS1,369.1 - BUY)  
 Marico (MRCO IB - RS369.4 - BUY)  
 Maruti Suzuki (MSIL IB - RS9,097.2 - BUY)  
 Microsoft (N-R)  
 Nestle (N-R)  
 Nestle India (NEST IB - RS11,576.6 - O-PF)  
 Nestle Malaysia (N-R)  
 NetEase (NTES US - US\$194.39 - O-PF)  
 Netflix (N-R)  
 Shiseido (4911 JP - ¥7,824 - BUY)  
 Tencent (700 HK - HK\$340.00 - BUY)  
 Tingyi (322 HK - HK\$14.02 - U-PF)  
 Titan (TTAN IB - RS890.7 - O-PF)  
 Unicharm (8113 JP - ¥3,632 - O-PF)  
 Unilever (N-R)  
 Unilever Indo (UNVR IJ - RP43,850 - U-PF)  
 Vinamilk (N-R)  
 Want Want (151 HK - HK\$6.41 - U-PF)  
 Zee Entertainment (Z IB - RS498.9 - BUY)  
 Zee Media (N-R)

## Analyst certification

The analyst(s) of this report hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this research report.

## Important disclosures

The policy of CLSA and CL Securities Taiwan Co., Ltd. ("CLST") is to only publish research that is impartial, independent, clear, fair, and not misleading. Regulations or market practice of some jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to a research report as below. This research disclosure should be read in conjunction with the research disclaimer as set out at [www.clsa.com/disclaimer.html](http://www.clsa.com/disclaimer.html) and the applicable regulation of the concerned market where the analyst is stationed and hence subject to. Investors are strongly encouraged to review this disclaimer before investing.

Neither analysts nor their household members/associates/may have a financial interest in, or be an officer, director or advisory board member of companies covered by the analyst unless disclosed herein. In circumstances where an analyst has a pre-existing holding in any securities under coverage, those holdings are grandfathered and the analyst is prohibited from trading such securities.

Unless specified otherwise, CLSA/CLST or its respective affiliates, did not receive investment banking/non-investment banking income from, and did not manage/co-manage a public offering for, the listed company during the past 12 months, and it does not expect to receive investment banking compensation from the listed company within the coming three months. Unless mentioned otherwise, CLSA/CLST does not own 1% or more of any class of securities of the subject company, and does not make a market, in the securities.

The analysts included herein hereby confirm that they have not been placed under any undue influence, intervention or pressure by any person/s in compiling this research report. In addition, the analysts attest that they were not in possession of any material, non-public information regarding the subject company at the time of publication of the report. Save from the disclosure below (if any), the analyst(s) is/are not aware of any material conflict of interest.

As analyst(s) of this report, I/we hereby certify that the views expressed in this research report accurately reflect my/our own personal views about the securities and/or the issuers and that no part of my/our compensation was, is, or will be directly or indirectly related to the specific recommendation or views contained in this report or to any investment banking relationship with the subject company covered in this report (for the past one year) or otherwise any other relationship with such company which leads to receipt of fees from the company except in ordinary course of business of the company. The analyst/s also state/s and confirm/s that he/she/they has/have not been placed under any undue influence, intervention or pressure by any person/s in compiling this research report. In addition, the analysts included herein attest that they were not in possession of any material, nonpublic information regarding the subject company at the time of publication of the report. Save from the disclosure below (if any), the analyst(s) is/are not aware of any material conflict of interest.

Key to CLSA/CLST investment rankings: BUY: Total stock return (including dividends) expected to exceed 20%; O-PF: Total expected return below 20% but exceeding market return; U-PF: Total expected return positive but below market return; SELL: Total return expected to be negative. For relative performance, we benchmark the 12-month total forecast return (including dividends) for the stock against the 12-month forecast return (including dividends) for the market on which the stock trades.

We define as "Double Baggers" stocks we expect to yield 100% or more (including dividends) within three years at the time the

stocks are introduced to our "Double Bagger" list. "High Conviction" Ideas are not necessarily stocks with the most upside/downside, but those where the Research Head/Strategist believes there is the highest likelihood of positive/negative returns. The list for each market is monitored weekly.

Overall rating distribution for CLSA/CLST only Universe: Overall rating distribution: BUY / Outperform - CLSA: 69.20%; CLST only: 67.44%, Underperform / SELL - CLSA: 30.53%; CLST only: 32.55%, Restricted - CLSA: 0.00%; CLST only: 0.00%. Data as of 30 June 2018. Investment banking clients as a % of rating category: BUY / Outperform - CLSA: 2.05%; CLST only: 0.00%, Underperform / SELL - CLSA: 1.16%; CLST only: 0.00%, Restricted - CLSA: 0.00%; CLST only: 0.00%. Data for 12-month period ending 30 June 2018.

There are no numbers for Hold/Neutral as CLSA/CLST do not have such investment rankings. For a history of the recommendation, price targets and disclosure information for companies mentioned in this report please write to: CLSA Group Compliance, 18/F, One Pacific Place, 88 Queensway, Hong Kong and/or; (c) CLST Compliance (27/F, 95, Section 2 Dun Hua South Road, Taipei 10682, Taiwan, telephone (886) 2 2326 8188). EVA® is a registered trademark of Stern, Stewart & Co. "CL" in charts and tables stands for CLSA estimates, "CT" stands for CLST estimates, "CRR" stands for CRR Research estimates and "CS" for Citic Securities estimates unless otherwise noted in the source.

This publication/communication is subject to and incorporates the terms and conditions of use set out on the [www.clsa.com](http://www.clsa.com) website (<https://www.clsa.com/disclaimer.html>). Neither the publication/communication nor any portion hereof may be reprinted, sold, resold, copied, reproduced, distributed, redistributed, published, republished, displayed, posted or transmitted in any form or media or by any means without the written consent of CLSA and/or CLST. CLSA and/or CLST has/have produced this publication/communication for private circulation to professional, institutional and/or wholesale clients only, and may not be distributed to retail investors. The information, opinions and estimates herein are not directed at, or intended for distribution to or use by, any person or entity in any jurisdiction where doing so would be contrary to law or regulation or which would subject CLSA, and/or CLST to any additional registration or licensing requirement within such jurisdiction. The information and statistical data herein have been obtained from sources we believe to be reliable. Such information has not been independently verified and we make no representation or warranty as to its accuracy, completeness or correctness. Any opinions or estimates herein reflect the judgment of CLSA and/or CLST at the date of this publication/communication and are subject to change at any time without notice. Where any part of the information, opinions or estimates contained herein reflects the views and opinions of a sales person or a non-analyst, such views and opinions may not correspond to the published view of CLSA and/or CLST. Any price target given in the report may be projected from one or more valuation models and hence any price target may be subject to the inherent risk of the selected model as well as other external risk factors. Where the publication does not contain ratings, the material should not be construed as research but is offered as factual commentary. It is not intended to, nor should it be used to form an investment opinion about the non-rated companies.

This publication/communication is for information purposes only and it does not constitute or contain, and should not be considered as an offer or invitation to sell, or any solicitation or invitation of any

offer to subscribe for or purchase any securities in any jurisdiction and neither this publication/communication nor anything contained herein shall form the basis of any investment decision, contract or commitment whatsoever. This is not intended to provide professional, investment or any other type of advice or recommendation and does not take into account the particular investment objectives, financial situation or needs of individual recipients. Before acting on any information in this publication/communication, you should consider whether it is suitable for your particular circumstances and, if appropriate, seek professional advice, including tax advice. Investments involve risks, and investors should exercise prudence and their own judgment in making their investment decisions. The value of any investment or income may go down as well as up, and investors may not get back the full (or any) amount invested. Past performance is not necessarily a guide to future performance. CLSA and/or CLST do/does not accept any responsibility and cannot be held liable for any person's use of or reliance on the information and opinions contained herein. To the extent permitted by applicable securities laws and regulations, CLSA and/or CLST accept(s) no liability whatsoever for any direct or consequential loss arising from the use of this publication/communication or its contents.

To maintain the independence and integrity of our research, our Corporate Finance, Sales Trading, Asset Management and Research business lines are distinct from one another. This means that CLSA's Research department is not part of and does not report to CLSA Corporate Finance department or CLSA's Sales and Trading business. Accordingly, neither the Corporate Finance nor the Sales and Trading department supervises or controls the activities of CLSA's research analysts. CLSA's research analysts report to the management of the Research department, who in turn report to CLSA's senior management. CLSA has put in place a number of internal controls designed to manage conflicts of interest that may arise as a result of CLSA engaging in Corporate Finance, Sales and Trading, Asset Management and Research activities. Some examples of these controls include: the use of information barriers and other controls designed to ensure that confidential information is only shared on a "need to know" basis and in compliance with CLSA's Chinese Wall policies and procedures; measures designed to ensure that interactions that may occur among CLSA's Research personnel, Corporate Finance, Asset Management, and Sales and Trading personnel, CLSA's financial product issuers and CLSA's research analysts do not compromise the integrity and independence of CLSA's research.

Subject to any applicable laws and regulations at any given time, CLSA, CLST, their respective affiliates, officers, directors or employees may have used the information contained herein before publication and may have positions in, or may from time to time purchase or sell or have a material interest in any of the securities mentioned or related securities, or may currently or in future have or have had a business or financial relationship with, or may provide or have provided corporate finance/capital markets and/or other services to, the entities referred to herein, their advisors and/or any other connected parties. As a result, you should be aware that CLSA and/or CLST and/or their respective affiliates, officers, directors or employees may have one or more conflicts of interest. Regulations or market practice of some jurisdictions/markets prescribe certain disclosures to be made for certain actual, potential or perceived conflicts of interests relating to research reports. Details of the disclosable interest can be found in certain reports as required by the relevant rules and regulation and the full details are available at

[http://www.clsa.com/member/research\\_disclosures/](http://www.clsa.com/member/research_disclosures/). Disclosures therein include the position of CLSA and CLST only. Unless specified otherwise, CLSA did not receive any compensation or other benefits from the subject company, covered in this publication/communication, or from any third party. If investors have any difficulty accessing this website, please contact [webadmin@clsa.com](mailto:webadmin@clsa.com) on +852 2600 8111. If you require disclosure information on previous dates, please contact [compliance\\_hk@clsa.com](mailto:compliance_hk@clsa.com).

This publication/communication is distributed for and on behalf of CLSA Limited (for research compiled by non-US and non-Taiwan analyst(s)), and/or CLST (for research compiled by Taiwan analyst(s)) in Australia by CLSA Australia Pty Ltd; in Hong Kong by CLSA Limited; in India by CLSA India Private Limited, (Address: 8/F, Dalamal House, Nariman Point, Mumbai 400021. Tel No: +91-22-66505050. Fax No: +91-22-22840271; CIN: U67120MH1994PLC083118; SEBI Registration No: INZ000001735 as Stock Broker, INM000010619 as Merchant Banker and INH000001113 as Research Analyst; in Indonesia by PT CLSA Sekuritas Indonesia; in Japan by CLSA Securities Japan Co., Ltd; in Korea by CLSA Securities Korea Ltd; in Malaysia by CLSA Securities Malaysia Sdn Bhd; in the Philippines by CLSA Philippines Inc (a member of Philippine Stock Exchange and Securities Investors Protection Fund); in Singapore by CLSA Singapore Pte Ltd and solely to persons who qualify as an institutional investor, accredited investor or expert investor; in Thailand by CLSA Securities (Thailand) Limited; in Taiwan by CLST and in United Kingdom by CLSA (UK).

United States of America: Where any section is compiled by non-US analyst(s), it is distributed into the United States by CLSA solely to persons who qualify as "Major US Institutional Investors" as defined in Rule 15a-6 under the Securities and Exchange Act of 1934 and who deal with CLSA Americas. However, the delivery of this research report to any person in the United States shall not be deemed a recommendation to effect any transactions in the securities discussed herein or an endorsement of any opinion expressed herein. Any recipient of this research in the United States wishing to effect a transaction in any security mentioned herein should do so by contacting CLSA Americas.

United Kingdom: In the United Kingdom, this research is a marketing communication. It has not been prepared in accordance with the legal requirements designed to promote the independence of investment research, and is not subject to any prohibition on dealing ahead of the dissemination of investment research. The research is disseminated in the EU by CLSA (UK), which is authorised and regulated by the Financial Conduct Authority. This document is directed at persons having professional experience in matters relating to investments as defined in Article 19 of the FSMA 2000 (Financial Promotion) Order 2005. Any investment activity to which it relates is only available to such persons. If you do not have professional experience in matters relating to investments you should not rely on this document. Where the research material is compiled by the UK analyst(s), it is produced and disseminated by CLSA (UK). For the purposes of the Financial Conduct Rules this research is prepared and intended as substantive research material.

For all other jurisdiction-specific disclaimers please refer to <https://www.clsa.com/disclaimer.html>. The analysts/contributors to this publication/communication may be employed by any relevant CLSA entity or CLST, which is different from the entity that distributes the publication/communication in the respective jurisdictions. © 2018 CLSA Limited and/or CL Securities Taiwan Co., Ltd. ("CLST").