THE INDIAN CEMENT INDUSTRY

MYTHS VS. FACTS

Jagdeep Verma

Holtec Consulting Pvt. Ltd., India

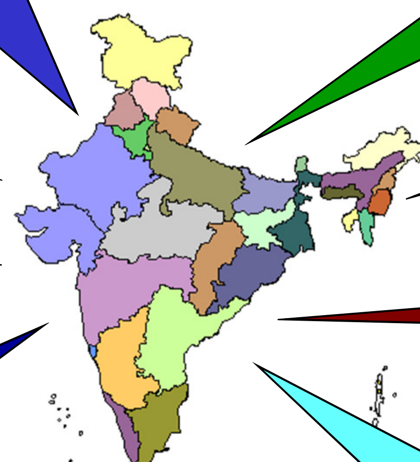
Indian Cement Market – FY 2015

Consumption Growth
7.5-8.0 % pa

Cement Consumption
~280 mio t

World's 2nd Largest
Cement Market

PCC
220 kgs



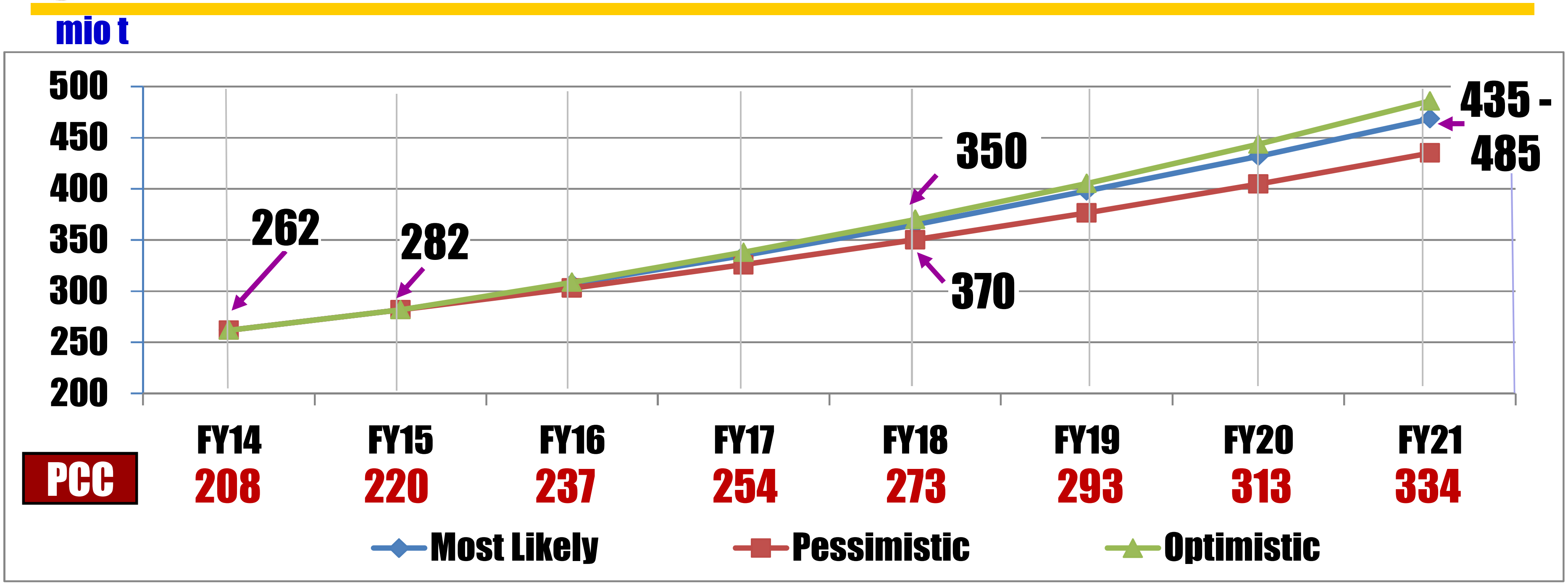
GDP Growth
~7.5 %

Supply
exceeds
Demand

Housing
Key Growth Segment

Capacity Share
National Players: 36 %
Regional Players: 34%
Independent Players:30%

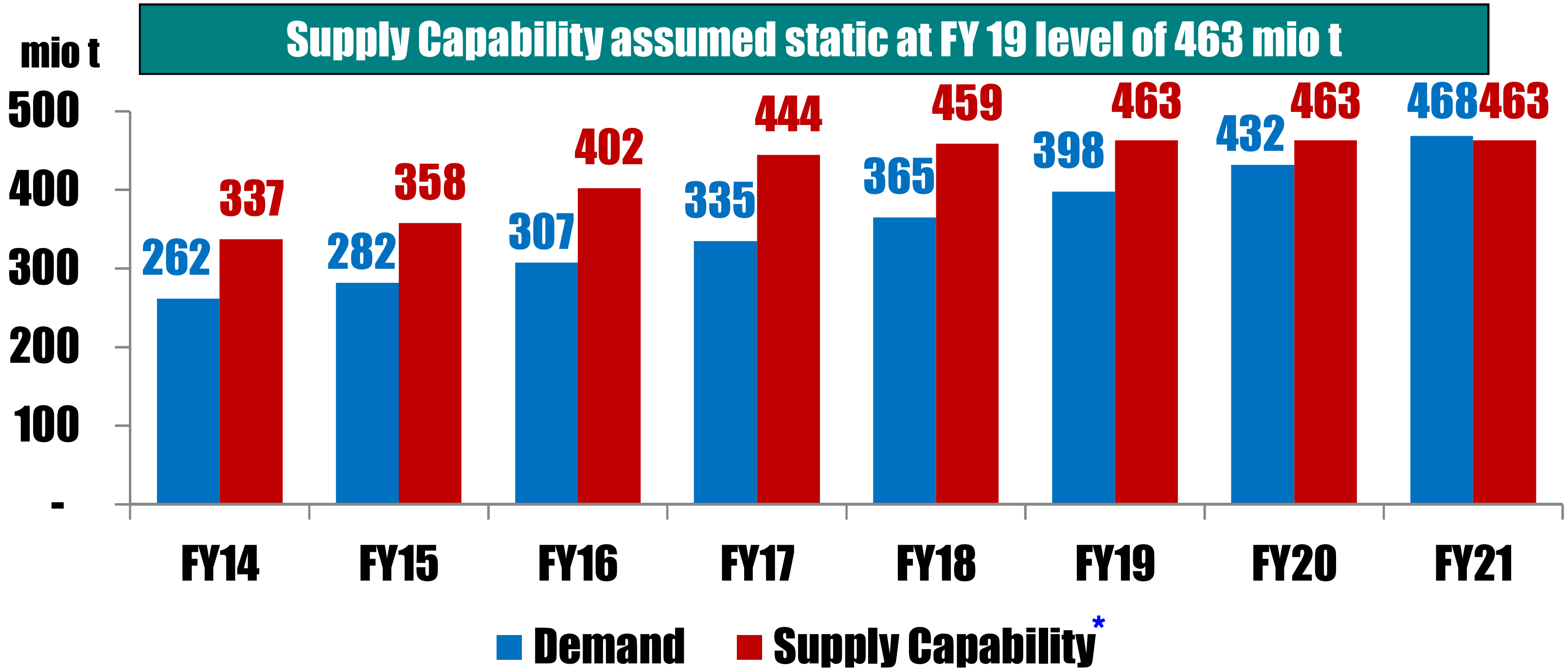
Demand



Over the period, we expect the CAGR of Demand to vary between 7.5 to 9.5 % between the Pessimistic and Optimistic forecasts.

In the Most Likely case it is expected to be ~9% which would result in a PCC growth of 7 % pa.

Demand & Supply Projections



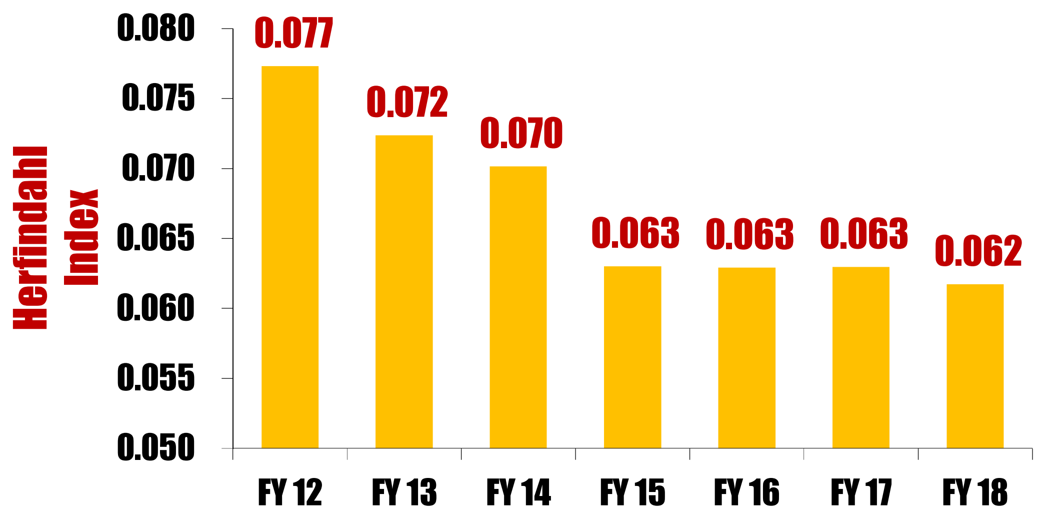
**Refers to domestic supply (net of exports), assuming supply for any capacity added as 50% in Yr 1 & 100% from Yr2 onwards & 90% Cap. Util.*

Supply capability also accounts for possible plants' closure – those that are very old, are not strategically located and have paucity of limestone.

After trailing potential supply between FY 13-FY 20, demand could exceed supply beyond FY 20, if fresh capacity expansion is not planned earlier.

Myth 1: Industry Consolidation

Herfindahl Index (HI) is a preferred metric to measure industry consolidation when studying market price implications.



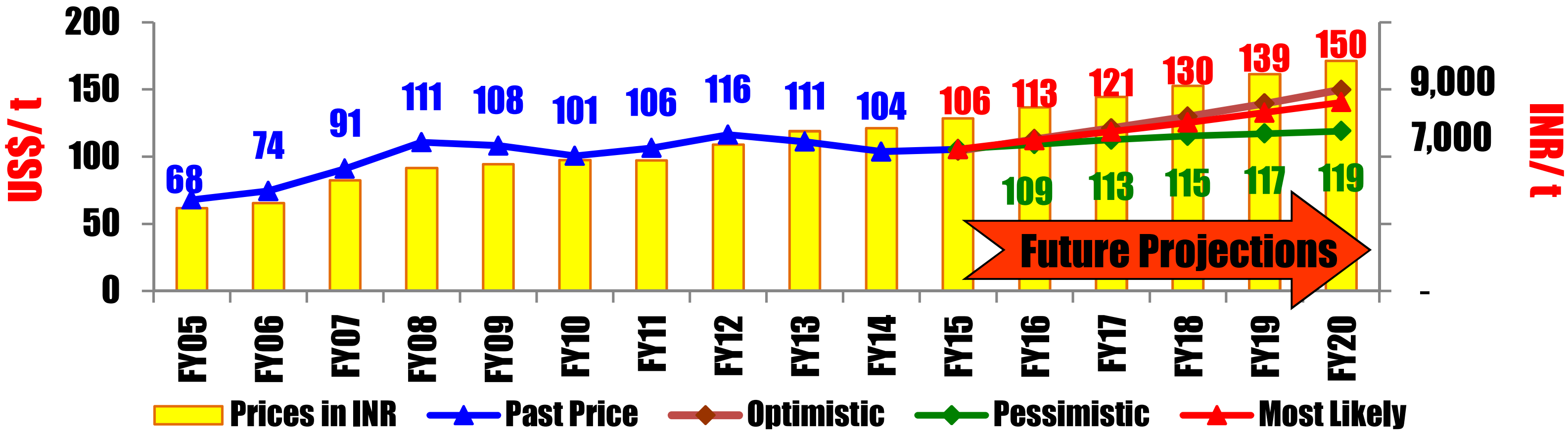
The index is seen to be falling implying a negative impact on prices.

To arrest this fall, the 3 largest players, singly or in tandem, have to create/ acquire more capacity.

Our analysis shows, that if either of these three players desire to arrest the Index at its FY12 level, they would need to attain a capacity of ~ 245 mio t by FY 18 (instead of the current estimated ~180 mio t).

Myth 2: Prices to Fall Sharply

- Fear that prices may fall due to prevalent demand-supply gap.
- Hypothesis tested by modeling and simulating the combined impact of various variables on retail price. Over 40 variables evaluated.
- Prices in past have grown at 5-8% pa.
- Future prices likely to increase by around 6% pa.



After Demand -Supply, rising input materials' prices have the most significant impact.

Myth 3: High Breakeven Point

Hypothesis tested by considering:

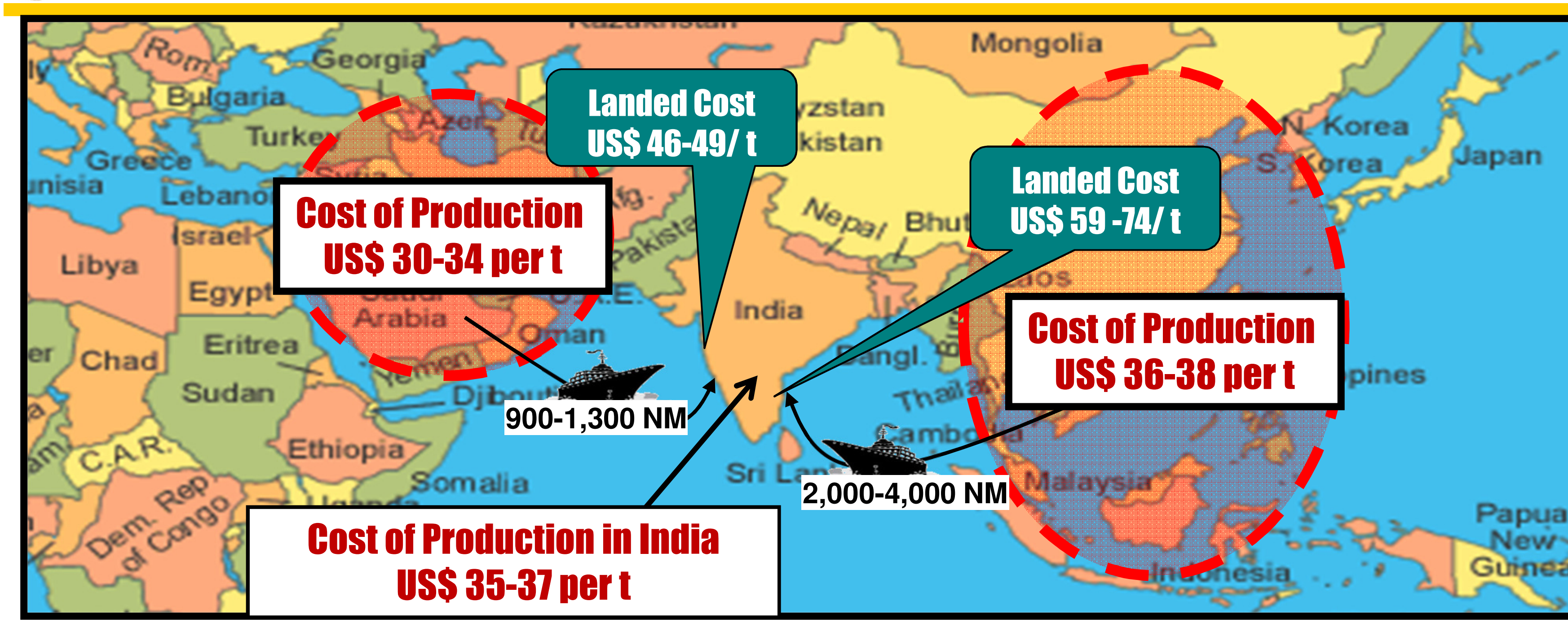
- ✓ Price points: US$ 106/ t (FY 2015 levels), US$ 112/ t (FY 2016 levels) & US$ 141 / t (FY 2020 levels).
- ✓ Specific Investing Cost/ t of OPC: US$ 130-135.
- ✓ Operational breakeven in 4th year of operations.

Price	Breakeven
US$ 106/ t	48-50 %
US$ 112/ t	46-48 %
US$ 141/ t	43-45 %

In Case 3, after considering loan repayment, breakeven seen to be ~ 70 %

Lower variable cost of production effected through improved, technologically-driven, energy efficiencies, falling cost of fuel and a much higher volume of blended cement.

Myth 4: Imports to Reduce Prices



Bottlenecks hindering imports include ports infrastructure, domestic distribution, market reach, competitiveness with domestic players, etc.

Low threat of imports and its impact on prices.

Myth 5: Blending Material Shortage

Fly ash

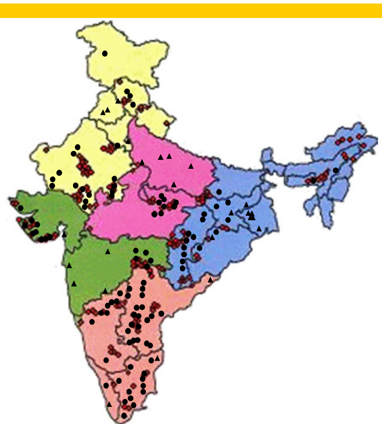
- Current flyash generation is around 100 mio tpa.
- 45 mio tpa of flyash is currently utilized by the cement industry.
- An additional 80 mio tpa could be available by FY 2016/2017 as against an incremental requirement of 25 mio tpa in next 4-5 years.

Slag

- Current slag generation is around 13 mio tpa.
- 8-9 mio tpa of slag is utilized by the cement industry.
- An additional 12 mio tpa could be available by FY 2016/ 2017 as against an incremental requirement of 6-7 mio tpa in next 4-5 years.

Availability appears assured. Yet, advance booking of future strategically located sources being increasingly adopted.

Myth 6: Limestone No Constraint



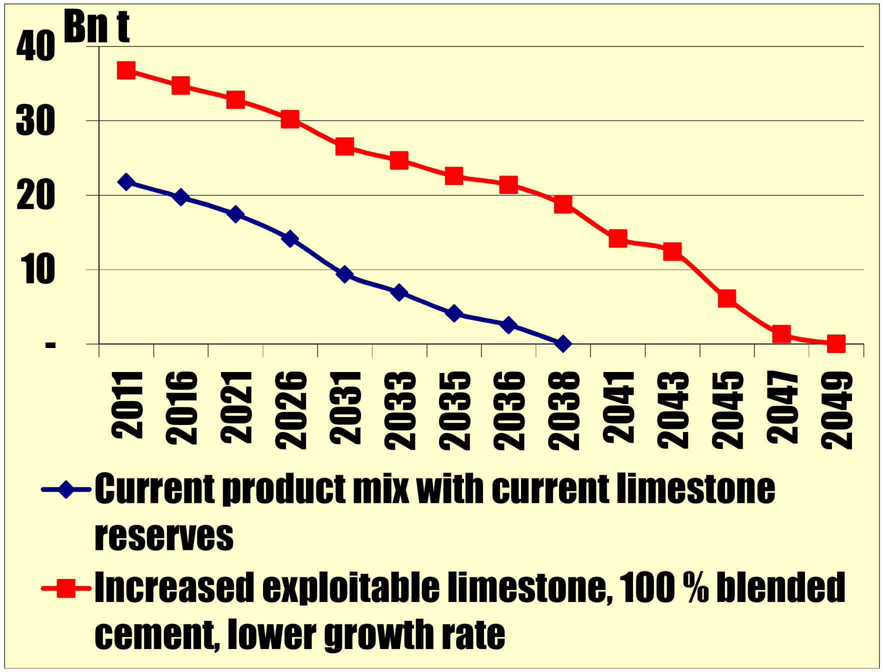
Total Deposits = 50 bio t

Individual Deposit > 50 mio t
CaO > 42%
45 bio t

In Forest Land
4 bio t

Statutorily Blocked
19 bio t

Exploitable Reserves = 22 bio t

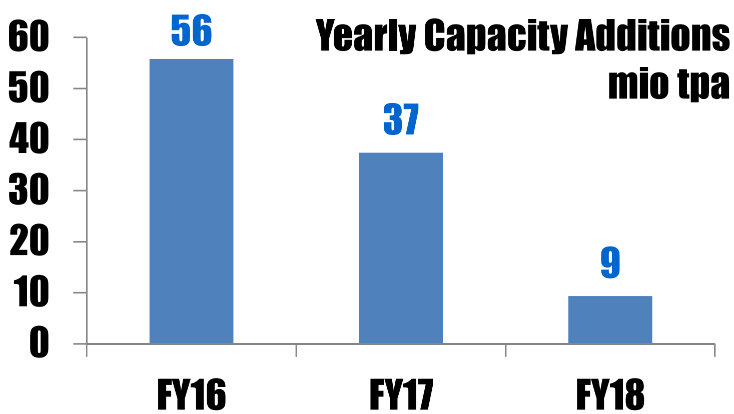


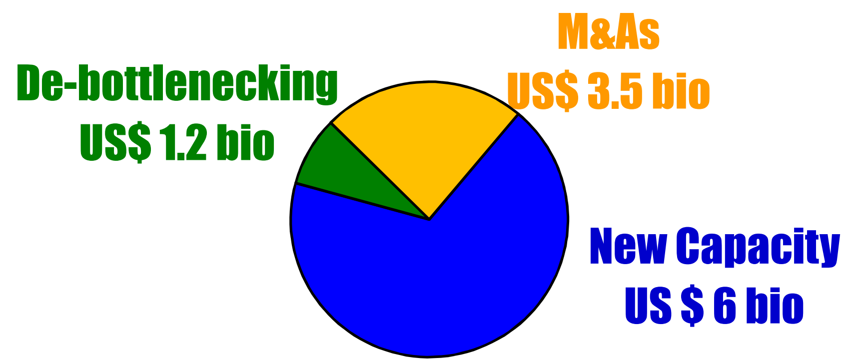
Need to secure deposits well in advance

Implications

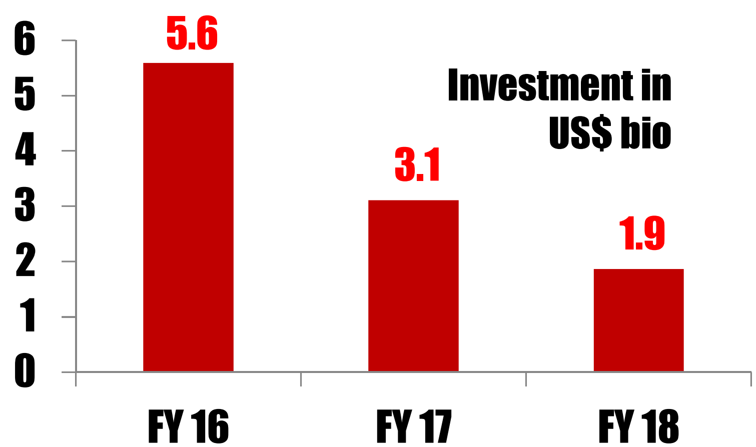
HAPPENING	IMPLICATION
Increasing Cement Demand	Capacity expansion to continue 100 mio tpa in next 3-4 years
Deconsolidation	Lower control over the industry
Good Prices	Reasonable Returns
Low Breakeven Point	New players survival likelihood higher in nascent stage
Limestone Constraint	Conservation efforts and increased production of blended cement
Sufficient Blending Material	Availability not a constraint, however, need to tie up in advance with strategically located resources

Investment Size



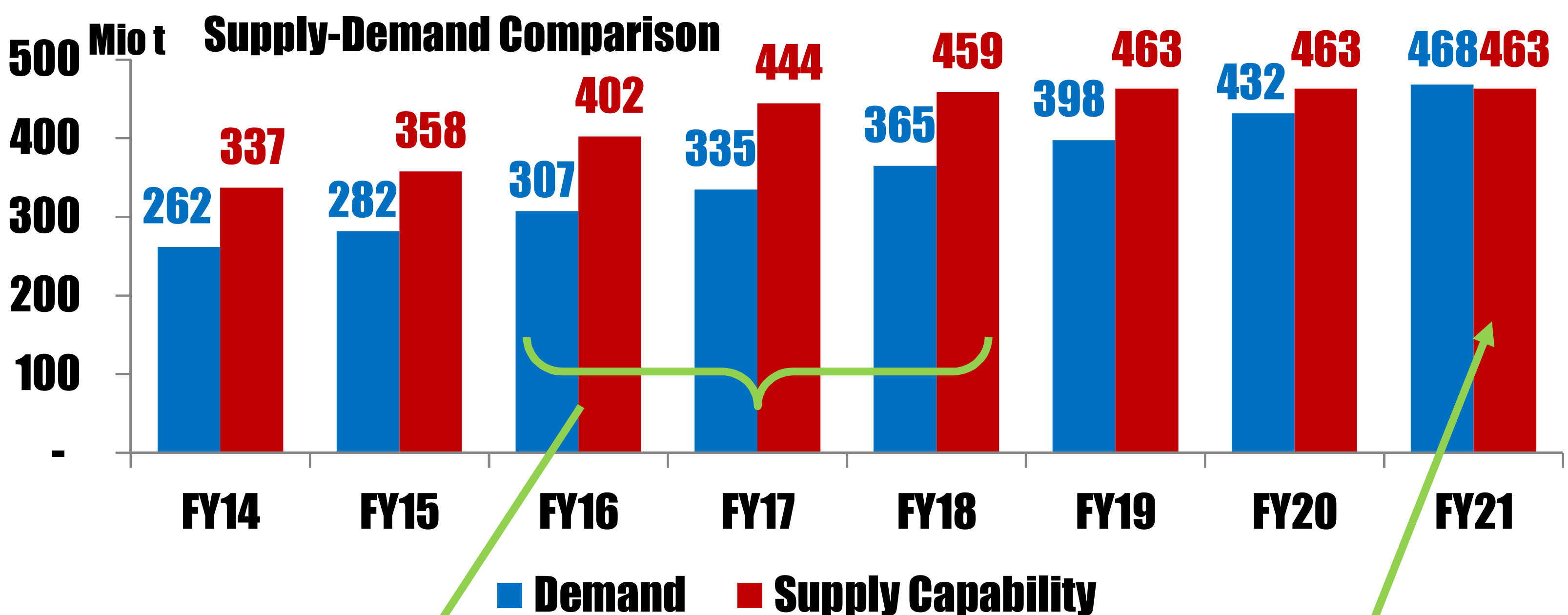


Investment Cost likely to increase from the current US$ 130/ t to ~ US$ 160/ t . Gestation Period of 48-72 months.



Total Investment ~ US$ 11 bio

Investment Timing



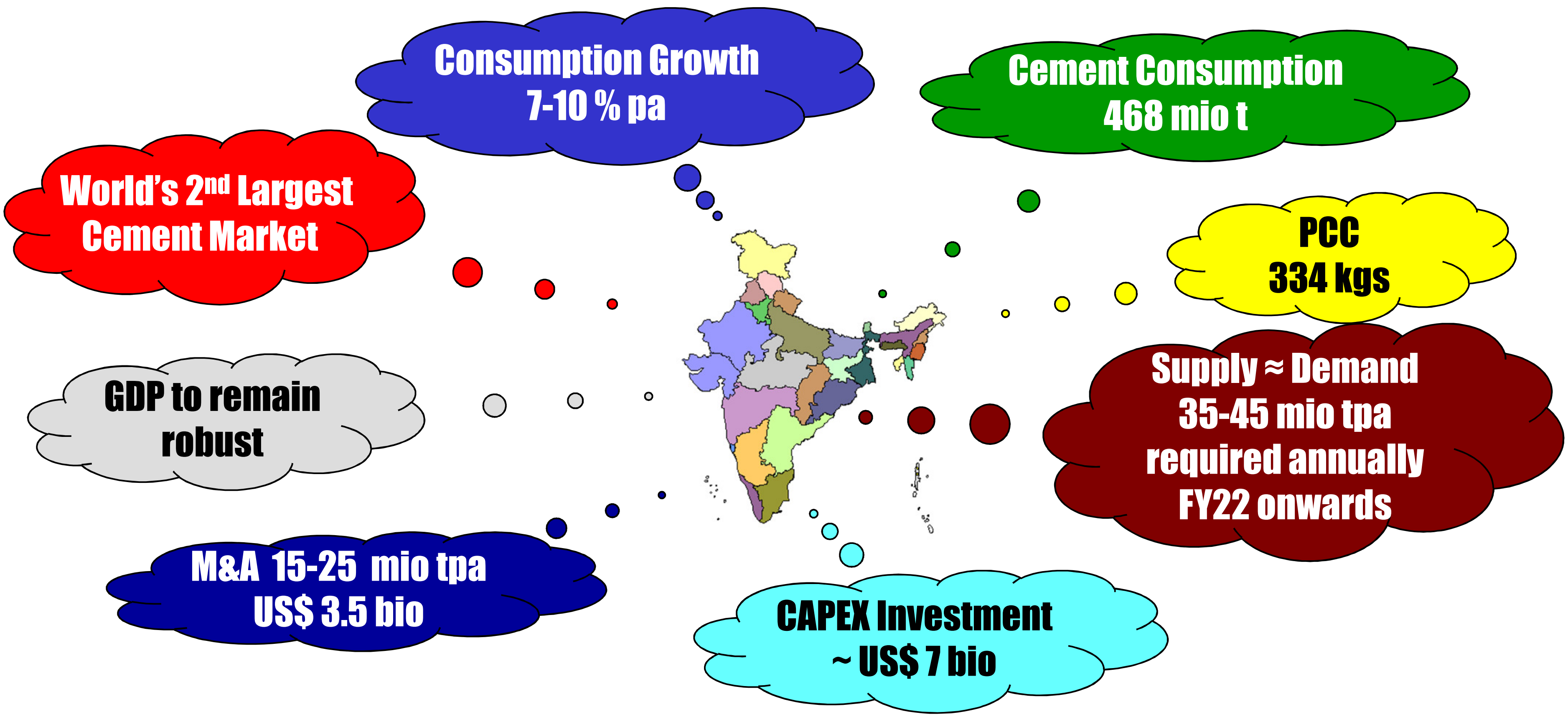
Substantial surplus capacity seen in
FY 2016 - FY 2018... Valuation could be lower!

M&A could see 15-25 mio tpa exchanging hands.

Demand exceeds Supply.

New expansion plans should be underway by FY 2016/ 17.

Indian Cement Market – FY 2021



Web	:	www.holtecnet.com
E-Mail	:	studies@holtecnet.com
Address	:	Holtec Centre, A Block, Sushant Lok, Gurgaon 122001 – India
Telephone	:	+91 - 124 - 238 5095, 404 7900
Facsimile	:	+91 - 124 - 238 5114, 238 5116

Thank you