

# INDIA'S LARGEST CEMENT INDUSTRY: SHORT-TERM PAIN FOR LONG-TERM GAIN WITH EFFECT ON DEMONETISATION

PRABHAKARA T <sup>1</sup>

Research scholar, Institute of Management Studies, Davangere University, Shivangothri Campus, Davangere-577 002

Dr. B BAKKAPPA <sup>2</sup>

Professor, Institute of Management Studies, Shivangothri, Davangere University, Davangere-577 002.

## ABSTRACT:

The main objective of this article is about the short term pain for long-term gain with impact of demonetization on the Indian cement industry. This study based on quantitative research methods, by using secondary data collection methods. This scheme has a great impact on the businesses, common people, and financial institutions along with multi-diverse industrial background of India. India's cement industry is estimated to have a capacity of about 420 million tonnes (mt). Production typically grows 5-6% a year, and caters to the housing, infrastructure and commercial sectors. The industry recovered from the demonetisation's shock faster than expected, with the southern markets affected the least. This study will be implemented and helpful to corporate managers, investors, researchers and management.

**Keywords:** Demonetisation, macroeconomic variables, Cement drivers, Impact analysis.

## 1. INTRODUCTION:

On 8 November 2016, India's Prime Minister Sh. Narendra Modi announced the Government of India's decision to cancel the legal tender character of Rs.500 and Rs.1,000 banknotes with effect from 9 November 2016. He also announced the issuance of new Rs.500 and Rs.2,000 banknotes in exchange for the old banknotes.

While the announcement essentially rendered the Rs.500 and Rs.1,000 banknotes invalid from 9 November 2016, the Ministry of Finance has been monitoring the implementation of these measures in a number of ways:

- Exchange of old currency notes for new Rs.500 and Rs.2,000 currency notes has been permitted until 31 December 2016 (i.e. 50 days from the date of the announcement)
- Such currency exchanges have been limited to certain specified amounts announced from time to time and excess amounts are required to be deposited with banks subject to applicable KYC requirements
- Cash withdrawals have been limited to ensure adequate supply of new currency notes.

- Usage of old currency notes has been permitted for certain specified periods and purposes, such as at hospitals and pharmacies, gas stations and foreign currency exchange for tourists.

The demonetization of the highest denomination currency notes is part of several measures undertaken by the government to address tax evasion, counterfeit currency and funding of illegal activities. The requirement to deposit currency notes in excess of specified limits directly into bank accounts has resulted in the declaration of hitherto unaccounted income, subject to higher tax and other penalties.

**After** the very bold move, finance minister Mr. Arun Jaitley said that though the old notes of 500 and 1000 are not a legal tender from 8th midnight, but they will be accepted at petrol pumps till November 18. So, our transporters need not to worry, they need not to go to banks to exchange 500 and 1000 notes, now they can keep their trucks filled at any petrol station for old currency notes, this is a boost for short time in cement sales.

**Secondly** Indian Government also suspended tax at national highways meaning that transportation cost will also come down drastically boosting cement sales. I have noticed since the demonetization, there are long queues outside banks and ATMs, similarly if you have noticed, you will find similar queues of trucks outside a cement industry as in a cement industry most of the transportation takes place through trucks and added to that they can run their old notes at petrol pumps simultaneously they need not to pay taxes at national highways. Certainly for truck drivers and transporters a headache has arrived. For rest of us folks, we have to be patient for 50 days; our nation is in growth stage after such a long delay of 70 years.

India is the second largest cement producer in the world after China and is one of the main contributors in the GDP of the country. Ever since its deregulation in 1982, it has attracted both Indian as well as many foreign investors. This industry hugely depends on the construction and the infrastructure sector. With a boost in the construction sector, vis-à-vis initiatives like Modi government's smart city initiative, the demand for cement would increase hugely. Apart from the smart city initiative, government's push for large infrastructure projects would also increase the demand for cement manifold.

The Indian cement industry is divided into two types of plants; the large plants with a capacity of 400 million tonnes per annum (MTPA) and the mini plants with a capacity less than 2 million tonnes per annum. It is a highly fragmented industry and is mostly dominated by the top 20 cement companies which accounts for almost 70 per cent of the total cement produced. Also if we look at the demand drivers, the housing sector is the major demand driver in the cement industry, followed by infrastructure, commercial and industrial. It accounts for nearly 64% of the total cement produced in a year.

**De-monetization impacts cement demand in near term:** Post the demonetization, cement demand has been impacted significantly. The total consumption in India is estimated to have declined by ~20% MoM in

Nov-16. Though it has improved slightly in Dec-16, it is expected to be down by ~15% on YoY basis. The key factor for decline in demand has been cash crunch in the system, which directly impacts demand from retail segment. As Housing segment contributes ~60% of the total demand in India, the shortage of cash has delayed the construction of individual houses in both rural & urban areas. Other construction activities have also been impacted due to payment issues with workers/labors/truck drivers. Few dealers saying that the some factors which may play a key role in further demand decline are “anticipation of fall in cement prices which would delay in purchase of cement” and “delay in monetization of land in rural areas would impact rural income”.

**Demand expected to grow ~6% CAGR over FY16-19E:** The overall demand has been weak because of slow growth from rural housing and corporate capex. The weakness in rural economy (which consists of ~40% of the total country's demand) has been the key drag because of normal monsoon. Delay in private capex recovery has also been impacting cement offatkes. We believe that public capex (through Roads/Highways, Urban development, Railways and Rural development) have been the key drivers of growth in the last 15-18 months. However, we expect rural housing demand would pick up from Q4FY17 led by normal monsoon. We estimate ~5% YoY decline in cement demand in H2FY17E (as against 4.5% YoY growth in H1FY17) which implies flat YoY growth in FY17E (vs. 4.8% YoY growth in FY16). We cut our demand estimate for FY18E also and now estimates demand CAGR of ~6% over FY16-19E (vs. earlier estimate of 7.9%).

**Demonetization is one of the many steps taken by government to curb black money:** For past 2 years, Government of India has taken many steps to unearth black money, curb benami transactions and systemized the informal economy into formal one. Demonetization of Rs 500 and Rs 1000 currency notes with new Rs 500 and Rs 2000 currency notes is one of the many steps the government has taken and many significant which may come in future.

**Demonetisation to impact cement demand negatively- we are factoring in only 3% demand growth for FY17:** Housing and infrastructure segments account for ~80% of total cement demand in India. Weak demand growth in recent years is on account of slowdown in both housing and infrastructure segments. With weak 1HFY17 demand, expectations of cement demand bouncing back were running high. However, post announcement of demonetisation scheme, we expect activity in both real estate and infrastructure segments to move slowly. As a result, we have cut our demand estimate for FY17 from 6% to 3%.

Cement demand recovery is expected only from FY18/19 driven by increased allowance under government housing schemes and infrastructure spending driven by roads. With slow capacity addition plans of incumbent players over next few years, utilization rates are expected to improve in next 2-3 years. Price realizations have already started improving across India in FY17.

## 2. EXPERTS AND ECONOMIST REVIEW

There are various views of experts on demonetisation, as some argues that it will hit the black money and other argued in negative.

**Sabyasachi Ma-jumdar, senior vice-president and group head, ICRA Ratings** said "ICRA expects cement demand growth to recover to around four to five per cent during the current financial year, driven by a pick-up in the housing and infrastructure segments — mostly road and irrigation."

**Kulshrestha and Singh** wrote, "Our channel checks across the country show cement demand, though still weak, is recovering from the effect of this move. Though states undergoing political processes (UP and Punjab) are an exception to this recovery as of now, there is a possibility demand may pick up once the government formation is complete".

According to **Ambit Capital**, After the government's demonetisation move, which triggered a cash shortage, cement production growth slowed to 0.5% in November and fell 9% in December—taking production growth for the first nine months of FY17 to a mere 2.6%. "Despite cement demand in FY17 being the weakest in 10 years, average prices have increased 5% as they are more of a function of supply moderation and pricing discipline than demand growth".

**Mint reported on 7 February**, India's cement industry is estimated to have a capacity of about 420 million tonnes (mt). Production typically grows 5-6% a year, and caters to the housing, infrastructure and commercial sectors. The industry recovered from the demonetisation's shock faster than expected, with the southern markets affected the least.

**Sumeet Soni**, Commercial Director, Benetton, says, "The impact is at both ends production and consumers". In production, as large part of the industry is still unorganized and lot of activities is subcontracted which are getting impacted due to cash crunch. It has also compelled consumers to pull the plug on spending. The way of doing business, largely cash dependent, has impacted the inflow of products.

**The India Ratings and Research (Ind-Ra)** said in a statement here, "Cement production is likely to grow by around 4 per cent in FY17; as against our earlier estimation of 4 to 6 per cent growth for FY17. We expect the credit profile of pan India cement players and strong regional players to remain stable; however the credit profile of small and medium cement companies, with high debt levels will come under stress in the next two quarters".

### 3. OBJECTIVES OF THE STUDY

- A. To analyse the impact of Demonetization on macroeconomic variables.
- B. To analyse the short term pain for long-term gain with impact of demonetization on the Indian cement industry

### 4. RESEARCH METHODOLOGY

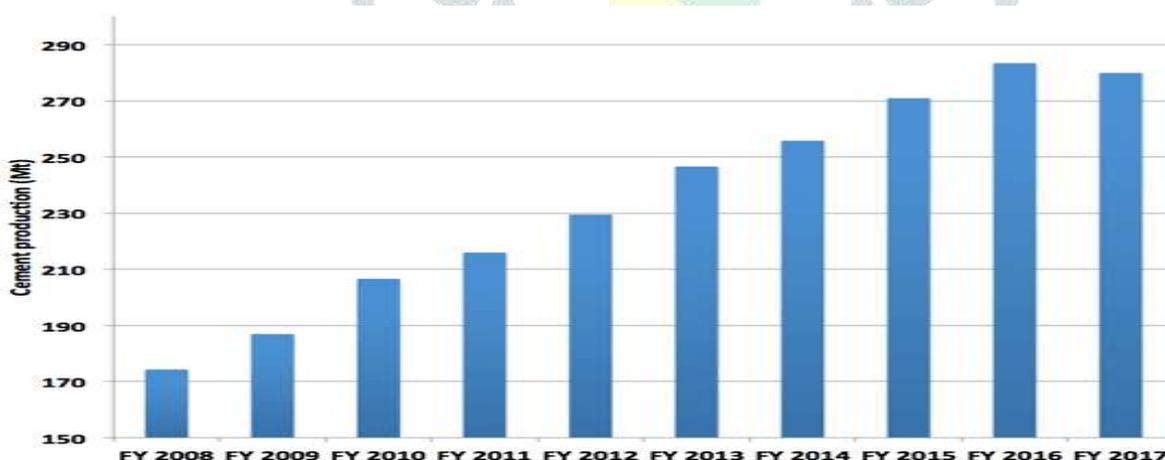
**Type of Data** The present study is quantitative in nature and secondary data will be used for the purpose of analysis.

**Source of Data** The present study is based on secondary data. The sources of data include the facts released by Reserve Bank of India (RBI), cement sectoral report, and from relevant websites available on internet

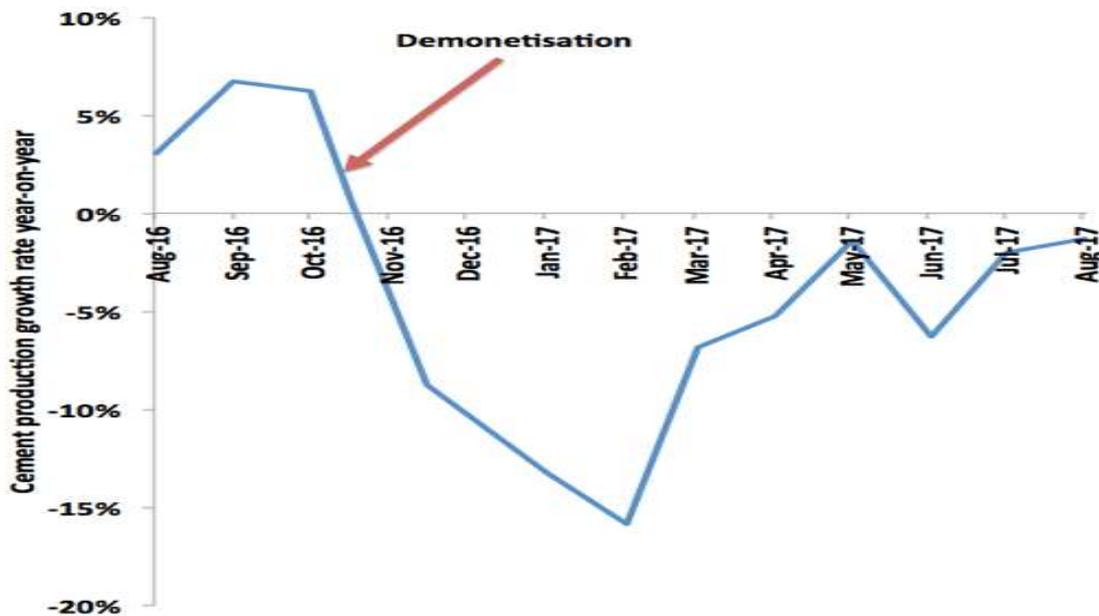
### 5. Theoretical Framework:

#### 1. Cement production growth rate

It's been a pessimistic month for the Indian cement industry with Ministry of Commerce & Industry data showing that cement production has fallen year-on-year every month since December 2016. This was followed by the Cement Manufacturers Association (CMA) saying that the industry was sitting on 100Mt/yr of excess production capacity. Now, the credit ratings agency ICRA has followed the data and downgraded its forecast for cement demand growth to not more than 4% for the 2017 - 2018 financial year.



**Graph 1:** Annual cement production in India. Source: Ministry of Commerce & Industry



Graph 2: Monthly cement production growth rate year-on-year in India: Source: Ministry of Commerce & Industry

Graph 1 shows a production peak in the 2015 - 2016 financial year before falling monthly production broke the trend in the 2016 - 2017 period. Graph 2 pinpoints the month it started to go wrong, November 2016, when the government introduced its demonetisation policy. Production growth went negative the following month in December 2017 and it hasn't managed to right itself since then and grow. It's convenient to blame the government for the slump in production but it troughed in February 2017 before taking a lower level of decline since then.

## 2. Key projects to boost cement demand:

By keeping focus on infrastructure development, the government has announced various infrastructure projects which are likely to boost the cement demand in the medium to long-term. They are Roads, Smart Cities, Dedicated freight corridors, The HRIDAY scheme and "Housing for All".

### Roads:

Roads and highways have been the key focus among all the infrastructure projects of the government. This segment is likely to be an important source of further cement demand in infrastructure. The government awarded a record 10,000 km of road projects and constructed 6,000 km of highways in FY16, a growth of 36% over the previous fiscal. For FY17, the government has set a target to award contracts for 25,000 km of national highway projects and construct ~15,000 km of roads - around 40 km a day. As per Union Budget FY17, the investment in roads, including the Pradhan Mantri Gram Sadak Yojana (PMGSY) allocation, would be Rs.970 bn during FY17, against the budgeted ~Rs.830 bn for FY16.

### 3. Smart Cities

The government's initiative to develop 100 smart cities in India and rejuvenate another 500 is likely to be an essential driver of demand for cement in the next decade. For this purpose, Rs.980 bn (\$15 bn) has been approved by the Union Cabinet. Of this, Rs.480 bn (\$7.1 bn) has been earmarked for the smartcities mission and Rs.500 bn (\$7.4 bn) for the Atal Mission for Rejuvenation and Urban Transformation (AMRUT). To select smart cities, 100 potential smart cities were nominated by the states and Union territories based on specific criteria (stage 1). These nominated cities were required to submit requisite smart-city plans, which were evaluated (stage 2) to prioritise finance for them. The first 20 selected cities and towns have proposed investment of Rs.508 bn over five years under the PPP model.

### 4. Dedicated freight corridors:

The Indian Railways is in the process of constructing an Eastern Corridor from Ludhiana (Punjab) to Dankuni (West Bengal) (1,856km) and a Western Corridor from Dadri to Jawaharlal Nehru Port (1,486km), involving investment of Rs.815 bn. The government has already awarded civil contracts for 66% of the former and 43% of the latter project. The entire Western Corridor is being funded by the Japan International Cooperation Agency (JICA); the Eastern Corridor from Mughalsarai to Ludhiana is being funded by the World Bank. The projects are likely to be completed by end-2019. These freight corridors are the India's most ambitious infrastructure projects. The associated and ancillary infrastructure and civil contracts on account of these projects are likely to generate significant cement demand.

### 5. The HRIDAY scheme

The government has recently announced a mega project to develop 12 heritage cities across the country under the National Heritage Development and Augmentation Yojana (HRIDAY). This focuses on developing civic infrastructure at Ajmer, Amravati, Amritsar, Badami, Dwarka, Gaya, Kanchipuram, Mathura, Puri, Varanasi, Vellankanni and Warangal. Under the scheme, for these 12 cities the urban development ministry has sanctioned an initial Rs.4.5 bn in the first phase. This would significantly boost cement demand in these areas.

### 6. "Housing for All"

The government launched "Housing-for-All Scheme", in 2015, to provide pucca houses across the country by 2022. The scheme has been reconstituted as the Pradhan Mantri Awas Yojna (PMAY). This proposes building 20 mn houses for the urban poor including the economically weaker sections and low income groups in urban areas by 2022. The government has increased the outlay under Pradhan Mantri Awas Yojna (PMAY) to Rs.200 bn from Rs.156 bn in 2015-16. We believe this scheme would prove to be a major boost for cement in the medium to long term.

**6. FACTS AND FINDINGS:****A. Demonetisation in India with immediate i.e., short term and long term effect:****Immediate effect i.e., short term impact on economic activities**

- 86% of current currency (INR 500 & INR 1000 notes) rendered illiquid
- Severe working capital crunch in businesses
- Banking system not geared up to meet the demand of cash distribution
- Restricted cash withdrawals has sucked out liquidity from Trade
- Distribution of new currency across the country has to be faster
- Segments most impacted due to cash settlements
- Daily wage earners
- Transporters
- Households
- Retail sales

**TABLE 1: SHOWS IMPACT ON SHORT TERM AND LONG TERM**

<b>Short term negative business sentiments:</b>	<b>Long-term:</b>
<p><b>I. Areas of Impact:</b></p> <ul style="list-style-type: none"> <li>a. Acute liquidity crunch</li> <li>b. 87% of consumer payments have been in cash</li> <li>c. Reduction in daily purchases and thus a decline in overall volumes</li> <li>d. Negative price impact of perishables &amp; services</li> <li>e. Potential impact on Rabi crop</li> <li>f. Currency fluctuation</li> <li>g. Decline in GDP &amp; De-growth</li> </ul>	<p><b>II. Areas of Impact:</b></p> <ul style="list-style-type: none"> <li>a. Fall in inflation</li> <li>b. Reduction in interest rates</li> <li>c. Increase in Public spending</li> <li>d. Speedy implementation of Government projects</li> <li>e. Strengthening of organized sector</li> <li>f. Likely Fiscal Stimulus</li> </ul>

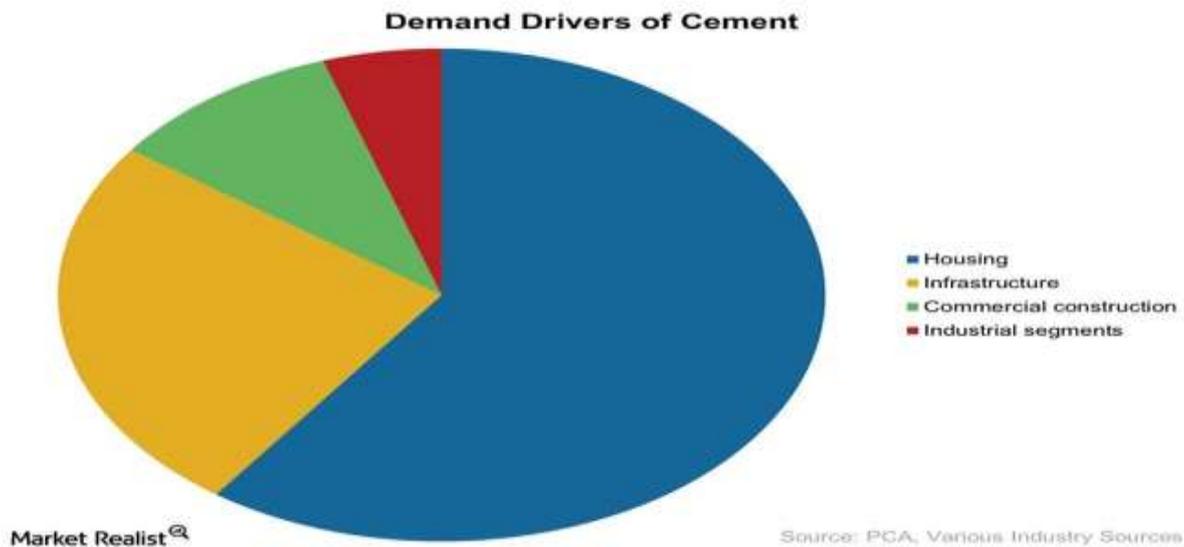
**B.Impact on key macroeconomic variables:**

Variable	Near term impact	Long term impact
<b>Currency in circulation</b>	INR 500 and INR 1000 notes constituted 86% (INR 14.8 tn) of the total currency in circulation. A cap on withdrawal along with decrease in the usage of these notes will bring down currency in circulation.	Once the new notes are amply available, the currency in circulation is likely to improve substantially.
	<b>Negative</b> in Near term, but <b>Neutral</b> in Long term	
<b>Inflation</b>	Given, the high share of cash transactions in rural India, the demand is likely to decrease. Lower demand could weigh negatively on prices. There could be a drop in the rural inflation.	Demand is likely to recuperate post government spending, which should have positive impact on employment and disposable income.
	<b>Positive</b> in Near term, but <b>Neutral</b> in Long term	
<b>GDP</b>	Consumption demand likely to decrease, with decline of currency in circulation. Moreover, there would be an adverse impact on informal sectors. As a result, there could be a dip in 3QFY17 GDP.	There could be a increase in direct tax collections which could pave way for increase in investment by the government.
	<b>Negative</b> in Near term, but <b>Positive</b> in Near term	
<b>Government finances</b>	As a share of the unaccounted money makes its way into formal channel, the government could benefit from higher income tax collections. This could help government's FY17 fiscal direct deficit target, especially post the short fall in anticipated spectrum revenues.	This could infuse a transition from unorganised to organised sector, which could there by enhance the government's ability to tax commercial transactions. As a result there is a likely structural improvement in tax to GDP ratio in Indian economy.
	<b>Positive</b> in Near term as well as Long term	
<b>Bond yields</b>	Improvement in bank deposits is likely to lead to higher SLR (Statutory Liquidity Ratio) demand. This could augur well for a fall in the government bond yields.	With expected improvement in tax buoyancy , supply of g-secs is likely to get more rationalized, putting downward pressure on yields.

<b>Positive</b> in Near term as well as Long term
---

### C. Impact of Demonetization on Cement industry drivers and indicators:

- Cement industry drivers and indicators:** Cement demand is primarily derived from the following segments—housing at 60%–65%, infrastructure at 20%–25%, commercial construction at 10%–15%, and industrial at 5%–10%



a. **Housing**

Housing accounts for a major portion of total domestic cement demand, ~60%–65%, as seen in the Homebuilder's Index.

b. **Infrastructure**

An increased focus on infrastructure development increases cement demand. This effect is prominent in emerging economies. A substantial portion of this demand comes from infrastructure projects. The projects are funded by the government. Infrastructure development can be tracked through the government funds that are allocated for the projects.

c. **Commercial construction**

The commercial construction sector can be divided into retail, office space, hotels, and other civil structures—hospitals, multiplexes, and schools.

d. **Other indicators**

- **Home inventories** – A declining level of inventories is a leading indicator of cement demand.
- **Global economic recovery** – Economic growth is directly related to increased demand of construction material.

- **Capacity utilization** – Capacity utilization of cement companies can be tracked to gauge their operating health.
- **Capex plans** – Capex plans of large industrial groups leads to a surge in demand during that period.
- **Special events** – Historically, special events that are organized on a large scale have led to a higher demand for cement.

## 2. Indian Cement Industry Demand drivers:

**Table 2: shows Indian Cement Industry Demand drivers pre and post demonetisation**

Cement Demand Centres	Share in Demand	Pre-demonetisation	Post-demonetisation
Rural Housing	35%	↑	↑
Urban Housing:			
Tier 1 Cities	10%	↔	↑
Tier 2 & other Cities	20%	↔	↓
Infrastructure	20%	↑	↑
Commercial	15%	↔	↔

Demonetization – Boost for Government infrastructure work

## 3. Impact on Cement demand Post-demonetization

### 1. Rural Housing:

#### Impact on Demand:

- a) Negative Effect of Immediate impact on demand due to cash crunch in retail demand for small construction works (repairs, extension etc.)
- b) Positive Effect on Demand to normalize in Long-term once new currency circulation improves

### 2. URBAN HOUSING - Tier 1 cities includes,

Key consumers – Institutional

Sales pattern – Large volumes

Transaction – largely cheque

#### Impact on Demand:

- a) Demand impacted due to squeeze on working Capital
- b) Demand from “A” category builders likely to remain intact
- c) Positive in the long run:
  - Fall in interest rates

- Correction in real estate prices
- Consolidation of the Industry (unorganized players will get aligned)

### 2.1 URBAN HOUSING – Other Cities includes,

Key consumers –Individual House Builders (IHB)

Largely cash transaction for procurement of building materials

Land purchase deals have a significant component of parallel economy

#### Impact on Demand:

- a) Demand will be impacted due to cash squeeze in system
- b) Land acquisition likely to become difficult as large part of consideration settled in cash
- c) Demand recovery likely to be slowest in this segment
- d) Interest rate correction may support positive traction in this segment

### 3. Infrastructure

- 1) Demand from large infrastructure companies
- 2) Large volume off-take (bulk as well as bagged)
- 3) Largely Government works viz. Roads, Metro Rails, Irrigation etc.
- 4) No direct impact

#### Impact on Demand:

- a) Short term: Likely no impact on demand, may face some working capital issues in case of sub-contractors
- b) In long-term demand to improve further as with the improvement in liquidity Government is likely to push infrastructure work

### 4. Commercial:

- Demand in form of industrial capex
- Large volume off-take
- Largely cheque transaction

#### Impact on Demand:

- a) Short term: This segment has not been growing
- b) Long-term: demand may improve with fall in interest rates & increase in consumption

### 3. EFFECT on key demand drivers of cement industry:

- 1) Improvement in Government liquidity to support for more infrastructure spending
- 2) Sharper Interest Rate cuts
- 3) Expect a fiscal stimulus in the Union budgets
- 4) Housing Demand:

- a. Rural - short term disruption, likely to normalize once cash circulation improves in system
- b. Government's thrust on low income housing program
- c. Urban housing demand in Tier 1 cities - likely increase in pace of liquidation of surplus inventory due to reduction in interest rates and real estate prices
- d. Urban housing demand in other cities – likely reduction in demand due to the old parallel economy

**TABLE 3 – Maximum impact on cement demand limited to 7%**

Particulars	Benchmark	Organized /Unregistered Housing	Vacant Urban	Vacant Rural	Total Impact
No. of units (mn)		2	4.6	4.2	10.9
a) Organised	0.5				
b) Funded by Apex Cooperative Hsg Bodies	1.0				
c) Unregistered	0.5				
Construction area (sq ft)		764	500	500	
Total area constructed (mn sqft)		1528	2321	2110	5959
Cement Proportion (%)		25	20	15	
Total cement demand during 2001-11 (mn tons)	1573				
Cement Requirement (mn tons)		38	46	32	116
Impact Range (%)		2	3	2	7

(Source: Government of India, Monarch Network Research)

Note: Based on the data of Census 2001 and 2011

We expect around 7% impact on cement demand post demonetization and relentless crackdown on black money by Indian Government unlike what consensus believes. In our view, moderation in real estate demand will be limited to organized sector of housing where builder-investor-buyer nexus works while large portion of India's housing is unorganized. Our analysis suggests ~2% of India's cement demand comes from the houses built by real estate builders and ~5% from vacant houses which is at risk.

## 7. CONCLUSION:

"While in the short term, demonetisation has negatively impacted real estate and construction activities, and the cement off-take, the situation is likely to normalise from the first quarter of this financial year,"

We expect around 7% impact on cement demand post demonetization and relentless crackdown on black money by Indian Government unlike. Our analysis suggests 2% of India's cement demand comes from the houses built by real estate builders and 5% from vacant houses which is at risk.

Business houses are an integral constituent of the country's economy. While medium and large scale business is unaffected to such ban, many small-size commercial establishments are deeply affected by such sudden move by the government. The economy of the country may experience recession in the coming few weeks but is expected to get back to its shape shortly after the influence of Modi government. Central government's recent decision to demonetise the high value currency is one of the major step towards the eradication of black money in India. The demonetization drive will affect some extent to the general public, but for larger interest of the country such decisions are inevitable. Also it may not curb black money fully, but definitely it has major impact in curbing black money to large extent.

## REFERENCES:

- 1) JR Financial | November 10, 2016, Impact of Demonetization on various sectors & the Economy
- 2) Karvy stock broking research report on cement as on Jan 13, 2017
- 3) HDFC Bank Investment Advisory Group, cement sector report on September 1, 2016
- 4) Nirmal Bang Equities Pvt. Ltd., Our Demand Estimate Slashed Further Post Demonetisation
- 5) Franklin by Demonetisation-No Pain No Gain November 2016
- 6) [investorrelations.utcl@adityabirla.com](mailto:investorrelations.utcl@adityabirla.com)
- 7) REPORT- CEMENT INDUSTRY, [www.sookshm.co.in](http://www.sookshm.co.in)
- 8) The Impact of Demonetization in India, [squirepattonboggs.com](http://squirepattonboggs.com)