State Wise Steel Demand in India

ISA Steel Conclave, New Delhi, October 26, 2018
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- worldsteel’s India state wise steel demand study
- Aspects of state wise steel use in India
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- Summary and conclusion
worldsteel’s India state wise steel demand study
Motivation of the study

- India is known as a country of potential, but there are different views about when India’s steel demand will start to take off.

- India’s growth prospects can be better understood by looking at India by states as was the case with worldsteel’s provincial approach to China.

- Such disaggregated approach enables identification of uniqueness of each state and better insight on economic and steel demand potential.

- The Project Team looked into characteristics of states (“White book of Indian states”) focusing on potential for growth of steel using sectors, notably construction and manufacturing.
Project team

- The Project was conducted under Joint leadership of worldsteel and ISA since 2016 2H
- Key contributors

- External partners: Joint Plant Committee
Estimating state wise steel demand – worldsteel approach

- In the absence of steel use statistics by state, SWIP share was used to estimate state wise steel use

\[
\frac{\text{GSDP Construction}}{\sum \text{GSDP Construction}} \times \text{ASU, fs India} \times 0.62 + \frac{\text{VA SWIP}}{\sum \text{VA SWIP}} \times \text{ASU, fs India} \times 0.38
\]
Aspects of state wise steel use in India
White books of India States

- Project Team has produced a “white book” for each state which covers the following aspects:
  - Macroeconomic performance and drivers.
  - Key policy initiatives and business environment.
  - Overview of key industries in the state.
  - Identification of steel demand drivers and SWOT analysis.

- Through this exercise, it was possible to identify and compare growth potential of different states and the team has produced an evaluation of steel demand growth potential for each state.

Note. 7 North Eastern states were approached in a consolidated way, the rest of the 22 states were studied separately along with National Capital Region of Delhi.
States show uneven and multispeed development

- Regional growth has been uneven among states.
  - West Bengal experienced economic decline after 1960s.
  - Tamil Nadu on the other hand has grown steadily and consistently.
  - Gujarat has been outperforming while northeastern states lag behind.
- Rich states are located in western/southern and northern India.

**GDP per capita, 2015-16**

- Uttar Pradesh
- Jammu & Kashmir
- Tamil Nadu
- Andhra Pradesh
- Kerala
- Maharashtra
- Madhya Pradesh
- Bihar
- Odisha
- Karnataka
- Rajasthan
- Gujarat
- Chhattisgarh
- Uttarakhand
- Himachal Pradesh
- Haryana
- Jharkhand
- West Bengal
- Sikkim
- Goa
- Punjab
- Arunachal Pradesh
- Assam
- Nagaland
- Manipur
- Mizoram
- Tripura
- Meghalaya

**GDP growth, CAGR 15-16 / 11-12**

- < 4 %
- 4-6 %
- 6-8 %
- > 8 %

Source: Central Statistics Office, worldsteel
Crude steel production by states

- Steel production centres: raw materials (iron ore) driven (Odisha, Chhattisgarh, Jharkhand and Karnataka) or port based and proximity to markets (Maharashtra and Gujarat).

Source: JPC, 2015-2016, million tonnes (Mt)
Steel use by states

- Maharashtra and Tamil Nadu are largest steel using states, both auto hubs.

Source: worldsteel estimation, 2014-15, million tonnes (Mt)
Steel geography of India is unbalanced

- Steel producing states in the east have not seen development of own steel markets.
- Therefore intra-state trade in steel has been a common feature.

Source: worldsteel estimation, 2014-15

Source: Joint Plant Committee, 2015-16
Steel use across states is also uneven

- Among rich states, only a few states show high steel use per capita, e.g. Tamil Nadu, Maharashtra, Gujarat, Goa.
- North-Eastern states feature low steel use per capita, e.g. Assam, Manipur, Nagaland.
- Some states have high steel use per capita despite low per capita income, driven by infrastructure, e.g. Uttarakhand.

Source: Central Statistics Office, worldsteel estimation, 2014-15
Diverse patterns of steel use of Indian states

- Reflecting uneven and diverse economic growth patterns, different states show different tracks of S-curve.

**S-curve, 2004-05 – 2014-15**

Source: worldsteel estimation, 2004-15
Insights on state wise steel demand prospects
Insight 1: Uneven growth will continue, but catching-up is taking place in some states (1/2)

- Uneven economic performances of Indian states has been driven by geography, natural resources and socio-political environments.

- Political leadership and consistent policy had important influence on the economic performance of the advanced states (e.g. Gujarat).

- Central government’s focus on improving ease of doing business has prompted pro-business reforms in various states.

<table>
<thead>
<tr>
<th>State GDP growth</th>
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<tbody>
<tr>
<td>CAGR 15-16 / 11-12 (India average: 6.7 %)</td>
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<tr>
<td>Gujarat</td>
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<td>Himachal Pradesh</td>
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<td>North East states</td>
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<td>Kerala</td>
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<td>Bihar</td>
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<td>Goa</td>
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</table>

Source: Central Statistics Office, worldsteel
Insight 1: Uneven growth will continue, but catching-up is taking place in some states (2/2)

- Strong growth momentum will continue in Gujarat, Haryana, Maharashtra & Tamil Nadu.

- Some middle income states shows high growth potential driven by renewed focus on economic development (Andhra Pradesh, Telangana).

- Eastern states (Chhattisgarh, Jharkhand, Odisha) are expected to catch up thanks to mining and manufacturing development.

- North eastern states are expected to stay on lower growth track limited by lack of reform and geography, but large infrastructure investment as announced by the government can change overall investment environment in the long run.

Potential for growth, economic development

Potential for growth:
- low
- medium low
- medium high
- high

Source: Project Team Analysis
Insight 2: Service sector will continue to be a growth driver

- Service sector has been the key growth driver for India, enabling employment generation with less capital investment.

- Service sector will continue to be important due to:
  - Stronger focus on generating employment for sustainable and equitable growth,
  - Competitive advantage in the knowledge based service sectors

Share of services in GDP

Potential for growth, services (knowledge based)

Source: Central Statistics Office, 2015-16

Source: Project Team Analysis
Insight 3: Manufacturing is slowly gaining momentum (1/2)

- The share of manufacturing in India’s GDP stayed within 14-16% in the last 40 years, only recently rising to 18%.

- Some states have strong presence of manufacturing due to:
  - Unfavorable climate for agriculture (e.g. Gujarat, Maharashtra and Tamil Nadu).
  - Mineral deposits leading to heavy industries base (e.g. Goa, Odisha, Chhattisgarh and Jharkhand).
  - Special tax benefits (e.g. Uttarakhand, Himachal Pradesh and Sikkim).

- “Make in India” provides vision for enhancing manufacturing activities across states, aiming to raise share of manufacturing to 25% of GDP.

Share of manufacturing in GDP

Source: Central Statistics Office, 2015-16
Insight 3: Manufacturing is slowly gaining momentum (2/2)

- Some states will have stronger focus on manufacturing:
  - Maharashtra, Uttarakhand, Tamil Nadu, Gujarat, and Haryana have made significant progress in implementing business reforms and suitable infrastructure.
  - States like Andhra Pradesh, Madhya Pradesh and Punjab have renewed thrust on manufacturing, especially in auto and ancillary sector.

- Within the manufacturing sector the focus is more on relatively labour intensive ones like food processing and textiles.

- Mechanical machinery and shipbuilding sectors are less prominent across states with a few exceptions (e.g. Punjab and Gujarat).

Potential for growth, manufacturing (steel intensive)

Source: Project Team Analysis
Insight 4: India’s auto manufacturing hub will expand

- India’s auto industry has shown a strong growth driven by domestic demand and FDI inductive policies.
- India aims to be a global auto hub for small cars with huge focus on exports.
- The existing automotive hubs in Haryana, Tamil Nadu, Maharashtra will continue to strengthen.
  - Haryana is the largest production hub and geared to domestic market.
- New auto hubs are emerging in Andhra Pradesh, Gujarat mainly driven by FDI.
- The sector is also poised for continued strong growth.

Source: SIAM, IBEF, public domain
Insight 5: Construction will be a common demand driver

- Growth in the construction sector will be a pan-India phenomenon driven both by infrastructure spending and housing demand, especially affordable housing.
- Construction has gained significant share in Tamil Nadu, Uttar Pradesh, Chhattisgarh, etc.
- Majority of states are expected to have strong infrastructure development, especially along major corridors.
- In some states, like Jammu & Kashmir and Bihar, steel demand will be driven almost entirely by infrastructure development.

**Share of construction in GDP**

**Potential for growth, infrastructure**

Source: Central Statistics Office

Source: Project Team Analysis
Insight 6: Steel geography of India will remain unbalanced

- Gujarat, Maharashtra and Haryana are likely to experience strongest growth in steel demand. Tamil Nadu also has good potential.
- The unbalanced steel geography will continue: capacity expansion have been mostly brownfield and new steel production facilities most likely to be built around raw materials.
- With decreased transportation cost, intra-state trade steel trade will continue to prevail.
Summary and conclusion
# Summary of state potential

## Steel demand potential

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<tr>
<td>ML</td>
<td>North East ex Assam</td>
<td>Bihar, Jammu and Kashmir, Kerala, Madhya Pradesh, Punjab, Rajasthan</td>
<td>Assam, Goa, Himachal Pradesh, West Bengal</td>
</tr>
<tr>
<td>MH</td>
<td>Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Odisha, Telangana, Uttar Pradesh, Uttarakhand</td>
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## Economic growth potential

- Gujarat, Haryana, Maharashtra
- Andhra Pradesh, Chhattisgarh, Jharkhand, Karnataka, Odisha, Telangana, Uttar Pradesh, Uttarakhand
- Tamil Nadu
- Assam, Goa, Himachal Pradesh, West Bengal
- Sikkim

- North East ex Assam
- Bihar, Jammu and Kashmir, Kerala, Madhya Pradesh, Punjab, Rajasthan
- Assam, Goa, Himachal Pradesh, West Bengal
- Sikkim
Geography of economic vs steel demand potential

- Eastern states are expected to catch up in economic development.
- Infrastructure will be a pan-India steel demand driver, driven by various government initiatives.
- Strong manufacturing potential are shown in a limited number of states.
- Gujarat, Maharashtra, Haryana show strongest, balanced potential.

Source: Project Team Analysis

Potential for economic growth

Potential for steel demand growth, infrastructure driven

Potential for steel demand growth, manufacturing driven

Potential for growth:
- low
- medium low
- medium high
- high

Source: Project Team Analysis
When will India’s demand take off?

Source: IHS Markit, worldsteel, Project Team Analysis
Thank you for your attention.

For further information contact:

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