Indian Infra Credit Risks with ESG Lens
S&P Global Ratings

Feb-2021
India Infra | Infra Deficit Weighs on Competitiveness

Infrastructure Deficit Weighs on India's Competitiveness

Key Idiosyncratic Risks for Indian Infrastructure and Impact on Foreign Debt Investors

- **Execution Risk:** Right of Way, Environmental clearance, Land acquisition, stalled projects
  - Many debt investors look at only operational projects

- **Regulatory Risk:** Varies sharply across sectors, Higher for Airports, lower for Utilities/Renewables.
  - Impacts sectoral exposure

- **Weaker Counterparty:** Risk of counterparty default, Receivables delay.
  - Build buffer in pricing, affects project economics/returns

- **Macro Risks:** Currency Risk, Interest Rates
  - Hedging/Pricing

Source: World Economic Forum
India Power | Stable Regulations Support, Receivables Drag

Regulatory Mechanism & Policies Support Cash Flows

- Fixed tariff/ regulated returns, availability-based payments support stable operating cash flows
- Favorable renewables policies and growth prospects & competitive prices attract significant FDI.

High Receivables & Weaker Counterparties Pose Risks

- Increase in overdue receivables post-March continues for already weak distribution companies (discom)
- Budget plans for supporting discoms. Effect of these moves won't be evident in the next one to two years.
- Structural problems remain.
India Airports, Ports and Roads | Varied Setting

**Airports:** High Regulatory, Traffic Risks
- Regulatory Delays, Ambiguity lead to uncertainty in cash flows.
- Passenger Traffic recovery unlikely till 2024.

**Ports:** Light Regulations, Market Driven
- Growth in volume to track economic rebound.
- Fertilizers and container traffic recover faster than crude and coal segments.

**Roads:** Fast Recovery, NHAI support
- Despite tariff suspension, proactive role played by NHAI in making timely payments.
- Hybrid Annuity Model (HAM) mitigates traffic risk.
- Strong recovery in road traffic masks differences among segments.

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Source: Cross-Sector Outlook: India’s Escape From COVID, Feb 16, 2021
Sustainability/ESG | Increasing Focus and Impact

1. **ESG-related impacts on a company's performance** are becoming increasingly obvious as climate change is causing more extreme weather events
   - Changing customer product/brand acceptance, preferences, and behaviors
   - Physical asset risks

2. **Environmental and social regulations/public policies are tightening** to address shift in societal priorities
   - Changes in public policy may influence the economics of a sector or individual company and can lead to stranded asset risk
   - A company's management of political/regulatory relationships increasingly intertwined with ensuring broader public acceptance

3. **The frequency and severity of financial consequences have surged**
   - ESG-related breaches or perceived lack of focus on customers/communities are triggering more decisive action and litigation/financial penalties risk
   - Companies having higher ESG risk may see a rise in cost of capital/reduced access to funding
How ESG factors impacted 2020 Rating Actions.

- We only tag COVID as ESG ‘Health & Safety’ if COVID had a ‘direct’ impact on business activities, not because of the ensuing economic crisis, i.e. applying to activities that are highly sensitive to social distancing and health of customers and employees.

- **ESG Pulse**: Reimagining Accounting To Measure Climate Change Risks, Dec. 22, 2020
S&P Global Ratings Initiatives in Sustainable Finance & Research

1. **ESG in credit ratings**
   - Long incorporated ESG into our credit analysis

2. **ESG Evaluation**
   - Relative ranking of how effectively an entity manages its ESG exposure and opportunities
   - Relative exposure to observable ESG-related risks and opportunities (the ESG “Profile”), with our qualitative opinion of long-term preparedness for ESG related opportunities and disruptions (ESG “Preparedness”)

3. **Green Evaluation**
   - A relative green impact score on instruments (typically bonds and loans) targeted at financing environmentally beneficial projects

### ESG Factors

Entity-specific scores assessed on a relative basis, against sector peers

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Social</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse Gas Emissions</td>
<td>Workforce &amp; Diversity</td>
<td>Structure &amp; Oversight</td>
</tr>
<tr>
<td>Waste &amp; Pollution</td>
<td>Safety Management</td>
<td>Code &amp; Values</td>
</tr>
<tr>
<td>Water Use</td>
<td>Customer Engagement</td>
<td>Transparency &amp; Reporting</td>
</tr>
<tr>
<td>Land Use</td>
<td>Communities</td>
<td>Cyber-Risk &amp; Systems</td>
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</tbody>
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Ability to **adjust**: factor weights, factor scores, and profile scores
Transportation Infrastructure: Environmental Exposure

Qualitative Sector Listing Of Relative Environmental Exposure: Transportation Infrastructure

Greenhouse gas emissions, waste, pollution, and land use

- Oil and gas
- Metals and mining
- Agribusiness
- Power generation
- Autos and auto parts
- Chemicals
- Transportation
- Forest and paper products
- Building materials
- Technology (hardware/semiconductors)
- Oil and gas infrastructure (midstream)

**Transportation Infrastructure**

- Containers and packaging
- Aerospace and defense
- Real estate and homebuilders/developers
- Consumer products
- Retail
- Regulated utility networks
- Capital goods
- Telecoms
- Leisure
- Engineering and construction
- Business and consumer services
- Technology (software/services)
- Health care
- Media and entertainment

Source: S&P Global Ratings.
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E&S Risk: Land Transport - General

Average Environmental Risks But Socially Sensitive

Rail & Mass Transport:
- Environmental: Below average: Lower emissions, High volume of passengers moved per trip. Exposed to extreme weather risks.
- Social: Above-average: Balancing economic versus environmental and lifestyle factors. Costly and often involves government-provided tariff subsidies. Sensitive to affordability. Service quality attracts high public scrutiny.

Roads:
- Environmental: Average: Emissions is mainly indirect - coming from cars, buses, and trucks. Disruption in technology, e.g. replacement of the fleet by EV, is not expected to significantly affect demand. Climate change can represent a key environmental risk.
- Social: Above-average: Sensitivity on affordability of tolls. Safety risk for assets involving bridges and tunnels. Low-probability catastrophes can have severe negative credit impact.
Analytical Team

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Sector Lead, Infra, SSEA

Abhishek Dangra is a Senior Director in S&P Global Ratings team; based out of Singapore. He is the Sector Lead for all Infrastructure and Utilities companies in South & South-East Asia region (mainly India + ASEAN) covering Regulated Utilities, Renewables, IPPs and Transportation Infra companies like Airports, Ports, Toll Roads etc.


Abhishek has over 15 years of credit experience; joining S&P in 2010 with over seven years of work experience in credit related profiles. Before joining S&P, he was heading the Industry Research Group - Credit at Kotak Mahindra Bank. Abhishek has also worked with Lehman Brothers in the Global Risk Management function.

Abhishek is a Management Graduate from the Indian Institute of Management (IIM) – Indore and a Chartered Accountant (CA) from The Institute of Chartered Accountants of India. He also has a Bachelor of Commerce (B.Com) degree from Gujarat University and is a Certified FRM by the Global Association of Risk Professionals (GARP).