CRISIL
An S&P Global Company

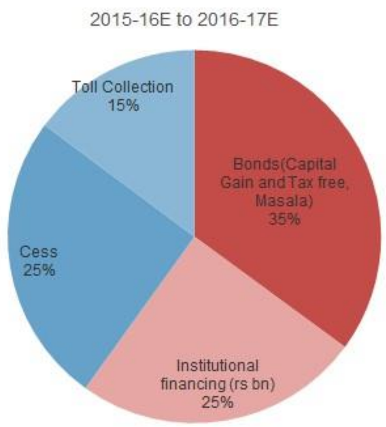
CRISIL Research Sector Round-up: Roads

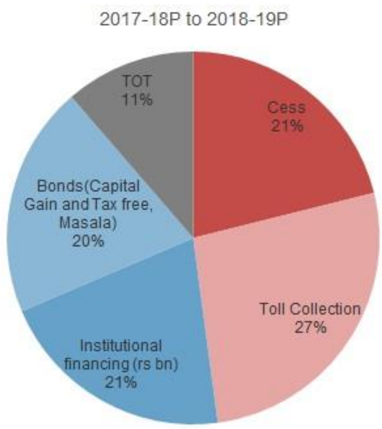
September 2017

New funding mechanisms to support project execution

Project execution by National Highways Authority of India (NHAI) is expected to reach 3,010 km in 2017-18 and over 3,500 km in the next coming fiscal, from 2,625 km in 2016-17. The pace of execution will involve sizeable increase in investments. In fact, over the next five years, overall investment is expected to rise 2.8 times. With public investment constituting a considerable 57% of the total investment in national highways, the funding needs of the NHAI - the key implementing agency - is set to rise. While cess used to be NHAI's biggest source of funding, the model is undergoing a change, with NHAI supporting project execution through higher external borrowings.

Significant change in NHAI's funding structure





E: Estimated; P: Projected

Source: CRISIL Research

In 2016-17, while NHAI had budgeted Rs 121 billion of cess funds, it is estimated to have utilised only ~Rs 75 billion. The agency instead raised funds from institutional investors, such as Life Insurance Corporation (LIC; Rs 85 billion) and Employees' Provident Fund Organisation (EPFO; Rs 100 billion). As NHAI has the ability to raise funds from other sources, the remaining portion of the budgetary support was diverted to non-NHAI road projects. LIC agreed in-principle to subscribe to NHAI's taxable bonds to the tune of Rs 250 billion over the next 3-4 years. NHAI also raised Rs 50 billion on the Bombay Stock Exchange bond platform. In 2017-18, it has raised funds totalling Rs 30 billion on the London Stock Exchange as well, in the form of masala bonds.

Over next five years, NHAI's funding through cess is expected to remain low at ~18% compared to ~35% in the previous corresponding period. In this scenario, the ability of NHAI to consistently raise debt through external sources is a key monitorable. Toll-operate-transfer is a new public-private partnership model for maintenance that NHAI is pursuing, and which is expected to provide the agency Rs 400 billion over the next 2-3 years. However, reforms such as the Goods and Services Tax and implementation of the dedicated freight corridor may significantly impact traffic composition.

Private participation in national highways is expected at 40-42% over the next two years, and 43% over a five-year period. To support this level of private participation, lending support to the sector is required to grow ~14% CAGR over the next five years, which is lower than the expected growth in bank lending to the sector. This shortfall will have to be funded through avenues such as National Infrastructure Investment Fund.

Hybrid annuity model to dominate awarding, promoter contribution may rise for quicker financial closure

The hybrid annuity model (HAM), which comprised over half of NHAI's awards in 2016-17, is expected to remain steady in 2017-18. As of June 2017, 44 projects, aggregating 2,780 km, have been awarded, of which 26 have achieved financial closure. However, at least 10 projects have crossed the limit of 150 days within which financial closure is required, and three projects have been terminated due to failure to secure funds. Bankers are hesitant to provide funds to less-known developers, as promoter equity in the project is only 12-15% and can be even lower in the case of projects that were bid out considerably above NHAI's estimated cost. We, however, believe that projects awarded to developers with a good track record should not face issues in securing funding.

Competition in HAM to remain low, EPC to stay competitive

As a result of bankers' cautious approach, competition in HAM, which had increased significantly in the first half of 2016-17 (from 2-3 bidders in January 2016 to 10 bidders in August 2016), has reduced to 4-5 bidders in March 2017, as smaller players find it difficult to secure funds. Engineering, procurement and construction (EPC) projects, though, are expected to remain highly competitive (more than 12 bidders per project) because of government funding, while participation in build-operate-transfer (BOT) projects will stay low (because of inability to raise funds), with only 4-5 players in the country bidding for these projects.

Investment to rise amid policy push

CRISIL Research expects investment in road projects to grow at a healthy pace over the next five years, led by the government's focus on the sector. Investment would largely be driven by public funds through EPC and HAM contracts, as private participation in the sector stays muted. We expect investment in road projects to increase 2 times to Rs 10 trillion over the next five years, with investments in national highways growing the fastest, at about 3 times.

In 2016-17, new policies were introduced to propel the sector, the most important being immediate payment of 75% of arbitral awards by government agencies. NHAI has established a standard operating procedure for the settlement of these claims, and up to May 2017 had received demand for payment of Rs 64 billion, of which it released Rs 10 billion. NHAI estimates Rs 60 billion outflow over the next 1-2 years as a result of this policy.

Success of TOT could bring Rs 400bn worth investments until FY19 to NHAI

Development of TOT model need of the hour

The toll-operate-transfer (TOT) is a new PPP model introduced by the Ministry of Road Transport and Highways (MoRTH) for the maintenance of roads. The model involves leasing out of operational national highways for periods as long as 30 years to collect toll revenue in return for one-time upfront payment to the government. The successful implementation of this model is essential to the sector given:

- Weak financial position of road developers resulting in most projects now being executed using public funds thereby putting stress on NHAI's funding position
- Increased awarding on EPC contracts will translate into more projects to be maintained by NHAI thereby utilizing NHAI's bandwidth and funds. Around 6500 kms are being maintained by NHAI today and this number is expected to more than double over the next 5 years.
- Weak participation of O&M players in existing PPP models for maintenance (OMT) due to problems experienced in the past. Only about 6-7 O&M players in the country continue to participate in OMT projects today.

A nascent model even globally, TOT comes with some crucial concerns

The Ministry released the TOT MCA in May 2016 after implementing several recommendations from stakeholders. Still, some concerns remain pertaining to latent defects in the projects that can significantly increase maintenance costs, absence of compensation in case of traffic falling significantly below NHAI's estimates and development of alternate routes. Since these concerns are yet to be addressed, in flows from this model are not expected before the second half of the next fiscal.

The TOT has been adopted only in a handful of projects even globally and this highlights the risk inherit in projects of this nature. The Indiana Toll Road Company in the United States had filed for bankruptcy in 2014 due to actual traffic falling below estimates. Also, in some projects, the gap between the first two bidders was very high underscoring the difficulty in valuation of projects whose revenues depend on traffic movement for long time periods. Valuation of these projects is expected to be even more difficult in a developing country like India where events like commencement of the Dedicated Freight Corridor and implementation of the Goods and Services Tax can significantly impact traffic growth and composition

TOT could target new category of investors along with participation from existing players

O&M players in the country are shying away from existing PPP models for maintenance as a result of problems faced in the past. O&M players were unable to effectively manage traffic risk while periodic payments to be made to NHAI were increased irrespective of traffic growth. Also, players felt they were penalized heavily due to their low bargaining power with the Authority. Hence, interest for OMT fell down drastically.

TOT hence targets a new category of investors who are averse towards construction risk but are interested in making long term investment in the country's infrastructure. These include sovereign wealth funds, pension and insurance funds. Even INVIT's through their SPV's can directly participate in bidding or bidders can transfer their projects to INVIT's after 2 years of bidding. These investors are expected to tie up with local O&M players to carry out the maintenance activity. We believe this would significantly aid reducing risk for TOT kind of projects.

First 75 projects to bring in Rs 400bn; can support construction of 2800 kms

The first 75 projects that are expected to be offered under this model aggregate a length of 4500 km. CRISIL Research estimates they can fetch the NHAI Rs 380 billion to Rs 420 billion, providing a return on equity between 14% and 16% to the TOT concessionaire.

Considering the average cost of constructing a four-lane highway to be Rs 140 million (excluding land costs), these funds can aid the construction of approximately 2800 km of national highways, which is close to the CRISIL-estimated NHAI construction for fiscal 2017.

For further information contact

Analytical contacts

Prasad Koparkar
Senior Director
CRISIL Limited
B: +91 22 3342 3000
prasad.koparkar@crisil.com

Binaifer Jehani
Director,
CRISIL Limited
B: +91 22 3342 3000
binaifer.jehani@crisil.com

Media contacts

Saman Khan
Media Relations
CRISIL Limited
D: +91 22 3342 3895
M: +91 95940 60612
B: +91 22 3342 3000
saman.khan@crisil.com

Khushboo Bhadani
Media Relations
CRISIL Limited
D: +91 22 3342 1812
M: +91 99300 93177
B: +91 22 3342 3000
khushboo.bhadani@crisil.com

Shruti Muddup
Media Relations
CRISIL Limited
D: +91 22 3342 1812
M: +91 98206 51056
B: +91 22 3342 3000
shruti.muddup@crisil.com

About CRISIL Limited

CRISIL is an agile and innovative, global analytics company driven by its mission of making markets function better. We are India's foremost provider of ratings, data, research, analytics and solutions. A strong track record of growth, culture of innovation and global footprint sets us apart. We have delivered independent opinions, actionable insights, and efficient solutions to over 100,000 customers.

We are majority owned by S&P Global Inc., a leading provider of transparent and independent ratings, benchmarks, analytics and data to the capital and commodity markets worldwide. For more information, visit www.crisil.com

Connect with us: LINKEDIN | TWITTER | YOUTUBE | FACEBOOK

About CRISIL Research

CRISIL Research is India's largest independent integrated research house. We provide insights, opinion and analysis on the Indian economy, industry, capital markets and companies. We also conduct training programs to financial sector professionals on a wide array of technical issues. We are India's most credible provider of economy and industry research. Our industry research covers 86 sectors and is known for its rich insights and perspectives. Our analysis is supported by inputs from our network of more than 5,000 primary sources, including industry experts, industry associations and trade channels. We play a key role in India's fixed income markets. We are the largest provider of valuation of fixed income securities to the mutual fund, insurance and banking industries in the country. We are also the sole provider of debt and hybrid indices to India's mutual fund and life insurance industries. We pioneered independent equity research in India, and are today the country's largest independent equity research house. Our defining trait is the ability to convert information and data into expert judgements and forecasts with complete objectivity. We leverage our deep understanding of the macro-economy and our extensive sector coverage to provide unique insights on micro-macro and cross-sectoral linkages. Our talent pool comprises economists, sector experts, company analysts and information management specialists.

CRISIL Privacy Notice

CRISIL respects your privacy. We use your contact information, such as your name, address, and email id, to fulfil your request and service your account and to provide you with additional information from CRISIL and other parts of S&P Global Inc. and its subsidiaries (collectively, the "Company") you may find of interest.

For further information, or to let us know your preferences with respect to receiving marketing materials, please visit http://www.crisil.com/privacy. You can view the Company's Customer Privacy at https://www.spglobal.com/privacy.

Last updated: April 2016

Disclaimer

CRISIL Research, a division of CRISIL Limited (CRISIL) has taken due care and caution in preparing this Report based on the information obtained by CRISIL from sources which it considers reliable (Data). However, CRISIL does not guarantee the accuracy, adequacy or completeness of the Data / Report and is not responsible for any errors or omissions or for the results obtained from the use of Data / Report. This Report is not a recommendation to invest / disinvest in any company covered in the Report. CRISIL especially states that it has no financial liability whatsoever to the subscribers/ users/ transmitters/ distributors of this Report. CRISIL Research operates independently of, and does not have access to information obtained by CRISIL's Ratings Division / CRISIL Risk and Infrastructure Solutions Limited (CRIS), which may, in their regular operations, obtain information of a confidential nature. The views expressed in this Report are that of CRISIL Research and not of CRISIL's Ratings Division / CRIS. No part of this Report may be published / reproduced in any form without CRISIL's prior written approval.