

Positive comeback

After adverse news flow over the past 2 months, burgeoning debt level and slower than expected ordering, NHAI held its maiden investors meet to assuage investors' confidence. It touched upon certain key points including (1) Structure of NHAI, with the authority being an extended arm of the Govt. for highway project implementation, thus enjoying a near sovereign status (2) Inherent Toll/ToT/InvIT revenue model makes case for debt servicing & (3) Ordering likely to resume from Nov-19.

HIGHLIGHTS OF THE ANALYST MEET

- NHAI's 'Authority' status lets it enjoy 'AAA' rating:** NHAI stressed upon the fact that it is not an Incorporated PSU, rather an 'Authority' with powers to implement GOIs 'National Highway Program'. The debt raised by NHAI is approved by GOI through Finance Bill. Thus the assets on NHAI's balance sheet are reflected as 'Held on Behalf of GoI'.
- Concerns surrounding spiraling land costs overhyped as 57.6% of cost towards Land Acquisition already incurred:** The Revised outgo of Bharatmala Pariyojna Phase 1 (BM-1) on land cost is expected to reach Rs 1.25tn of which 57.6% has already been incurred. NHAI is focusing on obtaining 80% of encumbrance free land at 3H stage now before awarding projects. This has caused slow down in ordering over last 18 months. For FY19, NHAI incurred Rs 391bn as land cost and estimates Rs 157bn on land capex for FY20. We expect ~Rs 150bn/yr outgo on land for FY21-23. Land cost share will reduce over FY20-23 to ~15-16% of NHAI overall expenditure vs. ~38% average over FY15-19. This shall alleviate concerns on land capex.
- Construction and awarding to ramp up with significant land in possession:** NHAI expects to award 7,731km of NH during FY20 in ratio of 60/30/10 for HAM/EPC/BOT respectively. FY21/22 awards are expected to be

5,530/5,530km respectively vs. our estimate of 4,500/5,500/6,500km. New BOT Model Concession Agreement is being re-worked to make it more attractive for developers as well as lenders. BOT share in ordering is expected to ramp up from FY21E.

- Increased revenue from toll collection, providing large cover to debt servicing:** BM-1 completion, transfer of earlier awarded BOT projects and highway transfers from MoRTH is expected to increase NHAI toll portfolio from 12,233km as of FY19 to 46,162km by FY25 (less 6,165km of ToT/InvITs monetization). The toll revenue is expected to ramp up from Rs 92.2bn (FY19) to Rs 387bn by FY23 (3.8x). This shall cover large part of debt servicing requirement post completion of BM-1.
- Asset monetization to provide additional buffer:** NHAI is expecting to monetize 6,165km of National Highways through ToT/InvITs/Securitization etc. We may see more of these bundles hitting market on quarterly/half yearly basis. Though continued appetite from global sovereign/domestic long term investors will be a key monitorable.

STANCE

NHAI's maiden analyst meet intended to address issues surrounding the long term sustainability of National Highways program. Being an authority, analyzing NHAI's financial position from the perspective of an Incorporated PSU would not be a fair assessment. Going forward, NHAI may continue to award a mix of viable projects as well as non-viable projects of strategic importance. Globally, highway programs are funded by fuel cess and toll collection rights. With an increasing share of fuel efficient and electronic vehicles, Governments across the globe are funding highway programs through fiscal initiatives. Visibility beyond BM1 remains an overhang as saturation would kick in. Companies will have to remodel their business to de-risk NH ordering concentration risks.

NHAI Ordering

NHAI Ordering	Till FY19	FY20E	FY21E	FY22E
Length (km)	7,494	4,500	5,500	6,500
Rs bn	1,349	743	963	1,203

NHAI Capital Structure

(Rs bn)	FY19	FY20E	FY21E	FY22E
Equity	1.93	2.32	2.78	3.38
Debt	1.79	2.54	3.44	4.44
D/E	0.93	1.10	1.24	1.31

NHAI-Receipts and Debt Servicing (Est.)

(Rs bn)	FY19	FY20E	FY21E	FY22E
Cess	161	177	195	214
Toll	92	102	148	252
ToT	-	110	121	133
Total	253	389	464	599
Debt Servicing	146	199	298	498
Surplus	106	190	166	102

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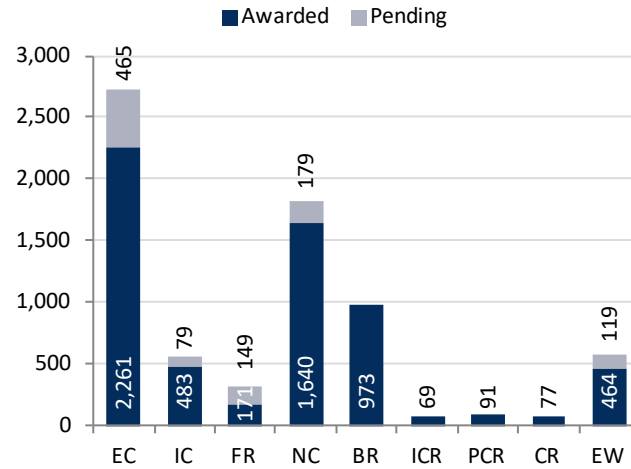
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After hitting an all time high in FY18 with respect to project awarding, NHAI is expected to rationalize its project awarding activity with ~5,000-6,000km expected to be awarded every year till the end of the Bharatmala-1 implementation Period

NHAI debt is expected to peak to Rs 5.24tn by FY23E with majority of the Bharatmala Implementation activity expected to be completed by then

Land Acquisition cost constitutes a significant portion of NHAI budgetary expense- constituting ~40% of the total expenditure for a second consecutive financial year after FY17. Going ahead (FY20-23) land share in overall expenditure will reduce to 15-16%

Bharatmala Project Status- Aug'19 (in km)*

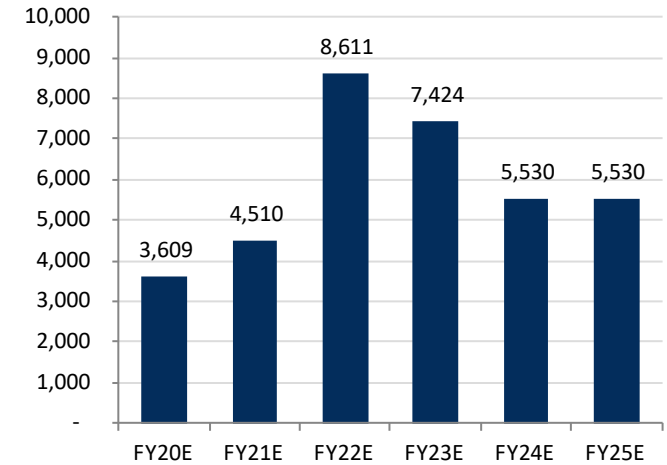


EC: Economic Corridor, IC: Inter Corridor, FR: Feeder Routes, NC: National Corridor, BR: Border Roads, ICR: International Connectivity Roads, PCR: Port Connectivity Roads, CR: Coastal Roads, EW: Expressways

Source: NHAI, HDFC Sec Inst Research

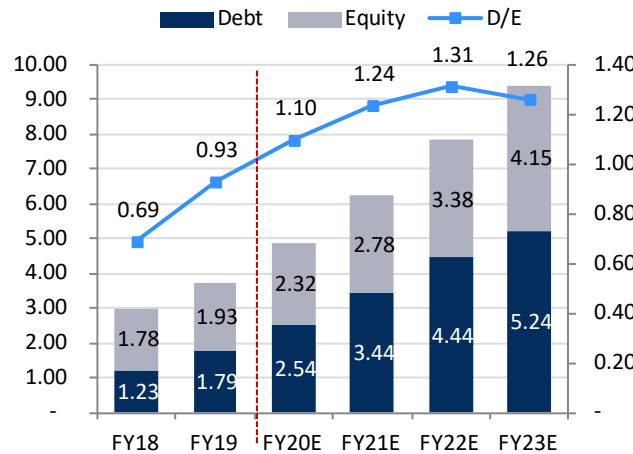
*For projects approved till August 2019

Bharatmala Project Execution Plan (in km)



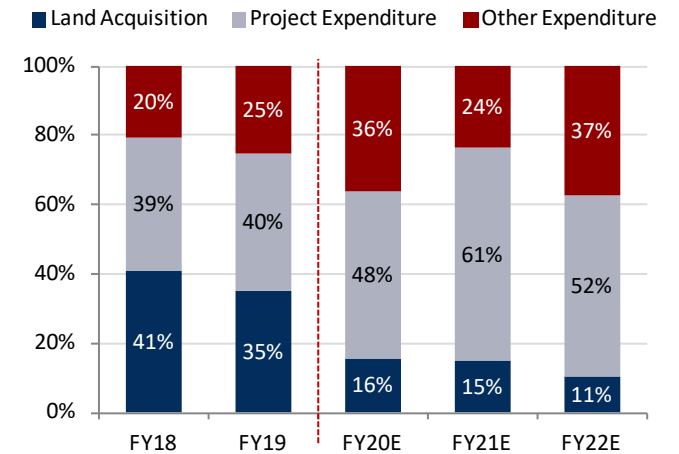
Source: NHAI, HDFC Sec Inst Research

NHAI Financial Position over Bharatmala Implementation period (Rs tn)



Source: NHAI, HDFC Sec Inst Research

Land Acquisition Expenditure as a percentage of total NHAI expenditure (HDFC Sec Estimates)



Source: NHAI, HDFC Sec Inst Research

The total Toll-able length under NHAH is expected to cross 46,162km by FY25 (net of asset monetization) due to addition of new projects completed under EPC/HAM and handover of earlier awarded BOT Projects

The Cess funds allocated to NHAH are assumed to increase at the rate of 10%/year

Despite the unfavourable response to ToT Bundle-2 and delay in awarding of ToT Bundle-3, NHAH is expected to award around 2 ToT bundles/year going forward

Increased Revenue Potential Through Increased Toll-able Length By FY25 (In Km)

	Length in km
Start of FY20	12,233
New Projects Completed	35,214
BOT Transfer Back	1,338
Transfer from Ministry	3,542
End FY25 before capitalization	52,327
Projects proposed to be capitalized (ToT, InvIT)	6,165
End of FY25	46,162

Source: NHAH

NHAH Estimates: Revenue Receipts and Debt Servicing (Rs bn)

Revenue Receipts	FY18	FY19	FY20E	FY21E	FY22E	FY23E
Cess through Budget	124	161	177	195	214	236
Rev from Toll	86	92	102	148	252	387
TOT	-	-	110	121	133	146
Securitization	-	-	386	-	-	-
Total Funds Generated	211	253	775	464	599	769
	-	-	-	-	-	-
Debt Servicing	89	146	199	298	498	464
Total						1,695

Source: NHAH

NHAI expects to earn up to Rs 387bn in Toll revenue by FY25 as under construction projects move into operational phase. It expects to earn revenues on ~35,000km of additional road stretches by FY25

However, we adopt a conservative stance based on conventional wisdom with regards to Toll projects

Tolled stretches require between 1-2 years for the traffic to stabilize and to realize significant toll revenue

Post implementation of Bharatmala Phase-1, we are not expecting the scale and speed of construction activity. Hence NHAI's Cess Fund allocation and Toll revenues are expected to be sufficient to satisfy debt obligations of NHAI even with an accelerated repayment schedule

HDFC Sec View

Toll Collections To Provide A Fillip To NHAI Activities

	FY19	NHAI Projections	HDFC Sec Assumption
NHAI length under tolling-FY19(Km)	12,233		
Revenue CAGR (FY19-23)		43%	35%
NHAI length Addition (Km)-by FY25		35,214	28,000
BOT Transfer Back		1,338	1,400
Revenue from Toll Collection-FY23 (Rs bn)		387.2	307.4

Source: NHAI, HDFC sec Inst Research

- We have assumed 28,000km of new addition to NHAI Toll portfolio by FY25 as a conservative stance vs ~35,000km as projected by NHAI to factor in the time required for a new toll roads to achieve stability in traffic flow after achieving Commercial Operational Date (COD) and hence uncertainty in toll collection during the initial stages. Despite conservative assumptions, revenue from tolling is expected to increase from Rs 92bn in FY19 to over Rs 300bn by FY23.
- We expect tolling to commence on 4,000-6,000km of new highways every year over the medium term with the HAM and EPC projects under implementation moving into commercial operation. We have assumed a 5% annual growth in average toll collection/km which factors in both the traffic growth as well as the annual revision in toll rates.

Significant Toll Revenues Expected To Support NHAI Debt Obligations

	FY19	FY20E	FY21E	FY22E	FY23E	FY24E	FY25E
Total Length under tolling (Km)	25,600	28,738	31,973	35,322	38,805	42,444	46,265
NHAI length under tolling(Km)	12,233	12,983	17,483	24,683	33,633	37,633	41,633
New Length Addition (Km)		750	4,500	6,500	8,250	4,000	4,000
Projects handed back to NHAI (km)				700	700		
Toll Collection (Rs mn/km)	7.5	0.79	0.83	0.87	0.91	0.96	1.01
CAGR Growth Till FY15-19							
Growth Assumption		5%	5%	5%	5%	5%	5%
Toll Collection (Rs bn)	91.9	102	145	214.9	307.4	361.2	419.4

Source: HDFC sec Inst Research

NHAI's debt is expected to peak to Rs 5.24tn by the end of FY23, which is also the end of Bharatmala Phase-1 implementation period.

To calculate the average annual payout towards debt servicing, we have assumed a blended tenure of 20 years considering different maturities of borrowings across which NHAI raises debt from the market

We have assumed a linear repayment structure to ascertain its debt servicing capability with respect to revenue from Toll Collection and Cess Fund Support

We expect NHAI to repay its debt by FY43 based on our assumptions of 20yr repayment. We don't envisage new NH build out beyond BM-1

NHAI Debt Within Control Despite Concerns

(Rs bn)	FY19	FY20E	FY21E	FY22E	FY23E
Total Equity	1,928	2,317	2,781	3,381	4,150
Total Borrowings	1,794	2,544	3,444	4,444	5,243
D/E	0.93	1.10	1.24	1.31	1.26
Bharatmala Requirement (incl. LA Cost)		950	1,010	1,423	1,803
Average Annual Payout post FY25		510			
Blended Tenure (years)		20			
Rate of interest (%) (assumed)		7.40			

Source: NHAI, HDFC sec Inst Research

- NHAI's external borrowing is expected to peak to Rs 5.24tn by the end of Bharatmala Implementation period in FY23. However, this includes the balance 60% liability accruing to NHAI towards HAM projects, as we have modeled debt on total project cost basis. These are expected to be raised over the next 15 years (operational period) in a phased manner based upon projects gradually moving into operational phase over the next 2-3 years. This capex phasing also takes into

account the escalation in Bharatmala's budgeted project cost on account of increase in Land Acquisition cost. The total project cost of Bharatmala Phase-1 is expected to cross Rs 6.1tn vs. Rs 5.3tn earlier. Unlike NHAI we are not considering debt servicing as part of BM-1 costs. Debt servicing is considered as separate and will be done through Cess Funds, Toll Revenues and ToT monetization proceeds.

NHAI Debt Repayment Schedule- Assuming Annual Repayment (Rs bn)

Repayment Schedule	Opening Balance	Annual Payment	Interest Payment	Closing Balance
FY24E	5,243	510	388	5,121
FY25E	5,121	510	379	4,989
FY26E	4,989	510	369	4,848
FY27E	4,848	510	359	4,697
FY31E	4,171	510	309	3,969
FY35E	3,270	510	242	3,001
FY39E	2,071	510	153	1,713
FY43E	475	510	35	0

Source: NHAI, HDFC sec Inst Research

Though NHAI borrowings typically have a ballooning repayment structure, we have assumed equal principal repayment throughout the tenor to assess NHAI's debt servicing capability with respect to its toll collection revenue and Cess Fund allocation.

Though NHAI plans to re-introduce the BOT Toll model, it is adopting a steady approach due to the averseness of developers and financial institutions to this mode of development due to legacy issues

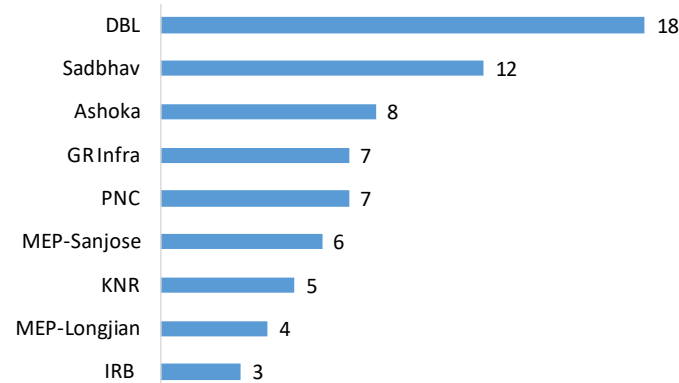
HAM continues to be the preferred mode of project awarding with the proportion of BOT projects awarded expected to increase gradually depending upon the response to the first round

HAM Remains The Preferred Mode Of Awarding Projects Over The Medium Term

- NHAI is expected to maintain a ratio of 60/30/10 for HAM/EPC/BOT(Toll) over the medium term. NHAI is looking to re-introduce BOT Toll model during FY20 in order to shift some of the funding requirement to private investments. It is working on bringing forth some changes in the model concession agreement to address some key issues of both the developers as well as lenders with regards to concession agreement and traffic risk.
- Unless, any sweeping changes are introduced in the Model Concession Agreement, banks and developers are expected to adopt a cautious approach towards BOT (Toll). Thus HAM is expected to remain the preferred model in the market.

Standard Operating Procedure For Faster Approvals In Asset Monetisation Transactions Under Works

HAM Projects Cornered By Major Players



- Close to 60% of the HAM projects awarded till FY19 were bagged by 8 major developers. Their appetite for new deals is dependent on the speed with which they can churn their capital.
- Dilip Buildcon and KNR successfully entered agreement for stake sale in existing HAM portfolio and are hence expected to resume bidding activity once the transaction is completed.
- NHAI is working on developing a ‘Standard Operating Procedure’ to streamline the approval process for equity stake sale transactions for ensuring an end-to-end approval time of 15 days from the day of receiving the application from the developer.

Source: HDFC Sec Inst Research

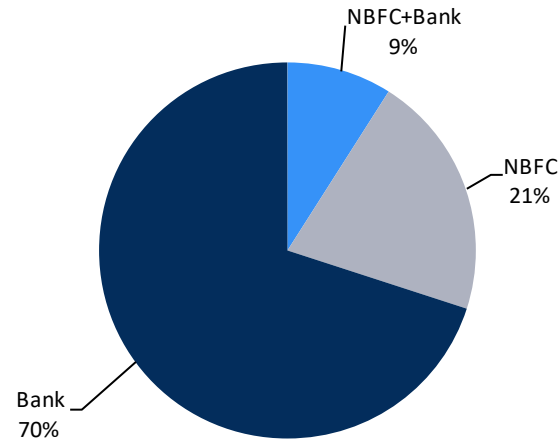
One of the major factors for the success of the HAM model is the acceptance by Banks and Financial Institutions

HAM projects awarded till FY19 were majorly supported by private financial institutions due to PSU banks struggling due to NPAs, PCA and averseness to infra due to legacy issues

NBFCs funded close to 21% of the total HAM projects by BPC. With liquidity issues in the Non-banking space, PSU bank who have exited the PCA list are expected to take its place

Bank Acceptance Of HAM Model Remains High

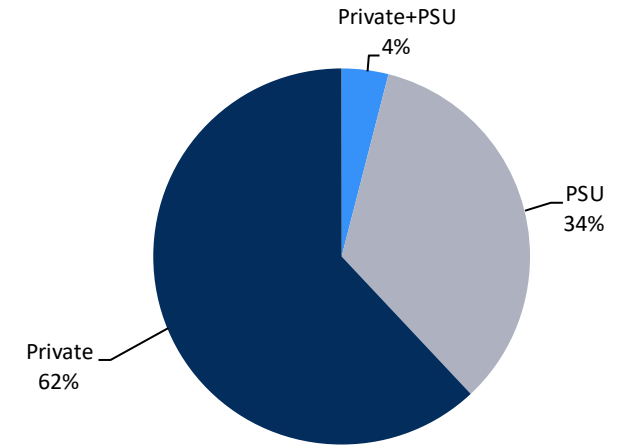
HAM Project Underwriters (by Bid Project Cost)*



Source: HDFC Sec Inst Research

- For HAM projects bid till FY19, ~87% of the projects have achieved Financial Closure with private sector financial institutions underwriting more than 60% of the projects. NBFCs underwrote around 21% of the total HAM projects that have achieved FC. Though the appetite for banks remain, they are adopting a selective approach to HAM by limiting

HAM Underwriters By Nature Of FIs (by Bid Project Cost)*



Source: HDFC Sec Inst Research

themselves to financing projects with developers having strong financial health and execution track record. Thus promoters with weak financials may face difficulties in securing financial closure on favourable terms.

* No of Projects where FC is achieved/ Status known: 101; Total BPC for which FC is achieved/ Status known: ~Rs 1.17tn

NHAI Debt- A Sovereign instrument

- NHAI is an implementation agency of the Ministry of Road Transport and Highways which has been set up under the NHAI Act, 1988 for carrying out Highway Construction activities. The Act empowers NHAI to raise funds from external sources in addition to its budgetary allocation for its activities. However, NHAI is eligible to borrow only with the consent of the Central Government through the approval of the Cabinet and final approval of the parliament through the Finance Bill. This Central Government consent acts as an implicit sovereign guarantee for NHAI's borrowing programme. Given the magnitude of borrowing by NHAI a government guarantee, even implicit, provides a comfort in raising funds from the market.
- The Central Government has also specified a provision for providing a guarantee for NHAI's borrowings (both principal and interest) in a manner it deems fit as per the provision of the NHAI Act, 1988.

Snapshot from the NHAI Act,1988

21. Borrowing powers of the Authority.—(1) The Authority may, with the consent of the Central Government or in accordance with the terms of any general or special authority given to it by the Central Government, borrow money from any source by the issue of bonds, debentures or such other instruments as it may deem fit for discharging all or any of its functions under this Act.

(2) Subject to such limits as the Central Government may, from time to time, lay down, the Authority may borrow temporarily by way of overdraft or otherwise, such amounts as it may require for discharging its functions under this Act.

(3) The Central Government may guarantee in such manner as it thinks fit the repayment of the principal and the payment of interest thereon with respect to the borrowings made by the Authority under sub-section (1).

INSTITUTIONAL RESEARCH
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