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Infrastructure Financing through Asset Monetization: Is it Sustainable in the Long-run?

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Abstract: Infrastructure development is a key building block towards enhancing domestic economic growth and sustaining the higher growth trajectory. Therefore, creating new and upgrading existing infrastructure will be critical to improve India's global competitiveness. Nevertheless, financing infrastructure projects continues to remain the most difficult aspect to tackle with. The National Infrastructure Pipeline (NIP) envisages investing Rs. 100 trillion on infrastructure projects across various States during the five years up to 2025. The Government of India has recently launched a four-year National Monetisation Pipeline (NMP) worth an estimated Rs. 6 trillion, with an aim to unlock value of hitherto unutilized or underutilized public assets in the brownfield projects by engaging the private sector and to tap the operational efficiencies of private sector along with the management of existing physical infrastructure. In addition, this paper provides various perspectives on the asset monetization and its sustainability as a robust infrastructure financing tool.

1. Introduction

Infrastructure development is a key building block towards enhancing domestic economic growth and sustaining the higher growth trajectory. Therefore, creating new and upgrading existing infrastructure will be critical to improve India's global competitiveness. Infrastructure development being labour-intensive, leads to increase in employment opportunities. Furthermore, strong backward linkages of infrastructure development with other labour-intensive sectors of the economy such as steel and cement, fuels aggregate demand in the domestic economy. All of this together could lead to a virtuous cycle of higher investments, growth and employment generation in the economy (Mohanty *et al.,* 2022). Hence the intended policy objective of the National Infrastructure Pipeline (NIP) is a step in that direction. The NIP envisages investing Rs. 100 trillion on infrastructure projects across various States during the five years up to 2025. It promotes collaborations and joint ventures with strong global infrastructure developers. Infrastructure projects under NIP will receive an equal share of contribution in terms of capital expenditure from the Centre and States of 39% each while private sector share being 22%. Furthermore, the PM Gati-Shakti initiative will provide the much-needed administrative imperative on the infrastructure sector which is expected to hasten the pace of implementation. Nevertheless, financing infrastructure projects continues to remain the most difficult aspect to deal with.

Against this backdrop, the Government of India has recently launched a four-year National Monetisation Pipeline (NMP) worth an estimated Rs. 6 trillion, with an aim to unlock value in brownfield projects by engaging the private sector. The government has proposed to monetize assets of 5 key sectors. These five key sectors cover 13 core sectors. The details of monetization value of these 13 core sectors are presented in the Table 1 and their relative shares and trends are depicted through Figure 1 and 2.

Table 1: Sector-Wise Monetisation Pipeline over FY 2022-25

S. No.	*Sector*	*Monetization Value (Rs. Crore)*
1	Roads	1,60,200
2	Railways	1,52,496
3	Power Transmission	45,200
4	Power Generation	39,832
5	Telecom	35,100
6	Warehousing	28,900
7	Mining	28,747
8	Gas Pipeline	24,462
9	Other Pipelines & Other Assets	22,504
10	Aviation	20,782
11	Urban Real Estates	15,000
12	Ports	12,828
13	Stadiums	11,450

Source: National Monetisation Pipeline (Vol. II), NITI Aayog

2. Asset Monetization and PPP

Ever since the advent of public-private partnership (PPP) project delivery models in India, there have been many issues discussed and debated in the literature on the implementation efficiency of PPP projects (Jagannathan & Soneji, 2019; Kelkar *et al.,* 2015). In response to the problems, the government has come up with many schemes to sustain the private party interests in PPPs. With the start of asset monetization (AM) policy, the government is entering into yet another dimension of private sector investment through AM. AM, though relatively new, has been existing in the form of Toll Operate Transfer (TOT) models as a part of the PPP framework (Cherkos & Jha, 2021).

While there is a push toward asset creation, on the other side, there is the humongous task of asset maintenance management. As assets are created for an extended period, asset maintenance is a crucial part of the lifecycle of the created asset. Asset monetization is one such mechanism through which the maintenance pressure on the government can be released so that the greater focus is laid on infrastructure asset creation. *"Asset monetization, also referred to as assets or capital recycling, is the method of leasing out 'idle' capital in government assets to private parties to operate and manage those assets for a specific period with an upfront payment of some capital"* (NITI Aayog, 2021). However, the asset ownership will remain with the government while the facility will be leased out to a private party for a particular lease period. According to the NITI Aayog, "AM will have dual benefits. First, it releases the maintenance management pressure on the government, and secondly, it helps tap into the management and operational efficiencies of the private sector. The driver for asset monetization is beyond its fiscal impact. It is not just a funding mechanism, but an overall paradigm shift in infrastructure operations, augmentation and maintenance" (Kant, 2021). It will help in tapping the operational efficiencies of private sector. However, a key attraction for AM is the absence of project completion risk, since the monetized projects have been operational for at least two years. This is a significant factor given the poor track record of infrastructure project implementation in the country.

To boost the infrastructure development, Government of India has finalized the national monetization plan which will include railway stations and tracks, and also 26, 700 km of roadways, 28,608 circuit km power transmission lines, 6 gigawatts of hydroelectric and solar power assets, 2, 86, 255 kilometres fiber assets and 14, 917 telecom sector towers, 3930 km of petroleum pipelines, and 8,154 km of natural gas pipe lines.

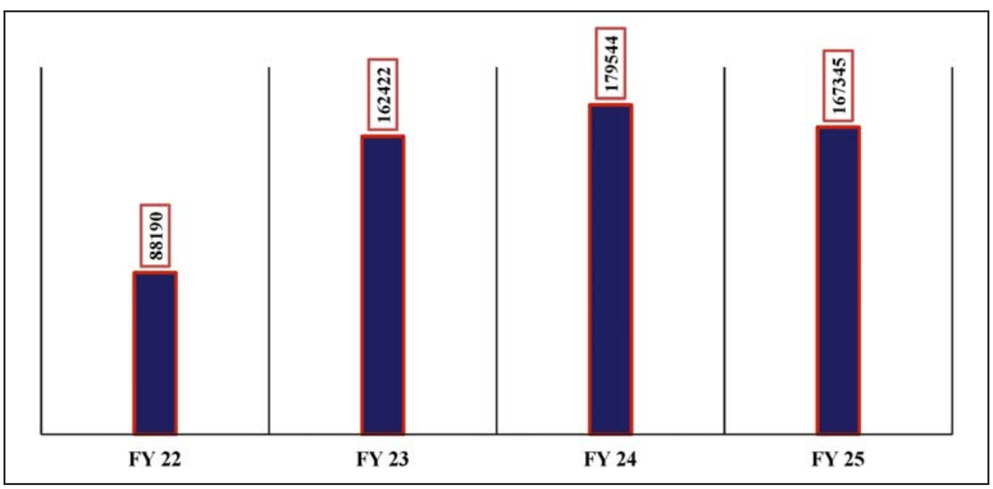

Figure 1: Indicative Value of the Monetisation Pipeline Year-wise (Rs. Crore)

Source: National Monetisation Pipeline (Vol. II), NITI Aayog

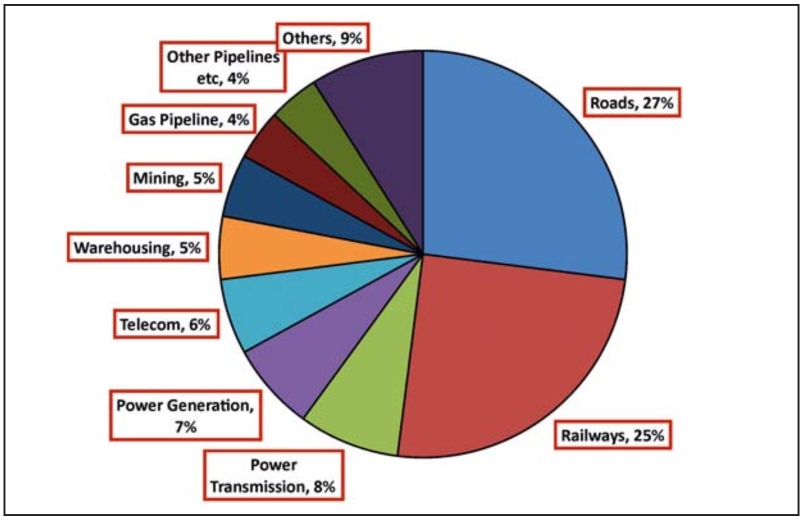

Figure 2: Share of Sectors in Terms of Indicative Monetisation Value in NMP

Source: National Monetisation Pipeline (Vol. II), NITI Aayog

Besides, according to the National Monetisation Pipeline, 160 coal mining assets with an estimated worth of Rs. 28,747 crore have been identified for monetization during FY 2022-25. About 761 mineral blocks are expected to be put on auction during this period.

3. Asset Monetization: Options and Progress

3.1. Asset Monetization Options

In the perspective of asset monetization, the two broad options considered are toll operate transfer (TOT) and the InvIT (Infrastructure Investment Trusts). Apart from these, structured bonds without or with restricted alternative to the government and asset concessions like for instance, airport concessions and station redevelopment, are also other options. One of the main advantages of all existing assets monetization is that there is no construction risk involved, which otherwise is present initially in any large infrastructure project (new assets). Hence, it is anticipated that existing assets earn greater value than new projects.

3.1.1. Toll Operate Transfer

The National Highway Authority of India (NHAI) introduced the toll-operate-transfer (TOT) model with an objective of monetizing the operational national highways. As part of the comprehensive bidding process under the TOT model, the NHAI transfers the toll collection rights along with operation and maintenance obligations for 30 years to a private developer in exchange of an upfront lump sum concession fees. Under this model, a bundle of assets (operational national highways) is transferred, which allows the investor to offset the risks of one project against another. Further, as only the operational national highways are awarded, investors need not have construction skills to participate in the bidding process. Since 100% Foreign Direct Investment (FDI) is permitted in this sector under the automatic route, foreign investors have actively participated in the TOT bidding process so far. The introduction of Fastag mechanism has enhanced transparency in toll collections and as a result, it has augmented attractiveness of the TOT model itself.

3.1.2. Infrastructure Investment Trusts

Infrastructure Investment Trusts (InvITs) are like mutual funds that pool money from investors and are regulated by the Securities and Exchange Board of India (SEBI). There are 19 registered InvITs in India as on September 13, 2022. InvITs allow developers to monetize revenue generating infrastructure assets, while enabling investors or unit holders to invest in these assets without actually owning them. Therefore, given this basic structure of InvITs, the InvIT investor is more passive unlike the TOT investor who is supposed to actively manage the assets. For instance, the magnitude of demand risk in an InvIT depends on the combination of toll roads and those with disposal payment concessions like annuity or Hybrid Annuity Model (HAM). One hand, InvITs may comprise purely toll road assets and on other hand it consists of those that are only composed of HAM projects. Speaking of private InvITs, although there is no generation of revenue for the public sector, the development of InvITs enables the effective monetization of private infrastructure assets and this generates additional space in the balance sheets of the developers for use in new projects.

3.1.3. Structured Bonds

In structured bonds, the risk of intermittent variability of revenue is not directly transferred to the bondholder although claims are broadly issued on the basis of revenue streams. Bondholders' realizations will be unaffected until the revenue receipts are adequate to meet the requisite bond payments. In case of a flexible rate bond, there might be variation in accordance with the changes in indexed rate. Rating of structured bonds critically hinges on the adequacy of cash flows; for instance, the rating would be high if the future bond payments are secured by a cash flow that is adequate enough.

Nevertheless, in a majority of cases this will lead to less cash on hand with the public authority. As a mitigating measure, issuance of structured bonds can be phased vis-à-vis periodicity of future cash flows with varied risk profiles which will then be subscribed by different categories of investors as per their respective risk appetite levels. On the one hand, bonds having lower risk profiles may be more attractive to risk averse investors such as, large domestic pension and insurance funds, while on the other hand, the more risky assets may be favourable to foreign pension funds which look to invest in emerging markets in the quest of higher returns.

3.1.4. Asset Concession / Sales

Asset concession/sales mode of monetization consists of mining assets, real estate transactions and other monetization projects such as station redevelopment and airport concessions. The framework of the concession, the bid parameter, etc. depicts the success and realization of revenue.

3.2. Asset Monetization: Progress

In the roads sector, the central government has already monetized assets worth Rs. 23,000 crore. In the power sector, five assets have been monetized through a PowerGrid InvIT raising Rs 9,500 crore, and coal mining generated Rs. 40,000 crore and mining of minerals fetched Rs. 18,700 crore. These successful examples of asset monetization in the infrastructure sector should encourage achieving the ambitious targets of NMP, going forward.

The NHAI has drawn up a list of 100 more operational highways with a total length of 7,000 km to be monetized through the toll-operate-transfer mechanism by 2024-25 with a target to raise Rs. 65,000 crore. The Indian railways are looking at raising Rs. 1 trillion over 10 years through monetization of the dedicated freight corridors, once these are commissioned. Another high-potential area of brownfield asset monetization is gas and oil pipelines. IOCL itself is slated to raise Rs. 1 trillion from its crude oil pipeline, product pipeline and natural gas pipeline. Similarly, HPCL and GAIL are also exploring their asset monetization plans.

4. Advantages of Asset Monetization

Asset monetization is the need of the hour as it eases the maintenance management pressure on the government and enhances national productivity through private sector contribution by tapping their efficiencies. The asset monetization program offers an array of benefits to the economy. These are:

- The asset monetization program helps in converting the 'idle capacity to active capacity'; thereby contributes to national income and output.
- It will help in raising the efficiency and productivity of the assets due to private sector participation and will create additional employment opportunities in the economy.
- It opens-up generation of new sources of revenue for the government which can be used for financing new/existing infrastructure projects.
- Active and efficient use of assets will improve the production process and will provide improve quality goods and services to the consumers.
- It will leads to value-added collaboration between public and private sector and will foster synergy for the infrastructure development.

5. Asset Monetization: Issues and Challenges

A stable and well-designed regulatory environment plays a crucial role for the success of asset monetization, apart from selecting the suitable model for monetization. This is more pertinent in case of infrastructure assets as they are critically dependent on regulated tariffs for their revenue streams. For private monetization transactions, there could also be other operational issues. For example: handling of disputes between the concessionaire authority and the concessionaire. The success of asset monetization would also depend on the manner in which such issues are addressed and resolved. Lack of clarity on various regulatory issues may impact the value realized from monetization or even impede the monetization process itself.

Monetization does not generate the best value for money all the time. For example, for NHAI, the key challenge pertains to the use of funds generated through asset monetization. The existing debt burden of NHAI prohibited additional borrowing, as indicated in the budget of this year (2022-23). Therefore, would the fund augmented through asset monetization be utilized to give up the current debt or would it be utilized to launch new projects? If it is to pay-off the current debt, then there has to be a careful appraisal between the value of borrowed capital and the value of capital augmented through asset monetization. NHAI's present borrowing is at very competitive rates, due to tax benefits, and it is likely that the value of capital augmented through asset monetization might really be higher. In this case, asset monetization will indeed decrease the funds available with NHAI since with monetization it will lose control over an income flow which is presently utilized to facilitate lower cost borrowings.

Likewise asset monetization in case of railways depends upon urban real estate market and value realization happens in larger cities. But after post-Covid scenario there has been reassessment of the need for physical space in metros. This may leads to inherent challenges in the near future, but can be mitigated putting these assets in prime location.

6. Way Forward

Infrastructure development is essential for faster economic development. Hence, Government of India is strategizing for the best possible opportunities for the development of the infrastructure sector through asset monetization. Asset monetization is critical in bringing efficiency and optimization in the use of assets through private-public collaboration. It will open-up the fiscal space for public sector by trading on the idle assets. The asset monetization program will further leverage to take the best from global institutional investors. It will attract global institutional investors such as Sovereign Wealth Funds (SWFs), Pension Funds (PFs) etc. to invest in India through the NMP initiatives. Asset monetization will certainly promote sustainability and will boost the economy through its multiplier effects. However, amidst all these positives, the above-mentioned regulatory issues and challenges need to be progressively weighed-in for asset monetization to sustain as a robust infrastructure financing tool in the long-term.

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