

India's Development of Infrastructures and Financing – An Analytical Study

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Abstract: *One of the most important foundations of productivity in every economy is infrastructure. The main problem in emerging countries has been pushing for infrastructure development, and in particular, raising money for infrastructure projects. The goal of the current study is to examine how India is funding its infrastructure development. In order to address the infrastructure deficit in the nation, the study looked at how India's infrastructure is developing, looked into where money for it comes from, assessed the government's efforts to make financing easier, and made recommendations for policies to boost infrastructure spending. The supply side and demand side still have a sizable imbalance, despite the government of India and the reserve bank of India having launched many steps to promote funding for infrastructure. Utilise the untapped potentials; review the statutory liquidity ratio norms for banks; develop the municipal bond market; promote regional integration and improved connectivity through creation of corridors between sub-continental regions, which would not only bridge the finance gap but also improve connectivity. These are just a few of the recommendations made in the paper.*

Keywords: Infrastructure development, infrastructure projects, untapped potentials, finance gap, recommendations

JEL Classification: G15, G19, O10, O20, Q15

I. INTRODUCTION

Infrastructure: The Engine of Growth

Infrastructure may significantly contribute to economic growth, poverty reduction, and environmental sustainability, but only if it offers services that effectively and efficiently meet customer demand (World Bank, 1994). Infrastructure is a country's fundamental framework, and how well it develops directly affects the economy of that country.

In its World Economic Outlook published in July 2015, the IMF (2015) predicted that the global economy would grow by 3.3% in 2015 and 3.6% in 2016. According to the economic updates, the growth rate in EMDEs (Emerging and Developing Market Economies) was 4.5 percent in 2014 and decreased to 4.2 percent in 2015 as a result of lower real wages, weakened demand, rising unemployment, a slowdown in China's economy, structural bottlenecks, and market volatility. The globe would have an infrastructure deficit of \$20 billion annually over the following two decades, according to the globe Economic Forum's Positive Infrastructure Report (World Bank, 2015a). According to the Organisation for Economic Co-operation and Development (OECD, 2007), between 2010 and 2030, new infrastructure spending of \$71 trillion is expected. According to the McKinsey Global Institute (2013), the cost of building infrastructure worldwide would range from US\$570 billion to US\$670 billion by the year 2030. The estimated share of infrastructure funding in global GDP needs to be raised from 3.8% to 5.6% in 2020, according to McKinsey Global Institute (2014).

According to the European Commission's (2011) estimate, Europe would need to invest 1.5 to 2 trillion euros in its infrastructure by 2020. The whole infrastructure has a US\$17 billion investment deficit, according to the American Society of Civil Engineers (2013), which estimated a US\$36 billion capital increase by 2020. The emerging economies have more trouble putting up the basic infrastructure than the industrialised economies do in order to maintain their outdated power, transportation, telecom, and water systems.

Objectives of the Study

The research's objectives were to:

- Examine the infrastructure development in India during the 11th and 12th Five Year Plans;
- Look into the sources used for financing infrastructure in India;
- Evaluate the steps taken by the government to facilitate financing infrastructure; and
- Suggest actions to increase infrastructure financing in the nation.

II. RESEARCH METHODOLOGY

A pragmatic analysis was conducted to identify the steps taken by the Indian government and reserve bank to promote infrastructure finance and growth in the nation. Secondary sources served as the study's foundation. The information was gathered from government records, academic studies, research agency reports, and other web sources.

III. REVIEW OF LITERATURES

The provision of infrastructure is essential to promoting rapid economic growth. It has been widely researched and shown that infrastructure investment and quality affect economic development (Calderón & Servén, 2004). The evidence of a substantial positive causal relationship between economic growth and telecommunications infrastructure was discovered by Röller and Waverman (2001). In their 2003 study, Calderón and Servén discovered that transportation, telecommunication, and power all made significant and positive contributions to the countries of Latin America's productivity. Donaldson (2010) concluded that railway construction reduced trading costs, increased overall trade, and increased real income using Indian data from 1870 to 1930. According to Mohammad (2010), increases in the fundamental infrastructure spurred rise in output. Despite significant differences between nations, Agénor and Moreno-Dodson (2006) and Canning and Pedroni (2008) noted that infrastructure unquestionably plays a long-term role in economic growth. It is acknowledged that the costs associated with building new infrastructure are positively correlated with productivity and advancement, notwithstanding the complex relationship between infrastructure and economic growth (Fay, Toman, Benitez, & Csordas, 2010). (OECD, 2007). Despite the many advantages of investing in infrastructure, there is a severe lack of financing for new infrastructure worldwide (Asian Development Bank, 2009; OECD, 2007) Bhattacharya, Romani, and Nicholas (2012) state that in order to support growing urbanisation and encourage inclusive growth, many developing markets—especially the low-income nations—need to take urgent steps to increase their infrastructure development spending. Infrastructure finance in developing countries is made more difficult for commercial organisations due to the need for large capital expenditures and budgetary constraints.

IV. RESULTS AND FINDINGS

India's Development of Infrastructure

The Indian economy shown resilience and strength in 2015–2016, with a GDP growth of 7.2%. Real GDP growth was predicted to be between 7 and 7.5 percent per year as the reform process gained steam (Ministry of Finance, 2016). The head of the IMF, Christine Lagarde, stated that in 2014, India's GDP grew by 7.3%, when most other economies in the world were experiencing weak GDP growth (World Bank, 2015b). Additionally, she stated that estimates indicated that in 2019, India's GDP would be expected to exceed the combined GDP of Germany and Japan. According to estimates, India's economy might reach \$200 billion in less than 20 years, and from its current share of less than 3% of the global economy, it could rise to roughly 9% (Christine, 2015). Still, there is no denying India's infrastructure deficit. As per the Global Competitiveness Report 2014–2015, India's infrastructure ranks 87th out of 148 countries. Approximately 67% of cargo and 85% of persons in India are transported by road. Massive infrastructure investments are urgently needed. It was projected that the overall capital expenditure in infrastructure, which accounted for 7% of GDP in the 11th Five Year Plan and 5% of GDP in the 10th Five Year Plan, would rise to 8% of GDP in the 12th Five Year Plan. According to a 2013 McKinsey Global Institute prediction, India would add 3.4 million employments if infrastructure spending rose by 1/100th of GDP. The current study describes the infrastructure development that occurred in India during the eleventh five-year plan (2007–2012) and the first part of the 12th five-year plan (2012–2017) in an effort to lessen the country's infrastructure deficit. It also includes the objectives and total capital budgeted for the following years.

Transportation

In 2007–2008, there were 10,385 passenger trains on average each day; in 2011–2012, that number rose to 12,335. The average daily passenger load in 2007–2008 was 17.88 million, and by 2011–2012 it had risen to 22.5 million. Additionally, railways improved the quality by electrifying more rails and switching from narrow and metre gauge to wide gauge. In 2011–2012, the percentage of broad gauge climbed from 81% in 2007–2008 to 87% in 2011. However, it is appalling that the average speed of goods trains is about 25 km/h, or about half the speed of American railroads. The railway network's expansion is woefully insufficient.

The goal is to raise the capacity to 12.4 million gross tonnes during the 12th Five Year Plan. The entire capacity of the port sector is projected to be 2,289.04 million tonnes in order to handle the anticipated traffic of 1,758.26 million tonnes by 2016–2017. The maritime sector was expected to receive INR 303.23 billion in capital expenditures under the 11th Five Year Plan, however only 58.3% of the funds were actually allocated. The maritime industry was to get INR 289.50 billion in investments under the 12th Five Year Plan. Nearly INR 1.7 trillion is anticipated to be invested in the ports by the private sector. (Infrastructure Statistics, 2014)

By 2017, the airline operators' investment plans call for an increase in passenger capacity to 370 million. The current increase in freight will require the purchase of equipment and a specialised cargo terminal. According to independent estimates, over the next ten years, an extra 180 operating airports will be needed. In order to fulfil the traffic growth estimates, Indian airports would need to invest approximately INR 675 billion over the 12th Five Year Plan.

Power

India is the world's fourth-largest energy consumer. The energy sector has expanded, but the gap between supply and demand is still very large. It must make advantage of the nation's rich energy resources and, if necessary, add imports to them. The total length of transmission lines increased over time to 8,726 circuit kilometres in 2011–2012 from 7,279 circuit kilometres in 2007–2008, according to Infrastructure Statistics Report (2014). In 2005–2006, the amount of power generated was 697 GWh (thousand). From there, it grew progressively to 1,057 GWh (thousand) in 2011–2012. The amount of electricity consumed per person increased from 430 Kwh in 2005–2006 to 884 Kwh in 2011–2012. However, progress in this field has shown that there is a persistent imbalance between the supply and demand for power. The entire energy demand in 2007–2008 was 739.343 thousand MU, and the total energy availability was 666.007 thousand MU. In contrast, the total energy demand in 2012–2013 was 999.114 thousand MU, and the total energy availability was 911.209 thousand MU.

The 12th Five Year Plan (2012–2017) states that, including renewable energy sources, the total installed capacity for the year ending March 31, 2012, was 199,877 mega Watt. Twelve percent of the energy came from renewable sources. According to estimates, the amount of energy supplied by renewable sources will rise from 24,503 megawatts (1%) in the 11th Five Year Plan to 54,503 megawatts (1.43%) in the 12th Five Year Plan and 99,617 megawatts (2%) in the 13th Five Year Plan (2017–2022). This is comparable to nations like China (0.5%), Indonesia (1.4%), the USA (1.7%), Thailand (1.0%), Brazil (3.1%), and Thailand (0.5%), but India still needs to do more.

Waterways

Ports enable international commercial linkage and coastal transportation, both of which are essential for economic growth. Docks where ships anchor while loading or unloading cargo make up ports. Major ports, which are under the jurisdiction of the Union Government, and non-major ports, which are under the administration of State Governments or Union Territories, are the two types of ports in India. India had 200 minor ports and 12 major ports as of March 31, 2012. The total amount of goods handled increased from 72.6 billion tonnes in 2007–2008 to 91.4 billion tonnes in 2011–2012, while the aggregate amount of passenger traffic increased from 1.66 billion in 2007–2008 to 2.14 billion in 2011–2012, indicating an increase in the use of water transport between 2007 and 2012 (Infrastructure Statistics, 2014). A total of INR 55.66 billion was invested during the 11th Five Year Plan to increase the capacity of various ports for handling cargo, resulting in an annual capacity addition of 185 million tonnes (MTPA). The Indian government intended to invest INR 737.93 billion in ports in the 12th Five Year Plan, with the aim of increasing the capacity of major ports to 1,229 MTPA (NMDP, 2012).

Roadways

National motorways, state motorways, district roads, and rural roads make up India's road network. The nation's 76,818 km of national highways make only 2% of the total road network, yet they carry 40% of all traffic, according to the 12th Five Year Plan. Thirteen percent of the nation's road network is made up of state highways and main district roads, which also carry forty percent of all traffic. Approximately 23% of the 76,818 km of national highways are four-lane (and above average), 54% are two-lane (average), and 23% are single-lane (below average).

The National Highway, which spanned 76,818 km and contained 100% surfaced road, the State Highway, which covered 164,360 km and contained 99.14 percent surfaced road, the Urban Roads, which covered 464,294 km and contained 73.04 percent surfaced road, the Rural Roads, which covered 1,938,220 km and contained 47.97 percent surfaced road, and the Other Roads, which covered 1,747,864 km and contained 75.97 percent surfaced road, are all included in the Basic Road Statistics (Ministry of Road Transport & Highways, 2012). The length of the road per 1,000 square kilometres increased from 1,288.74 km in 2007–2008 to 1,480.07 km in 2011–2012, as measured by the number of roads per unit area. According to Infrastructure Statistics (2014), the road length per 1,000 square kilometres as of March 31, 2012, was 1,480.07 km; in urban areas, it was 5,940.05 Agrawal 5 km, and in rural areas, it was 621.58 km. The estimations also revealed that the road length per 1,000 people was 4.03 km, with 1.27 km in urban regions and 2.3 km in rural areas.

The 12th Five Year Plan allocates INR 1.26491 trillion for rural roads and INR 1.44769 trillion for national highways. During the specified time, the sector is expected to earn INR 0.64834 trillion in Internal and Extra Budgetary Resources (IEBR) and attract INR 2.14186 trillion in private outlays.

The urbanisation processes

The present infrastructure is under a lot of strain as a result of increased urbanisation. According to the 2011 Census, 31% of the population resided in urban areas and 63% of the GDP was generated there. According to projections made by the Ministry of Urban Development (2014), by 2030, urban areas will house 4/10th of India's population and generate 3/4 of the country's GDP. The Modi Government's introduction of "Smart Cities" underscored the need for an inclusive expansion of physical, social, official, and economic infrastructure in order to improve the standard of living. The goal was to create 100 smart cities between 2015 and 2019. Additionally, the government established the "Sardar Patel Urban Housing Mission" and the "Atal Mission for Rejuvenation of Urban Transformation" (AMRUT) to modernise 500 cities (Khan, 2015). The "Smart City" plan has received US\$150 billion from the Modi administration. The government will pick 100 cities in conjunction with a consortium of national and international advisors. Each city that was chosen would get a grant of INR 1 billion (US\$15.7 million) annually for a period of five years. The first 20 cities to be developed into Smart Cities were announced by the government in January 2016. These 20 cities are home to 35.4 million people, and over the course of the five years, they would get an INR 508.02 billion investment.

Finance for Infrastructure in India

India's savings rate is comparatively high. Savings as a percentage of GDP are 2.3% for households, 7.2% for corporations, and 1.3% for the public sector. The majority of household savings—nearly half—are held as bank deposits, with the remaining tiny amount going into contractual investments. Therefore, investing savings in infrastructure rather than simply having them available is the real issue (GOI, 2013). The government, commercial banks, NBFCs, insurance companies, pension funds, external commercial borrowings, foreign equity, and foreign direct investment are the methods via which the money enter the infrastructure sector. It is projected that during the 12th Five Year Plan, debt financing shares will be as follows: 51.4% for Bank Credit; 27.3% for Nonbanking Financial Companies (NBFCs); 14.6% for External Commercial Borrowings (ECBs); and 6.6% for Pension or Insurance Funds (12th Five Year Plan, Vol. 1).

Though there are still obstacles to overcome, the administration's recent reform and creative measures have aided in the growth of the infrastructure industry. The inability to guarantee financial returns and the deteriorating macroeconomic climate have made developers less willing to take on risk in relation to new projects. The sector may recover, but it is expected to do so slowly because most of the businesses are burdened with leveraged balance sheets and unfinished projects. Furthermore, the executions on the ground might not provide additional incentive if the structural

limitations—such as unclear land procurement, excessive delays in sanctioning actions, and inadequate funding sources—are not swiftly resolved (ICRA, 2015).

The following are some of the actions the administration has made to provide funding for the infrastructure sector:

Infrastructure (Development and Regulation) Bill, Land Acquisition Act, Tax-free Infrastructure Bond, Infrastructure Debt Fund, Real Estate (Regulation and Development) Bill, Amendment of the IRDA Investment Regulations, 2013, Simplifying FDI regulations for defence, construction, and railroads; and Loosening ECB policy (ICRA, 2015).

The Reserve Bank of India has implemented a number of changes to simplify the financing of infrastructure. A rise in credit exposure to a single borrower from 15% to 20% and for a group from 40% to 50% of the bank's capital (Tier I & Tier II capital) was made possible by the adjustment of prudential requirements (RBI, 2013a).

IRDA (2012) reports that non-life insurance companies saw growth from INR 5,040 million in 2007 to INR 9,930 million in 2012, while the overall investments of life businesses went from INR 60,420 million in 2007 to INR 158,130 million in 2012. About 7% of all investments made by life insurance companies and 15% of all capital expenditures made by non-life businesses in 2012 went towards the infrastructure sector. Life enterprises are required under the 5th Amendment of the IRDA Investment Regulation (2013) to allocate 15% of their funds to the social and infrastructure sectors. However, the regulations also established an AA minimum rating for debt paper investments, which ultimately disqualified financing for debt held by private sponsors.

It is predicted that INR 54.9574 trillion will be borrowed in total for ECB/FCCB (foreign currency convertible bond) borrowings, and INR 5,495.7 billion will be borrowed in foreign money for infrastructure projects. The Working Group on Savings 12th Five Year Plan states that funds totalling INR 33.1834 trillion, of which INR 6,106.5 billion are foreign money, have been handled through this channel.

Facts and Discussions

It goes without saying that finance and infrastructure are the two main components of every economy. The main thing preventing the Indian economy from growing and developing is inadequate infrastructure. India must build a strong infrastructure system in order to achieve the projected growth rates. There is a significant financing gap that needs to be closed in India. To make infrastructure a profitable investment, problems with clearances, land acquisition challenges, decision-making delays, pricing models for infrastructure projects, insufficient dispute resolution mechanisms, etc., must be resolved. In order to promote increased private sector involvement in infrastructure projects, it is also necessary to establish favourable conditions and appropriate safeguards. A good policy environment is a basic requirement for the growth of investment in the infrastructure sector. It can attract private and foreign investment while safeguarding the welfare and advantages of the society. The issue with infrastructure funding is not a lack of funds, but rather a lack of financial intermediaries who are capable of directing and energising domestic savings towards the infrastructure sector.

In order to increase infrastructure financing, policymakers have taken a number of actions in the last few years, including introducing the PPP model to the infrastructure sector, facilitating bank financing to the sector, stimulating bond markets as a backup source of funding, and developing cutting-edge and innovative funding channels. In order to maintain a robust financial system with a diversified investor base, creative financial instruments, liquidity, and depth to support long-term funding, the regulatory and investment requirements, however, require more reorganisation.

Right now, among the BRICS countries, India has the highest loan rate. The state's ability to (a) popularise the bond market as a substitute for bank credit and (b) to bring about financial consolidation and lessen upward pressure on interest rates are critical factors in meeting the US\$1 trillion infrastructure investment target. The Ministry of Overseas Indian Affairs (2015) estimates that 28 million Indians are expatriated. As a result, there is a sizable amount of unrealized potential for diaspora financing to support national infrastructure development. Since most diaspora savings are kept in low-yielding bank accounts with yearly interest rates of only 4% or 5% in the host countries, the government and reputable private businesses can take advantage of the wealth of migrants by offering diaspora bonds with competitive interest rates. These ties would also elicit an emotional plea from the NRI to contribute significantly to the development of their homeland. Finance from the diaspora could potentially assist in bringing down the cost of funding for home-based development projects.

Banks have traditionally been essential to the financing of infrastructure. Bank credit exposure is extended to the maximum extent possible. The extent of their balance sheet, the rise in non-performing assets, and their lack of

ambition to progress into infrastructure industries severely limit the amount of credit they can extend. To prevent sector concentration, banks should seek more capital by adding Tier II capital and selling off government holdings. Exposure limits may be lessened by banking sector mergers and consolidation. In order to overcome the issue of asset-liability mismatch that banks confront, the banks should finance the infrastructure project's development and initial operating phase. Insurance and pension funds should then provide long-term refinancing of bank loans. The way that CRR or SLR are applied to "NDTL" in India does not align with international trends. For prudential reasons, wealthy nations do not now enforce SLR rules. The liquidity requirements for time deposits are typically lower in developing nations than those for demand deposits. The Basel II standards suitably guarantee that the financial intermediary possesses adequate liquidity to meet its fixed-term obligations. The banks can also attempt employing the following tenets: consider savings account balances as long-term money and manage daily liquidity through interbank operations.

Niti Ayog (2015) claims that there has been a sharp decline in private sector investments in the nation's infrastructure throughout the 12th Five Year Plan era. To rationalise the distribution of risk and reward among the various stakeholders, it is necessary to: (1) rework the 3P models; (2) implement a suitable and efficient dispute resolution mechanism; (3) open up the ports, railways, and renewable energy sectors for 3P; and (4) create a comprehensive national PPP policy outlining the objectives, parameters, and guiding principles of the state's PPP programme. (5) Create an electronic due diligence system to guarantee quicker clearances. (6) more openness in the screening process; (7) prompt policy updates and improved accessibility to important publications and data; (8) additional "go-to-market" channels and (9) investment insurance for capital projects related to infrastructure, with the aim of reviving private involvement in the sector. The government must provide incentives such as tax breaks (such as the exemption of taxes on capital goods required for the infrastructure sector or fractional VAT reductions upon project completion); limited public guarantees (such as minimum revenue guarantees or buyout guarantees); incentives and bonuses (for on-time/prompt completion, for preventing cost overruns, etc.); and compensation for losses resulting from fluctuations in exchange rates. It is imperative that subsidies or incentives be subject to social inclusivity requirements. It is necessary to create a collection of primary quantitative impact markers or indicators. In order to expedite infrastructure development in the nation, the state should also investigate various PPP models, including Build and Build, Finance Only, Operation & Maintenance Contract, Build-Finance, Design-Build-Finance-Maintain, Build-Own-Operate, Transfer-Operate-Transfer, and Build-Lease-Transfer, among others, which are utilised worldwide.

Sub-sovereign or municipal bonds account for a significant share of infrastructure financing in a number of countries. On the other hand, India still lacks access to the municipal bond market. It is imperative that local governments take the lead in developing the nation's infrastructure. It is necessary to give local governments more financial authority so they may raise capital for infrastructure projects, subject to control procedures and with set caps. This will hold them directly responsible for borrowing money and repaying it. Local Government Financing Vehicles (LGFVs) are a tool used by local governments to increase the size of its capital base and get around budgetary restrictions. To finance infrastructure projects, they can issue "revenue bonds," where interest is paid out of projected cash inflows, "common bonds," which aid in funding capital outlays that do not produce income, and "direct pay bonds," which are taxable bonds for which the federal government directly subsidises interest expenses. Local municipal bodies can issue and register debt instruments using the framework that SEBI has established, although those rules still need to be adjusted. To create a more dependable municipal bond market, the federal government, state governments, and municipal bodies must work together.

The depository profile of post offices, insurance companies and pension and provident funds is more in line with the infrastructure's currency requirements. They are able to invest for the long term and are not affected by asset-liability mismatch because of the basic structure of their liabilities. These institutions do, however, currently participate in infrastructure funding to a limited extent. In order to approve investments in (a) AA-rated securities (also known as "not permitted" investments) and (b) infrastructure projects with state assurance, their exposure restrictions to the infrastructure sector must be appropriately modified. The middle class in India is growing at the fastest rate in the world, but very few people there are investing in pension and insurance products. The market for fixed-income securities may grow significantly as a result of the privatisation of the pension system. The country needs to announce and support a privatised pension plan in which employees receive stock or bonds in proportion to their contributions to the public system, and pension fund contributions are deducted automatically from their monthly pay. The workers'

retirement benefits include a considerable amount of their account being transformed into an inflation-indexed annuity, with only a partial withdrawal allowed. The country's retirement plan would expand significantly as a result of the annuity requirement, eventually making room for additional funding for the infrastructure sector. It is also necessary to redirect the savings made in the different Post Office-offered schemes towards the funding of infrastructure projects.

For infrastructure companies to receive extra capital, a robust corporate bond market is necessary. In order to increase infrastructure investment, it is necessary to create a framework that allows lenders to convert debt into equity in failing companies, reform pay and performance structures, create novel rating systems that incentivize long-term investments in the infrastructure sector, promote the use of innovative financial instruments, relax new regulations governing foreign portfolio investors by doing away with paperwork for entities subject to foreign securities market regulation, lower withholding taxes, and offer tax shelters for infrastructure bonds. By offering creative financing options, investment bankers can serve as a liaison between public and private entities. They are able to underwrite new issues that are given by semi-government organisations like municipal organisations, which are used to finance infrastructure projects. Derivatives markets must be developed, especially for interest rates and foreign exchange. Foreign currency shares, bonds, ADRs, GDRs, and hybrid instruments should be permitted for Indian public utility companies with investment-grade ratings and implicit sovereign guarantees in foreign markets; nevertheless, the financial risks will need to be carefully monitored and controlled.

Private sector involvement in infrastructure finance will mostly depend on the country's capacity to create a well-functioning debt market, change regulations to allow for greater diversification, and lower barriers for foreign investors. The reasons why ECBs for infrastructure are insufficient are (a) inadequate credit ratings and weak balance sheets of infrastructure corporations, (b) interest rate ceilings, (c) limitations on international involvement, and (d) little options for hedging. Lack of a sufficiently deep forwards market in foreign exchange is another barrier to taking advantage of foreign capital.

By building corridors between sub-regions, the government should encourage the development of intra-regional infrastructure, or enhanced connectivity and regional integration. This would spur economic growth, draw in new investment, and expedite the building of infrastructure. To do this, policy coherence and the creation of synergies are crucial. It is critical that there be some shared vocabulary and connections between national and international investment policies, as well as between investment and sustainable development initiatives. Transnational companies, development banks, and the home nations of investors might build partnerships to reduce information gaps and promote coordinated investments in the infrastructure sector.

V. CONCLUSION

Theoretically, there should be an ideal match between a large source of capital and the need for investment, but infrastructure spending has not been enough to close the financing gap. The majority of the measures have been state-driven, although market- and investor-driven initiatives are also necessary. Governments must reevaluate how they assist in financing infrastructure. In response to supply (the lack of enough infrastructure) and demand (the hunt for an appropriate asset class), financial markets and intermediaries must innovate to draw in more capital.

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