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TOPIC: BRIDGING NIGERIA INFRASTRUCTURE GAP FOR ECONOMIC GROWTH AND DEVELOPMENT: INNOVATIVE OPTIONS FOR FINANCING INFRASTRUCTURE DEVELOPMENT

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1. Introduction: Setting the Stage

Distinguished guests, esteemed business leaders, ladies and gentlemen.

It is an honor to be with you today at this important forum, where we gather to address a topic that holds profound significance for Nigeria: the innovative options for financing infrastructure development. Infrastructure is the foundation of economic progress and social transformation, yet Nigeria, like many parts of Africa faces a considerable infrastructure deficit that limits its ability to realize its full potential. Today, we explore the opportunities that lie in closing this gap, as well as the critical role innovative financing must play.

The African Infrastructure Financing Landscape

Africa has no shortage of ambition when it comes to infrastructure development, and the demand for financing is substantial. According to the African Development Bank (AfDB), it will cost between $130 billion and $180 billion annually to close the continent's infrastructure gap, yet current funding falls short by $68 billion to $108 billion each year. The most critical needs include water and sanitation (41% of the gap), followed by electricity supply and transport access (28% each). The urgency of bridging these gaps cannot be overstated, without adequate infrastructure, the continent struggles to attract foreign direct investment, develop regional value chains, and fully participate in the global economy.

In 2020, just 42.2% of infrastructure investment in African countries was financed by national governments. Infrastructure spending by these governments is often constrained by **limited revenue sources, volatile commodity prices, and debt sustainability concerns,** underscoring the need for more sustainable and diversified financing models.

World Bank had in 2017 reported that bridging the gap in both the quantity and quality of infrastructure to match the world's top performers could boost GDP per capita growth by 2.6% annually. The most significant potential gains would stem from enhancing electricity-generating capacity. Globally, it is becoming clear that relying on traditional sources of funding through government budgets or external loans cannot adequately address this gap. Thus, the focus must shift towards innovative methods that mobilize private capital, while ensuring sustainable outcomes. Nigeria needs to reposition its policy framework to be able to benefit from the more than $50 trillion international investment pool held by the world's top 300 investors.

Current Financing Models: Challenges and Gaps

Traditionally, infrastructure has been funded through:

1. **Government Allocations**: These are derived from taxes and national revenues. However, limited budgets, particularly in low-income countries like Nigeria, restrict the ability to

finance large-scale projects. For example, Nigeria's infrastructure financing is heavily dependent on oil revenues, which are subject to market volatility. A drop in oil prices often leads to delays or cancellations of critical projects.

2. **Grants and Loans from Multilateral Institutions**: Institutions such as the World Bank and AfDB have been instrumental in supporting infrastructure projects. They bring technical expertise, guarantees, and act as catalysts for private sector participation. However, these loans contribute to the national debt and can be burdensome for countries already struggling with debt sustainability.

3. **Private Sector Participation (Limited and Uneven)**: While private investment has begun to play a role in certain infrastructure sectors, there remain significant barriers to entry. The perception of high risk, regulatory uncertainties, and challenges in project bankability make it **difficult to attract private capital at scale**.

The infrastructure financing gap in Nigeria is estimated at over $3 trillion over the next 30 years, yet only a fraction of this need is being met. In the 2023 budget, only around N1.4 trillion ($875 million) was allocated for capital expenditure on infrastructure, far below the $100 billion required annually to bridge the gap.

The Case for Innovative Financing Solutions

Nigeria's immense infrastructure needs demand more creative, sustainable, and scalable financing solutions. The traditional reliance on government budgets and external loans is no longer sufficient. To close the infrastructure gap effectively, innovative financing methods are needed approaches that not only appeal to investors, but also drive economic development.

According to the African Union Development Agency-NEPAD (AUDA-NEPAD), there is a vast pool of potential financing available among institutional investors such as pension funds, investment corporations, and sovereign wealth funds. By 2025, an estimated $2.5 trillion worth of infrastructure projects will be in the pipeline across Africa. However, a significant portion of these projects remains in the feasibility phase, with only about 10% advancing to financial close.

To successfully attract private capital, it is essential to lower perceived investment risks and improve the bankability of infrastructure projects. Governments, international financial institutions, and private sector players must work together to develop financing structures that balance financial returns with social impact. Such collaboration will make these projects more attractive to investors and help move them forward from planning to completion.

One of the most significant challenges lies in the nature of infrastructure projects - they are typically large-scale, expensive, and fraught with uncertainties. These projects can take years, even decades, to complete, with returns on investment not immediately evident. In Nigeria, infrastructure spending currently makes up just 10-15% of the annual national budget. This is a stark contrast to the estimated $100 billion needed annually, highlighting a substantial shortfall.

Relying solely on government funding or external loans is not a sustainable strategy. The path forward requires mobilizing private capital and finding smarter, more effective ways to attract both local and foreign investors. Innovative financing structures are key to making this happen and to unlocking the full potential of Nigeria's infrastructure development.

Attracting Feasible Infrastructure Financing

A 2020 McKinsey study proposes a number of solutions to make infrastructure projects less risky and thus more attractive to private capital. The government, international financial institutions and private investors can all play a part: **Governments should minimise risks for investors by reducing regulatory, currency, and political uncertainties.** This **includes safeguarding investments from arbitrary decision-making, expropriation or delays in obtaining necessary regulatory approvals to ensure profitability**. A tax system that incentivises investment, but is also fair to local citizens may be difficult to achieve, but is an important objective, nevertheless. International financial institutions should offer risk-sharing instruments to private investors, such as guarantees.

Governments and international financial institutions (through its technical assistance programs) should invest more in early feasibility studies. **We need to see governments take on low-return projects, such as basic water and sanitation and transport projects, and set aside high-return projects for the private sector.** This is an important caveat, as the primary goal of governments in their infrastructure strategy is to develop the economy and improve citizen well-being. This goal must be balanced by the need to attract private investment in the sector.

2. Innovative Financing Models for Sustainable Infrastructure

Ladies and gentlemen let's delve into some of the most promising and innovative approaches to infrastructure financing. As we explore these models, you will see how they offer opportunities to transform the way we build and sustain infrastructure, ensuring long-term economic development and public welfare. So, what are the innovative approaches that we can turn to? Let me highlight some of the most promising models.

Public-Private Partnerships (PPPs)

One of the key innovative models is Public-Private Partnerships (PPPs). The World Bank Group defines PPPs as long-term contracts between a private party and a government entity for providing a public asset or service, where the private party assumes significant risk and management responsibility, and remuneration is performance-based.

PPPs can be an effective tool for closing the infrastructure gap by leveraging limited public funds, attracting private sector investment, and introducing operational efficiencies and technology from the private sector. In essence, they offer better quality public services and enhance economic growth. However, it's important to acknowledge that implementing PPPs can involve relatively high transaction costs, making smaller projects potentially unviable. That's why many governments have set minimum project sizes for PPPs, as seen in Singapore (≥US$50 million) and Brazil (≥US$11.7 million).

A well-structured PPP framework ensures that projects are selected and executed efficiently, transparently, and in a way that minimizes risk, while delivering value for money. According to the African Development Bank (AfDB), while PPPs have great potential to bridge Africa's infrastructure gap, improvements in institutional, legal, and regulatory frameworks are needed to enable their success. The Infrastructure Concession Regulatory Commission (ICRC) of Nigeria reported that, as of 2022, it has approved Outline Business Cases (OBCs) for 51 PPP projects valued at over NGN 6.92 trillion.

Examples of Successful PPP Projects in Nigeria

Nigeria has seen numerous successful PPPs that have significantly contributed to infrastructure development. Here are some noteworthy examples:

- **Lekki-Epe Expressway Toll Road**: A critical road infrastructure project that improves transportation in Lagos.
- **Murtala Muhammed Airport Terminal 2 (MMA2)**: A modern airport terminal developed and operated by Bi-Courtney Aviation Services.
- **Azura-Edo Independent Power Project (IPP)**: A power generation project that has increased Nigeria's electricity capacity.
- **Lekki Deep Sea Port**: A major port facility developed by Tolaram and China Harbour Engineering Company.
- **Kainji and Jebba Hydro Electric Power Plants**: Managed by Mainstream Energy Ltd, these plants contribute to the national grid's power supply.
- **Shiroro Hydro Electric Power Plant**: Managed by North South Power Company, this project is vital for hydroelectric power generation.
- **Ajaokuta-Kaduna-Kano (AKK) Gas Pipeline**: A 614 km gas pipeline project executed by a consortium led by Oando/Oilserve and China Petroleum Pipeline (CPP)/Brentex.

Variants of PPP Models in Nigeria

Several innovative frameworks have emerged under the PPP model in Nigeria, which have furthered infrastructure development:

1. **Highway Development and Management Initiative (HDMI)**: The HDMI is a PPP program launched by the Federal Ministry of Works and Housing (FMWH), in collaboration with ICRC, focusing on the concessioning of economically viable road corridors to private sector companies for management and development. Under this model, which uses a "Design, Build, Operate & Transfer" approach, 12 highways representing 5.6% (1,963 km) of Nigeria's federal highway network are targeted for concession. The initiative anticipates a minimum capital investment of **N1.13 trillion**, and the FMWH began a competitive bidding process in 2021 to select competent private sector bidders for the roads.

   Some of the successful bidders in the concession process include: Africa Finance Corporation (AFC), Africa Plus Partners Nigeria Limited, Avia Infrastructure Limited, China Harbour Engineering Company (CHEC), Enyimba Economic City Development Company Consortium.

2. **Road Infrastructure Development and Refurbishment Investment Tax Credit Scheme**: This innovative financing approach was established under Executive Order No. 007 in 2019, allowing the private sector to finance critical road infrastructure development. Companies that participate in the scheme are entitled to claim the total cost of constructing or refurbishing eligible roads as a tax credit against their future Companies Income Tax (CIT) liability, offering a compelling incentive for private investment in infrastructure.

The scheme runs for a period of 10 years and is administered by a Management Committee comprising top officials from various government ministries and agencies, including the Federal Inland Revenue Service, Ministry of Finance, and Nigeria Sovereign Investment Authority.

Participants in the scheme include major corporations such as: Nigerian National Petroleum Company (NNPC), MTN Nigeria Communications, Transcorp Group, Access Bank, BUA Group, Dangote Group, Nigeria LNG (NLNG).

The scheme offers not just a tax credit, but also a "single non-taxable uplift" – an added percentage on the project cost based on the Monetary Policy Rate plus 2%, which enhances the attractiveness of private investment.

Conclusion on PPP Models

PPPs are clearly a versatile and powerful tool for financing infrastructure, and their application in Nigeria has already delivered significant benefits. However, to fully harness their potential, it is crucial to develop a supportive regulatory environment, improve capacity building, and ensure transparent project selection and execution. With innovative financing models like PPPs and schemes like the Road Infrastructure Tax Credit Scheme, Nigeria can continue to make strides in closing the infrastructure gap and achieving sustainable development.

2. Blended Finance as an Innovative Model for Infrastructure Funding

Ladies and gentlemen, let's take a closer look at blended finance, one of the most innovative approaches in funding sustainable infrastructure projects. Blended finance has emerged as a powerful tool that combines different sources of funding, including public, private, and philanthropic capital, to address the most pressing development needs – **all while making these projects financially viable and attractive for investors.**

Understanding Blended Finance

Blended concessional finance, as defined by the Development Finance Institution (DFI) Working Group, is the strategic use of concessional capital from donors or third parties alongside Development Finance Institutions' (DFIs) regular commercial financing to attract private sector investment into sustainable development initiatives. Simply put, blended finance uses public or philanthropic capital to **de-risk investments, enhance returns, and encourage private sector participation in projects that might otherwise be deemed too risky or unprofitable**.

The goal of blended finance is to unlock private capital by using Concessionality – **financial support provided at below-market rates to reduce risks and enhance the commercial viability of investments**. This approach supports development impact, whether through financial incentives, return enhancements, or technical assistance to ensure project success.

The Current State of Blended Finance

Blended finance has evolved significantly over the past 15 years. According to Convergence's Historical Deals Database, there have been approximately 1,123 transactions totaling around $213 billion in investment, averaging about 85 deals per year with a median annual financing total of $15 billion. We've witnessed a growing trend in the adoption of blended finance, especially in recent years, with an increased use of concessional guarantees and risk insurance to mitigate financial risks.

Interestingly, the energy sector is the most active in this space, accounting for nearly one-third of deal activity and around 47% ($101 billion) of the total capital flow. Renewable energy projects dominate this sector, with 91% of blended finance deals directed toward clean energy, particularly solar, where investments totaled nearly $10 billion in the past year alone.

Key Players in Blended Finance

Blended finance typically brings together a mix of actors:

- **Multilateral Development Banks**: These include the World Bank, African Development Bank, Asian Development Bank, KfW Development Bank, and Overseas Private Investment Corporation (OPIC).
- **Philanthropic Foundations**: Major foundations such as the Bill & Melinda Gates Foundation, Rockefeller Foundation, and Ford Foundation play a critical role in providing concessional funding.
- **Public Sector Agencies**: Agencies like the United States Agency for International Development (USAID), Department for International Development (DFID), and Agence Française de Développement (AFD) contribute through funding, technical assistance, and policy support.

Blended Finance Structures

Blended finance is highly flexible, with a range of structures tailored to reduce project risk and attract private investment. Key mechanisms include:

- **Below-Market Financing**: Public or philanthropic investors provide funds at concessional terms, lowering the overall cost of capital or adding a layer of protection for private investors.
- **Credit Enhancement**: This can take the form of guarantees or insurance that protect private investors against financial losses. It also includes mechanisms like first-loss capital, where public investors absorb the initial losses to make the investment more appealing to the private sector.
- **Technical Assistance Facilities**: Grant-funded technical assistance can be critical in preparing projects pre-investment or in supporting operational performance post-investment to improve commercial viability and enhance development outcomes.
- **Grant-Funded Project Development**: Grants are used to fund feasibility studies, project preparation, or design-phase activities, making projects more bankable.
- **Structured Funds and Bonds**: Private equity or debt funds with concessional funding are created to attract institutional investors, and bonds or notes may be issued with public or philanthropic guarantees.
- **Capacity Building and Development Impact**: Grants can be provided to build capacity for investments to achieve their financial and social returns or to structure projects to appeal to a wider range of investors.

The De-Risking Role of Public and Concessional Capital

The **ability of blended finance to de-risk infrastructure projects is one of its strongest advantages**. Public or concessional capital can enhance the attractiveness of projects by offering different forms of risk mitigation:

- **Credit Enhancement**: By providing guarantees to private investors, public entities can ensure repayment even if a project fails. Additionally, loan participation by public entities can reduce risk exposure for private investors.
- **Equity Investment**: Public capital can be used as first-loss capital, absorbing the initial financial losses and thus reducing downside risk for private investors. Seed capital from public funds can also help get projects off the ground.
- **Technical Assistance**: Funding feasibility studies and project development assistance helps clarify the risks, assess the commercial potential of projects, and support the development process, making investments more attractive.
- **Political Risk Mitigation**: Public entities can purchase political risk insurance to shield private investors from potential instability or policy changes that could affect project outcomes.

Examples of Blended Finance in Action

To better understand the application of blended finance, let's consider some real-world examples:

1. **Renewable Energy Projects in Nigeria**: The World Bank Group, the African Development Bank (AfDB), and several philanthropic foundations have been working with Nigeria's Rural Electrification Agency (REA) to expand access to electricity in rural communities. The development of mini-grids has been a focus, with concessional funding and technical support helping to accelerate renewable energy solutions in off-grid areas.

- **Morocco's Noor Solar Complex:** This mega-project, one of the largest solar parks in the world, was financed through a blend of concessional finance from development institutions such as the World Bank and private investment. It serves as a blueprint for how blended finance can help tackle Africa's energy deficits, particularly in renewable energy.
- **Rwanda's Kigali Bulk Water Project:** This water infrastructure project is a PPP, but with blended finance, where both public and private funding is used to provide clean drinking water to Kigali's residents. By blending concessional loans with commercial finance, the project has become bankable and scalable.

Conclusion

Blended finance offers a transformative opportunity to address infrastructure deficits and contribute to sustainable development. By leveraging concessional capital to mitigate risks, attract private sector investment, and promote impactful development, blended finance is a critical tool for bridging the infrastructure financing gap in Nigeria and beyond. As these examples have shown, the strategic combination of public, philanthropic, and private capital can create scalable and bankable solutions to complex development challenges.

3. Green Bonds and Sustainable Finance: Opportunities for Infrastructure Development

Ladies and gentlemen, let's explore green bonds and sustainable finance – crucial tools that are increasingly shaping the way we think about funding infrastructure projects in a climate-conscious world.

The Context: Africa's Climate Vulnerability

Sub-Saharan Africa (SSA) remains highly vulnerable to climate change, despite contributing only around 4% to global greenhouse gas emissions (Heinrich Böll Stiftung Foundation). Nigeria is no exception, facing the dual challenge of mitigating environmental impact while closing the infrastructure gap. In response, Nigeria established its Green Bond Advisory Group, co-chaired by the Honourable Minister of Environment and the Nigerian Exchange Group Plc. This group comprises stakeholders from local and international organizations like the World Bank, UNEP, IFC, AfDB, and Climate Bonds Initiative (CBI). Together, they played a pivotal role in developing the strategy and groundwork for Nigeria's debut sovereign green bond issuance in 2017 – a groundbreaking initiative not just for the nation but for the entire continent.

Green Bonds: A Powerful Tool for Sustainable Development

So, what are green bonds, and why are they so important? Simply put, green bonds are debt instruments used to raise capital specifically for projects that have positive environmental or climate benefits, such as renewable energy, clean transportation, or afforestation. As concerns over climate change intensify globally, green bonds are gaining significant traction as an effective means of financing sustainable projects. Nigeria became a frontrunner in this space as the first African nation and only the fourth globally to issue a sovereign green bond, channelling funds into renewable energy and afforestation initiatives. The first green bond issued in 2017 by the Federal Government of Nigeria (FGN) raised N10.69 billion, with a 13.48% 5-year tenor.

This initial success laid the foundation for further efforts, aligning with Nigeria's commitment to achieving a Net-Zero target by 2060. To meet its Nationally Determined Contributions (NDCs) as part of the Paris Agreement, Nigeria aims to reduce carbon emissions by 20% unconditionally and up to 45% with international support by 2030. To realize these goals, the country must mobilize approximately US$17.7 billion annually through 2030.

Building on the Green Bond Momentum

The issuance of the first green bond opened the doors for subsequent green finance initiatives. This included corporate green bonds, such as:

- **Access Bank Green Bond**: N15 billion, 15.5% 5-year Fixed Rate Senior Unsecured Green Bond.
- **North South Power Company (NSP) Green Infrastructure Bond**: N8.5 billion, 15.6% 15-year Guaranteed Fixed Rate Senior Bond.
- **FGN's Series II Green Bond**: N15 billion raised in 2019 with a 7-year tenor and an impressive 220% subscription rate, oversubscribed by an additional N17.93 billion.

These bonds have paved the way for private and public entities to participate in sustainable finance, with a focus on sectors like energy, infrastructure, and transport – all areas critical to Nigeria's economic transition.

Global Trends in Green Finance

In the first seven months of 2024, over US$400 billion in green bonds were issued worldwide, with a growth rate of more than 125% anticipated in 2023. This shows the strong global appetite for green finance. However, Africa's uptake remains modest, raising only US$4.9billion. The African

Development Bank led the way with US$3.1 billion in green finance, followed by Côte d'Ivoire's US$1.1 billion issuance in January.

Despite being the trailblazer in sovereign green bonds, Nigeria's overall transition funding is still underwhelming, with just US$10 billion needed annually and a cumulative US$410 billion required to fund the economic transition. In 2024, Nigeria plans to issue another US$250 million in green bonds – potentially its third issuance within seven years. However, Nigeria must step up to match other African economies, such as Egypt, which plans to raise US$700 million in green finance this year, with an additional US$5 billion in the pipeline after a successful US$750 million debut.

Driving ESG and Sustainable Finance in Nigeria

One of the main ways to support environmental, social, and governance (ESG) practices is through regulation and policy enforcement. Nigeria's Climate Change Act and the establishment of the National Council on Climate Change (NCCC) aim to catalyze ESG adoption. To achieve this, stakeholders must **be motivated, informed, and incentivized**. Government regulations can be a powerful catalyst, requiring organizations to **disclose ESG practices transparently**. Additionally, offering tax incentives and credits to companies actively meeting ESG goals can further drive sustainable practices.

As institutional investors – including banks, pension funds, insurance companies, and mutual funds – increasingly prioritize sustainability metrics, organizations aligning their strategies with ESG principles will be well-positioned to access investment capital. Green funds and financial instruments targeted at environmentally and socially responsible projects are key to attracting sustainable investment and boosting ESG adoption rates.

Closing Thoughts

As we move toward a sustainable future, green bonds and sustainable finance offer Nigeria the chance to drive impactful change. By aligning business goals with environmental and social responsibilities, Nigeria can unlock a new era of development, one that not only meets the needs of the present but also safeguards the prosperity of future generations. Sustainable finance isn't just about achieving a rating, rather it's about creating lasting value for money, for people, and for the planet.

4. Infrastructure Investment Funds (IIFs)

Ladies and gentlemen let's turn our attention to infrastructure investment funds (IIFs) – an innovative approach that has gained momentum as a vital financing tool for large-scale infrastructure development.

What Are Infrastructure Investment Funds (IIFs)?

Infrastructure Investment Funds pool capital from institutional investors – including pension funds, insurance companies, and sovereign wealth funds – to finance infrastructure projects. These funds are tailored to align with the long-term nature of infrastructure investments, offering both investors and project developers a reliable means to address long gestation periods and the significant capital requirements often associated with infrastructure development.

The key advantage of IIFs is that they provide a structured mechanism for channelling private capital into public infrastructure projects. This not only supports government-led initiatives but also creates opportunities for private sector participation in critical areas such as transportation, energy, and utilities.

The Role of the Capital Market in Infrastructure Financing

Recognizing the potential of IIFs to drive economic growth, the Securities and Exchange Commission (SEC) of Nigeria has approved five infrastructure fund shelf programs, collectively totaling N1.5 trillion. These approvals are designed to directly support the federal government's goals for infrastructure development and help address deficits in key sectors, such as roads, railways, and power. By leveraging the capital market, these funds can attract long-term financing, providing a sustainable solution for Nigeria's infrastructure needs.

The capital market, as economists and analysts have pointed out, is an optimal platform to mobilize long-term capital for infrastructure financing. The long-term nature of infrastructure projects – often spanning 10, 20, or even 30 years – makes the capital raised through these funds well-suited for projects with extended timelines and capital-intensive requirements.

Examples of Infrastructure Funds in Nigeria

There are already successful cases of infrastructure funds in the Nigerian capital market, serving as role models for future investment vehicles:

- **Chapel Hill Denham Nigeria Infrastructure Debt Fund (NIDF)**: The first listed infrastructure debt fund in Nigeria, NIDF focuses on lending to projects in sectors such as energy, transport, and utilities. By providing debt financing, it plays a critical role in supporting long-term infrastructure development.
- **United Capital Infrastructure Fund**: This fund pools capital from institutional investors and strategically invests in a diverse portfolio of infrastructure projects across Nigeria, fostering economic growth and development.
- **TIB Infrastructure Fund**: Set to launch its own infrastructure fund soon, The Infrastructure Bank Plc aims to channel investment into strategic sectors and enhance the quality of Nigeria's infrastructure network.

Benefits of Infrastructure Investment Funds

Infrastructure Investment Funds (IIFs) offer several benefits for funding infrastructure projects. They align long-term capital from institutional investors with projects requiring extended payback periods, providing stable returns. By diversifying investments across multiple projects, IIFs reduce risks and enhance stability for investors. They also mobilize private capital to fund public infrastructure needs, reducing the financial burden on governments and promoting efficiency and innovation. Additionally, IIFs boost economic growth by funding projects that improve connectivity, energy access, and quality of life.

To maximize the potential of IIFs, a supportive regulatory and financial framework is crucial. Governments should provide stability, incentives, and transparency in project selection to attract private investment. Collaboration between the public and private sectors is vital for effective financing, construction, and management of infrastructure, ultimately driving sustainable growth. Overall, IIFs offer a transformative opportunity to close the infrastructure gap and promote development in emerging markets.

5. Infrastructure Debt Securitization

Ladies and gentlemen let's explore how infrastructure debt securitization can serve as an innovative approach to financing infrastructure development.

What is Infrastructure Debt Securitization?
Infrastructure debt securitization involves pooling debt from infrastructure projects and issuing it as securities to investors. By converting these traditionally illiquid debt assets into tradable securities, this model provides upfront capital for infrastructure while offering regular returns to investors, enhancing liquidity in the market.

Key Benefits

1. **Access to Capital**: Securitization taps into a broad pool of investors, such as pension funds and asset managers, providing long-term financing for infrastructure projects.

2. **Lower Borrowing Costs and Risk Diversification**: By spreading risk across multiple investors, securitization reduces financing costs, while offering different risk-return profiles through tranches of securities.

3. **Efficient Use of Capital**: Originators, like banks, can offload these debts from their balance sheets, freeing up capital for new lending.

4. **Transparency**: The process offers clear information on underlying assets, enabling informed investment decisions and attracting investors.

How it Works
The cash flows generated by infrastructure assets – like toll roads or power plants – are used to pay interest and principal to investors holding the securitized debt. These securities are structured into tranches, ranging from low-risk, lower-return senior tranches to higher-risk, higher-return subordinated tranches, and can be traded on secondary markets.

Notable Examples in Africa
While infrastructure debt securitization is still emerging in Africa, there are notable initiatives:

- The **African Development Bank (AfDB)** and **Emerging Africa Infrastructure Fund (EAIF)** have driven infrastructure securitization, with AfDB participating in a $500 million fund for various projects.
- **South Africa's Bayport Securitization Programme** has expanded from consumer loans to infrastructure financing, raising over ZAR 5 billion (~$350 million).

These examples indicate growing potential for securitization as a credible financing tool for long-term infrastructure projects across the continent.

Challenges and Solutions
Challenges in securitization include large loan sizes, complex structuring, and varying regulatory environments. However, these can be addressed through clear regulation, smaller loan tranches to appeal to a diverse investor base, and effective structuring for transparency.

Conclusion
Infrastructure debt securitization offers a transformative opportunity to mobilize private capital, enhance market liquidity, and bridge Africa's infrastructure gap. By **aligning policy support, market development, and thoughtful structuring,** this model can help fund vital infrastructure and drive sustainable growth across the region.

6. Sukuk Islamic Bonds

Sukuk Islamic bonds have gained wider acceptance as a strategic tool for financing critical infrastructure since its debut in 2017. Sukuk is a form of Islamic financial instrument structured to comply with Shariah law, which prohibits interest-based financing. Unlike conventional bonds that represent debt obligations, Sukuk bonds represent partial ownership in an asset, or a project, thus **creating a link between financing and real economic activity**. The returns are generated through the performance of the underlying asset, thereby ensuring ethical use of funds.

Nigeria has been actively issuing Sukuk bonds to fund its infrastructure since its inaugural issuance. The Federal Government has raised a total of over NGN612.56 billion through three issuances of Sukuk, aimed at developing key national infrastructure. This strategy aligns with the government's objectives of diversifying funding sources and meeting the country's growing demand for capital-intensive infrastructure projects. The key benefits of using Sukuk Bonds in Nigeria are as follows:

- **Ethical and Sustainable Funding**: Sukuk is grounded in ethical and socially responsible investing. The funds raised are tied to specific infrastructure projects, ensuring accountability and transparency in the deployment of capital.
- **Broadening the Investor Base**: Sukuk bonds attract a diverse group of investors, including Islamic finance stakeholders, retail investors, and institutions that prioritize ethical investment.
- **Asset-Backed Financing Reduces Risk**: Sukuk bonds are backed by tangible assets or projects, reducing default risk and fostering investor confidence. This asset-based approach makes it particularly suitable for infrastructure development, where tangible outcomes are easily measurable.

Sukuk bonds have helped to address the country's infrastructure deficits, focusing on critical sectors such as transportation, education, and energy. Given the inherent principles of Sukuk – which emphasize asset-backed financing and ethical investment – the bonds have proven to be an effective and innovative alternative to traditional debt financing. This report explores how Nigeria has successfully used Sukuk to fund infrastructure and discusses how this approach can be further adopted for sustainable economic growth. Significant portions of the funds raised have been dedicated to the rehabilitation and construction of over 25 major federal highways across the six geopolitical zones of Nigeria. Notable examples include: **Lokoja-Benin Road**, **Enugu-Port Harcourt Road**, **Kano-Maiduguri Expressway** in addition to **Bridge Construction and Rehabilitation.**

It is advocated that Nigeria should build on successful momentum by making Sukuk a core part of its infrastructure financing strategy. By expanding the scope of Sukuk use across different sectors, enhancing investor education, and fostering a robust regulatory framework, the country can fully harness the benefits of this innovative financial instrument to address its infrastructure needs, drive economic growth, and improve the quality of life for its citizens.

7. Infrastructure-as-a-Service (IaaS):

Ladies and gentlemen, as we continue to explore innovative approaches to infrastructure financing, I would like to introduce you to the concept of **Infrastructure-as-a-Service (IaaS)**. Traditionally, when we think of infrastructure, we envision large-scale physical assets like roads, bridges, and power plants. However, in today's rapidly evolving digital world, there is a growing need for digital infrastructure to power businesses and economies.

Infrastructure-as-a-Service (IaaS) is a cloud-based model in which infrastructure assets, primarily IT infrastructure, are provisioned and managed as a service. Think of IaaS as renting rather than buying. Instead of businesses investing heavily in their hardware, data centers, and network equipment, they can access these resources on-demand over the internet. This model allows companies to pay only for the resources they consume, shifting their focus from capital-intensive infrastructure development to more flexible and operational spending.

The IaaS market in Nigeria is on a sharp upward trajectory. According to a report by the **International Data Corporation (IDC)**, the IaaS market in Nigeria is expected to grow at an impressive **Compound Annual Growth Rate (CAGR) of 25% over the next five years**. This projected growth signals the critical role of IaaS in Nigeria's digital transformation and infrastructure development.

In **2023**, the **total spend on IaaS in Nigeria** was around **$100 million**. This is part of a broader **African market** that is expected to exceed **$1billion in annual spending by 2025**. The growth in IaaS spending across Africa is driven by several factors:

- **Increasing Adoption of Cloud Computing**: Businesses in Nigeria and across the continent are recognizing the benefits of migrating to cloud services for scalability, flexibility, and cost savings.
- **Improved Internet Connectivity**: The rapid expansion of high-speed internet and fiber optic infrastructure has made accessing cloud-based services more practical and widespread.
- **Government Support**: Governments in Nigeria and across Africa are implementing policies that support cloud adoption as part of their broader digital transformation agendas.

Technology as an Enabler for Innovative Infrastructure Financing
In this era of digital transformation, **technology** has also emerged as a game-changer in how we finance infrastructure.

Fintech Solutions:
Fintech companies are developing innovative platforms that make it easier to raise funds for infrastructure projects. **Digital financing platforms** enable project sponsors to connect with a wide array of investors globally, cutting out intermediaries and reducing transaction costs.

Crowdfunding Platforms:
Though still in its infancy in Nigeria, crowdfunding holds immense potential for infrastructure projects. Through these platforms, smaller projects—particularly those with high social impact, such as **community solar energy**—can attract investment from retail investors who pool together smaller sums to fund the project.

Blockchain and Smart Contracts:
Blockchain technology has the potential to revolutionize infrastructure financing by enhancing **transparency**, **accountability**, and **security**. Smart contracts on blockchain platforms can automate project payment flows, reducing the risk of corruption and ensuring that funds are used efficiently.

Challenges and Risks Associated with Innovative Infrastructure Financing
Of course, these innovative methods are not without their risks. Investors still worry **about political instability, regulatory uncertainty, and currency fluctuations** particularly here in Nigeria. For example, foreign investors are often hesitant to commit their capital if they fear sudden shifts in policy or the risk of currency devaluation.

That's why risk mitigation strategies like **guarantees** and **currency hedging instruments** are so important. Governments can provide guarantees to reduce the risk for private investors, ensuring that even if the project fails, they'll still be repaid. This goes a long way in making long-term projects more attractive to private capital.

The Role of Government in Enabling Innovative Infrastructure Financing

The government has a critical role to play in creating an enabling environment for innovative infrastructure financing. This includes:

- **Improving the Regulatory Framework:** Clear, stable regulations will encourage private sector participation.
- **Building Institutional Capacity:** The public sector must be equipped to manage large, complex infrastructure projects in collaboration with private sector partners.
- **Offering Risk Mitigation:** Governments can provide guarantees and other risk-sharing mechanisms to make projects more attractive to private investors.

Critical Success Factors for Innovative Financing

I want to now highlight the critical factors for the success of innovative infrastructure financing in Nigeria.

- I will start with highlighting the function **strong regulatory frameworks**. As we look beyond traditional public financing, innovative models like PPPs and bond markets offer significant opportunities to bridge Nigeria's infrastructure deficit. However, their success hinges on the strength and reliability of our regulatory systems.
- With PPPs, a robust regulatory framework is essential for building investor confidence. Private sector participants **need clarity and security regarding contracts, risk allocation, and dispute resolution**. This is especially true in a developing market like Nigeria, where perceptions of risk can be high. A well-regulated PPP environment can **provide transparency, protect both public and private interests, and ensure projects are delivered on time and within budget.** In the absence of clear guidelines, investors may hesitate, and projects can face costly delays or failures.
- Infrastructure bonds represent another powerful financing tool. By tapping into the bond market, we can unlock long-term capital from institutional investors like pension funds and insurance companies. However, **without a strong regulatory framework governing bond issuance, pricing, and repayment, these investors might perceive bonds as too risky.** Clear regulations ensure that bond markets operate efficiently, protecting both issuers and investors and providing a sustainable pipeline of financing for infrastructure.
- Moreover, a solid regulatory structure must address transparency, accountability, and monitoring. For innovative financing to succeed, the government and financial institutions must ensure that funds raised are used effectively and projects meet performance standards. This reduces the risk of mismanagement and ensures that projects deliver the expected economic and social benefits. At The Infrastructure Bank, we remain committed to partnering with government and private sector players to drive this agenda forward.
- Another key pillar for the success of innovative financing is **institutional capacity**. Without strong institutional frameworks, attracting private sector investments will remain a challenge. This capacity is crucial for three areas: project preparation, risk management, and contract negotiation.

- First, let's talk about project preparation. Many infrastructure projects in Nigeria fail to reach financial close because they lack proper planning and structuring. A robust institutional framework ensures that projects are bankable, with clearly defined financial models, realistic timelines, and a solid legal foundation. This increases investor confidence, as they see the government and other stakeholders as capable of executing complex projects.
- Next is risk management. Infrastructure projects inherently carry risks—be it regulatory, financial, or operational. Strong institutions provide the expertise and mechanisms to mitigate these risks. By developing frameworks for risk sharing between the public and private sectors, and offering guarantees or insurance where needed, institutions help de-risk investments, making them more attractive to private financiers.
- Finally, contract negotiation is an area where institutional strength is critical. Private investors look for transparent, enforceable contracts. Government bodies must have the capacity to negotiate contracts that protect public interests while also providing incentives for private investors. This requires deep technical knowledge, legal expertise, and an understanding of global best practices. Building up institutional capacity is essential if we want to unlock the potential of innovative financing in Nigeria. The time to strengthen these institutions is now, and it requires collaboration across public and private sectors.
- But, I would like to highlight **risk management** as its own point towards infrastructure projects succeeding. We can all attest to the powerful tool like Guarantees when successfully financing infrastructure. A guarantee can be used to assure private investors that their capital or returns are protected in case of default by a government entity or unforeseen circumstances. Guarantees help bridge the trust gap between the public and private sectors, making investors more willing to commit capital to long-term infrastructure projects.
- Currency hedging instruments are also essential in a country like Nigeria, where exchange rate volatility is a major concern for foreign investors. Hedging instruments allow investors to lock in exchange rates and protect themselves against devaluation risks. This makes foreign capital more willing to enter the market, as investors have confidence, they won't face unexpected losses due to currency movements.

Conclusion: A Call to Action

So, what's the takeaway from all this?

The infrastructure gap in Nigeria is vast, but it's not insurmountable. Traditional funding models have played their part, but they are no longer sufficient. By embracing innovative financing methods whether through PPPs, blended finance, green bonds, or leveraging technology like IaaS we can close this gap and build the infrastructure we need for a sustainable and prosperous future.

But this can't happen in isolation. It requires collaboration. Governments, private investors, development partners, everyone has a role to play. Only by working together can we turn the challenge of infrastructure financing into an opportunity for growth and development.

Thank you very much for your attention, and I look forward to our discussion

References

1. https://blogs.worldbank.org/en/ppps/the-2024-africa-infrastructure-fellowship-program--empowering
2. Jakkie Cilliers and Blessing Chipanda (2024) Large Infrastructure. Published online at futures.issafrica.org. Retrieved from https://futures.issafrica.org/thematic/11-large-infrastructure/ [Online Resource] Updated 15 June 2024.
3. https://ppp.worldbank.org/public-private-partnership/what-ppp-defining-public-private-partnership.
4. Delmon, Jeffrey. 2010. "Understanding Options for Private-Partnership Partnerships in Infrastructure: Sorting out the forest from the trees: BOT, DBFO, DCMS, Concession, Lease...." Policy Research Working Paper 5173. Washington, DC: World Bank.
5. Involving the public and private sectors working together in some way (Farquharson, de Mastle, Yescombe, & Encinas, 2011).
6. FEMIP Study on PPP Legal & Financial Frameworks in the Mediterranean Partner Countries – European Investment Bank.
7. Tapping into the Growing Global ESG Bonds Market – Nigeria Puncing below its Weight**:** Patrick Kwabena Stephenson – July 26, 2024. https://africanclimatewire.org/2024/07/tapping-into-the-growing-global-esg-bonds-market-nigeria-punching-below-its-weight/
8. IDC (International Data Corporation): Provides comprehensive data and projections on the IaaS market in Nigeria and Africa.
9. Gartner: Another reliable source offering insights on global cloud infrastructure markets, including African regional spend on IaaS.