



CAPITAL MARKETS FINANCING FOR INFRASTRUCTURE PROJECTS

PRESENTATION BY

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Introduction



Introduction

	 Infrastructure remains a major challenge to Nigeria as it seeks to achieve its full development potential
Background	 In 2012 President Goodluck Jonathan commissioned a work group, coordinated by the National Planning Commission, to draw up a National Integrated Infrastructure Master Plan ("NIIMP") to address the current deficit in infrastructure in the country
	 Current deficit requires investment of \$2.9trillion over the next 30 years to fill
	 The NIIMP would also address the lack of linkages between the major stakeholders in the infrastructure sector
	 In line with the NIIMP, today's discussion will be centered on how private capital can be mobilized through the local and international capital markets to deliver the master plan
Objective	 Our focus will be on the current capacity and great potential of our capital markets to contribute to filling the gap in infrastructure investment needs of the country given the limited resources of government and banks
Objective	 We understand that there is no single solution to Nigeria's infrastructure needs, the most effective approach lies in creating initiatives that will drive an effective collaboration between a broad spectrum of players (public and private) in our financial markets
	·
Our Approach	In this presentation we define infrastructure, discuss the state of infrastructure financing in Nigeria: current process and funding sources available, the role of capital markets, available products and other enablers, and how government and key players in our financial markets can collaborate to build capacity in the capital

markets to effectively support infrastructure development



The Nigerian Economy



The Nigerian Economy



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Infrastructure as an Asset Class

What is Infrastructure?	 Infrastructure can be broadly classified into Economic and Social groups: Economic or hard infrastructure refers to the large physical networks necessary for the functioning of a modern industrial nation including infrastructure such as Roads, Railways, Ports, Airports, Power plants etc Social or Soft infrastructure refers to all the institutions which are required to maintain the economic, health, cultural and social standards of a country, such as the financial system, the education system, the health care system, the system of government, and law enforcement, as well as emergency services.
Characteristics	 Long-term assets - 10 to 30+ years useful life Require significant financial investments for development and maintenance Advisedly financed with long-term funds Generate long-term stable and predictable revenues
	 Mostly require long planning lead times
	Strategic competitive advantage
Attractive	 Iypically stable and predictable current returns/cash yields Low correlation to most other asset classes
Features	 Very low demand elasticity
	 Long life assets, very capital intensive



Infrastructure Funding in Nigeria



Ongoing Sector Reforms...

Sector	Achievements	Current Initiatives
Air Transport	 Recent expansion of domestic market Emergence of important regional carriers Significant improvements in safety oversight 	 Developing potential as regional air transport hub Concessioning of airport terminals
ICT	 Extensive low-cost GSM coverage Vibrant competitive fixed-line sector Extensive private fiber optic backbones 	 Increasing penetration of ICT Services Reducing cost of internet Services Addressing market-efficiency gap
Ports	 Adoption of modern landlord model Award of numerous concessions 	 Improving customs performance Improving land and marine access Planning for new capacity additions
Power	 Improved rates of electricification Sector reforms in progress 	 Investing to improve service reliability Addressing huge sector inefficiencies
Railways	 Rehabilitation of national rail network 	 Improving performance to recapture traffic
Road	 Extensive national road network 	Increasing funding for road networkImproving rural access

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Infrastructure Financing in Nigeria...

- Nigeria needs \$15 billion annually over the next five to six years to finance its infrastructural deficits
- With around 20% expected to come from the private sector, this suggests at least \$3 billion per year
- This financing should come from:
 - Local project sponsors
 - International project sponsors
 - Local Banks
 - International Banks
 - Local Institutional Investors
 - International Institutional Investors
 - Multilateral Finance Organisations
- However, there are issues to be resolved in order to take full advantage of the options available
- We need to foster an environment that encourages sustainable investment in infrastructure

Public Infrastructure Expenditure as a % of GDP



Source: UBAC Analysis

Infrastructure Financing Requirements...

Estimated infrastructure funding gap in Nigeria	US\$100 Billion
Annual funding requirements over the next10 years for new infrastructure	US\$15 Billion (N2.4 Trillion)
FGN Capital Expenditure budget in 2012	N1.34 trillion - 50% allocated to infrastructure; 51.2% utilized at year end
State Government expenditure on infrastructure (between January 2010 and June 2012)	12 States have raised a total of N365.5 billion from the capital market of which about 80% is used for infrastructure projects
Bank financing for Infrastructure projects across different sectors (based on submissions by 12 Banks)	N432.8billion in value which is approximately 6.2% of the loans of 12 banks surveyed; and 9.1% of total loans of the banking sector
Key sectors where banks' loans are concentrated	Construction, power and Transport : these sectors account for 47% , 23% and 14% respectively of total infrastructure loans.



Infrastructure Financing in Nigeria - Challenges





Infrastructure Financing in Nigeria - Challenges

Public Sector Financing - Challenges

Sluggish Implementation of the National Infrastructure Development Plan

Limited Budgetary Allocation to Infrastructure

Appropriate Macro/Micro Economic Conditions

- Government's first National Implementation Plan (covering 2010 to 2013) envisages a total investment outlay of ¥32 trillion with contributions of ¥10 trillion, ¥9 trillion and ¥13 trillion by the Federal Government, State Governments and the Private Sector including development partners respectively¹.
- However, this and other development plans developed in the past have not been properly implemented.
- A cursory look at the federal government spending pattern over the last 3 years has indicated that only 54.8%, 40.2% and 52.8% of planned N2.5 trillion was actually allocated to capital expenditure in the 2010, 2011 and 2012 budgets respectively
- Further analysis suggest that most of the budgeted amounts are never 100% implemented thus further limiting the amount spent on infrastructure by the government
- Encourage stable exchange rates, low inflation, low interest rates; build out yield curve; pensions reform; regulate effectively; sanctity of contract; tax incentives, capital markets reforms

1. Figures taken from the economic information blueprint published by the national planning commission



Nigerian Infrastructure Financing – Some Key Players

	Financing Phases		
Development Phase			
Sponsor/Sweat Equity = Development Capital	Constr	uction and Operation	is Phase
 ARM Heirs Holdings 	Private Equity Firms	Mezzanine Debt	Senior Debt & DFIs
 Dangote Group Bi-Courtney Amaya Capital AFC. 	 African Capital Alliance ACTIS West Africa Africa Finance Corp. ARM Infrastructure Fund 	 Africa Finance Corp. AFDB FMO DEG 	 Standard Bank SA Citibank Standard Chartered First Bank UBA Fidelity Bank AFDB FMO DEG
		Capital Markets	
	Public Markets with C Enhancement	redit Public Mc Er	arkets without Credit Nhancement
	I	 Equity Issuance 	
		 Bond Issuance 	
,	· C	 Pension Funds 	
There is a dearth of institutional project	•	 Banks 	
developers in Nigeria		 Insurance Comp 	anies
	1	 Discount Houses 	



Role of Capital Markets



Capital Markets Solutions to Infrastructure Development...



infrastructure projects

- Liquidity Facilities
- Financial Engineering/Transaction Structuring
- Securitisation (converting the projects into tradable securities)

Reducing the cost of project related financing



SOURCES:FDHL Analytics , UBA Capital



Nigeria's Demand Story...

Existence of contractual savings institutions to create a pool of long-term investible funds:

- Pension funds ("PFAs") are by far the largest in Nigeria with #3.4tr (\$21.25bn) available for investments
 - South Africa (\$312bn), Namibia (\$8.5bn), Kenya (\$5bn) and Ghana (\$2bn)
- 2012 Draft guidelines allow PFAs invest in several classes of assets including Infrastructure bonds

PenCom ASSET ALLOCATION - PFA Active and Retirement Funds

Asset Class	Portfolio Limit	Portfolio Amount (bn)	Assets In Issue (bn)	PFA Assets (bn) as at 2012	% of PFA Assets
Infrastructure Bonds*	15%	510	0	0	0
State Government Bonds	20%	540	354.7	166.5	5.05%
Corporate Bonds	35%	945	144	70.5	2.14%
Supranational Bonds	20%	680	0	0	0

TOTAL PENSION FUND ASSETS 2012



■ FGN SECURITIES

- LOCAL MONEY MARKET SECURITIES
- LOCAL ORDINARY SHARES
- STATE GOVT SECURITIES
- CORPORATE DEBT SECURITIES
- OTHER

- Clearly PFAs are grossly underweight on Infrastructure Bonds, indicating that there is demand depending on quality......
- *Reduced from 35% to 15% in 2012 guidelines



Capital Market Products

Infrastructure Projects can be funded through the following Capital Markets products:







Bond vs. bank debt: pros and cons





Sovereign Bonds

Overview	 Issued by a national government Tenors in excess of one year Foreign or local currency Bond terms dependent on the perceived credit worthiness of the country International recognized credit rating agencies perform credit rating of Sovereign bonds
	 Various attributes: Conventional, Floating rate Zero-Coupon, Index-Linked, STRIPSetc Various tenors, Nigeria's longest tenor is 20 years

FGN Domestic Bonds since 2005.....

- Conventional, with a bullet repayment.
- 90% of total debt securities market cap in the capital markets
- Cummulative issuances in excess of ¥5.6tr over the last eight years





Sovereign Bonds Cont'd

- First ever sovereign bond issuance was by the Bank of England in 1693 to fund a war
- National governments issue such bonds for various purposes including:
 - o funding budget deficits;
 - o setting a benchmark for local sub-sovereign borrowers;
 - o refinancing other debt; and
 - o funding infrastructure development
- More prevalent means of funding infrastructure development
 - o Based on creditworthiness of the government not the project
 - o Lower pricing
 - o Includes "sweeteners" (no withholding tax, tax credits...etc) to attract investors
 - Source of payment will be from taxes or other inflows, and use of proceeds will be limited to infrastructure
- Several governments in developed and developing countries have issued bonds to finance infrastructure:
 - Kenya, which offered tax incentives
 - o South Africa; and
 - o Malaysia, which has issued Sovereign bonds in the form of Sukuks



Diaspora Bonds

	 A bond issued by a country to its own diaspora to tap into their assets in the destination country Nearly 140 million Africans are living outside the continent Saving up to \$53 billion in the destination countries every year 					
	 Remittances are the largest source of net foreign inflows after foreign direct investment 					
	 Quadrupled in the 20 years since 1990, reaching nearly \$40 billion in 2010 					
	 Not a new concept 					
	 Dates back to early 1930s, first issuers were Japan and China as well as issuances by India and Israel in the 					
Overview	1950s					
	• The State of Israel Bond stands out as most successful, mobilizing close to \$25 billion over the course of the last					
	30 years					
	 Trustworthy source of finance for countries going through difficulty 					
	 Israel's issuance in 1973, during Yom Kippur war was \$473 million, greater than average issuance between 1970 and 1979 					
	 Ethiopia's 2011 issuance was needed to allow the country build a 5,250MWdam on the Nile River with an estimated cost of \$4.8 billion 					
	 Emotional affiliation will allow issuance at a discount price 					
	 Transparency in use of proceeds is critical 					

Key features of Diaspora Bonds: Ethiopia, India and Israel:

Country	Year of Issue	Amount	Maturity	Interest Rate
India	2000	USD 5.5 bn	5 years	Fixed 8.5%
Israel	2010	EUR 1.5 bn	10 years	Fixed 4.625%
Ethiopia	2011	Unknown (Project cost was \$4.8bn)	Range of 5 - 10 years	Floating rate, LIBOR + Margin

 Nigeria is planning on tapping into the Capital Markets through a Diaspora Bond, which should be issued before the end of this year



Sub-sovereign Bonds

	• Refers to issuances by any entity below the federal government level, Includes: state governments,
	government agencies, municipalities, companiesetc
	 Dominated by agencies and supranationals (World Bank, KfW, EIBetc
Overview	• US has the largest and most sophisticated market for Sub-Sovereign issuances at \$2.6 tr through municipal
	bond issuances
	 Use of proceeds primarily for infrastructure, including roads, bridges, schools and reservoirsetc
	 Debt securities are tax-exempt;
	• Issuers is independent from the Federal Government and financially robust enough to carry a

- programme
- Sub-sovereign bonds are a developing phenomenon in the Nigerian market, currently dominated by State government issuers, with about ₦370bn outstanding as at December 2012

Recent State Bond Issuance

S/N	States	Total Amount (N Billions)	Tenor	Coupon	Infrastructure Projects	Refinancing Related to Infrastructure	Percentage of Funding Related to Infrastructure	lssue Date	Use of Proceeds: 1	Use of Proceeds: 2	Use of Proceeds: 3
1	Ondo State	27.0	7Yrs	14.0%	25.9	10.0	96.01%	Feb-12	Dualisation of Airport Junction (N3.64bn)	Rehabilitation of road (N1.9bn)	Rehabilitation of road (N1.7bn)
2	Ekiti State	20.0	7Yrs	14.5%	15.0	0.0	74.91%	Dec-11	Roads (N9.7bn)	Modern Market (N2.8bn)	Civic Center (N1bn)
3	Delta State	50.0	7Yrs	14.0%	46.6	0.0	93.20%	Sep-11	Education (N8.8bn)	Transportation (N5.5bn)	Road (5bn)
4	Benue State	13.0	5Yrs	14.0%	9.2	2.8	92.14%	May-11	Roads (N5.3bn)	Refinancing of road construction and Water projects (N4.1bn)	Water projects (N2.2bn)
5	Edo State	25.0	7Yrs	14.0%	10.7	13.4	96.4 1%	Dec-10	Roads, Drainage, Beautification, Flood control (N 13.4bn)	Road Construction (N3.4bn)	Road Expansion (N2.4bn)
6	Ebonyi	16.5	5Yrs	13.5%	10.0	5.7	94.99%	Sep-10	Rice Mills, Roads, Bridges, Water Projects (N5.6bn)	International Market(N5.06bn)	WaterSchemes (N2.7bn)
7	Kaduna State	15.0	5Yrs	12.5%	11.8	0.0	78.80%	Aug-10	WaterSupply Treatment (N5bn)	Bridge Construction (N 2.28(Construction of Power Plant (N 2.01)
8	Bayelsa State	50.0	7Yrs	13.8%	0.0	15.0	29.96%	Jun-10	GasTurbines (N14.4bn)	Extention of Yenagoa Water System (N567m)	Gateway Construction road to Yenogoa (N6.4bn)
9	Lagos State II	57.5	7Yrs	10.0%	43.9	5.0	85.07%	Apr-10	Roads (N23.8bn)	Drainage systems (N 5.8bn)	Refinancing Lekki Constructions (5bn)
10	Niger State	6.0	5Yrs	14.0%	5.5	0.0	9 2.17%	Mar-10	Roads(N2.26bn)	Roads (N 900m)	Rehabilitation of Minna Indsutrial Layout Roads (N 633m)
11	Imo State	18.5	7Yrs	15.5%	17.6	0.0	95.00%	Jun-09	WonderLake (N12.5bn)	Roads(N3.77 bn)	WaterScheme (N1.3bn)
12	Kwara State	17.0	5Yrs	14.0%	12.3	2.4	86.18%	May-09	Truck plaza, DAM development, Water distribution project (N6bn)	Hospital Construction, Equipment procurement for Hospital, Drugs Project (N 2.4bn)	Aviation College, Commercial Agriculture, Kwara State Univeristy (N4.5bn)
13	Lagos State I	50.0	5Yrs	13.0%	35.7	0.0	71.38%	Feb-09	Link Bridge and Road Works (N 6.96`bn)	Road Development (N 6.6bn)	Road construction (N 6.2bn)
· · · · · ·	TOTAL	365.5			•••••••••••••••••••••••••••••••••••••••	AVERAGE	83.56%				

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Infrastructure Bonds

Overview	 Infrastructure bonds could be: (a) project Bonds – that rely on the cash flows from a project or (b) Sovereign or Sub-Sovereign Bonds – branded as Infrastructure bonds, because proceeds are for a particular project, recourse is to the Sovereign or Sub-Sovereign not the project Project Bonds: Debt Issued to raise capital for specific stand-alone projects Repayment from cash generated from the project versus from taxes or other revenues with a Sovereign or Regular Sub-Sovereign Bond Performance of the bond is subject to certain project specific risks Issuer is normally a Special Purpose Vehicle
Comment	 Important that stakeholders have a clear framework for assessing the suitability of the projects for the bond market Certain characteristics must be in place, including: Off takers; Full Commercial operations; Bond investors may not be comfortable with the construction risk; Currency match between revenue and debt. If not, adequate hedging arrangements; and Credit Enhancement from a reputable sponsor Only a few Infrastructure Bond issuances in the African region, Kenya, (5 Issuances including the financing for the Nairobi-Thika Highway Project) and South Africa

• Stage is set for Nigerian companies, especially those in the Power sector, in the next few years

Infrastructure Bonds issued by the Kenyan Government

Year of Issue	Year of Maturity	Coupon	Amount (USD Equivalent Million)
2009	2021	12.50%	18,573.00
2009	2021	12.00%	18,417.00
2010	2018	9.75%	16,264.00
2010	2019	6.00%	30,590.00
2011	2023	12.00%	35,919.00
Total			119,763.00



Infrastructure Bonds Cont'd

Steps for developing Infrastructure bonds:

Macro Fundamentals

*Fiscal and Monetary Stabilization *Reduced Inflation *Stable Interest Rates *Increased Savings Rate

Capital Markets

*Public Securities Market *Effective Independent Regulation *Bond Listing Rules/Procedures *Intermediation and Credit Ratings

Pension Sector

*Incentives for Contributions *Professional Asset Management *Effective Independent Regulation *Flexible Sector Allocation of Portfolio

<u>lssuers</u>

*Long-term Government Bonds *Parastatal and Municipal Bonds *Corporate Bonds in Different Sectors *Innovative structures, such as ABS

Infrastructure

*Infrastructure as Policy Priority *Utility Regulation and Tariff Reform *Independent Power Producers (IPPs) *Enabling Law for Concessions/PPP



Infrastructure Bonds Cont'd



Investor Base and Capital Market Development



Credit Enhancements



Credit Enhancements

- One development that has facilitated institutional investor appetite for Infrastructure related securities has been the inclusion of credit enhancement sin the bond structure to enhance the marketability
- Credit enhancement refers to protection that shields the investor from any potential losses on the bonds
- Credit enhancements can be distinguished between internal and external
 - o Internal refers to enhancements structure put in place from within the parameters of the issuer
 - External credit enhancement refers to provision of credit enhancement by an third party
 - Rating of the bonds are linked to the rating of the third party credit enhancer
 - See examples below:

	 Monoline Financial Wrap or guarantee 	Basic Structure
External	InsurancePartial Credit GuaranteeSovereign Guarantee	Issue Issuer
	Political Risk GuaranteeRevenue Guarantee	Proceeds from sale of
	 Bank letter of credit (liquidity facility) 	Credit enhancement

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Monoline Insurance

Overview	 A Monoline Insurer is an insurance company that provides guarantees to issuers, often in the form of credit wraps that enhances the credit of the issuer These insurance companies first began providing wraps for municipal bond issues, but now provide credit enhancement for other types of bonds, such as mortgage backed securities and collateralized debt obligations Issuers will often go to monoline insurance companies to either boost the rating of one of their debt issues or to ensure that a debt issue does not become downgraded Issuers approach Monoline insurance companies, because of the Monoline company's AAA rating, which is the most valuable asset of the Monoline. The ratings of debt issues that are enhanced by credit wraps often reflect the wrap provider's credit rating
	 Monoline insurers are global financial insurance companies, providing financial guarantees is their only line of business (hence the term monoline) Before the outbreak of the crisis, their role was important in project finance transaction and was to issue lenders and certain other parties unconditional and irrevocable guarantees to pay debt service at maturity Credit enhancements are provided on projects, as a result of the top ratings confirmed by rating agencies (S&P, Moody's and Fitch) Monoline Insurance companies are absent in the Nigerian Market.
Benefits	 Monoline companies provide an attractive, new funding sources from cross-border markets based on international market acceptance Securities that carry a monoline insurance guaranty are monitored to detect and remediate problems prior to their occurrence The need for lenders to be compliant with capital coefficients imposed by Basel Rules provided considerable impetus for insurance products focusing on increasing credit ratings for deals. The SPV bonds would benefit from the triple A rating of the monoline, which should translate into lower funding cost and less capital absorption for bank purchasing and trading such "wrapped bonds".



Monoline Insurance Company Cont'd

	 The problems of monoline industry have become well known after the collapse of Lehman Brothers and the subprime securitization market Most of the monoliners were hit hard by the financial crisis Today, especially in Europe, they remain quite active in the market for bond issuance issued by PPP vehicles.
Current Status of Monoline Industry	 In the next few years, it is reasonable to assume that supranational organization will substitute most insurers Recently, Europe Union have pointed to an active role for the European Investment Bank and other state-owned entities (SACE and Cassa Depositi e Prestiti in Italy, Caisse des Depots et Consignation in France and KFW in Germany)

Monoline Ratings Pre & Post crisis

	Jun-07		Nov-09	
	Moody's	S&P	Moody's	S&P
Assured Guaranty Corp.	Aaa	AAA	Aa3	AAA
FSA (UK) Ltd.	Aaa	AAA	Aa3	AAA
Ambac Assurance Corp.	Aaa	AAA	СС	Caa2
MBIA UK Insurance Ltd.	Aaa	AAA	BB+	B3
Syncora Guarantee (UK) Ltd.	Aaa	AAA	Ca	СС
FGIC Uk Ltd.	Aaa	AAA	Withdrawn	Withdrawn



Source: Epec (2010)

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Other Credit Enhancements

	Minimum Revenue Guarantee	Public Service Obligation	Liquidity Facility
Overview	 This refers to financial support provided by government to a related concessioner or guaranteeing a certain amount of revenue. This arrangement has been used in several Public Private Partnerships, on infrastructure development .e.g. Toll Road concessions in Chile 	 Subsidy provided by the government to an issuer or operator in return for a public service offered at a discount for the benefit of the country's citizens The PSO ensures that the operator has adequate funding to service any project bond issued A PSO was provided by the Indonesian Government to PLN the country's largest power distribution company 	 This refers to an issuer securing a line of credit to augment any shortfalls in cash flows due for debt service. Liquidity facilities are predominantly used as a stop gap for timing mismatches between inflows from a particular project and outflows due to service debt Also used to cover losses of income
Benefits	 Beneficial to private investors as a portion of expected repayment is guaranteed Easier sell to investors by an issuer 	 Offers both social and capital benefits Enhances the marketability of any bonds issued by the operator 	 Provides for immediate resolution of any potential shortfalls versus the sometimes long process of calling in a guarantee Probably Less expensive than a full guarantee as the basis of the fee will be less
Cons	 Challenging to value the contingent liability for the government Additional costs to the issuer Additional liability on the government's books 	 Drains to the country's resources Hampers the free flow of the market 	 Additional expenses in the form of Commitment fees and interest If not properly managed could end up a bad loan

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How Can the Nigerian Government help?

Summary of Ways forward for the Nigerian Government			
Aspect	Government Policy		
	• Focus on low and stable inflation and domestic interest rates to improve market conditions for issuers		
Macro-Economy	 Prioritize strong fiscal position for rating and wider economic stability and to allow government to have the fiscal capacity to promote and incentivize PPPs 		
Capital Markets	 Update listing process and disclosure rules to be consistent with global standards Allow for bonds issued by SPVs or project companies and improve legal frame work Retain tax incentives for infrastructure bonds 		
Pension Sector	 Continue progress on Pension-sector growth, including mandatory employee/employer contribution, tax incentives and professional asset management Increase investment limit in ifrastructure bonds back to 35% 		
	 Continue corporatization and related initiatives of utilities and parastatals to prepare them for debt and equity offers Enhance transparency and promote rules based regulatory environment 		
Infrastructure	• Promote projects with structures that remove demand or market risks so more acceptable to bond investors. Consider full and partial guarantees to improve bankability. Raise capital for possible co-investment in local bond markets. Enhance transparency and promote rules based regulatory environment		





This section will focus on measures taken by other countries to facilitate infrastructure development by the private sector



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Experience from other Countries

Legal and Regulatory Framework S/n Initiative Precedent Clear regulatory framework. Amendment of regulatory frameworks and issuance Japan/ of regulations and clarity of procurement requirements is necessary to ensure a United Kingdom 1. robust framework that attracts financing. Standardised Framework. The development of standardized laws, documents, India/ 2. guidelines and manuals aid the process of project development and assure United Kingdom participants of uniformity and predictability on projects. Institutional Capacity Building. MDAs should be trained on private participation in infrastructure financing to enable them structure bankable projects and regulate appropriately. United 3. Kingdom/India The PPP Resource Centre could be enhanced to pool expertise and resources for utilisation across MDAs.



Source	Sources of Finance			
S/n	Initiative	Precedent		
1.	Infrastructure Banks/Specialised Development Banks. Government established/supported financial institutions with a mandate to fund development of infrastructure. Could involve grant of tax-exempt status to debentures issued by infrastructure banks.	United States/ Malaysia/India- IIFCL/ Brazil/		
2.	Financial Guarantee Institutions/Monoline Insurers . Established financial guarantee institutions can raise credit rating of bonds that would normally be below investment grade by lending their own ratings to bond issues.	Malaysia/ Chile/Brazil		
3.	Emphasis on Early Stage Funding . Establishment of a fund to cater for early stage development funding would improve access to capital and ultimately the probability of project financing success. This fund would operate on both government and private sides. Government also can play a role in the development stage of projects and take projects to bankability.	United Kingdom/ Infraco		
4.	Long-term Credit Banks . Private-sector owned institutions backed by a overnment with a specific mandate to fund infrastructure projects.	Japan		

5. Increased Bank Lending. Introducing a suite of enhancements to projects would United Kingdom ensure greater funding by Banks.



Sources of Finance cont'd			
S/n	Initiative	Precedent	
6.	Super-Pension Funds . Pooling of assets of pension funds to create a super-pension fund that would be able to finance infrastructure at cheaper rates due to benefits of pooling i.e. shared resources/expertise, larger volume of funds.	United Kingdom/ Canada	
7.	Growth of Non-interest (Islamic) Finance Market . Issuance of sukuks used to fund infrastructure projects and encouragement of Islamic finance instruments through favorable tax treatments (no tax on profits) opens up a significant financing avenue.	Malaysia/ Indonesia/UAE	



Government Support S/n Initiative Precedent Federal Government Grants. Provision of grants and credit assistance to state United States/India 1. and local governments through loans, loan guarantees and tax preferences. (VGF) Viability Gap Funding: The Indian government provides up to 20% of the total capital cost for PPP projects undertaken by government entities. 2. Federal Capital Assistance Programs. FGN credit assistance to projects United States –TIFIA through loan guarantees and lines of credit including loan guarantees for program. majority of construction costs for qualifying projects. 3. **Guarantees**. Government commitment towards providing guarantees to cover United Kinadom risks which the private sector is not prepared to take will galvanise internal sources of funding within the country as well as encourage external financiers. Note however that Government must be able to monitor the guarantees it provides to keep track of contingent liabilities.

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Experience from other Countries

Incentives and Initiatives

S/n	Initiative	Precedent
1.	 Specific tax incentives. - 5% tax rate for dividend income from investments up to a cap, and 14% above the cap. - 0% tax rate for VAT for construction services of revertible infrastructure facilities - Separate tax rate is applied to dividends from infrastructure bonds investments. 	South Korea
2.	 Specific Tax Incentives for financial Institutions FIs are allowed to deduct 40 per cent of the profit arising from long-term lending to infrastructure from their total income 	India
3	Expansion of Pioneer Status List . Grant of extended tax holidays for companies operating in certain infrastructure sectors.	Indonesia
4	Tax incentives for project companies. Provisions allowing PPP projects to enjoy certain tax rebates/deduction therefore projects enjoy lower tax burdens.	Malaysia/India



Sector Specific Initiatives		
S/n	Initiative	Precedent
1.	Highway projects. For selected highway projects, Government provides subsidy on interest cost incurred by companies or extends soft loans to projects.	Malaysia/ Chile
2.	Road Fund . Establishment of a dedicated fund such as the Central Road Fund through fees, levies and fines. The fund could be used as a viability gap fund.	India



Project Development		
S/n	Initiative	Precedent
1.	Encouragement of Unsolicited Proposals . Promotion of solicited as well as unsolicited projects in line with government infrastructure plans and priorities. Government agencies could be mandated to consider unsolicited proposals.	South Korea Japan
2.	IIPDF: GOI has also set up a revolving fund with a corpus of USD 20 million titled, 'India Infrastructure Project Development Fund' (IIPDF), to support project development expenses.	India
3.	 Adequate Institutional Planning. Successful projects are the product of an elaborate planning framework which ranks all infrastructure projects in the order of importance to the economy. Important projects can be prioritized in terms of government support and funding. National Highway Development Programme in India is an example in this regard. 	United Kingdom/ India
4.	Marketing. Selling specific projects further to the National Infrastructure Plan in a	South Korea

coordinated manner would increase international interest in Nigerian projects.

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Experience from other Countries

Project Development		
S/n	Initiative	Precedent
1.	 Minimum Revenue Guarantee. Provision of operational period subsidy in the form of minimum revenue guarantees which guarantee a portion of projected revenues for a fixed number of years. Alternate structure: government assumes a part of the investment risk and makes payment to the private sector for the shortfall in actual operational revenue in comparison to shared investment risk of government. 	South Korea
2.	Early Termination Payment . Provision of clear methodology for determining payments in case of early termination which must be stipulated in concession agreements.	South Korea/India
3.	Exchange Rate Guarantee . Provision of guarantee of exchange rate guarantees (up to a cap) for a limited period for projects.	Chile
4.	Standard Risk Allocation Template . Development of a template regulates which risks Government must take on to increase bankability of projects.	India

- India has model concessions documents



Case Studies - Examples



Chilean Toll Road Concession Experience

- The importance of the public-private partnership ("PPP") model for infrastructure development in Latin America has increased dramatically during the last two decades.
- In the early 90's, a major deficit in transportation infrastructure became evident in Chile.
- Lacking the financial, organizational and human resources to overcome it, the Chilean government embarked on an ambitious franchising program through the build-operate-and-transfer (BOT) contracts.
- In recent years, Brazil, Chile and Mexico have been most active in seeking PPP investments but Chile has arguably the most successful infrastructure development track record in Latin America
- For years, Chile has welcomed private participation in a variety of sectors and its success with PPPs has helped make Chile a regional leader in infrastructure, particularly in roads, airports and seaports



Chilean Toll Road Concession Experience

Institution and Regulatory framework

- Investor Friendly environment encouraged Private Sector Investment in Infrastructure.
 - enactment of the Concessions Law in 1991 to set general standards for the execution, operation, and maintenance of public works, as well as for bids for public works contracts.
- Institutional Framework was transparent to appeal to various investors
- Regulatory Framework also protected the interest of investors
 - The regulatory framework provides for all concessions to undergo a bidding process that ensures transparency and limits corruption. Such regulatory frameworks allow for private participation in several regulated industries
- The Chilean Financial Sector Provides Support for Infrastructure Finance
 - Well capitalized Banks to support infrastructure projects;
 - Provision of credit enhancement by the mono-line Insurance companies for infrastructure bonds
 - Privately owned pension systems with assets of about US\$148billion representing about 70% of the GDP and about circa 10% invested of Assets Under Management invested in infrastructure related projects.
- The Chilean Government also provided support in terms of guarantee
 - A major complement to the financing activities of the private sector is the minimum revenue guarantee, a government support instrument for attracting investors and facilitating the structuring of financing arrangements.

Financing Initiatives



Chilean Toll Road Concession Experience

Key Lessons Learnt

The experience gained during the implementation of the program yielded several lessons, from which policy recommendations can be derived. Key :

- The concessions schemes ensure resources are optimally allocated and risk efficiently distributed to road infrastructure.
- Chilean government deliberately implemented policies to attract foreign investors who have the wherewithal to finance large ticket transactions and that also have experience in road construction and management of toll roads.
- Local Chilean banks were hesitant to offer long-term loan until construction is complete and most projects resorted to some sort of bridge financing from local banks to cover construction phase.
- Minimum revenue guarantees were a key factor in providing comfort to investors and financiers.
- The small size of the domestic financial market led to the creation of an exchange rate guarantee that provided access to foreign financial markets.

After almost two decades of its first application, there is no doubt that the concession system in Chile has been successful. This mechanism has allowed building great public works, which would not have been possible with fiscal resources, enabling, at the same time, to liberate greater resources to be used in other areas of social investment. Through this system, the investment in infrastructure has increased considerably, making important transformations in urban and rural road infrastructure, airports, ports, reservoirs, prisons, sport facilities and others.

Chile currently has US\$60bn worth of contracts under way and in the pipeline, including concessions for Airports, Ports, and Hospitals. Chile's physical infrastructure has improved substantially since the adoption of the build, operate, and transfer (BOT) concessions program that has allowed the active participation of the private sector.



Global Light Rail

Comparison of fare revenues and operating costs, USA 2004



Fare Revenue as a percentage of Operating costs, USA 2004

% of farebox revenue to operating costs	
	%
London Underground	129
New York Underground	77
Paris Underground	63



Sources: Federal Transit Administration National Transit Database



Key Issues	Example Project
 Government Subsidies A light rail project requires government subsidy to be financially viable. The subsidy may take the form of an upfront contribution or an ongoing contribution 	 Croydon Tramlink, UK Funded via a contribution of government upfront grant and private farebox revenues £185m total cost, split as follows: £100m Government grant, with the balance between a lease provided by mandated banks, bank loans, standby debt, subdebt and sponsors equity
 Specialized Government agencies with borrowing powers It is possible for government to set up agencies with special borrowing powers to secure finance against their assets and/or future revenues. 	 Madrid Metro, Spain Creation of company to act as financing agent for the Administration takes loans from open market and repays through annual transfers awarded to it from the Administration secure backing improves credit ratings and results in cheaper cost of borrowing
 Privatisation Unless there is significant risk sharing, a history of operations is required in order to privatise, along with stable cash flows and predictable passenger numbers are essential 	 Hong Kong Mass Transit Railway Shares in the Hong Kong Mass Transit Railway are publicly traded on the stock exchange, following privatisation in 2000



Key Issues

Vertical Integration or Seperation

- Possible for interface problems to arise between the train and tracks during commissioning when using separate DBFM and Operation contracts
- Also potential for interface risk during operation as well as commissioning
- Calls for clear definition and allocation of risk

Authority Guarantees

- Privatisation of existing publicly funded infrastructure.
- Public sector guarantees are often needed to improve bankability and reduce finance cost.
- Demand risk taken by Authority, but any profits from revenue upside used to pay down debt rather than to shareholders of concessionaire

Example Project

Nottingham Express Transit, UK

- Local council will pay the "Arrow" Consortium to maintain the project over the 27 yr franchise
 - Payments will depend on factors such as: frequency, cleanliness and noise
- This project encountered problems due to separate operating and construction contracts

Florence Light Rail, Italy

- First public transport PPP in Italy
- Line 1 was state-funded: Lines 2&3 put out to tender to private consortia
- Infrastructure SPA, a Government body with the specific ability to borrow to fund large scale infrastructure projects, provided extra security to the City Council



Key Issues	Example Project
Complex Public Private Partnerships	London Underground
 Involves inviting the private 	 Government transferred all operations and maintenance to private sector
sector to provide (new) or	 However, all staff are still employed by the public sector
 Payment tends to be availability- based with little or no demand 	 When PPP was proposed, Government objective was to avoid paying further grants
risk transfer	 As at 2001, 45% of funding was from Government grants, with 30% from fare revenue and 25% from private finance
Dedicated Transport Taxes	A variety of North American schemes use this financing technique
 Governments may set up taxes that are dedicated to funding 	 A calculation is made based upon the rise in property prices as a result of a light railway system reaching a new area
transport infrastructure	 land tax/business rates are adjusted accordingly
Integrated Transport System	Manchester, UK
 It might be possible to capture efficiency savings or raise 	 Key to an integrated transport policy in Manchester is receiving access to the Transport Innovation Fund (TIF)
additional revenues by taking an integrated approach to transport planning	 TIF is a Government fund, specifically for use in transport projects delivering national level benefits (e.g. productivity)
	 funding is likely to be increased if applicants demonstrate commitment to an innovative congestion charging scheme



Key Issues

Securitization of farebox

- It is possible to secure finance against future revenues from ticket sales.
- The farebox, however, is often inadequate to secure the finance for the entire capital cost of the project

Example Project

New York Metro, USA

- Created a framework which allows the Metropolitan Transport Authority the ability to issue its own bonds directly to the capital markets
- Bonds have been backed by a layer of revenues that are guaranteed for each 5 yr plan
 - these revenues include federal, state and local subsidies, farebox revenues, surplus road tolls and dedicated taxes
- Over US\$23bn of capital spending has been funded

Demand Risk

- It is often difficult to transfer full demand risk to the private sector due to the uncertainties associated with forecasting future revenues.
- It is widely acknowledged that such forecasts are often subject to a degree of optimism bias

Croydon Tramlink, UK

- Instead of 27m passengers predicted in the first year of service, only 16m actually used the tram system
- Since harmonisation of transport fares, passenger numbers are currently at 80% of existing predictions, representing growth of 6m passengers since opening and a 12% rise on last year



Key Issues

Dedicated Transport Funds

- Dedicated funds can be established to ensure a steady flow of funding for transport investment.
- The money for the funds can come from a combination of taxes and fees, for example Congestion charging

Municipal Financing

 It is possible to finance light rail projects by bonds issues that are guaranteed by the public sector

Integrated Transport System

 It is possible to use property development receipts that arise out of building/extending a light rail to finance part of its construction

Example Project

Czech Republic

- The Czech State Fund for Transport Infrastructure as a subordinate to the Ministry.
- Responsible for funding development, building, maintenance and modernisation of, amongst others, railways
- Fund's revenues are derived from Government transfers, motorway tolls, investment income, loan interest and EU grants

Metro Rail, Los Angeles

 The construction of third largest public transportation system in North America was part funded by bond issuance

Hong Kong Mass Transit Railway

- Hong Kong railway is incorporated with other infrastructure, for example, office, residential and retail developments
 - income from these alternative sources supplements farebox income from the light railway



Global Transportation Case Studies- Key Success Factors





Global Transportation Case Studies- Key Success Factors

Project realism	 Strong link between cost and affordability Problem for "prestige" projects Unrealistic traffic projections can cause project failure Grants/guarantees can help project financial viability Tolls must be set at the right level
Project preparation	 Good feasibility studies are essential Planning risks should be shared Stakeholders buy-in is crucial Beware technically complex projects A programme of projects helps build capacity and develop expertise
Regulatory Environment	 Effective and unambiguous regulatory framework is vital Regulation may be through contracts or via an independent regulator
Financial Markets	 Must facilitate long-term lending in local currency Innovative and competitive products reduce cost of funds
Legal Framework	 Sanctity of contract is key Internationally acceptable procurement practice helps
Bidders Expertise	 Credible bidders increase competition and value for money Confidence in the process will encourage bidders to invest in developing expertise



Global Transportation Case Studies – Hungary M5



UBA Capital Plc Global Transportation Case Studies- Netherlands - High Speed Rail Link





Global Transportation Case Studies – Channel Tunnel Rail Link





Heavy Rail - Nigeria



- With a 3.5%* annual rate of urban growth, there is an increasing need for rail transportation to connect urban areas.
- Rail transportation will facilitate the inter regional movement across the country encouraging tourism.
- Efficient railway systems will facilitate the industrialization of other regions as was done with Lagos, Kano and Kaduna.
- Railway systems encourage inter-regional development as population and urbanization are on the increase.
- Railway systems relieve pressure on the Nigerian roads.
- High density community systems increase the need for alternative transportation systems.
- There is an increased need to alleviate regional inequality and foster national integration



Heavy Rail –Structuring Options for Nigeria

Structuring Options





Heavy Rail –Structuring Options for Nigeria

Main Component of a Rail Business





Heavy Rail –Structuring Options for Nigeria





Ports-Structuring Options for Nigeria

Key Considerations for PPP





Majority Public

Ports-Structuring Options for Nigeria

Private

Port Operating Models



Private

Private

Private Service Port

Source: World Bank



Ports-Structuring Options for Nigeria

The Landlord Model





- SSA Consortium Members:
 - Securicor Custodial Services
 - John Siefert
 - WS Atkins Consultants
 - Costain/Stanska Joint Venture
 - Costain Engineering & Construction
 - Skanska International Building
- PFI brings together the diverse range of private sector skills required to design, build, finance, operate and maintain infrastructure.
- Category B Prison 800 Prisoner Places
- Concession 27 years : 2 year construction and 25 years operation
- Site Bridgend South Wales





- Project Company
 - Bridgend Custodial Services Ltd
- Shareholders

Debt Equity Ratio		85:15
		100%
-	WS Atkins Consultants	10%
-	John Siefert	10%
-	Skanska International Building	20%
-	Costain Engineering & Construction	20%
-	Securicor Security Services	40%







- Where should the boundary lie between the public and private sector. Should the private sector employ the prison guards as well as provide the prison accommodation?
- Payment Mechanisms: what should be the optimal allocation of project risks between public and private sectors?
 Should payment be based on Availability?
- What is required to make Prison PPPs possible in the Nigerian context?



Breakout Session

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Mile 2 to Seme Expressway

The Ministry of Works initiated a project to upgrade 100km of the existing roads between Mile 2 in Lagos and Seme in Badagry to motorway standard

- This will result in a reduction in the number of access and exit points, limiting the noise impact and stimulating economic growth by reducing traffic congestion.
- In accordance with Government policy the project needs to be considered for a PPP scheme
- This will be a Design, Build, Finance, Operate (DBFO) scheme with the successful supplier (DBFO Co) responsible for:
 - Construction of the new road

Maintaining the existing road from the commencement date of the contract until the new road opens

- Operating and maintaining the new road from the date that a permit to use is issued
- The project will involve widening to the west of the existing carriageway to create a mix of three and four-lane expresssway. A new interchange will be required at Mile 2 and five new junctions
- The Ministry of Transport estimates construction costs at around US\$500million
- Land acquisition and construction to be completed within 30 months of the contract's commencement
- The initial contact will last 30 years

Background

UBA Capital Plc

Mile 2 to Seme Expressway

- You are required to advise the Ministry on the business case for this project. This should include:
 - 1. The indicative transaction structure?
 - 2. How would you go about bidder selection and what criteria will be used?
 - 3. What type of credit enhancements will be suitable for the project and why?
 - 4. What are the risks and how should they be allocated?
 - 5. What risks should be transferred and what payment mechanism can be used?
 - 6. What should be the financing structure for the project?
 - 7. How should the project be promoted?
 - 8. Is the local financial market sufficiently strong and deep to fund the project? Should we fund in local or foreign currency and why?
 - 9. How can we ensure project realism?
 - 10. What should project preparation entail?
 - 11. How do we ensure a supportive regulatory environment?
 - 12. What are the key legal provisions required to make the project bankable?

You should be prepared to present you findings at the end of the session

Group Work