Promoting long-term Islamic infrastructure investment

Tahir Ali Sheikh

6 October 2020

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Basics

What is infrastructure?

Economic infrastructure – World Development Report (1994)

Utilities	Works	Other Sectors
power, telecommunications, piped water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas	roads and major dam and canal works for irrigation and drainage	urban and interurban railways, urban transport, ports and water ways, and airports

Importance of infrastructure

Economic growth	Poverty alleviation	Environment sustainability

Source: World Development Report 1994 Infrastructure for Development

Salient characteristics of infrastructure investments

- Provides essential services (public good characteristics)
- Typically capital intensive
- Once made, it is sunk
- Possesses natural monopoly attributes
- Often large and indivisible
- Long gestation and payback periods
- Typically, output is non-tradable
- Often significant externalities
- Involves networks

Source: World Development Report 1994 Infrastructure for Development

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Financing

Source: World Development Report 1994 Infrastructure for Development

Massive infrastructure investments needed in Asia

Projected infrastructure investment in Asia and the Pacific by sector (2016-2030)

Power
$11.7 trillion
($779 billion a year)

Transport
$7.8 trillion
($520 billion a year)

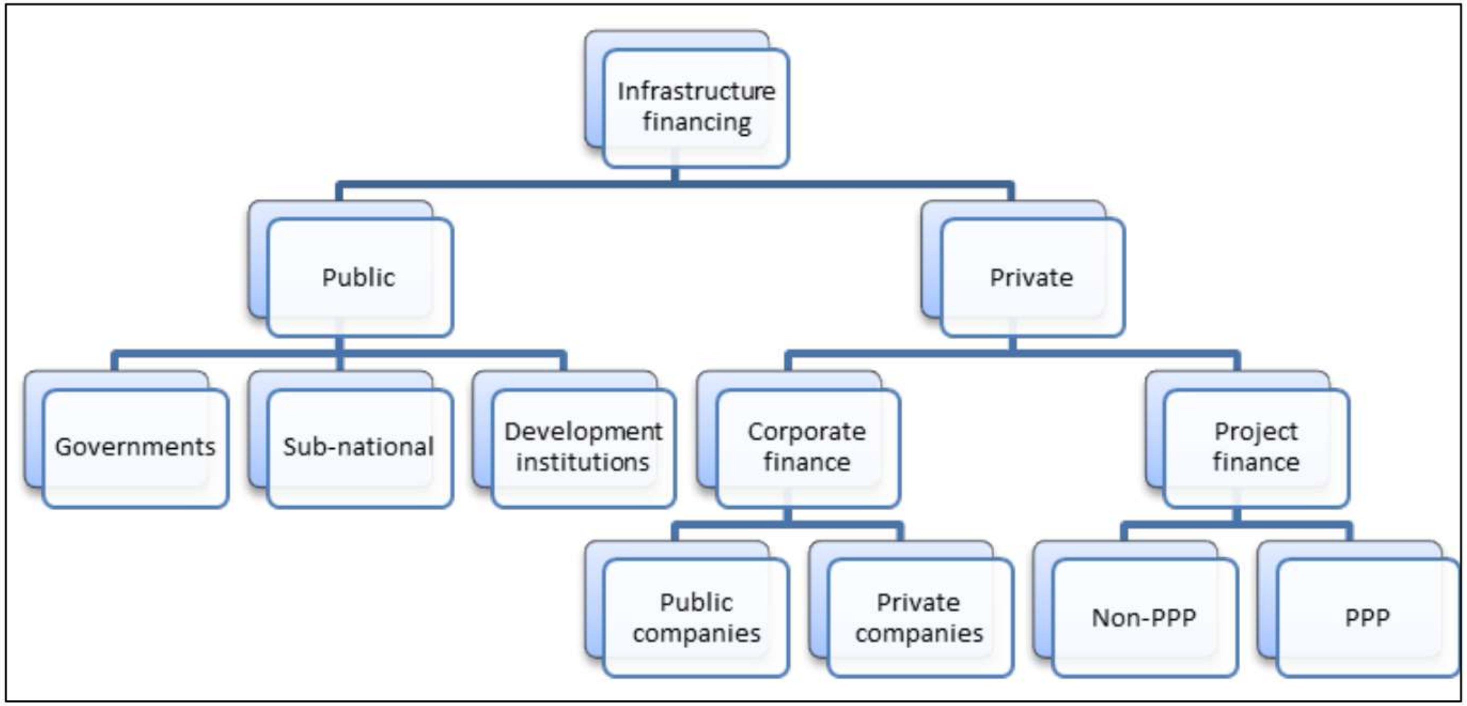
Telecommunications
$2.3 trillion
($152 billion a year)

Water and sanitation
$0.8 trillion
($52 billion a year)

Source: Asian Development Bank (2017) Meeting Asia's Infrastructure Needs

Financing infrastructure

Sources of infrastructure finance



Public and Private Finance

- In **Emerging Markets and Developing Economies (EMDEs), public funding for infrastructure accounts for 70% of total infrastructure expenditure, according to the World Bank estimates. Approximately, 20% is financed by private sources, and the rest by development banks and agencies.**
- Public finance generally dominates in emerging Asia, especially in the PRC. Among the ASEAN countries, Goldman Sachs (2013) estimates a government share in infrastructure of 90% in the Philippines, 80% in Thailand, 65% in Indonesia, and 50% in Malaysia.

Source: Inderst, G. 2016. Infrastructure Investment, Private Finance, and Institutional Investors: Asia from a Global Perspective. ADBI Working Paper 555. Tokyo: Asian Development Bank Institute.

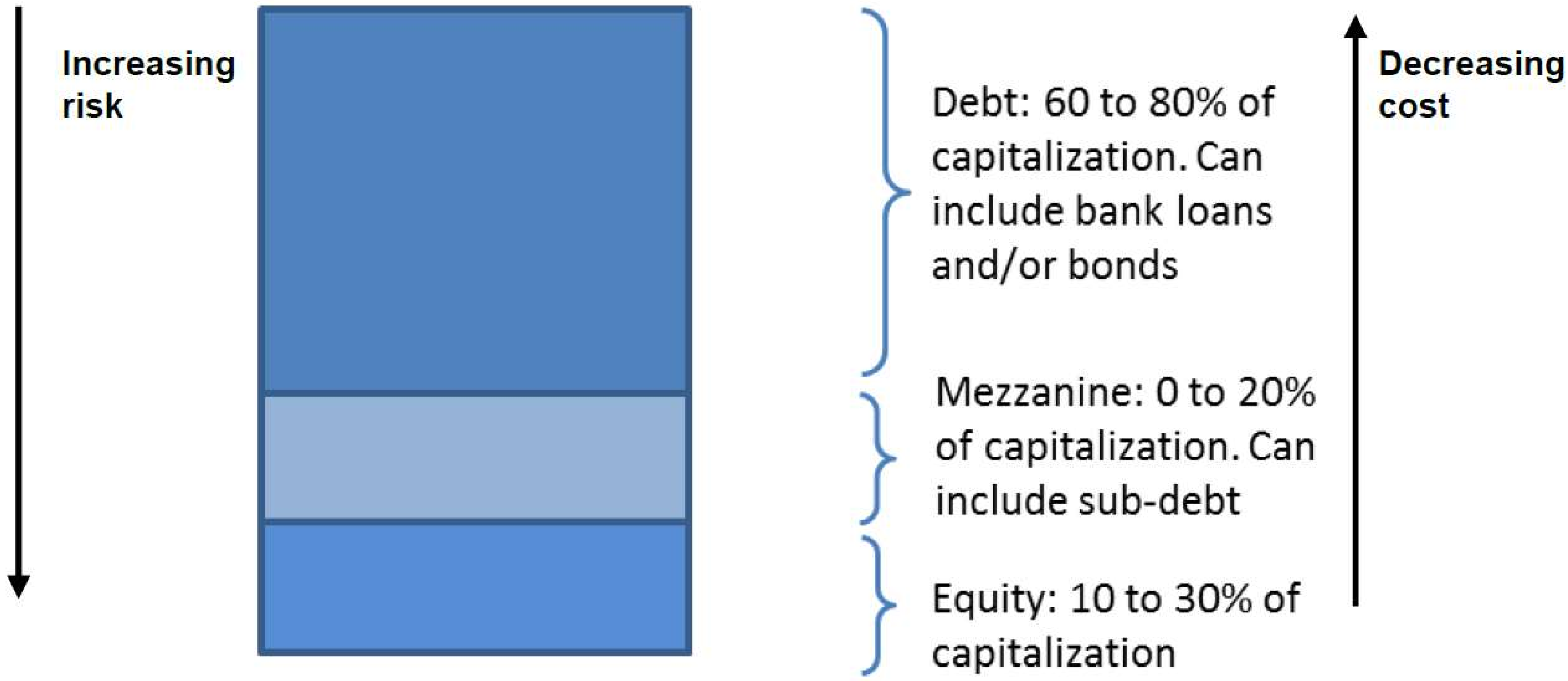
Typical infrastructure financing instruments

Conventional

Modes		Infrastructure Finance Instruments		Market Vehicles
Asset Category	**Instrument**	**Infrastructure Project**	**Corporate Balance Sheet / Other Entities**	**Capital Pool**
Fixed Income	**Bonds (Capital Market)**	Project Bonds	Corporate Bonds, Green Bonds,	Bond Indices, Bond Funds, ETFs
		Municipal, Sub-sovereign Bonds		Debt Funds (GPs)
		Green Bonds	Subordinated Bonds	Loan Indices, Loan Funds
	Loans	Direct/Co-Investment lending to Infrastructure projects, Syndicated Project Loans	Direct/Co-Investment lending to Infrastructure corporate	Debt Funds(GPs)
			Syndicated Loans, Securitized Loans(ABS), Collateralized Loan Obligation (CLOs)	Loan Indices, Loan Funds
Mixed	**Hybrid**	Subordinated Loans/ Bonds, Mezzanine Finance	Subordinated Bonds, Convertible Bonds, Preferred Stock	Mezzanine Debt Funds(GPs), Hybrid Debt Funds
Equity	**Listed**	YieldCos	Listed infrastructure & utilities stocks, Closed-end Funds, REITs, IITs, MLPs	Listed Infrastructure Equity Funds, Indices, trusts, ETFs
	Unlisted	Direct/Co-Investment in infrastructure project equity, PPP	Direct/Co-Investment in infrastructure corporate equity	Unlisted Infrastructure Funds

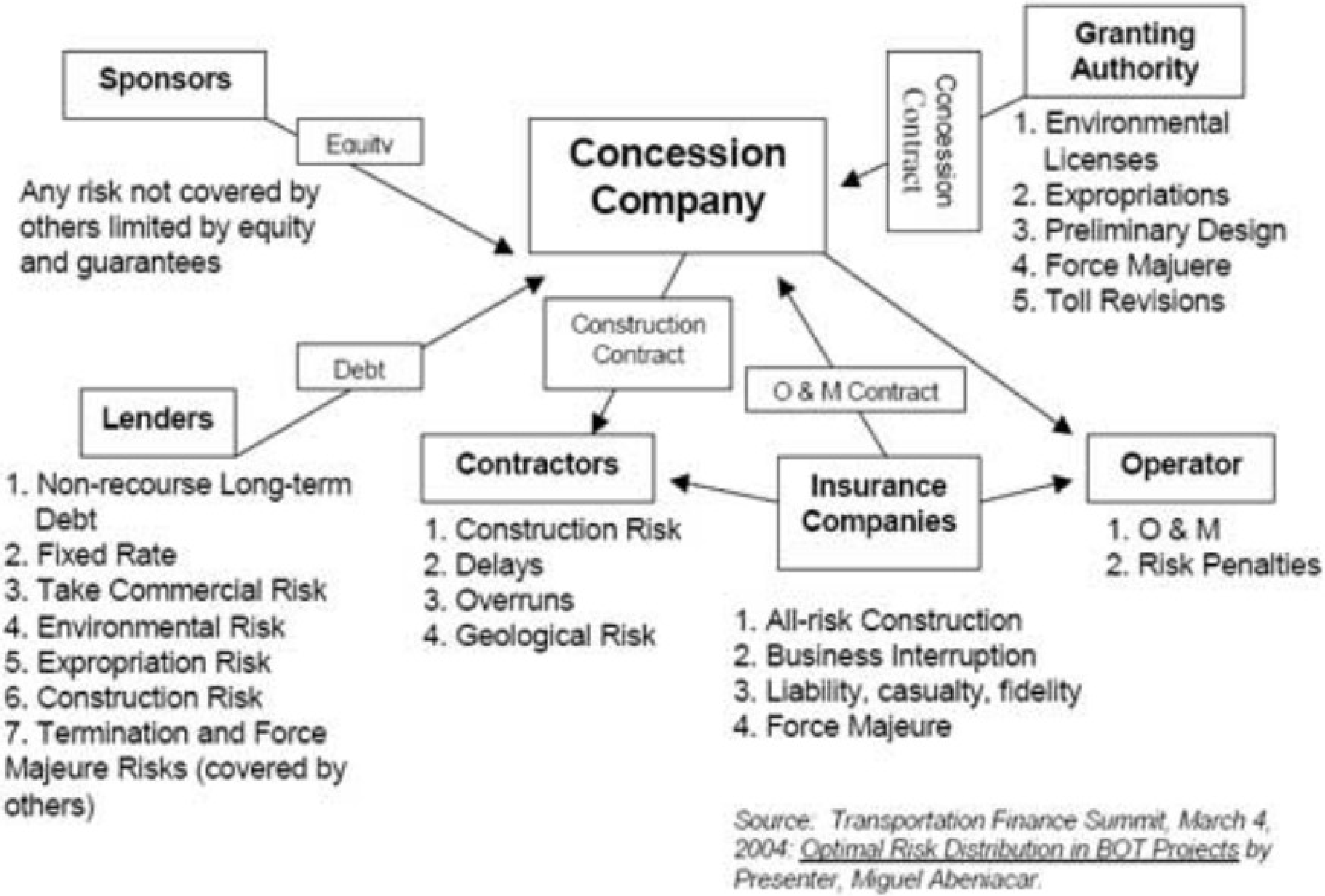
Source: OECD (2015) Infrastructure Financing Instruments and Incentives

Capital structure selection



Source: OECD (2015) Infrastructure Financing Instruments and Incentives

Risks linked to infrastructure assets



Source:http://transportationfortomorrow.com/final_report/volume_3_html/08_background_material/content3a59.htm

Risk Mitigation Approaches

Guarantees
By Government, Gov controlled agency or development banks

Insurance
By insurance companies

Hedging
Swaps, forwards & options by banks

Contract design
Availability payment
Offtake contract
By contracting authority

Provision of capital
Subordinated debt, debt & equity
By Government, Gov controlled agency or development banks

Grants
On lump sum capital, revenue & interest of debt
By contracting authority

Tax incentives
For SPV & equity investors
By national or local authority

Source: OECD (2015) Infrastructure Financing Instruments and Incentives

Financial risk mitigation & incentives

Type of Measure	Instrument
1. Guarantees, realised directly by Government or by its own controlled agency or development bank	1. Minimum payment, paid by contracting authority
	2. Guarantee in case of default
	3. Guarantee in case of refinancing
	4. Exchange rate guarantees
2. Insurance (private sector)	1. Wrap insurance, technology guarantees, warranties, commercial and political risk insurance
3. Hedging (private sector)	1. Derivatives contracts such as swaps, forwards, options etc.
4. Contract design, paid by contracting authority	1. Availability payment mechanisms
	2. Offtake contracts
5. Provision of capital, realised directly by Government or by its own controlled agency or development bank	1. Subordinated (junior) debt
	2. Debt: 2.1 at market condition 2.2 at lower interest rate
	3. Equity: 3.1 at market conditions 3.2 at more advantageous conditions
6.Grants, generally delivered by contracting authority, even if some dedicated fund at national level may exists. Tax incentives can be delivered by national or local authorities	1. Lump sum capital grant
	2. Revenue grant: 2.1 Periodic fixed amount (mitigating the demand risk) 2.2 Revenue integration (it leaves the demand risk on the private player)
	3. Grant on debt interests
	4. Favourable taxation schemes for SPV
	5. Favourable taxation schemes for equity investors

Source: OECD (2015) Infrastructure Financing Instruments and Incentives

Using Islamic finance for infrastructure

Why Islamic Finance for infrastructure?

Principles of Islamic finance	Infrastructure PPP project
Returns should be linked to the profits/earnings and derived from commercial risk taken by financier.	Infrastructure PPP projects allow risk to be shared among the parties involved in the project, including financiers.
Islamic financiers become partners in the project.	PPP projects allow Islamic financiers to become a party to the project, not just a mere lender.
Transactions should be free from speculation or gambling (*maysir*).	Infrastructure PPP projects are by nature free from speculation or gambling.
Existence of uncertainty in a contract is prohibited.	Project contracts are generally well defined with no uncertainty (such as lump sum, turn-key, EPC contracts).
Investments relating to alcohol, drugs, gambling, weapons, and other prohibited activities are not permitted.	Infrastructure PPP projects exclude these areas.

Source: World Bank, Mobilizing Islamic Finance for Infrastructure PPP (2017)

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Typical infrastructure financing instruments

Islamic Equivalent

Modes	Infrastructure Finance Instruments			Market Vehicles
Asset Category	**Instrument**	**Infrastructure Project**	**Corporate Balance Sheet / Other Entities**	**Capital Pool**
Fixed Income	**Sukuk (Capital Market)**	Project Sukuk	Corporate Sukuk, Green Sukuk,	Bond Indices, Bond Funds, ETFs
		Municipal, Sub-sovereign Sukuk		Debt Funds (GPs)
		Green Sukuk	Subordinated Sukuk	Loan Indices, Loan Funds
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Source: OECD (2015) Infrastructure Financing Instruments and Incentives; Tahir Ali Sheikh

Risk Mitigation Approaches

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Risk Mitigation Approaches in Islamic finance

Guarantees
By Government, Gov controlled agency or development banks

Takaful
By Takaful providers

Islamic Hedging
Islamic swaps, forwards, & options
By Islamic banks

Contract design
Availability payment, Offtake contract
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Islamic contracts

- Contracts of compensation
  - Exchange: Sale, purchase, or lease of tangible asset or real service
    - Sale (Bai’)
    - Lease (Ijara)
  - Investment: investing money in a business project via a partnership
    - Mudaraba (trust financing)
    - Musharaka (partnership)
  - Agency (Wakala)
- Types of Sale contracts
    - Musawamah (sale in which cost is not disclosed; bargaining sale)
    - Murabaha (cost-plus or mark-up sale)
    - Bai’-Mu’ajjal (price-deferred sale, full, installments)
    - Salam (deferred delivery, advance payment in full, pre-paid sale)
    - Istisna (manufacturing, construction, payment according to progress)
    - [Rare] Wadiah (safe-keeping); Tawliah (cost-to-cost); Mugayadah (barter, cross-sale)
- Contracts without compensation
    - Assignment of debt (hawalah)
    - Sale of debt (Bai al Dayn)
    - Guarantee (Kafalah)

Islamic contracts commonly used for infra financing

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    - Sale (Bai')
    - **Lease (Ijara)**
  - Investment: investing money in a business project via a partnership
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    - Sale of debt (Bai al Dayn)
    - **Guarantee (Kafalah)**

- **Different modes of financing entail different risks**
- **Nature of credit risk (corporate financing, project financing) and phase of a project (construction, operational) determines the most appropriate contract**

Common structures

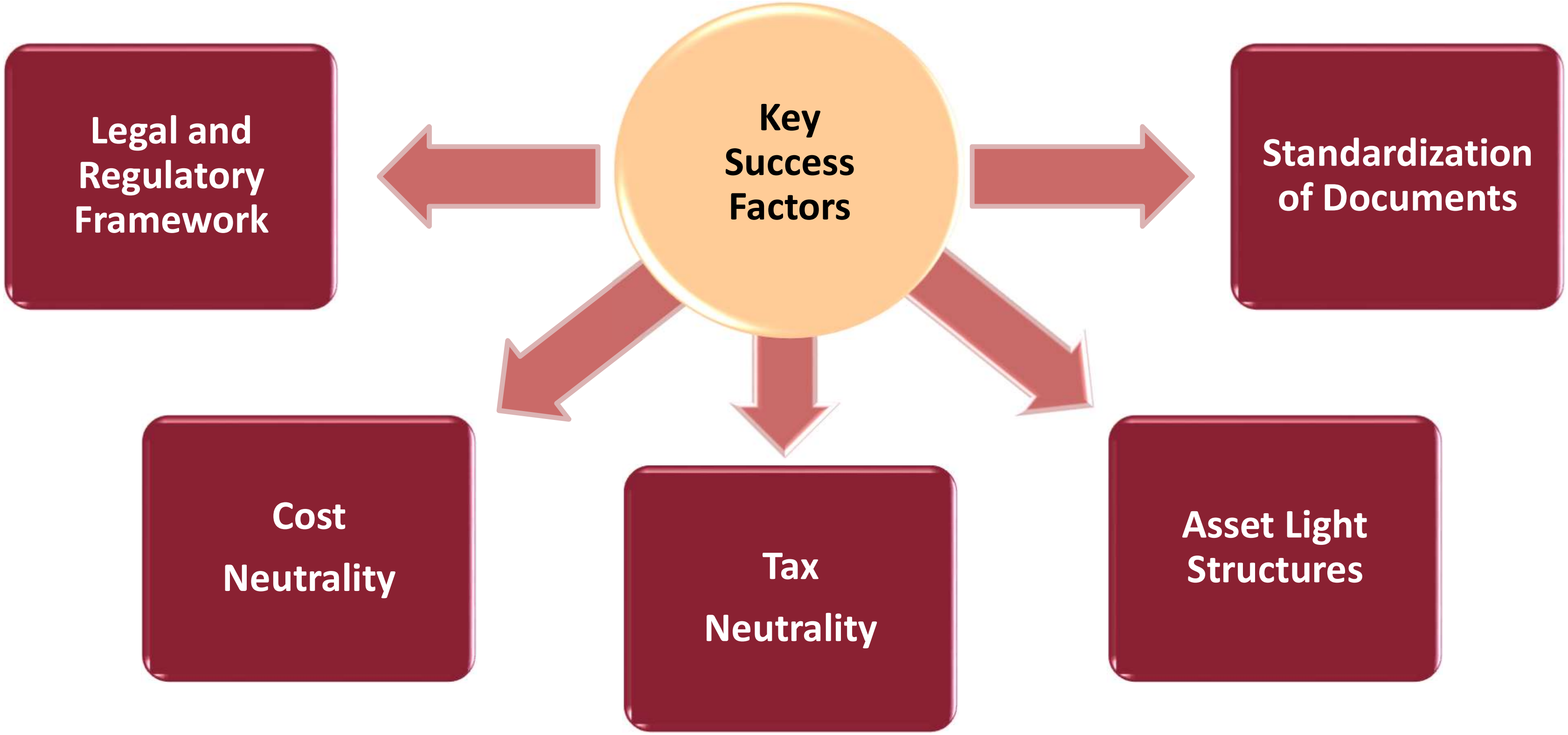
- Sukuk
  - Ijarah
  - Musharakah
  - Wakalah
  - Commodity Murabahah
  - Mudarabah
- Project Financing
  - Parallel istisna
  - Istina-Ijarah
  - Wakalah-Ijarah
  - Musharakah-Ijarah
- Hybrid Structures
- Islamic Derivatives
  - Islamic profit rate swap
  - Islamic cross-country profit rate swap

Expanding the role of Islamic Finance in infrastructure development

Key challenges

- Legal and regulatory environment
- Structuring constraints
- Investor constraints
- Lack of sufficient availability of Islamic financing

Market structural underpinnings



Examples: Enabling Regulation and Legislation

Indonesia

- **Indonesia**: Law No. 19 of 2008 on Sovereign Sukuk (Surat Berharga Syariah Negara) enacted, which set the stage for Republic of Indonesia to be the most prolific sovereign Sukuk issuer to date.

Singapore

- **Singapore**: Under Financial Sector Incentive scheme, gave preferential tax treatment for Islamic finance, with a 5 year concessionary tax rate of 5% in 2002, and extended in 2008 for a period of 5 years until the end of 2013.

United Kingdom

- **UK**: 2003 Finance Act-Stamp Duty Land Tax (SDLT), which was extended to equity sharing agreements and corporate entities in 2006.
- **UK**: Finance Act 2009 provided SDLT relief to Sukuk, capital gains tax relief for transfers of land to and from Sukuk issuance vehicles, and ensured entity or person obtaining financing continues to be able to claim capital allowances while land is held by Sukuk issuance vehicle.
- **UK**: Financial Services & Market Act 2000 Order 2010 created new category for Sukuk and enabled Sukuk to avoid a higher regulatory burden compared to conventional bonds.

Hong Kong

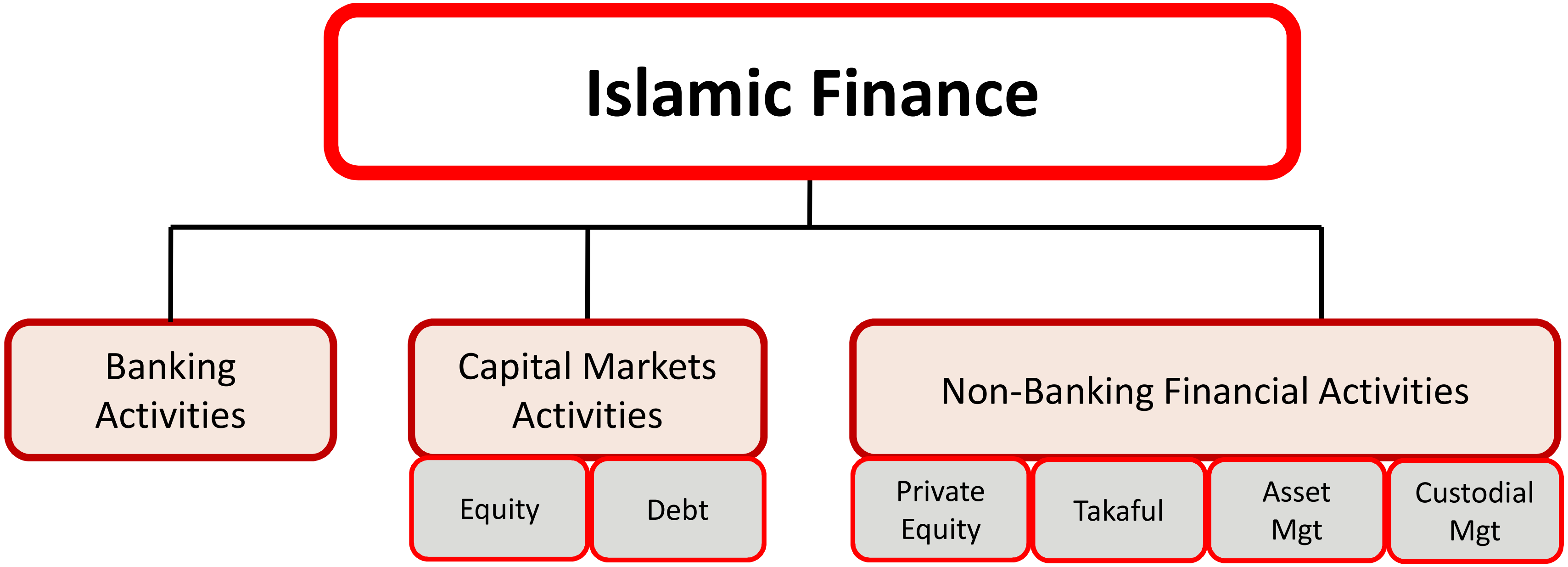
- **Hong Kong**: Inland Revenue and Stamp Duty Legislation (Alternative Bond Schemes) (Amendment) Ordinance 2013 gazetted, conforming tax treatment for Islamic securities to conventional bonds.

Examples: Enabling Regulation and Legislation

Pakistan

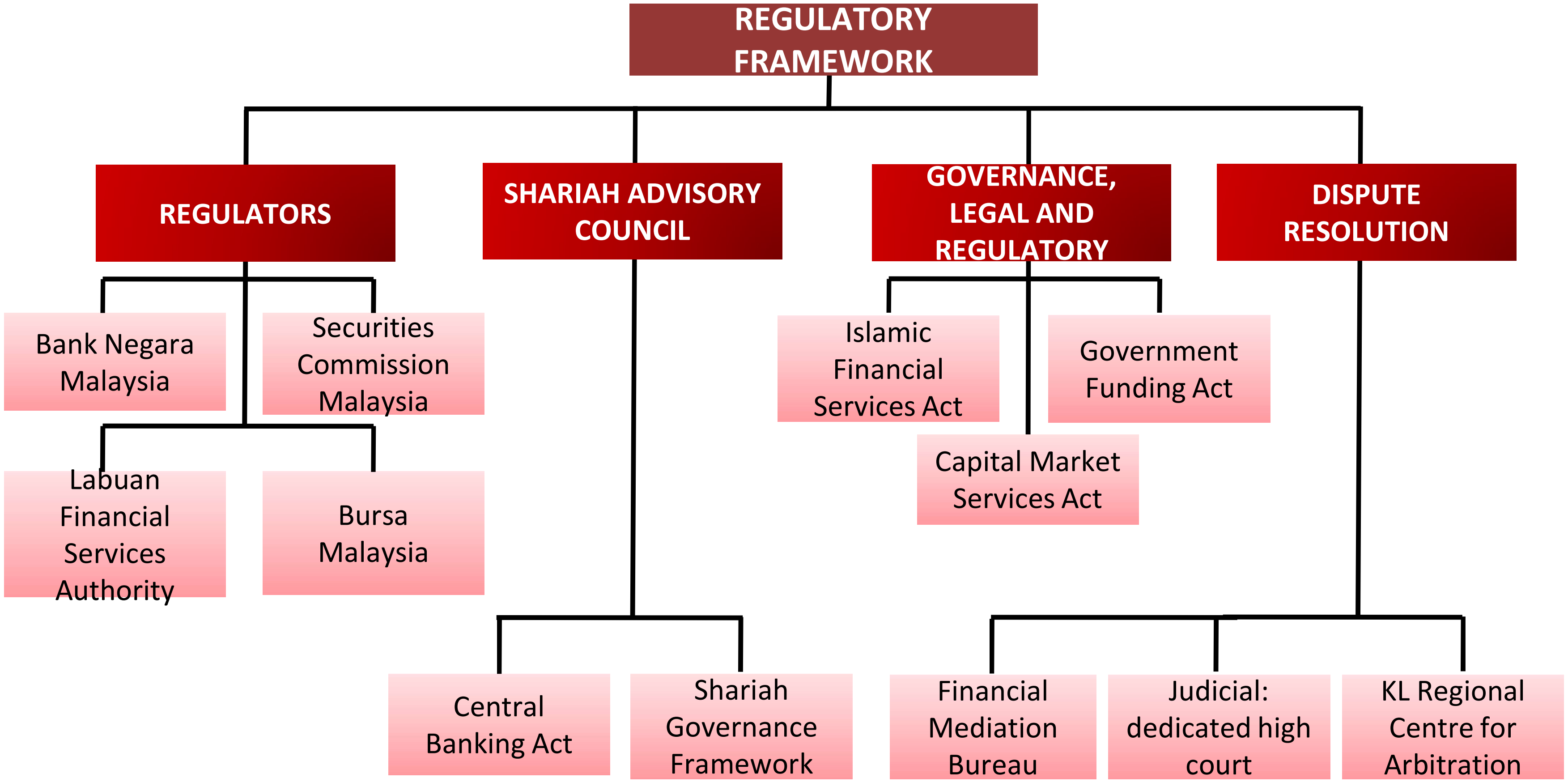
- **Pakistan**: In 2015 an updated version of the Non-Banking Finance Companies Rules 2003 adopted significant amendments designed to better meet the growing needs of the Islamic finance industry, which led to the creation of two new asset classes: non-bank microfinance companies and private funds.
- **Pakistan**: In 2015, new Sukuk regulations were issued which dictated the eligibility & requirements for Sukuk issuance. Regulations also require the appointment of a Shariah Advisor and Investment Agent.
- **Pakistan**: In 2015, further amendments were approved to the Takaful Rules 2012 allowing Islamic insurers to participate on a co-Takaful basis with conventional insurers under the lead of a conventional insurer.

To deliver Islamic solutions that provide real value, holistically integrated Islamic Finance industry components are a must



This will result in a compelling case for businesses to utilize Islamic financing

Malaysia: Creation of an Enabling Environment



Structuring constraints – issues related to transaction structure

- Ownership of assets of infrastructure projects
  - Issue in case of parallel or co-financing structures
  - Security sharing among conventional and Islamic financiers
- Fees that do not comply with Shariah
  - e.g., commitment fees
- Economic burden - transaction costs & time required
  - Additional complexity and difficulty in negotiations
  - Additional legal cost. Islamic and conventional finance documentation
  - Additional (Shariah) approvals
  - SPVs and cross-border issues

Structuring constraints – issues related to transaction structure

- Tax issues
  - Depending on jurisdiction, Islamic finance transactions requiring multiple transfers of underlying assets may trigger multiple taxes
- Default and late payment charges
  - Payment amount cannot be increased in response to project company's default
  - Extra payment received may be required to be paid to charity
- Total loss scenarios
  - Indemnity in case of inadequate insurance

Structuring constraints – product features

- Typical structures
  - For floating rate: Ijara, Commodity Murabaha
  - For fixed rate: Ijara, Parallel Istisna
- Issues
  - Commodity Murabaha
    - Not allowed in many jurisdictions
  - Parallel Istisna
    - Entails inflexible disbursement structure during long-term construction period
  - Ijara
    - Issues with pari-passu sharing of securities

Structuring constraints – risk mitigation

- Shariah-compliant hedging
  (currency risk, exchange rate risk)
  - Limited access to the Islamic derivatives markets
  - Shallow and short-term nature of Islamic derivatives markets not compatible with long-term facility agreements
  - Pricing issues
  - Varying Sharia acceptability of swap structures
- Takaful or Shariah-compliant insurance
  - Credit strength of Takaful providers
  - Pricing issues

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Investor constraints
(common to conventional and Islamic financiers)

Issues with government support for infrastructure projects	• Lack of political commitment over the long term • Lack of infrastructure project pipeline • Fragmentation of the market among different levels of government • Regulatory instability • High bidding costs
Lack of investor capability	• Lack of expertise in the infrastructure sector • Problem of scale of pension funds • Regulatory barriers • Short-termism of investors
Issues with investment conditions	• Negative perception of the value of infrastructure investments • Lack of transparency in the infrastructure sector • Misalignment of interests between infrastructure funds and pension funds • Shortage of data on infrastructure projects

Source: Inderst, G. 2016. Infrastructure Investment, Private Finance, and Institutional Investors: Asia from a Global Perspective. ADBI Working Paper 555. Tokyo: Asian Development Bank Institute.

Investor regulation

- Restrictions on equity or corporate bond investments
- Investment in unlisted infrastructure companies (including Hong Kong, China, the Republic of Korea, and Japan)
- Direct investments in projects (including Thailand)
- Infrastructure funds or investments (including the PRC)
- Alternative investments (including Pakistan)
- Minimum ratings for bonds
- Constraints on leverage and the use of derivatives
- Prohibitions or limits on foreign exposure (including India)

Source: Mobilizing Islamic Finance for Infrastructure PPP

Current thinking on the way forward

- Raise awareness
- Create an enabling environment
- Build capacity
- Develop easily accessible repository of projects and case studies
- Develop new products and expand existing ones
- Standardize documentation and approaches
- Mobilize local Shariah-compliant capital
- Set-up Shariah-compliant infrastructure funds

Source: Mobilizing Islamic Finance for Infrastructure PPPs (2017)

Thank You