

# **BANK LONG-TERM FUNDING: DEVELOPING NON-TRADITIONAL ALTERNATIVES**

**INFRASTRUCTURE FINANCE:  
THE UNLEASED POTENTIAL OF ISLAMIC FINANCE  
12-13 NOVEMBER 2015  
JAKARTA, REPUBLIC OF INDONESIA**

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Consider some issues relating to developing non-traditional structures for, and sources of, Shari'ah-compliant infrastructure financing.

## **OBJECTIVE**

Shari'ah-compliant tools.

Fundamental transactional considerations.

Appendix A: Capital Stack for Infrastructure Projects

Appendix B: Inducing Banks to Participate

Appendix C: Quadratic Partnership Structure

## **INTRODUCTORY NOTE**

# INTRODUCTORY NOTE

- Implementing Shari'ah-compliant contractual arrangements for infrastructure finance is relatively simple.
- We have the contractual tools:
  - Istisna'a
  - Musharaka
  - Mudaraba
  - Ijara
  - Murabaha
  - Others
- Other speakers will provide more specifics on these tools.



# INTRODUCTORY NOTE

- More difficult, determining:
- **why** and **how** the transactions are done (COORF):
  - **who controls what** (two major segments)
    - **ownership** arrangements
    - **operational** arrangements
  - **risk** allocations
  - **finance** arrangements
- **Then develop the structure:** capital, organizational, contractual
- in light of existing realities that affect both Islamic and interest-based infrastructure financing.
- This is the focus today.

# **BANKS AND INFRASTRUCTURE PROJECTS**

**LIMITATIONS AND INDUCEMENTS**

# LIMITATIONS ON BANK FINANCING

- Large, expensive, capital-intensive projects.
- **Need syndicates and consortia**; individual banks cannot and should not finance these projects.
- Financing cannot be undertaken by only Islamic banks.
  - Transaction size is too large.
  - Risk concentration would be too great (consider the position of bank regulators).
- **Need both Islamic and interest-based banks.**
- **Influences the transactional structures**, and should be welcomed but adds complexity.

# PROJECT SIZE AND TENORS

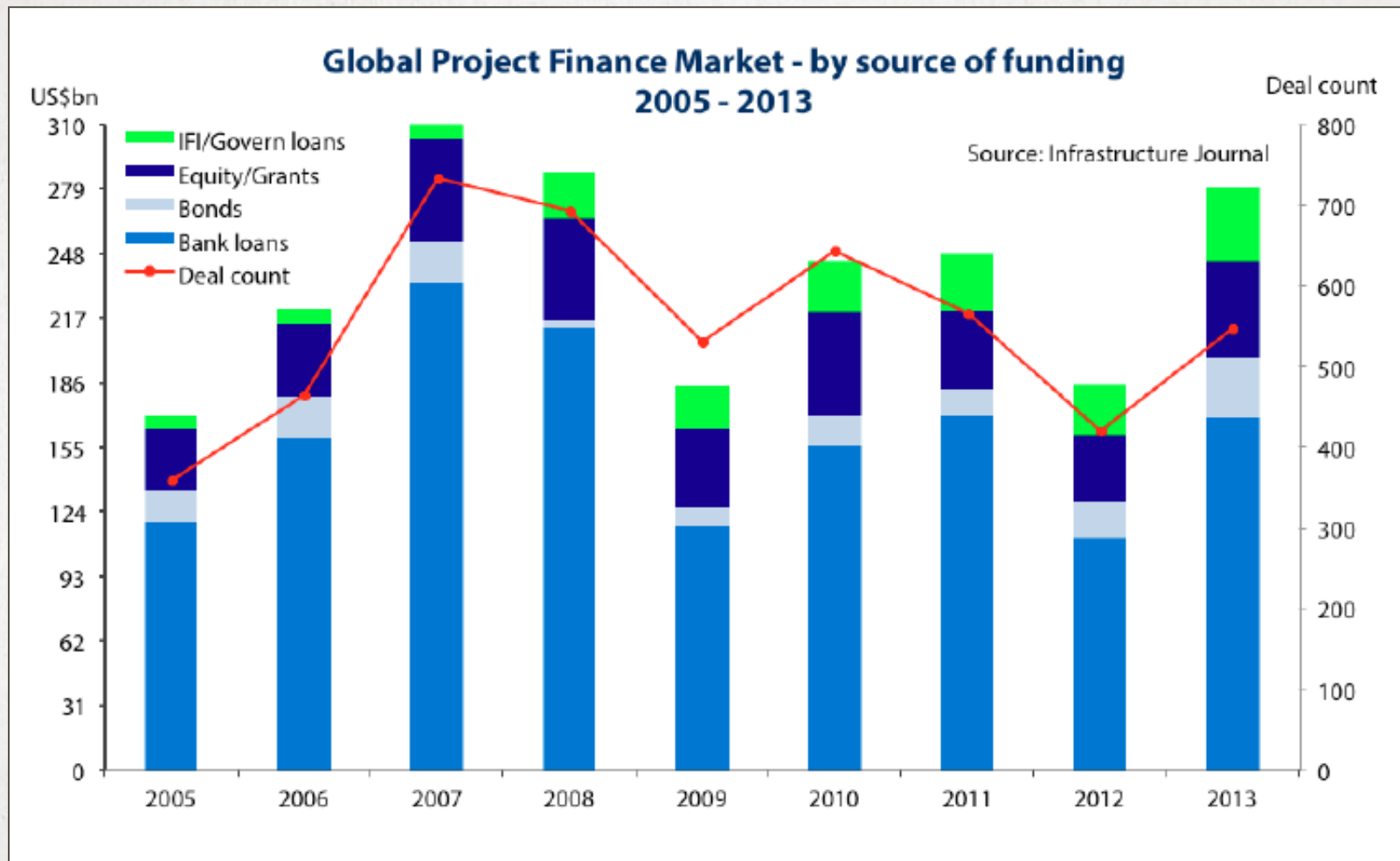
- **Tenor** of financing influenced by:
  - Project **size**.
  - Project **economics**.
- Project cash flows:
  - insufficient to repay the financing in the short term or the medium term.
- **Need long-term** repayment schedules.



# PROJECT SIZE AND TENORS

- Many banks are reluctant to finance for the long term.
- **Likelihood of long-term bank financing increased** where:
  - the debt is **liquid**.
  - there are **other objectives** (China): political, growth, fiscal, etc.
  - the **industry** is **desirable** (e.g., oil and gas).
  - developed, stable, predictable **legal regime**.
- **Islamic finance industry** should **focus on these** types of factors in their various jurisdictions.

# PROJECT FINANCE FUNDING SOURCES



Source: Infrastructure Journal – Global Project Finance Infrastructure Review Full Year 2013

# INDUCING BANK PARTICIPATION

- Can induce banks to participate.
  - **Equity enhancements:** means more financing alternatives.
    - More and stronger equity.
  - **Financing enhancements.**
    - More liquid finance.
    - Stronger, more predictable legal regimes.
  - **Different combinations of equity and financing.**
    - Evidencing different risk allocations among public and private.
- See Appendix B to these slides.

# COST REDUCTIONS FROM LEGAL ELEMENTS

- Demonstrable evidence that **legal elements and reforms reduce financing costs and encourage broader participation** in financings.
- **Special purpose vehicles (SPVs)** are one such factor.
  - They reduce bankruptcy/insolvency and other credit risks.
  - Ease of formation is a critical factor.
- **Bankruptcy/insolvency** reform is another factor.
- **Contractual enforcement** is another obvious factor.
- There are many others.



# **INFRASTRUCTURE PROJECTS**

**SOME BACKGROUND**

# WHAT IS INFRASTRUCTURE FINANCE?

- Finance of ownership, design, construction, operation and maintenance of large capital-intensive **enabling assets**: assets with some **public purpose**.
- Often **monopolistic, single-purpose** (single-location) assets.
  - Electricity.
  - Transportation.
  - Telecommunication.
  - Water.
  - Oil and gas.
  - Petrochemicals.
  - Mining.
  - Other natural resources.
  - Roads.
  - Bridges and tunnels.
  - Airports.
  - Railways.
  - Other transportation.
  - Waste water and sewage.
  - Hospitals and health care.
  - Schools.

# INFRASTRUCTURE FINANCE: WHO AND HOW

- **Who owns and who operates?** These two questions must be separately analyzed.
  - Government.
  - Public sector - private sector combinations.
  - Private sector.
- **How is infrastructure financed?**
  - Sometimes depends upon the “who” answers.
  - Government.
  - Private corporate.
  - Mixed: public-private partnerships (PPP).
  - Project finance: a structural methodology.



# INFRASTRUCTURE FINANCE: RISK COMBINATIONS

- Usually, and appropriately, a combination of
- **Project finance** techniques.
- **Different combinations of risks and different transaction participants** determined by risk determinations relating to:
  - Ownership
  - Operations.
  - Regulation.
  - Outsourcing.



# **PROJECT FINANCE**

**CRITICAL DYNAMIC ELEMENTS**

# WHAT IS PROJECT FINANCE?

- Project finance is **financing** of an economic unit
- in which the **lenders/financiers** look to:
  - **operational cash flows**, and
  - **cash flows and project assets** – collateral.
- **Isolate** risks and then **reallocate** risks:
  - greater efficiency and certainty.

# WHAT IS PROJECT FINANCE?

- **Collateral availability is stressed where asset is a monopolistic public good.**
  - Cannot move the asset.
  - Monopolistic off-taker.
  - Limited operators.
  - Political risks (expropriation, direct and creeping).
- Must **structure remedies** that allow collateral realization.

# PROJECT FINANCE CHARACTERISTICS

- Lending to a **special purpose vehicle** (SPV project company) that owns/holds the project assets
  - Lower bankruptcy and creditor risk.
- No or **limited recourse** to shareholders of the project company.
  - Careful credit analysis of the project stand alone.
- **Off-balance-sheet** to the grantor: lower direct credit risk.
- **Shifts** some project **risks to the lenders**, who get a higher margin than normal corporate loans.
- Often **high leverage** and **syndicated debt**.



# WHY HIGH LEVERAGE AND SYNDICATION?

- **Expropriation (direct and creeping) and renegotiation risks** for infrastructure assets are **high**: governments and concentrated buyers/suppliers.
- **Investors cannot mitigate** these risks effectively.
- Leverage and syndication **enhance ex post negotiating positions** of project company.
- **Pre-commits cash flows.**
- **Enhances monitoring.**
- Syndication **increases reputational risk** of government.
- High debt **shields wealth from concentrated buyers and suppliers.**

# **PUBLIC-PRIVATE PARTNERSHIPS**

**SHARED RISK AND RESPONSIBILITY**

# WHAT IS A PUBLIC-PRIVATE PARTNERSHIP?

- Many (and diverse) definitions and conceptions.
- Generally:
  - **collaboration** between (a) the **public** sector and (b) for-profit or non-profit organizations in the **private** sector,
  - **different motivations**: to provide **enhanced services** to the public, to accelerate **economic growth**, or to **supplement revenues** of government (note the different motivations; there are others – **political**, **fiscal**, etc.),
  - with some **risk sharing** as between the public sector and the private sector.



# CAUTION REGARDING GOVERNMENT MOTIVATIONS

- **Government motivations** often:
  - **political** considerations
  - **fiscal** rule constraints
  - **accounting** considerations
  - **other non-economic** considerations
- Introduces significant costs and inefficiencies.



# MOTIVES AND INVOLVEMENTS

- Motivation, relative involvement, balance among each (separately analyzed):
  - **Operational** elements: design, construction, operation, management, maintenance and the like.
  - **Ownership**
  - **Financial** elements: finance for design, engineering, construction and operation.
  - **Regulation motives**: manager benefit is private information; government control and decision-making and cash-flow rights.
  - **Outsourcing motives**: private investor gets control, decision-making and fees and/or profit sharing.
  - **Incentives/disincentives** relative to each.

# RISK EXPOSURE AND ANALYSIS

- **Public risks:** often (usually?) **implicit** and **not isolated, exposed and analyzed.**
  - Effects on taxpayers, different taxpayer groups, future financial requirements, etc.
- **Private** entity risks are largely **exposed and analyzed.**

# WHO - ULTIMATELY – PAYS?

- **Who, ultimately, pays** for the infrastructure project?
  - The public?
    - Taxpayers? Which taxpayers?
  - The private sector?
    - Users?
- And **how do they pay?**
  - Broad-based taxation?
  - Targeted taxation of groups or geographies?
  - General fees?
  - Direct usage fees?
  - Tariffs?

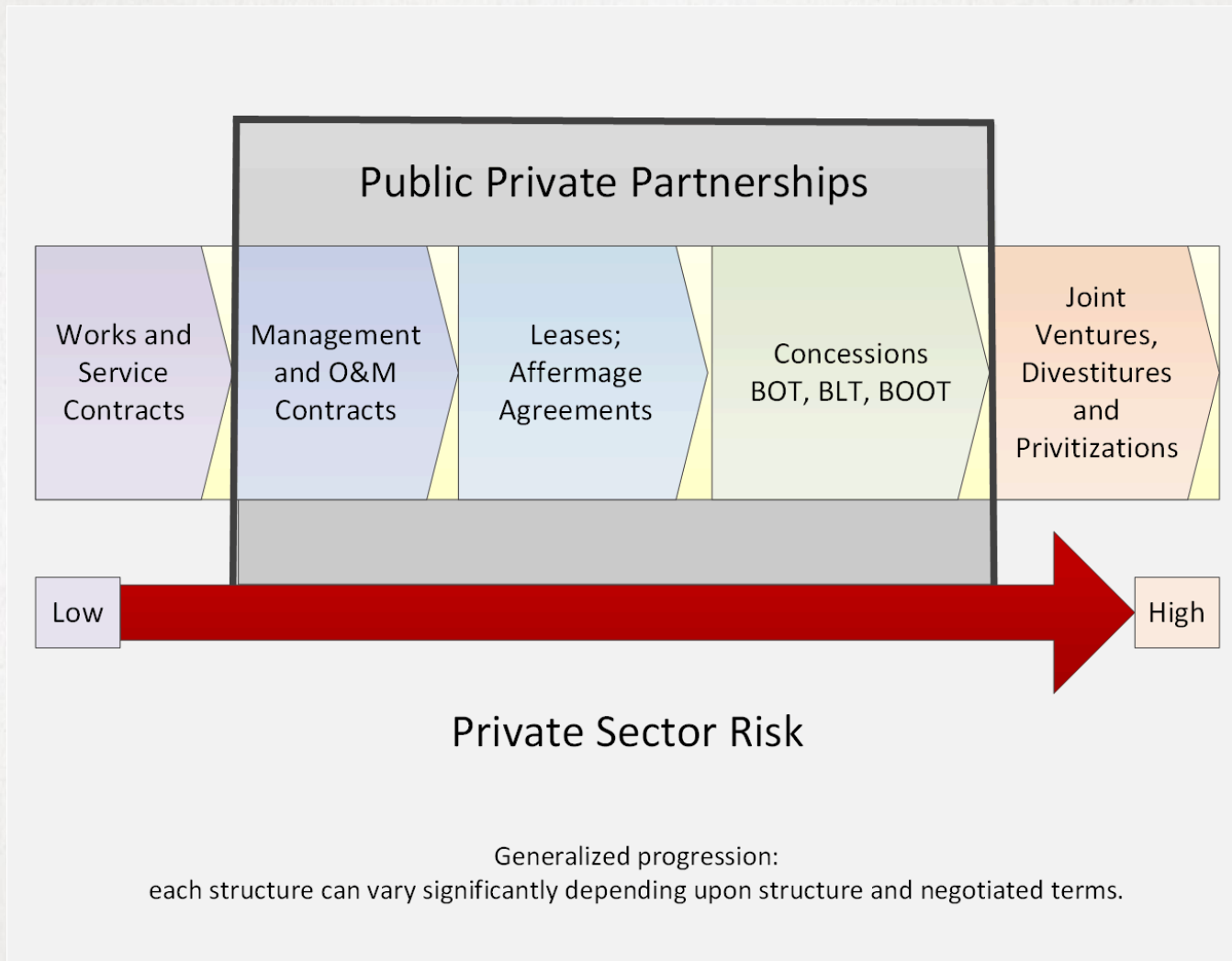


# STRUCTURES

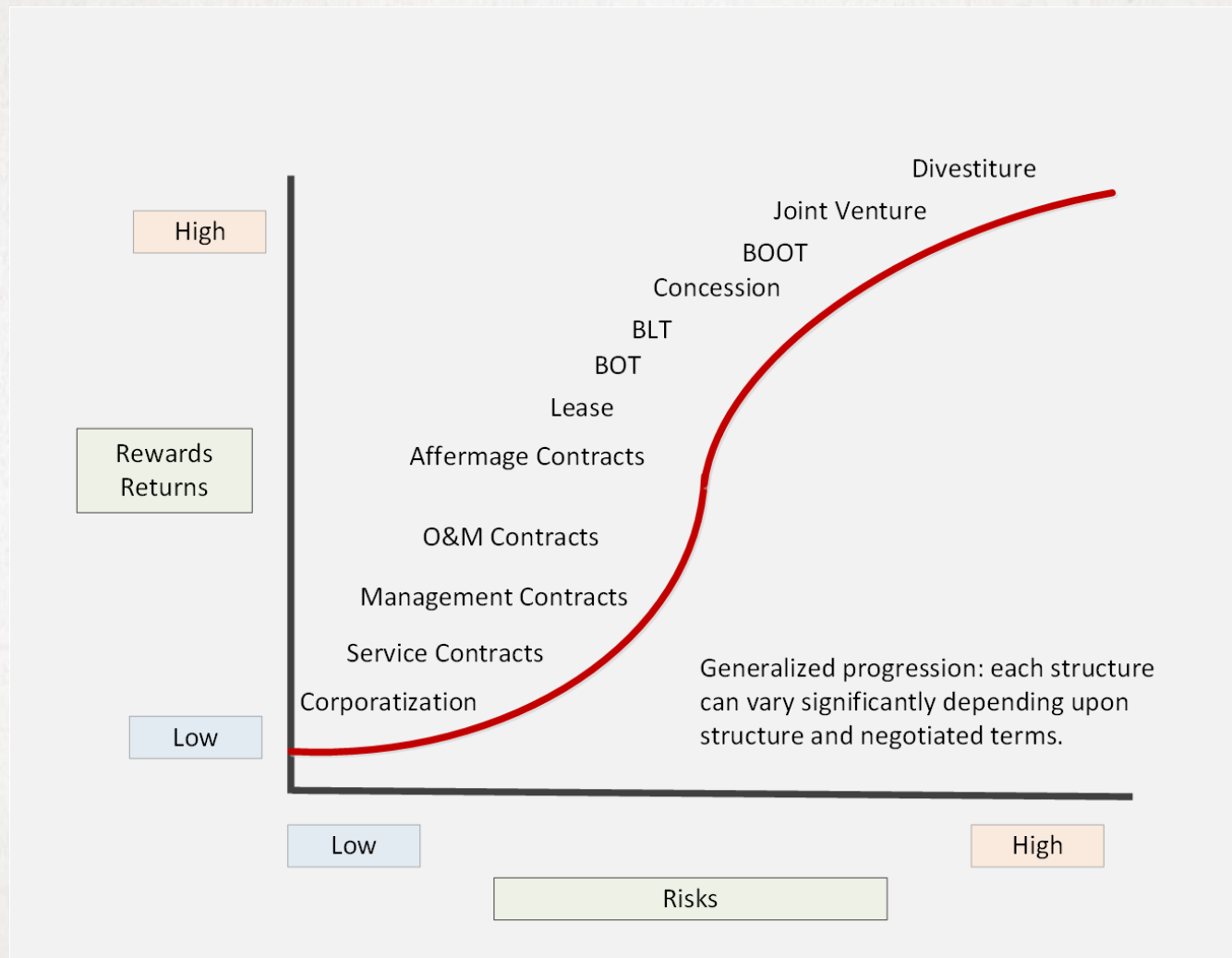
- Analysis of these factors will determine much of the structure:
  - Government build and operate
  - Concession: private build and operate
  - Public-private partnerships rubric encompasses, among others:
    - Build, own, operate, transfer (BOOT)
    - Build, operate, transfer (BOT)
    - Build, own, operate (BOO)
    - Build, lease, transfer (BLT)
    - Build, transfer, operate (BTO)
    - Design, build, operate, maintain (DBOM)
- These are **all quite different** in terms of **risk allocations**.
- These **all use Shari'ah-compliant contracts**.



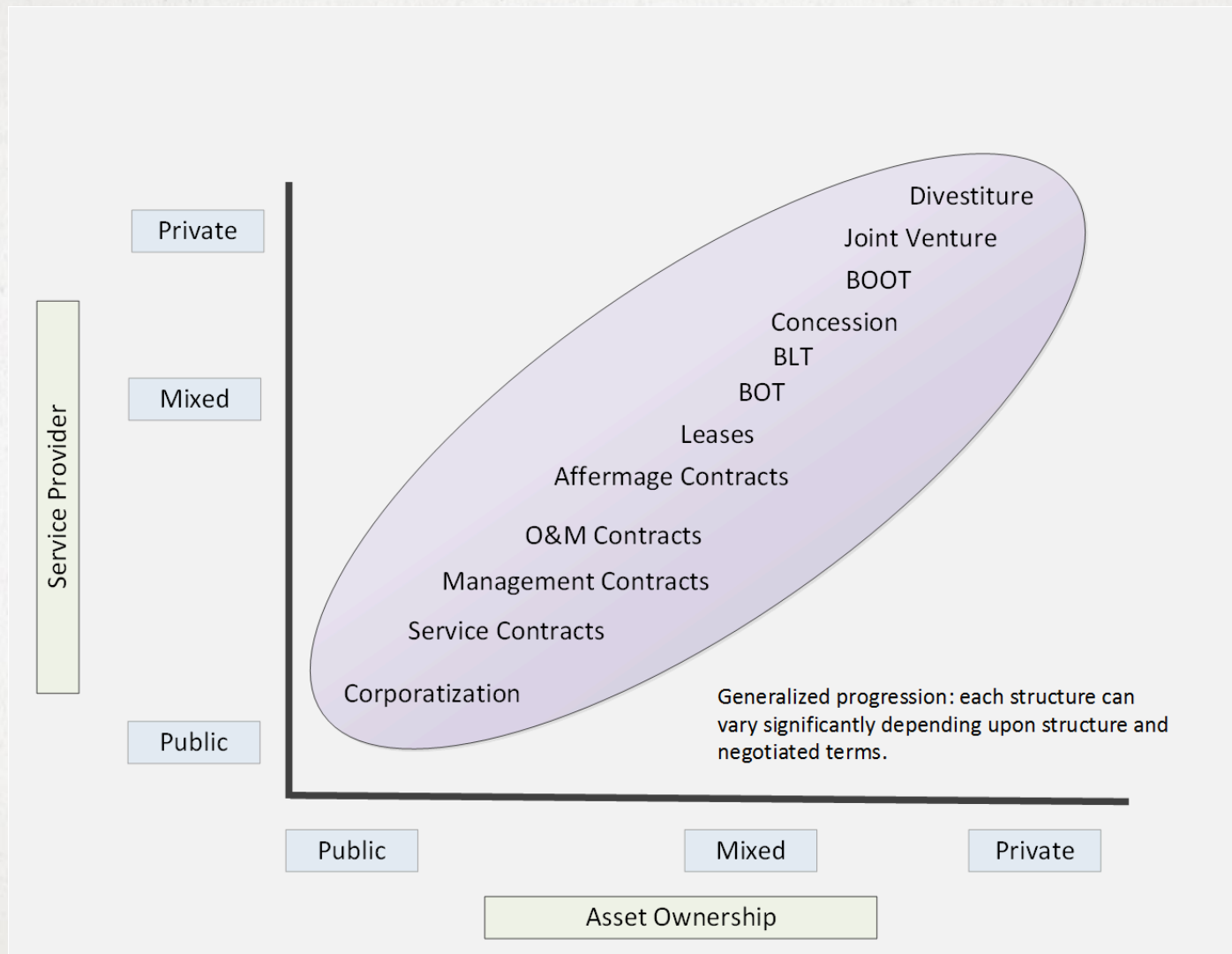
# STRUCTURAL PRIVATE RISK PROGRESSION



# STRUCTURAL RISK-REWARD CONTINUUM



# STRUCTURAL OWNERSHIP RISK CONTINUUM



# INCOMPLETE CONTACTS

- Do the **contracts address all risks?**
  - **Usually not**, which makes private finance inefficient with varying and excessive costs.
  - **Private sector involvement:**
    - more contractual **complexity**
    - higher **transaction costs** (at least initially)
    - **more accurate risk exposure and allocation**
    - blends operational and financial risks, with pricing difficulties.



# INCOMPLETE CONTRACTS

- **Renegotiations** of contracts are commonplace in PPPs.
  - Governments rebid *ex post facto*.
  - Unanticipated circumstances lead to renegotiation.
- **Political risks** are omni-present (expropriation: direct and creeping).
- These two risks are priced into the private participation, resulting in cost increases.

# CONCLUSION

OPPORTUNITIES EXIST

# CONCLUSION

- Pressing need for infrastructure financing in OIC jurisdictions.
- Need new structures.
- Need new combinations of existing elements.
- Need both Islamic and interest-based banks and financing institutions.
- Need understanding of
  - Why the transaction is being considered.
  - How risks are allocated (transparently).
  - What Shari'ah contracts are responsive.
- PPP structures are dominant, and Shari'ah-compliant contracts and structures suit these arrangements well.

**THANK YOU**



## APPENDIX A

# CAPITAL STACK FOR INFRASTRUCTURE PROJECTS

WHAT COMBINATION OF EQUITY-DEBT?

# THE CAPITAL STACK

- Two general categories of funds for financing: Equity and Debt
- Both have ranked subdivisions or components.
- **Equity**, includes:
  - Subordinated debt
  - Preferred equity
  - Common equity
  - Invisible equity (next slide)
- **Debt**, includes:
  - Senior debt
  - Subordinated debt
  - Mezzanine debt

# IN ANY FINANCING, THERE IS ALWAYS EQUITY

- **Public finance (including public debt):** equity is provided by taxpayers or customers (if charges are made for goods and services).
- **Government guarantees:** equity is provided by (some or all) taxpayers or through increased usage charges.
- **Mutual arrangements and not-for-profits:** equity is in the form of reserves, retained earnings or some similar buffers (there is no 'equity capital' entry on the balance sheet).
- Taxpayers, customers, users, mutual entities and not-for-profits are often (usually) not afforded equity rates of return.



# THE TRADE-OFF

- **The over-all cost of financing is constant**, whatever the mix of debt and equity and whatever the mix of public and private finance.
  - Debt finance is less expensive than equity finance due to the senior claim of debt on cash flows and assets.
  - Lower debt, means less risk and lower cost of funds.
  - But that also means more and riskier equity at a higher cost of funds.
- The foregoing assumes away the complexities of:
  - Taxes.
  - Transaction costs
  - Principal agent and other asymmetric information costs.
  - Incomplete contract costs and complexities.



Inducing banks to participate

## **APPENDIX B**

# INDUCING BANKS: ADDITIONAL EQUITY

- Equity:
  - Combinations: Government and private equity: PPPs (more later).
  - Private equity funds.
  - Targeted taxation arrangements.
  - User contributions, including through tolls, tariffs, fees, etc.
- Numerous Shari'ah-compliant contracts work well in this category.
  - Musharaka.
  - Quadratic partnerships (more later).
  - Mudaraba.
  - Ijara (various lease-leaseback, sale-leaseback, etc)

# INDUCING BANKS: ADDITIONAL FINANCE

- Debt:
  - Combinations of Government and private equity: PPPs (more later).
  - Multi-laterals.
  - Insurance.
  - Government bond funding.
  - Government guarantees of debt, usage, off-take, etc.
  - Tax subsidies.
  - Capital market issuances for some portion of total debt.
    - Banks may purchase sukuk because of slightly increased liquidity (combine initiatives with sukuk markets).

# INDUCING BANKS: ADDITIONAL FINANCE

- Debt (continued):
- Numerous Shari'ah-compliant contracts work well here.
  - Sukuk.
  - Istisna'a and istisna'a - ijara.
  - Murabaha.
  - Diminishing musharaka.
  - Guarantees.



# QUADRATIC PARTNERSHIPS

CLASSICAL PRINCIPLES  
CONTEMPORARY TRENDS

APPENDIX C

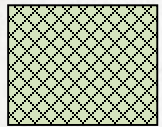
# QUADRATIC PARTNERSHIPS

- A Shari'ah-compliant structure that we have used for outpatient medical facilities, hospitals and real estate projects.
- Considerable potential for infrastructure financing.

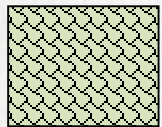
# PARTNERSHIP AGREEMENTS GENERALLY



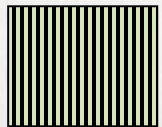
Management



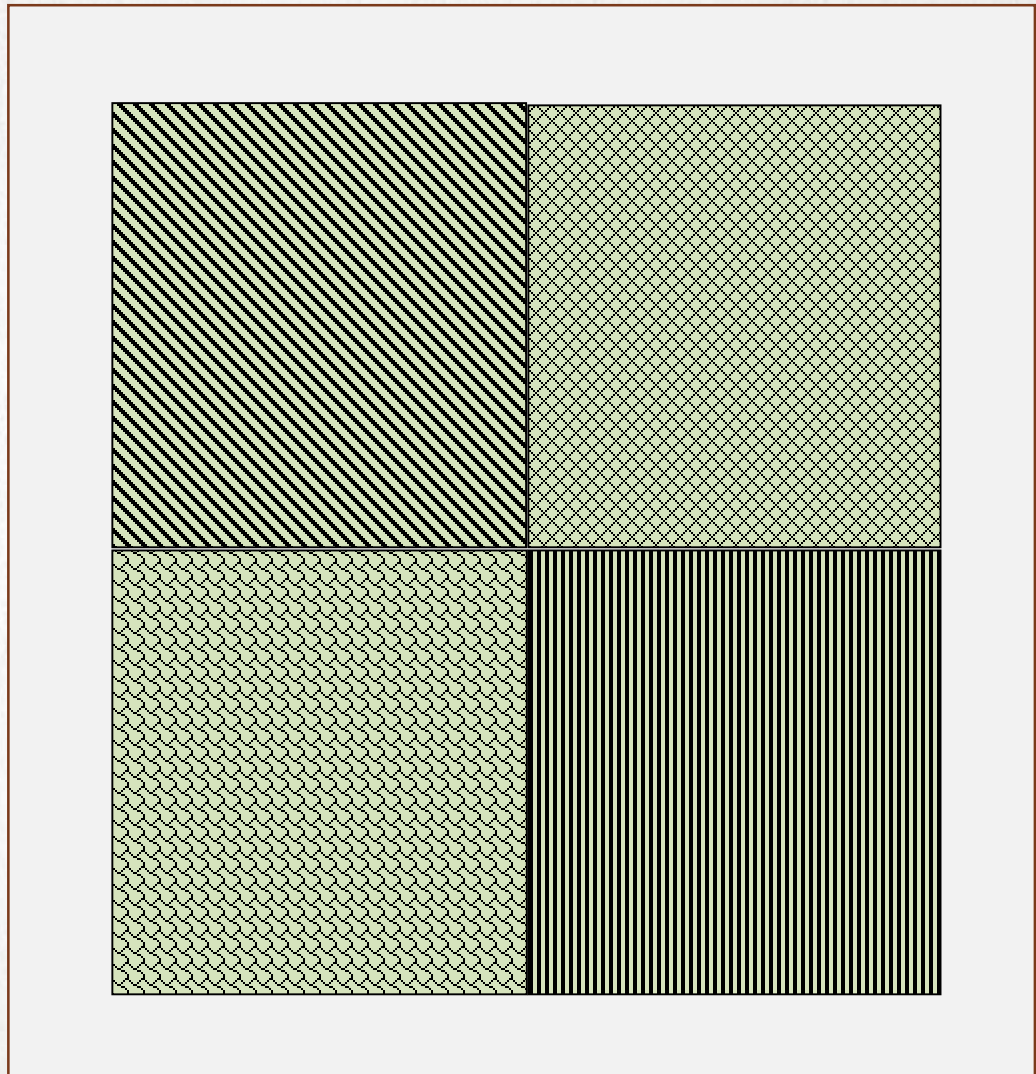
Responsibilities



Distribution



Tax



# QUADRATIC PARTNERSHIP

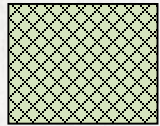
- Categories of provisions:
  - Management provisions
  - Responsibility allocation provisions
  - Profit and loss distribution provisions
  - Tax matters provisions
- Conception:
  - convert these four sets of provisions
  - into four separate Shari'ah-compliant agreements
  - in a manner that preserves (if desired) the partnership characterization for tax and secular law purposes.
- First step: disaggregate four sets of provisions into four components.



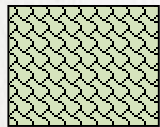
# QUADRATIC PARTNERSHIP



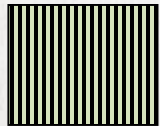
Management



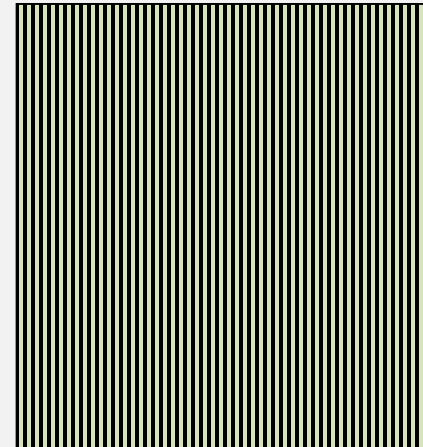
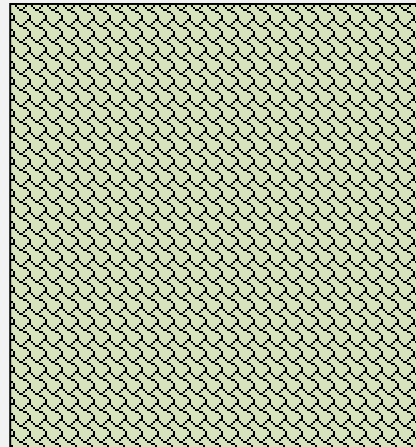
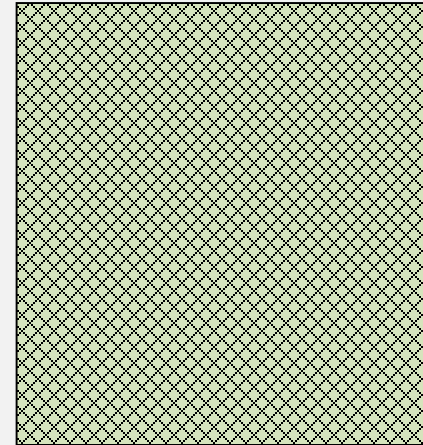
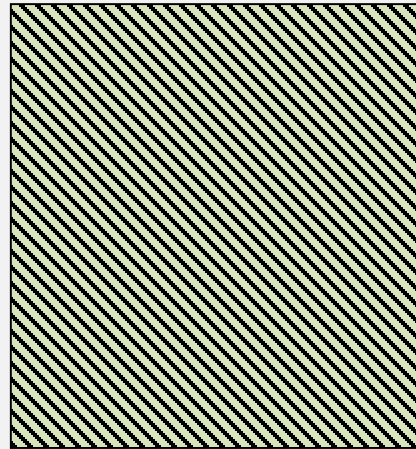
Responsibilities



Distribution



Tax



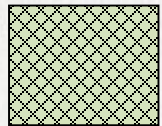
# QUADRATIC PARTNERSHIP

- Second step: create four Shari'ah-compliant agreements.

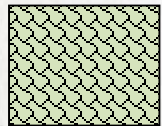
# QUADRATIC PARTNERSHIP



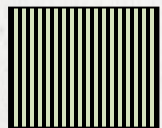
Management



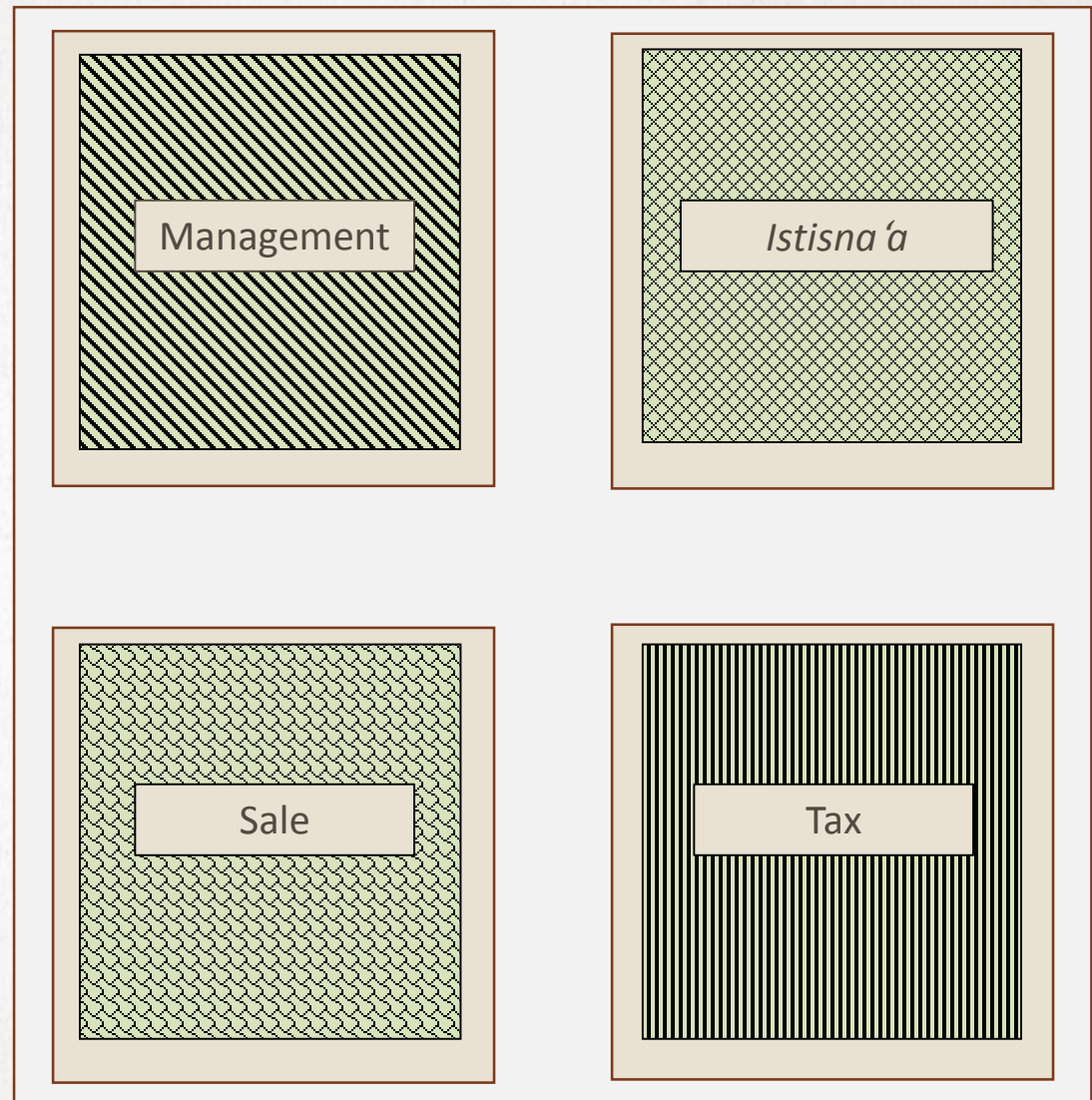
*Istisna'a*



Sale



Tax



# QUADRATIC PARTNERSHIP: EXPERIENCE

- Transactional experience:
  - Relatively straight-forward process.
  - Can be done with fidelity to economic, financial and risk allocation parameters.
- Adaptable under differing tax, regulatory and secular law regimes in numerous jurisdictions.
- Adaptable where either a secular partnership is desired or it is not desired.



# QUADRATIC PARTNERSHIP: EXAMPLES

- Where existing structure cannot be modified to accommodate subsequent Shari'ah-compliant investment.
- Where legal requirements mandate a specific type of structure that is not compatible with Shari'ah structures (e.g., due to tax-exempt financing).
- Where Shari'ah-compliant investors desire no visibility in the transaction.
- U.S. health care facility financings are an example.

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