


Infrastructure and Natural Resources Department

Assessing the Financial Viability of Infrastructure Projects

September 2014

Istanbul

The World Bank Group

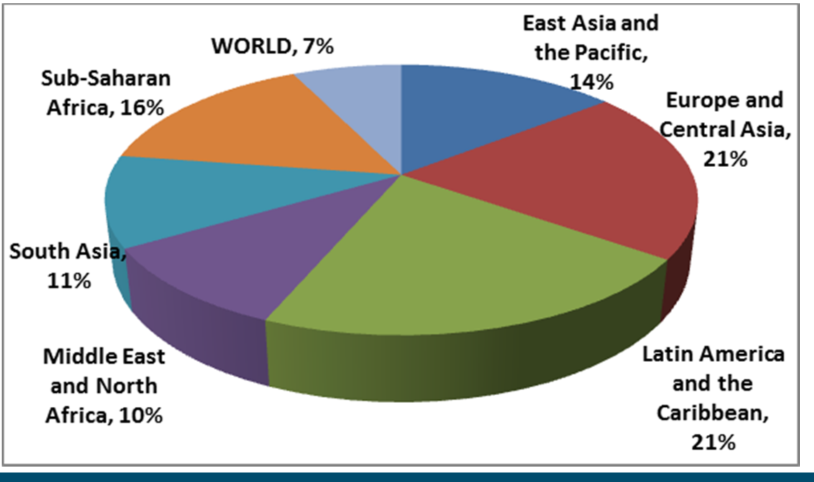
	IBRD International Bank for Reconstruction and Development	IDA International Development Association	IFC International Finance Corporation	MIGA Multilateral Investment and Guarantee Agency
	Est. 1945	Est. 1960	Est. 1956	Est. 1988
Role:	To promote institutional, legal and regulatory reform	To promote institutional, legal and regulatory reform	**To promote private sector development**	To reduce political investment risk
Client:	Governments of member countries with per capita income between $1,025 and $6,055.	Governments of poorest countries with per capita income of less than $1,025	**Private companies in member countries**	Foreign investors in member countries
Product:	- Technical assistance - Loans - Policy Advice	- Technical assistance - Interest Free Loans - Policy Advice	**- Equity/Quasi-Equity - Long-term Loans - Risk Management - Advisory Services**	- Political Risk Insurance

Shared Mission: To Promote Economic Development and Reduce Poverty

Over $97 Billion Invested Since 1956

- Largest multilateral source of loan/equity financing for the emerging markets private sector
- Founded in 1956 with 184 member countries
- AAA-rated by S&P and Moody's
- Equity, quasi-equity, loans, risk management and local currency products
- Takes market risk with no sovereign guarantees
- Promoter of environmental, social, and corporate governance standards
- Resources and know-how of a global development bank with the flexibility of a merchant bank
- EMENA accounted for 31% of IFC's commitments in FY14 while Infra and Natural Resources accounted for 27% of commitments

FY 2014 Investments by region



FY2014 highlights

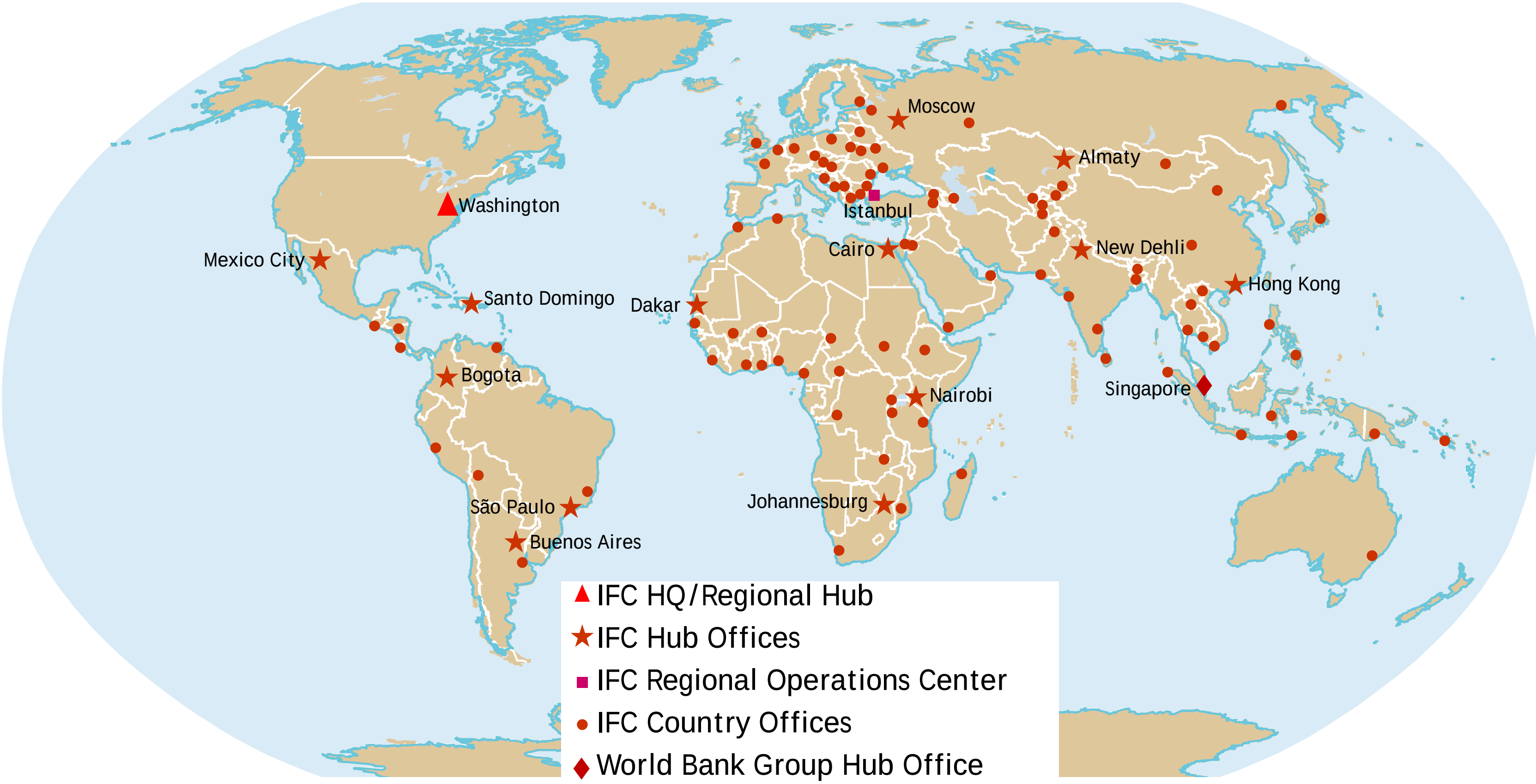
Portfolio*	$51.7 billion
Committed	$17.3 billion
Mobilized	$9.3 billion
# of Companies	2110
# of Countries	147

[1] *IFC's account only*

[2] *Including World Region*

IFC's Global Reach to 104 country and regional offices worldwide

3,763 *staff of which* ***56%*** *are outside of Washington*



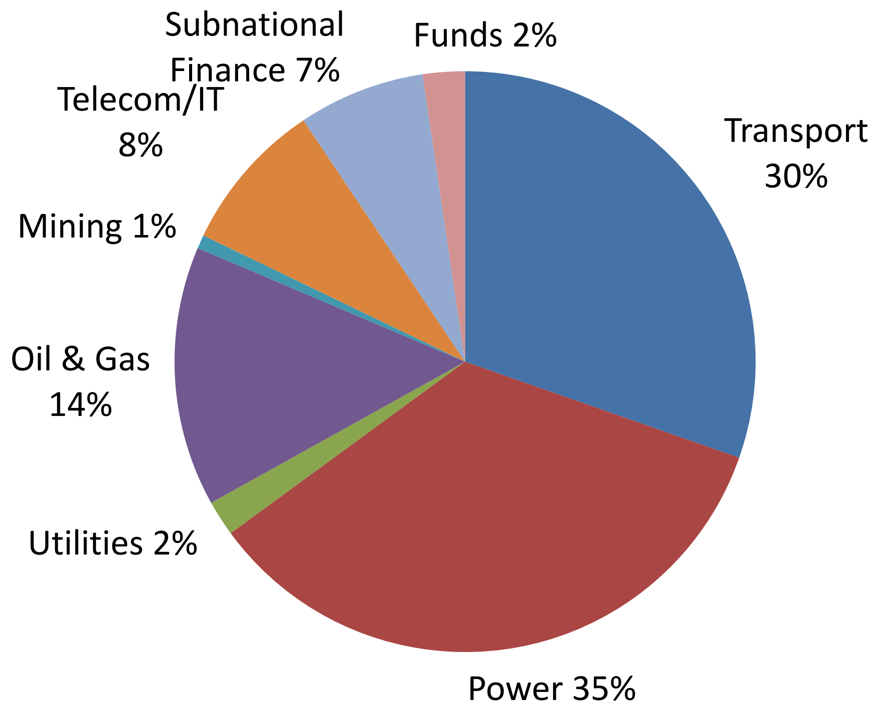
IFC has gone through a structural change in 2010, moving its EMENA management team to Istanbul from Washington DC. Istanbul is the Operating Center for EMENA region.

•IFC Infrastructure and Natural Resources in EMENA

Infrastructure and Natural Resources Overview

- IFC's EMENA Infrastructure and Natural Resources (INR) commitment volumes averages around US$1 bn per year
- In the EMENA region, IFC's outstanding INR portfolio is around US$2.9bn. Close to 16% of our portfolio is equity
- IFC is active in all infrastructure sectors in the region. Power and Transport are the largest exposures at 35% and 30% of our outstanding portfolio

EMENA Portfolio Breakdown by sectors Outstanding Portfolio - June 2014



Transport includes a number of Ports:
Asyaport, Mersin and TCE Ege in Turkey as well as HPC Ukraine

Assessing Financial Viability

Assessing Port Projects: 1-2

1. **Market and Competition:**
   - Origin/Destination or Transhipment
   - Greenfield or Existing Facility
   - Landside location relative to hinterland market (if O/D) and competing facilities
   - Location versus major sea lanes
   - Realistic traffic and tariff assumptions

     (esp. during ramp up and if changing traffic flows)
   - Correlated with economic growth and tariff regime

2. **Sponsors:**
   - Management capacity and financial strength to implement the Project
   - Technical know-how, track record and local knowledge
   - Including ability to manage relations with government and community and implement large construction projects on time and budget
   - Management technical assistance agreement (if applicable)

Assessing Port Projects: 3-4

3. Technical Considerations:

- Depth
- Quay length
- Efficiency
- Types and quantities of equipment (e.g. STS vs MHC)
- Port layout, capacity and potential for expansion
- How familiar are Customs with this type of operation?

4. EPC Contract:

- Contract should define the scope and quality of the works, implementation timeline, mechanisms to deal with cost overruns, changes in scope, delays, defects and liabilities
- Evaluate track record and financial strength of the contractor plus the selection process, level of contingencies, performance bonds, liquidated damages, etc.

Assessing Port Projects: 5-6

5. Environmental and Social Considerations:

- Environmental Impacts (especially if dredging and/or land reclamation)
- Resettlement (if applicable)
- Impact on existing labor force (if applicable)

6. Insurance Considerations:

- Is the Insurance Program appropriate and adequate?

Assessing Port Projects: 7

7. Legal Considerations:

- **Is the port concessioned or on private land?**

- **Legal framework varies significantly between countries**
  - Need to assess underlying legal and regulatory framework

    => "Fatal flaw analysis" on legal framework (and draft concession documents)

- **Appropriate security package:**
  - Mortgage
  - Pledge of shares
  - Assignment of termination compensation
  - Assignment of insurance

Assessing Port Projects: 8

8. If a Concession – Part 1:

- **Was it awarded in a transparent process?**

- **Quality of the Concession Agreement:**
  - Termination provisions
    - Who, when, why and compensation
  - Force Majeure provisions
    - Definition plus rights and obligations and adjustment mechanisms

- **Lenders Direct Agreement covering:**
  - Assignment of termination compensation
  - Step-in rights
  - Reasonable Cure Periods for events of default under the concession

Assessing Port Projects: 8 (continued)

8. If a Concession – Part 2:

➢ Tariffs:

- Some tariffs likely to be regulated (e.g. container handling fees)
- Generally approved by regulator or concession counterparty
- Sometimes (some) tariffs are based on market conditions (eg. storage tariffs)
- Tariff regime should be clearly defined and "fair" – transparent, independent adjustment process
- Especially if direct subsidies /transfers (such as "availability" payments) are involved

➢ Operational Performance Targets (if applicable):

- Can include:
    - Deadlines to complete construction;
    - Expected capacity and/or volume targets
    - Quality standards during operation
    - Legal, environmental and safety compliance
- Are targets clear and achievable and what are the consequences of non performance

Case Study: Mersin International Port

Mersin International Port - 1

Overview

- Main existing port in SE Turkey
- Handles both Containers and General Cargo
- Largest multi purpose port by total throughput
- Concessioned in 2007 for 36 years
- Owned 50%/50% by Akfen Holding and PSA, a global port operator

Container Terminal Services

- Loading and unloading of coı storage of containers and ha within terminal premises
- Capacity: 1.8 m TEU of contả
- Over 20 container lines are c

Conventional Cargo Services

- Loading, unloading, handling and storage of conventional cargo (general cargo, dry bulk, liquid bulk) and Ro-Ro

Marine Services

- Pilotage, tugboat services, mooring, unmooring

Mersin International Port - 2

- Excellent inland road and rail connections both to Anatolia and also east into Syria and Iraq
- Long standing relations with shipping lines, logistics companies, customs brokers etc.
- Competitive quay depth and length
- Well run terminal operations

Mersin International Port - 3

- In August 2013, issued a $450 mn 7-year Eurobond issue
- First single asset Eurobond issued by a corporate in Turkey's infrastructure sector
- IFC, EBRD and Clifford Capital Cornerstone Investors
- BBB-/Baa3 Rated
- Objectives:
  - Refinance existing debt
  - Release cash trapped in existing financial structure
  - Raise capital for expansion

Mersin International Port - 4

1) Market and competition:

   Main incumbent terminal in SE Turkey, excellent inland connections

2) Sponsors:

   PSA and Akfen – world class port operator and a highly reputable Turkish group

3) Technical Considerations:

   Competitive quay depth and length, state of the art equipment

4) EPC Contract: Reputable, experienced contractor
5) Environmental and Social Considerations: Mitigated
6) Insurance Regime: Acceptable
7) Legal Framework: Concession
8) Concession: Acceptable

Proceed!

Thank you!

Ian Twinn
Head of Portfolio
Infrastructure and Natural Resources
Buyukdere Caddesi 185
Kanyon Ofis Blogu, Kat 19
34394 Istanbul Turkey
Tel: +90 212 385 2530
E-mail: itwinn@ifc.org

Annex 1: Infrastructure Bonds

Why Infrastructure Bonds?

Up to $110 bn of infrastructure investment planned in Turkey over the next 5 yrs

- Increasing demand for infrastructure
- Reduction in bank appetite for providing long-term funding
  - (Basel III plus liquidity constraints post the financial crisis)
- Increased Institutional Investor (pension funds, insurance companies, etc) interest in infrastructure debt given its stable, long-dated cash flows (plus relatively advantageous treatment of debt versus equity under Solvency II)

  Examples: AXA (Europe's second largest insurer) allocating EUR 5 bn over 5-years

  Blackrock hiring a management team to focus on infrastructure debt in Nov 2012

Types of Bond

- Corporate Issue
  - Issue is done at holding company level with proceeds down streamed to projects
- "Project Bond"
  - Proceeds of the issue are used to finance or refinance a specific infrastructure project
  - Can be thought of as a form of Asset Backed Security
- Can be Listed or Private

Advantages of a Bond for the Issuer

- Access a new investor base

  (Pension funds, insurance companies, etc)

- Lengthen maturity structure of debt

  (Bullet payments typical on corporate bonds)

- Create a benchmark for pricing other facilities

  (Other debt for corporate loans or parallel loan tranches)

- Covenants and reporting requirements typically lighter

- Information provision can be more organized

  (All investors should receive the same information)

- Issuance Process can be “industrialized” as individual investors do not negotiate terms

Disadvantages of a Bond for the Issuer

- Exposed to market risk during the closing period
  - Extensive preparatory work required but then exposed to the market “being open” at issuance
- Relationship with investors is more remote
  - Investors may be anonymous and/or transitory
  - Harder to get significant waivers/amendments given a more diffuse investor group
- Bullet feature creates refinancing risk or inefficient cash build up in later years (can be managed through a call feature with a make whole provision)

Challenges of a Bond for the Issuer

- Extensive and time consuming preparatory work required:
  - Typically issue is rated Rated
  - Need to select an investment bank(s) to lead the transaction
  - Information Memorandum needs to be prepared
  - Terms and Conditions need to be agreed with lawyers/lead arranger
  - Authorization from the Capital Markets Board + registration with Central Registry Agency etc…
- Monolines no more
- Limited window to issue (eg. till financials "stale")
  - Road show
- Ongoing reporting requirements and rating requirements

IFC's Participation in Bond Transactions - 1

- IFC has always been active in global capital markets markets:
  - Approximately $37 bn of Liquid Assets on balance sheet for AAA rating
  - Also active issuer (e.g. $1.3 bn of TRY IFC Eurobonds issued 2010-2013)

- Increasingly active purchaser of EM bonds:
  - To support capital market development
  - Finance projects

IFC's Participation in Bond Transactions - 2

- IFC invests in EM Bonds for its own account alongside other investors
  - (in USD, EUR, TRY, etc.)
- IFC's participation signals to other investors IFC's comfort about long-term relationship with the issuer
- IFC's participation decreases the total amount to be sought in the market
- IFC can also provide a Partial Credit Guarantee of Principal and Interest thereby increasing the Bond's rating and/or tenor

IFC's Participation in Bond Transactions - 3

- IFC can expedite processing (eg 45 days) but still need internal approvals

  Engage early!

- Sign an Mandate Letter (and, if required, Non Disclosure Agreement)

- IFC Policy Issues (E&S, AML, etc) covered in a Side Letter or embedded in into the Terms and Conditions or Trust Agreement/On Loan Agreement

- Disclosure can be delayed until after the issue is public

Annex 2: IFC Products and Process

International Finance Corporation

International Finance Corporation, IFC, is the private arm of the World Bank Group dedicated towards the promotion of private sector participation in emerging countries.

Our vision is that people should have the opportunity to escape poverty and improve their lives.

Our values are excellence, commitment, integrity, and teamwork.

IFC's Purpose is to create opportunity for people to escape poverty and improve their lives by

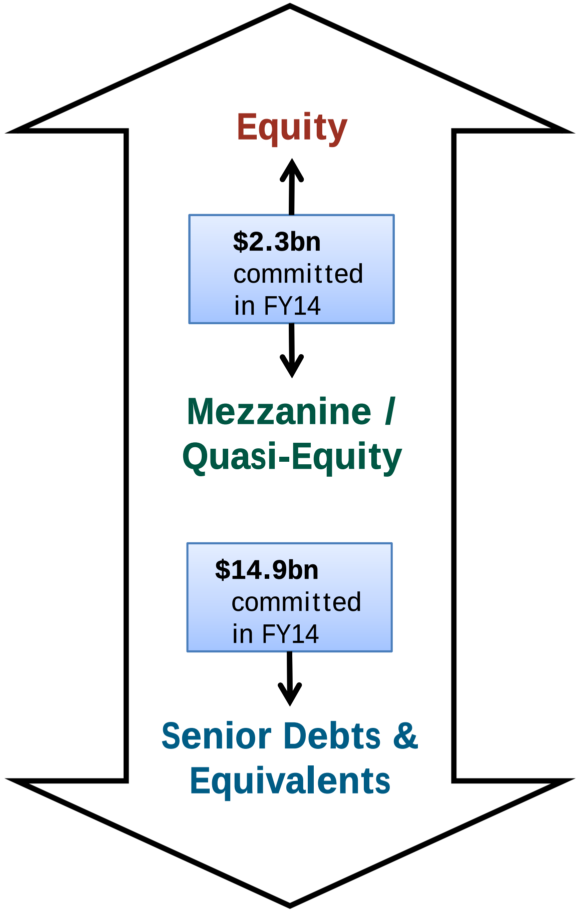
- Promoting open and competitive markets in developing countries
- Supporting companies and other private sector partners where there is a gap
- Helping generate productive jobs and deliver essential services to the underserved
- Catalyzing and mobilizing other sources of finance for private enterprise development

To achieve its Purpose, IFC offers development-impact solutions through firm-level interventions (direct investments, advisory services, and the IFC Asset Management Company); standard-setting; and business enabling environment work.

IFC's Three Businesses

IFC Investment Services	IFC Advisory Services	IFC Asset Management Company
❑ *Loans* ❑ *Equity* ❑ *Other forms of financing* ❑ *Resource Mobilization*	❑ *Advice* ❑ *Problem-solving* ❑ *Training*	❑ *Wholly owned subsidiary of IFC* ❑ *Private equity fund manager* ❑ *Invests third-party capital alongside IFC*
$56.5 b portfolio	**$200 m per year**	**$4.5 b under mngt**

IFC Offers a Wide Range of Financial Products



- Typically 5-15% shareholding. Cannot exceed 20% of total equity.
- Long-term investor, typically 6-8 year holding period, though no formal tenor constraints

- Subordinated loans
- Income participating loans
- Convertibles
- Other hybrid instruments

- Senior Debt (corporate finance, project finance)
- Fixed/floating rates, US$, Euro and local currencies available
- Commercial rates, repayment tailored to project/company needs
- Long maturities: 7-15 years, appropriate grace periods tailored to cash flow needs
- Mobilization of funds from other lenders and investors, through financings, syndications (IFC "B" Loan structure), and guarantees

IFC Investment Services: Infrastructure & Natural Resources

- Current portfolio: $13.9 bn, $2.3 bn of which is equity investments
- FY14 investments: $3.5 bn, including $0.6 bn in mobilizations
- Relationships with more than *300* global, regional and local clients in the infrastructure space (and more than 50% of investments done with existing clients)
- Infrastructure practice group established in early 1990s
- Dedicated team of 136 investment professionals; 12 technical and regulatory experts and 4 economists located in 35 country offices and in Washington. In-house environmental, social and legal experts.

Power	Utilities	Transport Infrastructure	Transport Services	Natural Resources	Telecom, Media, Tech
• Generation, thermal and renewable • Transmission • Distribution • Integrated Utilities	• Water, Waste • Privatized Public Services	• Airports • Ports • Roads • Railroads	• Logistics • Shipping • Airlines • Rolling Stock	• Oil & Gas • Gas Distribution • Mining • Pipelines • LNG	• Broadband • Mobile • Data Centers • E-banking

IFC's Investment Parameters

Commercially Sound	• IFC invests exclusively in for-profit projects and charges market rates for its products and services
Market Catalyst	• IFC generally finances no more than 25-50% of total project cost • Never the largest shareholder, typical stake up to 20% • Typical ticket size $20-50m, but can go to $100m + • Able to mobilize additional debt (B loan program) and equity funds (AMC)
Long-term Horizon	• IFC invests for the medium-to-long term
Environmentally & Socially Responsible	• Each investment assessed for E&S risks by in-house team of experts, and action plan put in place to mitigate risks • Increasingly relevant for clients, namely land acquisition, carbon footprint, community buy-in • Facilitates debt raising (Equator Principles)
Corporate Governance	• Detailed corporate governance assessment carried out (dedicated internal resources) • Work on governance issues with companies pre-IPO and those already listed • Roster of quality independent directors • Facilitates exit, especially in public markets

How We Finance Projects

•Project Type	•IFC Investment
•Greenfield, total cost less than $50 million	•Up to 35% of project cost for IFC's account
•Greenfield, total cost more than $50 million	•Up to 25% of project cost for IFC's account
•Expansion or rehabilitation	•Up to 50% of project cost

- Umbrella for participants in IFC's syndication program: IFC lender of record, immunity from taxation and provisioning requirements.
- IFC's total financing (for its own account) must be less than 25% of total company capitalization

IFC's Value-Add in Transactions

From Patient Equity to Long Term Debt	Sector Expertise	Country Risk Mitigation	Environmental & Social Risk Management	Advisory Services
DEBT ▪ Long Maturities Tailored to Project Needs ▪ Fixed/Floating Rates, Local Currencies ▪ Flexible Amortization Profile ▪ Syndication/Mobilization SUB-DEBT ▪ Terms tailored to meet project needs EQUITY ▪ Up to 20% in project or company ▪ On selective basis, start-up equity/co-developer under Joint Development Agreement	▪ Deep sector knowledge gained from experience ▪ In-house Engineers: can offer technical advice and consider new technologies ▪ In-house Market Expertise ▪ In-house Regulatory Expertise: Can assess and structure for Regulatory Risk	▪ Government Relations ▪ Neutral broker Role ▪ World Bank Synergies	▪ Advice on Environmental and Social Best Practices ▪ Equator Principles Modeled after IFC Standards	▪ Access to Donor Funding/Con-cessionary Support Coordination ▪ Programs to assist client, including: Local Supplier Development, Corporate Governance, Community Development Funding ▪ Carbon Finance

IFC's Project Cycle

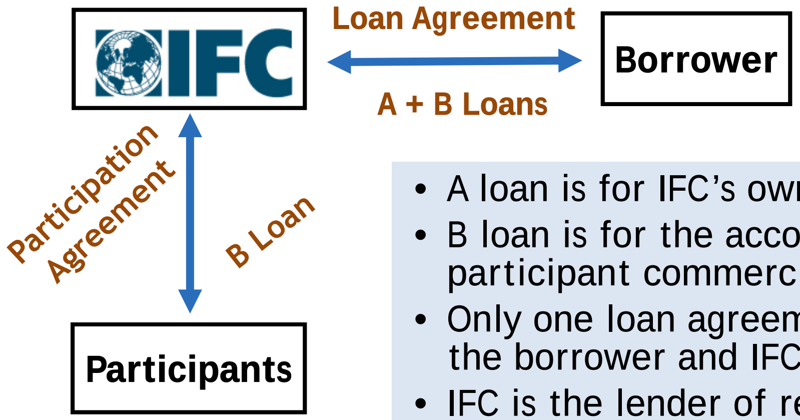
Early Review	Due Diligence	Disclosure	Commitment and Disbursement	Monitoring
Client needs determined	Assessment of business opportunities and risks	Disclosure of environmental and social information	Negotiation and agreement of principal terms	Annual review of project performance
Assessment of project's impacts and development contributions	Analysis of environmental and social opportunities and risks	Opportunity for public comment	Board approval	
Management committee approval	Appraisal		Signing of legal documents	
Mandate letter	Credit committee approval		Disbursement	

We agree on a specific timeline to meet client's needs

IFC also works together with banks and investors to mobilize additional resources for projects

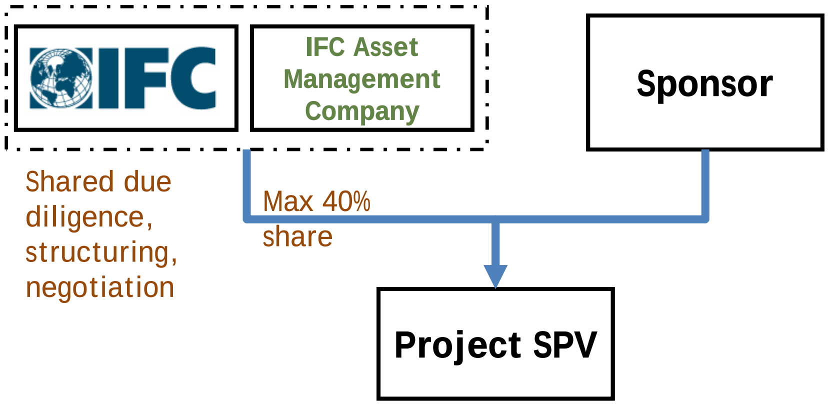
- IFC leverages its balance sheet by mobilizing additional capital from the market
- Total mobilization, including equity (Asset Management Company) and debt (syndication + parallel loan) was nearly US$5 billion in FY12

Debt Syndication

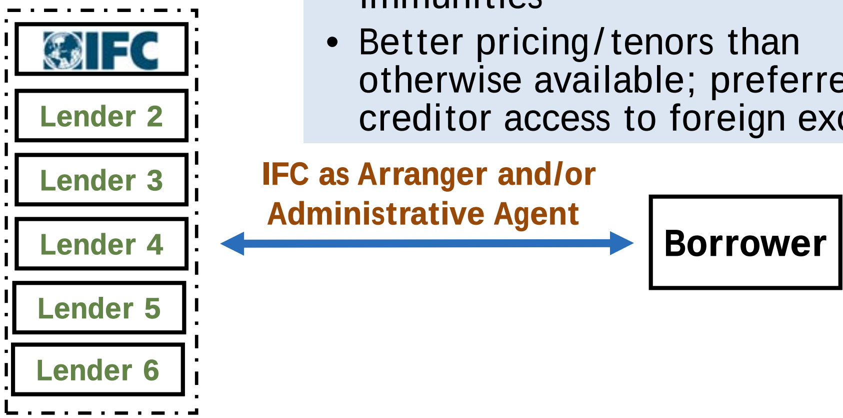


- A loan is for IFC's own account
- B loan is for the account of participant commercial banks
- Only one loan agreement signed by the borrower and IFC
- IFC is the lender of record for the entire loan (A+B)
- Structure allows participants to benefit from IFC privileges and immunities
- Better pricing/tenors than otherwise available; preferred creditor access to foreign exchange

Equity Mobilization



Parallel Loan



Three Products Available to Co-Invest with IFC

In Senior Loans

• TYPES OF IFC SYNDICATED LENDING

- B loan
- Parallel Loans
- Managed Co-Lending Portfolio Program

Type of Investor	Commercial Banks	Development Finance Institutions & Local Banks	Institutional Investors
Investment Process	Deal by Deal approach Independent credit approval	Deal by Deal approach Independent credit approval	Portfolio approach Full delegation to IFC
Deal Preferences	Follows Investor's own strategy and client relationships	Follows Developmental Mandate (DFIs) and/or own strategy	Follows IFC's strategy within pre-agreed investment criteria and portfolio concentration limits
Tenor (average final maturity)	FY12 6 years FY13 8 years	FY12 9 years FY13 10 years	Matching IFC's A Loan Tenor, similar to Parallel Loans
Documentation	B loan Participation Agreement	Common Terms Agreement Loan Agreement	Administration Agreement
Portfolio Rights	Voting	Voting	Follow IFC

IFC's Other Products and Services

Senior Debt
- On-lending
- Liquidity management
- Acquisition financing
- Warehousing facilities
- Syndicated loans

Structured Finance
- Partial credit guarantees
- Securitization
- Bond underwriting

Mezzanine Finance
- Convertible debt
- Subordinated debt
- Other Tier II instruments

Private Equity
- Common shares
- Preferred shares

Global Trade Finance Program
- $1 billion program
- Guarantees to issuing banks - 46 issuing banks in 24 countries - 92 confirming banks in 62 countries
- $579 million of issued guarantees in first 12 months

Advisory Services
- Corporate governance
- Risk management
- SME banking
- Housing finance
- Energy efficiency finance

Sustainable Finance
- Carbon finance
- Renewable energy
- Supply chain financing
- Corporate governance financing

PPP Transaction Advisory
- Public-private partnerships
- Ports, airports, airlines, power, water, sanitation, health, roads, education, mining, telecoms