


Asset-Backed Securities

**Project Financing**

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**Project Financing**

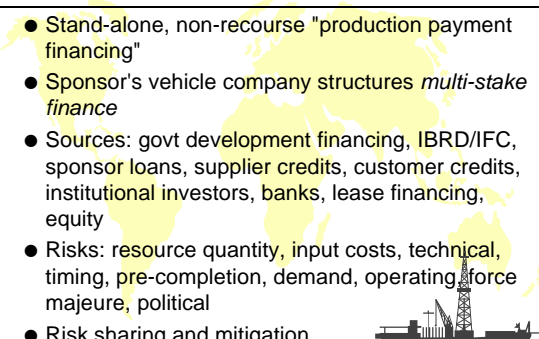
- Stand-alone, non-recourse, multi-stake, "production payment financing"
- Structure?
- Participants?
- Funding sources?
- Risks?



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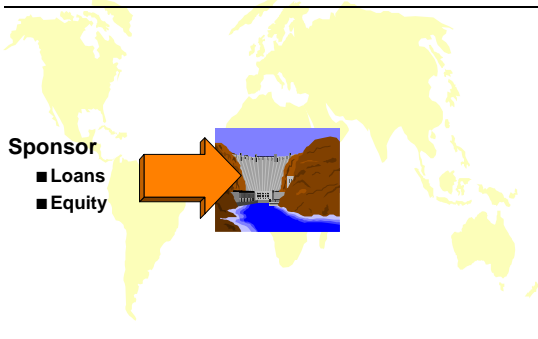
**Project Financing (Summary)**

- Stand-alone, non-recourse "production payment financing"
- Sponsor's vehicle company structures *multi-stake finance*
- Sources: govt development financing, IBRD/IFC, sponsor loans, supplier credits, customer credits, institutional investors, banks, lease financing, equity
- Risks: resource quantity, input costs, technical, timing, pre-completion, demand, operating force majeure, political
- Risk sharing and mitigation



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**Financing Sources**

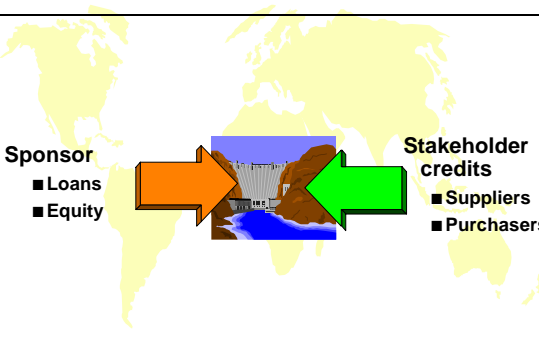


**Sponsor**

- Loans
- Equity

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**Financing Sources**



**Sponsor**

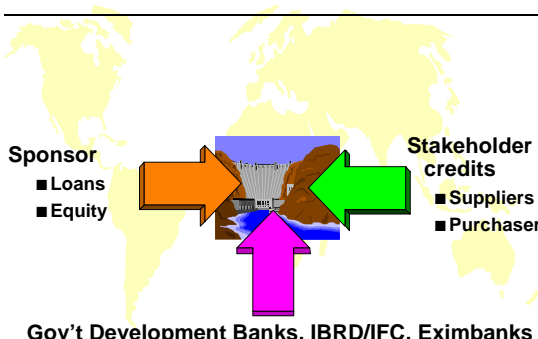
- Loans
- Equity

**Stakeholder credits**

- Suppliers
- Purchasers

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**Financing Sources**



**Sponsor**

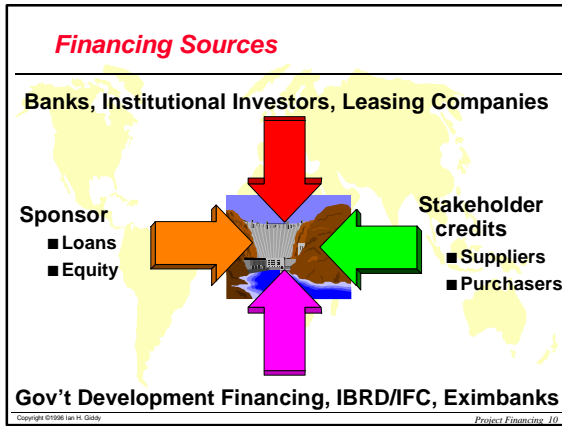
- Loans
- Equity

**Stakeholder credits**

- Suppliers
- Purchasers

**Gov't Development Banks, IBRD/IFC, Eximbanks**

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### Project Financing

**Definition**

- **Lending** to a single purpose entity for the acquisition and/or construction of a revenue-generating asset with limited or no recourse to the sponsor
- **Repayment** of the loan is solely from the revenues generated from operation of the asset owned by the entity
- **Security** for the loan
  - ◆ the revenue generating asset
  - ◆ all shares and interests in the entity
  - ◆ real property
  - ◆ all contacts, permits
  - ◆ authorizations, etc.; and,
  - ◆ all other instruments necessary for continuing project operations

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**Steps**

Project Identification & Resource Allocation

Risk Allocation & Project Structuring

Bidding & Mandating Contracts

Due Diligence & Documentation

Execution & Monitoring

Construction Monitoring

Term Loan Conversion & Ongoing Monitoring

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### Benefits of Project Financing

- Limitation of Equity Investment to Project's Economic Requirement - Enhanced Returns
- Risk Sharing and Diversification
- Accounting Treatment Preserves Corporate Borrowing Capacity
- Access to Long Term Financing
- Tax Benefits
- Political Risk Mitigation

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### The Risks

- Political
- Resource & input
- Technical
- Construction
- Legal
- Economic

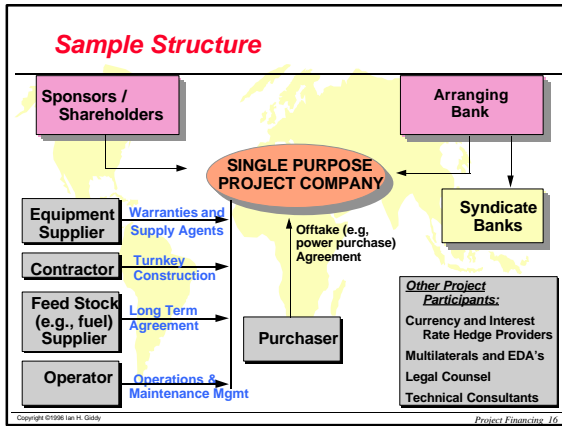
**Cost overruns**  
**Completion delays**  
**Mounting interest expenses**

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### Eurotunnel: The Risks and the Remedies

Category	Nature	Remedy
Political	Nationalization	Legal
	Govt interference	Treaty ratified
	Taxes & the like	
Technical	Process	Use existing technology
	Effect on completion	
Construction	Repairability	
	Delays	Use top experts
	Overruns	Performance bonds
Legal	Repairability	
	Access to control in default	Security interests
	Fire, injury, etc liability	Default defn
Economic	Price competition	Market studies
	Rail links	

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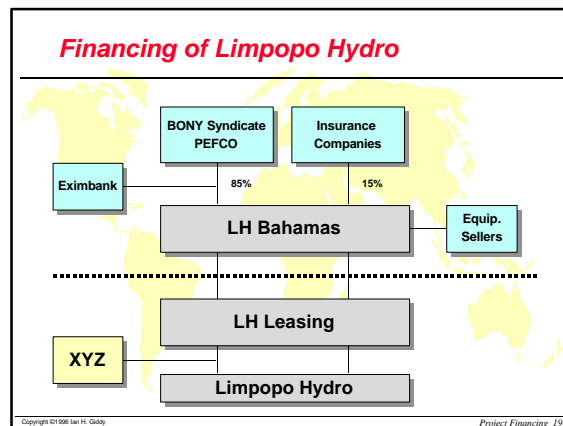


### Limpopo Hydro

- US\$302 million project for Zimbabwe and regional electricity supply
- Financing from
  - ◆ UK banks
  - ◆ US banks/PEFCO with Exim g'tee
  - ◆ US insurance co's
- 8.5-year lease financing

### Financing of Limpopo Hydro

Financing Source	Amount, US\$ equiv.	Currency	Guarantees	Rate
UK banks	\$15 million	£	XYZ	£LIBOR + 2.65%
US bank syndicate, then PEFCO	\$244 million	US\$	US Eximbank and XYZ	\$LIBOR + .30%, then T+0.75
Private placements with US insurance companies	\$34 million	US\$	XYZ	\$LIBOR + 2%, then T+4.00%



### Bakun?

- Cost: RM15 billion (\$6 billion)
- Completion: 2002?
- Capacity: 2,400 magawatts
- Contract for sale to Tenaga:
  - Years 1-5: 16.5 sen/kwh
  - Years 6-30: 17 sen/kwh

### Asset-Backed and Project Financing

- Collateralized debt
- Securitized loans
- Non-recourse project debt -- future payments rather than assets are the collateral in the SPV
- *Basic question: When is an asset worth more to investors outside the company than inside it?*

### Case Studies

- Ras Laffan Qatar/Korea
- YPF Argentina/Oil Trading Corp
- West Java Power Project

Questions:

- ◆ Who is the issuer?
- ◆ What assets does it have?
- ◆ What are the risks, and how are they handled?

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### Ras Laffan

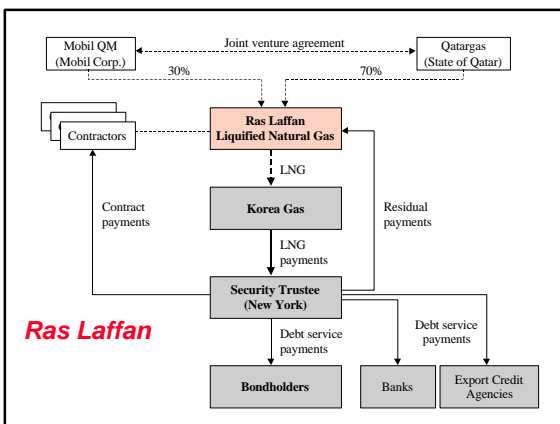
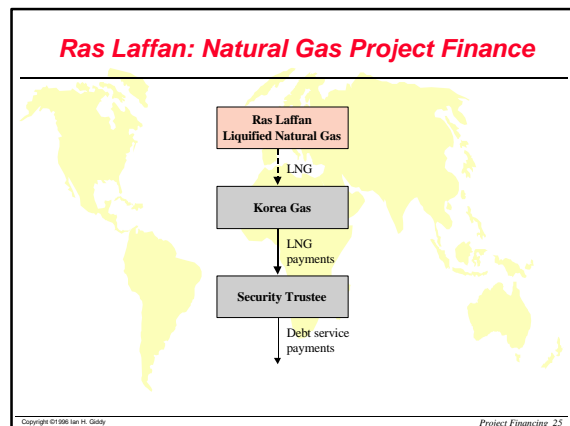
- Who is the issuer?
  - ◆ Ras Laffan LNG Co. Ltd. (Qatar)
  - ◆ But Security Trustee (IBJ) plays unusually major role
- What assets does it have?
  - ◆ Natural gas reserves;
  - ◆ LNG take-or-pay Sale and Purchase Agreement with Korea Gas;
  - ◆ Security Trust Agreement; Project Coordination Agreement; loan refund agreement, etc.

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### Ras Laffan

- What are the risks, and how are they handled?
  - ◆ Qatar/regional interference
  - ◆ Qatar legal system
  - ◆ Default on Agreements
  - ◆ Completion/timing
  - ◆ Operating
  - ◆ Economic (LNG market)

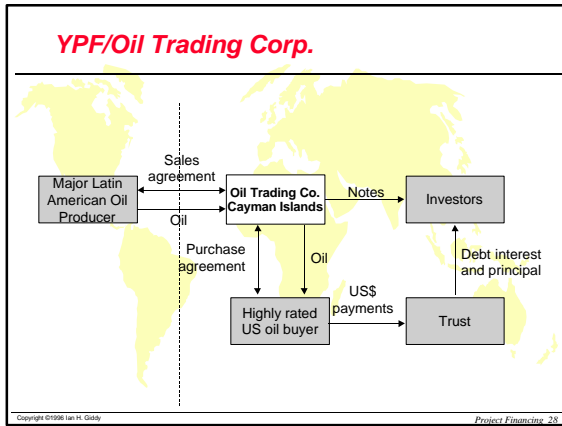
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### YPF Argentina/Oil Trading Corp

- Who is the issuer?
  - ◆ Oil Trading Corp, Cayman Is. SPV
- What assets does it have?
  - ◆ No oil, just purchase and sale agreements
- What are the risks, and how are they handled?
  - ◆ Seller: Political, production
  - ◆ Buyer: Credit, legal
  - ◆ Economic

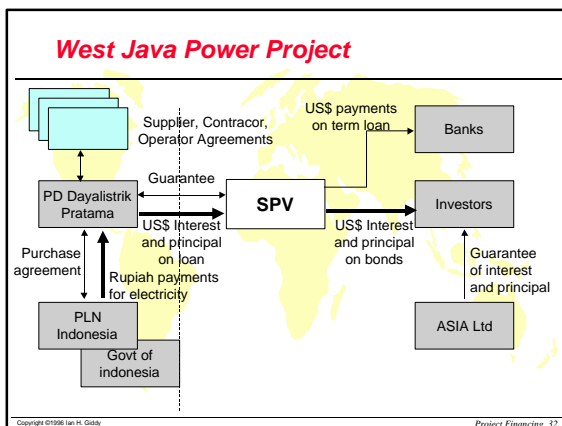
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- ### West Java Power Project
- Who is the issuer?
    - ◆ Pratama SPV
  - What assets does it have?
    - ◆ Loan to Dayalistrik Pratama
  - What are the risks, and how are they handled?
    - ◆ Political; Engineering; Coal supply; Default on Purchase Agreement; Economic
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- ### West Java Project Financing
- Project stage:
- Uncompleted coal-fired power plant, generating power
  - Has multi-year power purchase agreement with utility
  - Currently has bank financing
  - Sponsors seeking to extend financing and reduce cost by tapping the debt securities market
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- ### West Java Project Financing
- Proposal:
- Sponsor issues "infrastructure revenue bonds" to refinance bank loans
  - Bonds to be issued with 19 year maturities - longer than the term on the bank loans
  - May have fixed rate; distributed in US, Euro or domestic bond market
  - Int. and principal secured by contract revenues
  - May have 100% guarantee from monoline insurance company
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