

Financial Dimensions of Public Private Partnerships

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Outline

- Deciding on a PPP
- Structure: Financial Impacts
- Risk Transfer: Financial Impact
- Debt and Equity Providers: What do they want/need?
- Financial Negotiations: Key Issues
- Case Study



1. Deciding on a PPP: Financial Criteria

- Identifying the service/assets needed
- Operations and/or infrastructure investment
- Is public money available
- Value for Money calculations
- Public Sector Comparator



Is Public Money Available?

- Debt limits and/or annual budget constraints can impact ability of public sector to finance infrastructure projects directly
- But private sector must still be paid
 - From annual service charges that must come from the budget
 - From users for whom affordability can be an issue (essential services)



Value for Money

- Reduced life cycle costs
- Better allocation of risk
- Faster implementation
- Improved service quality
- Generation of additional revenue



Public Sector Comparator

- **Who will provide lower overall cost: public or private sector**
- **Factors:**
 - **Cost overruns: public sector history determines risk premium**
 - **Ongoing operating costs: private sector incentives plus initial competition favor private sector**
 - **Integrated design: can be used by both private and public sectors, but favors private sector**
 - **Time value of project can add to private sector benefit**
 - **Cost of capital: usually favors public sector**



Comparing Cost of Capital

- **Private sector**
 - Lenders charge risk premium based on level of risk transfers
 - Equity investors look for higher return than lenders
- **Public sector**
 - Based on normal borrowing costs – usually lower than private sector
 - Avoiding increased capital costs can help other borrowings – overlooked in comparator



A Simple Comparison

- Private sector has 3% higher cost of capital
- Public sector typically has 30% cost overrun
- 10 million project cost; 15-year contract

Public	PMT (5%, 15, 13,000,000)
Private	PMT (8%, 15, 10,000,000)

Public Sector costs approximately 7-8% more



2. Structuring Options: Financial Impact

Concession Model

- Private sector responsible for investment – higher interest costs
- Limited impact on public sector debt or budget
- Tariffs or other user charges may be impacted affecting affordability



2. Structuring Options: Financial Impact

PFI Model (Build Operate Transfer BOT/DBFO)

- Private sector responsible for financing – higher costs
- Service payments included in annual budget
- Risk transfer can affect debt limit treatment
- Tariffs or other user charges may be used to offset general budget impact



2. Structuring Options: Financial Impact

DBO (Design Build Operate)

- Private sector responsible for construction financing
- Public sector pays for project at completion with own financing – increases public sector debt and annual debt service costs
- Uses lower public sector cost of capital
- Ongoing operating costs from general budget



2. Structuring Options: Financial Impact

O&M Model

- Public sector responsible for financing investment which can increase debt
- O&M payments included in annual budget
- Easier termination
- Tariffs or other user charges may be used to pay O&M payments



Risk Transfer

- **Revenue/demand risk –**
 - Untested demand increases cost of capital with limited benefit
 - Demand can influence operating costs
- **Construction risk**
 - Lowers overall cost of project
 - Most acceptable to private sector
- **Foreign exchange risk**
 - May be mitigated by higher risk premium or local funding and sourcing
 - IFIs, export credit agencies and government

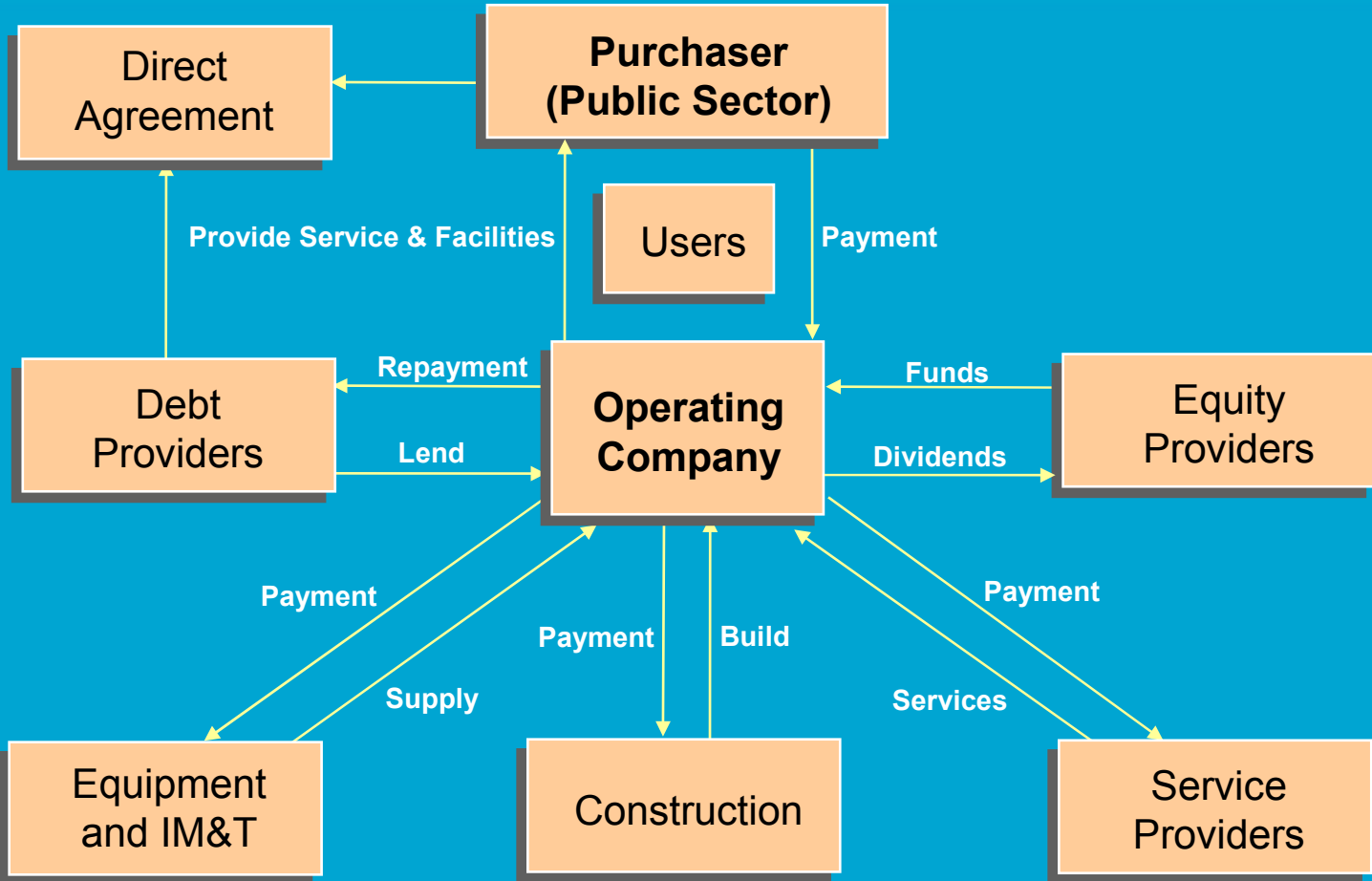


Risk Transfer (2)

- **Regulatory/Contractual Risk –**
 - in control of public sector
 - transfer significantly increases risk premium
- **Environmental Risk**
 - Usually transferred to the private sector
 - Requires due diligence to mitigate risk



3. Lenders/ Equity Providers: Typical PPP Financing Structure



Lenders: Major Source of Finance

- **Lenders in CEE typically IFIs and Commercial banks**
 - Bond investors, insurance companies, pension funds in developed markets
- **Borrowers can be public or private sector**
 - DBO (Design Build Operate) Model – public sector\
 - DBFO/BOT (Design Build Finance Operate) – private sector
- **Lenders provide review of project viability**



Lenders: What They Look For

- **Quality project**
- **Reliable cash flows**
 - appropriate risk allocations and payment mechanisms
- **Quality project partners**
 - project sponsors
 - equity investors
- **Robust financing – with contingency**
 - security
 - legal framework
 - debt covenants, ratios and reserve accounts



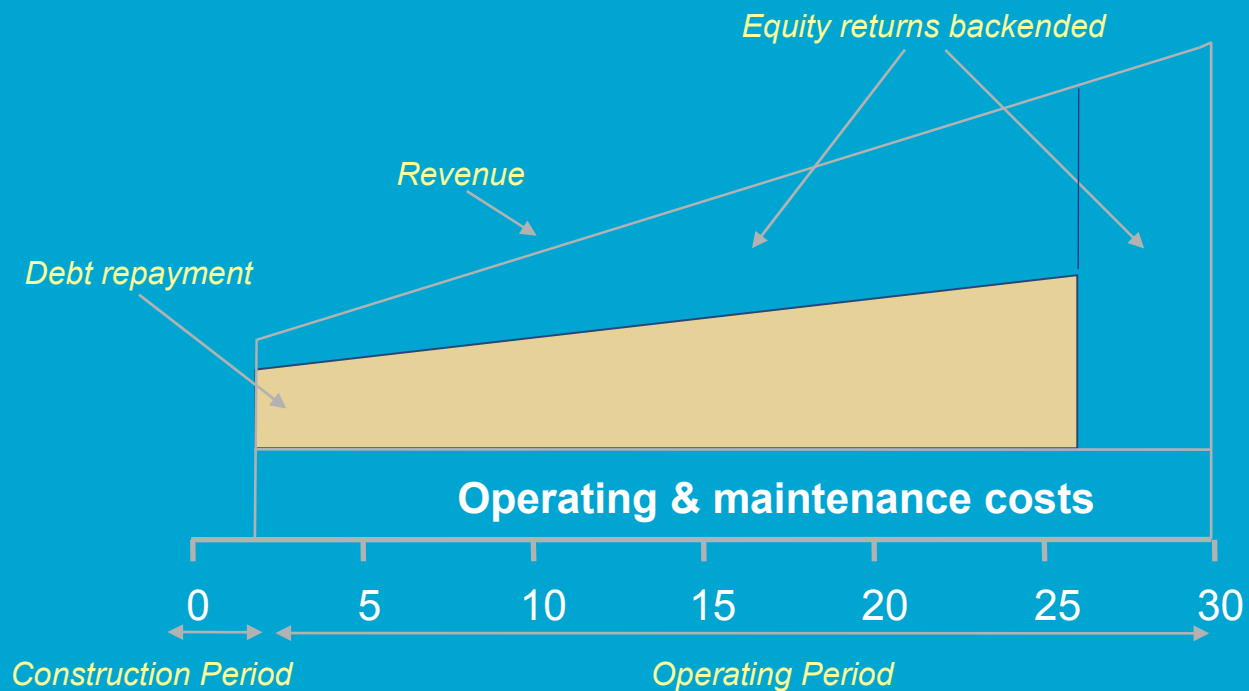
Lender Objectives

- Reduction of risk
 - Completion and performance guarantees from sponsor
 - Payment revenues from strongest counterparty in public sector
 - Repayment in event of termination
 - Step-in rights
 - Debt service coverage



Typical Payment Structure

Project funded by debt and equity

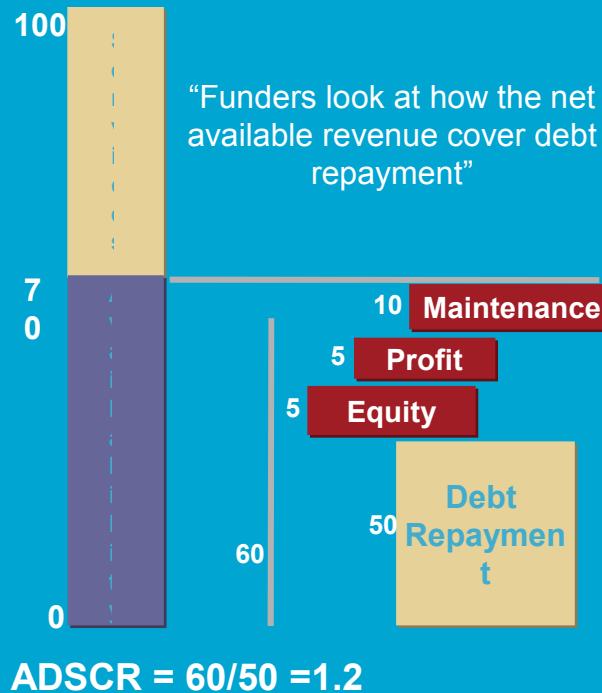


Lenders: Key Terms

- **Interest rate**
 - Fixed or variable
 - Based on risk of project and cash flow coverage
- **Tenor**
 - Based on risk of counterparty and length of contract
 - Tail – period after final debt repayment
- **Financial Covenants**
 - Debt service coverage
 - Restrictions on dividend payments to equity investors



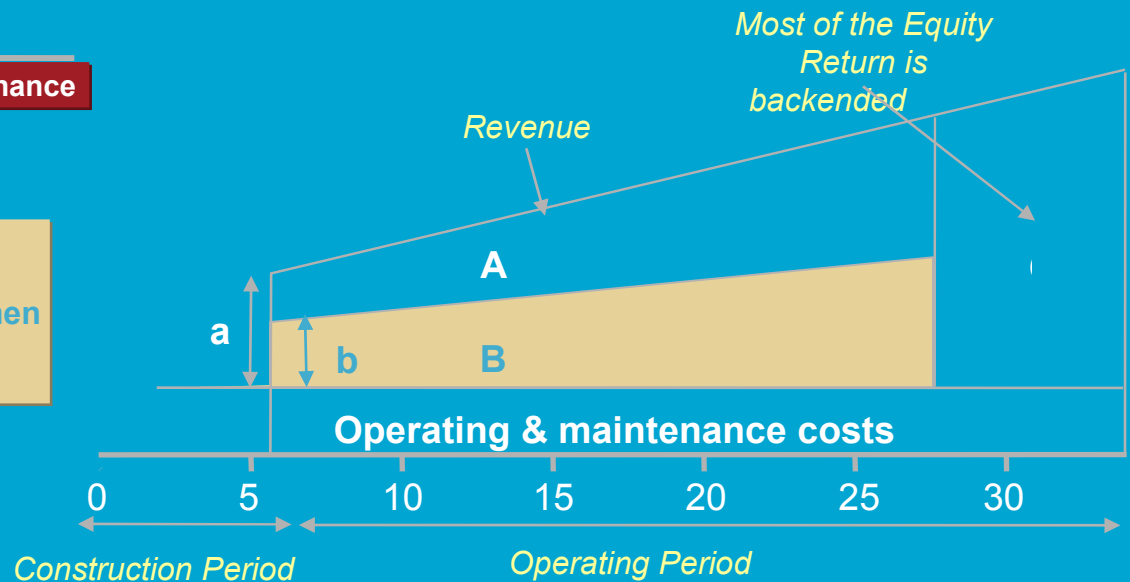
Repayments from Lender's View



This is done by consideration of annual ratios, loan life ratios and project ratios

$$\text{Annual Debt Service Cover Ratio} = \frac{a}{b}$$

$$\text{Loan Life Cover Ratio} = \frac{A+B}{B}$$



Equity Investors: What They Look For

- Efficient and transparent procurement process
- Appropriate political/legislative/commercial/financial environment
- Risk/return and upside



Equity Investors

- **Level of equity set by lenders and public sector partner**
 - As low as 1% in UK
 - 20-30% in CEE countries
- **Equity usually comes from project consortium**
 - Limited market for non-strategic investors
- **Cash flow projections provide for higher return than lenders**
- **Incentives for improving performance – limited upside potential compared with other investments**



Setting the Level of Equity

Pros and cons of public partner setting equity requirements

PROS	CONS
<ul style="list-style-type: none">• Protection against financial problems• Protects PPP benefits• Ensures strong private sector partners• Provides security to lenders	<ul style="list-style-type: none">• Higher cost of capital demanded by equity investors• Eliminates potential bidders



4. Financial Negotiations: Some Key Issues

Competitive bidding eliminates many negotiating points but some may remain

- Risk transfers – some may be unclear
- Step-in rights for lenders – lenders require ability to step into project in event of failure by project sponsors
 - Direct agreement with lenders
- Termination payments (for cause and not for cause)
- Refinancing: who gets the benefit



5. Case Study: Bucharest Water Concession

- 25-year concession for entire water and wastewater system in Bucharest
- International competitive bidding organised with the assistance of IFC
- Winner: Apa Nova Bucuresti owned by Vivendi Universal
- Needed financing for Crivina Water Treatment Plant



Case Study: Key Facts

- EBRD Loan size: €55.4 million
- DEG - co-financing: €18.4 million
- EBRD's portion of the loan to be offered to other banks for syndication
- 13 years maturity including a 3.5 year grace period
- Pricing: Euribor + Margin >400 basis points



Case Study: Key Facts (continued)

Financing plan

Financing	Financing Source	%
EBRD	55.0	34%
DEG	19.0	12%
IBRD Sub loan	5.0	3%
Internally Generated Cash Flow	48.0	30%
Equity	35.0	21%
Total	162.0	100%

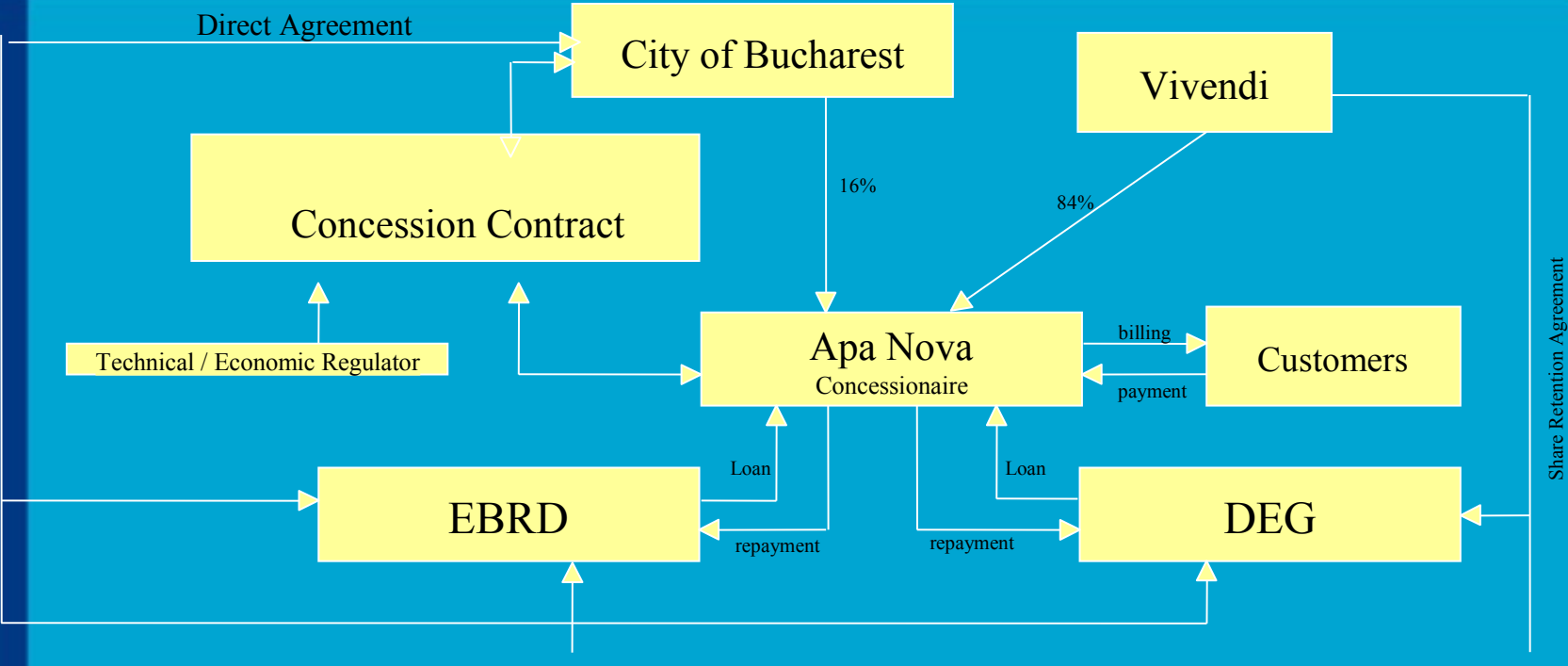


Case Study: Key Facts (continued)

- Borrower: Apa Nova. No recourse to sponsors or to the City (except for special circumstances defined in Direct Agreement).
- Direct Agreement with the City of Bucharest - confirming the City's compliance with its obligations under the concession agreement and regulation of the lenders' step-in rights



Case Study: Project Structure



Other Key Financing Agreements

- Direct Agreement with the City of Bucharest
- Share pledge agreement
- Share Retention and Subordination Agreement
- Enterprise Mortgage



Case Study: Allocation of Major Risks

- Legal / Political risk: including, concession termination risk, default by the Municipality or Apa Nova
- Completion risk
- Financial default risk by Apa Nova
- Tariff risk and affordability
- Collection and demand risk



EBRD contact and web site

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The screenshot shows the EBRD website homepage. On the left is a vertical navigation menu with the following items: Welcome, Operations, Business information, Procurement, Transition, The environment, Finance, Publications, Annual meeting, Recruitment, and What's new. The main content area features a heading "Welcome to the EBRD" followed by a paragraph: "The European Bank for Reconstruction and Development (EBRD) was established in 1991. It exists to foster the transition towards open market-oriented economies and to promote private and entrepreneurial initiative in the countries of central and eastern Europe and the Commonwealth of Independent States (CIS) committed to and applying the principles of multiparty democracy, pluralism and market economics." To the right of this text is a map of Europe with red dots indicating operational countries. Below the map is the URL "www.ebrd.com" in large blue font. Further down is another paragraph: "The EBRD seeks to help its 26 countries of operations to implement structural and sectoral economic reforms, promoting competition, privatisation and entrepreneurship, taking into account the particular needs of countries at different stages of transition. Through its investments it promotes private sector activity, the strengthening of financial institutions and legal systems, and the development of the infrastructure needed to support the private sector. The Bank applies sound banking and investment principles in all of its operations." At the bottom left of the main content area is a small image of two construction workers in hard hats and safety vests, one holding a tool. A "HELP" icon is visible in the bottom left corner of the screenshot.

