

# Multilateral Development Banks : Contribution to Infrastructure Development via support to PPP transactions

Asia-Pacific Ministerial Conference on Public Private  
Partnerships (PPPs) for Infrastructure Development  
October 2<sup>nd</sup> – 5<sup>th</sup>, 2007, Seoul, Korea

- Overview : The Economics of Infrastructure Investments
- Leveraging public money via PPPs
- Limited amounts of private capital going into infrastructure investments despite record levels in private capital flows to emerging markets
- What are the type of risks that investors are not willing to underwrite today (after the late 90s financial crisis).
- World Bank Group : Lending and Risk Mitigation Support to PPPs
- Where is the new product development in the World Bank is heading in the near future.

# Overview: The Economics of Infrastructure Investments

- Infrastructure investments are inherently “lumpy” (involve **huge sunk costs** and create assets that are long-lived and **location-specific**).
- Creation of Infrastructure has **economics both of scale and scope** (i.e., minimum size of facilities, inelastic adjustment of capacity to demand, long term project completion, etc.).
- Infrastructure supply systems contain elements of **natural monopoly (competition)**.
- Demand is wide spread (difficult to **target**).
- Revenues are usually in **local currency** (mismatch if foreign debt financing)
- Services have an essentiality component that raise legitimate public policy concerns of **affordability**.

*However .....*

- Sound infrastructure allows countries to integrate to the global economy and **increases competitiveness** (transport and telecom sectors are the highest contributors to a country’s competitiveness) **impacting job creation and economic growth**.

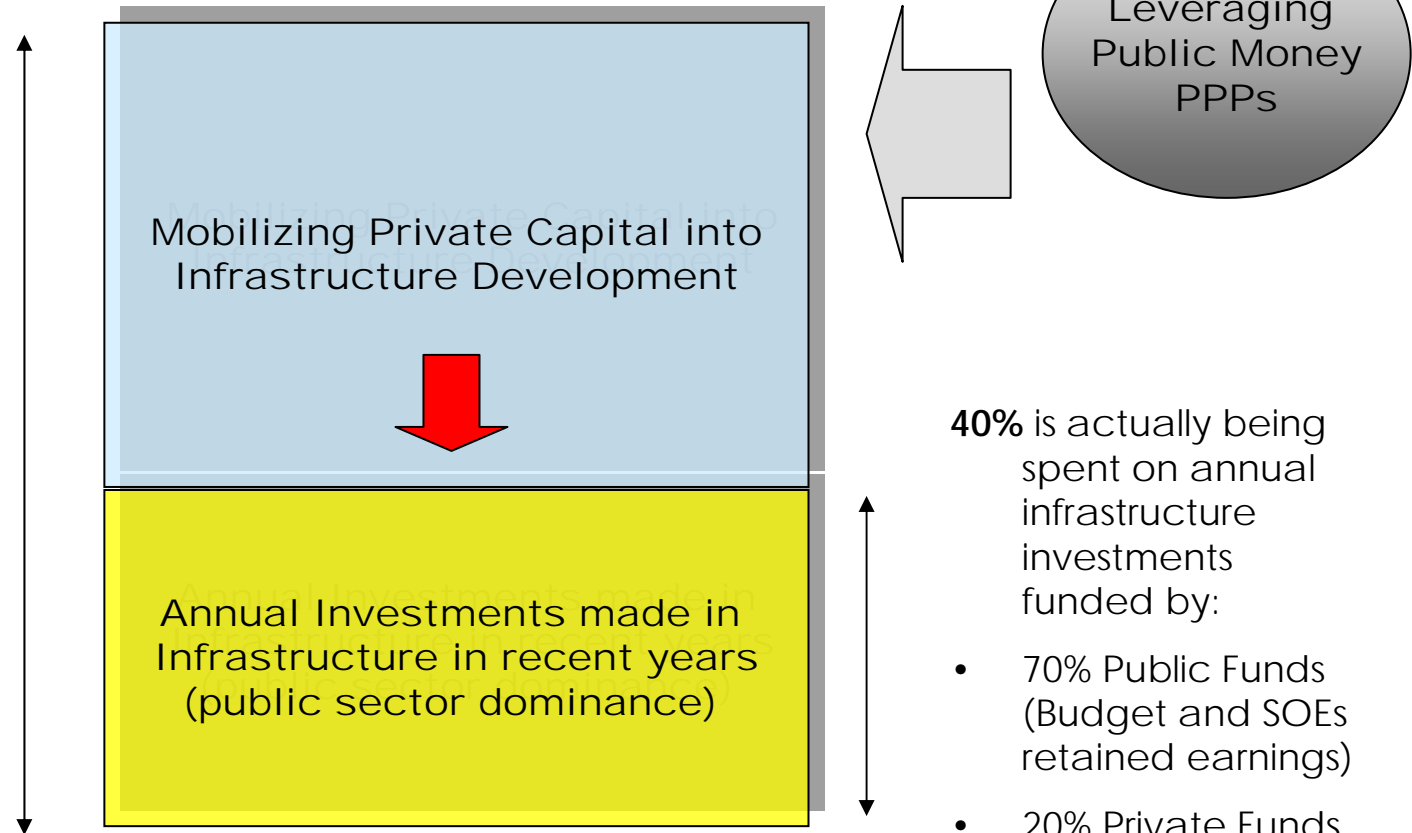
# Leveraging Public Money via PPPs

- Public Services provision is ultimately paid by:
  - (i) end-users , or
  - (ii) tax payers, or – most likely
  - (iii) a combination of both
  
- Public service provision with ***high degree of certainty*** that end-users will be able to pay ***full cost recovery tariffs*** have limited fiscal risks and can be procured via private sector with limited government support.
  - Service provision to corporate or commercial clients (i.e., ports, airports, cargo railways, etc.) and technology driven (i.e., ICT – information, communication and technology)
  
- Public service provision with ***high degree of uncertainty*** that end-users will be able to pay ***full cost recovery tariffs*** have high fiscal risks and are usually procured via PPPs with strong public support.
  - Urban transport (mass transit systems, bridges, tunnels), highways, water and sanitation, Communal services, etc.

# Global Infrastructure Finance <sup>/1</sup>

Total **Infrastructure Investments Needs** in Transition & Developing Countries

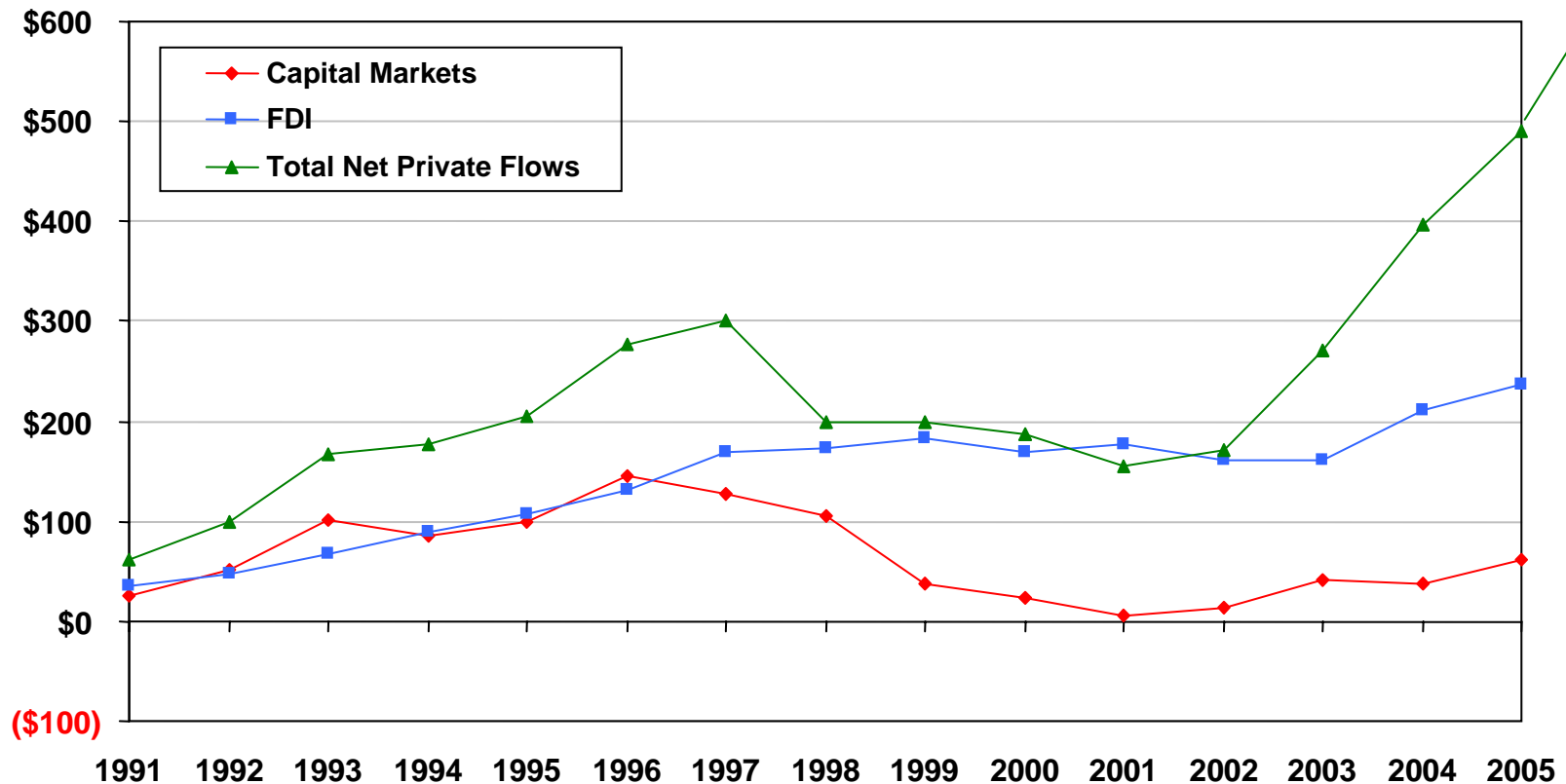
US\$ 500 to US\$ 600 billion per year (5% to 6% of GDP)



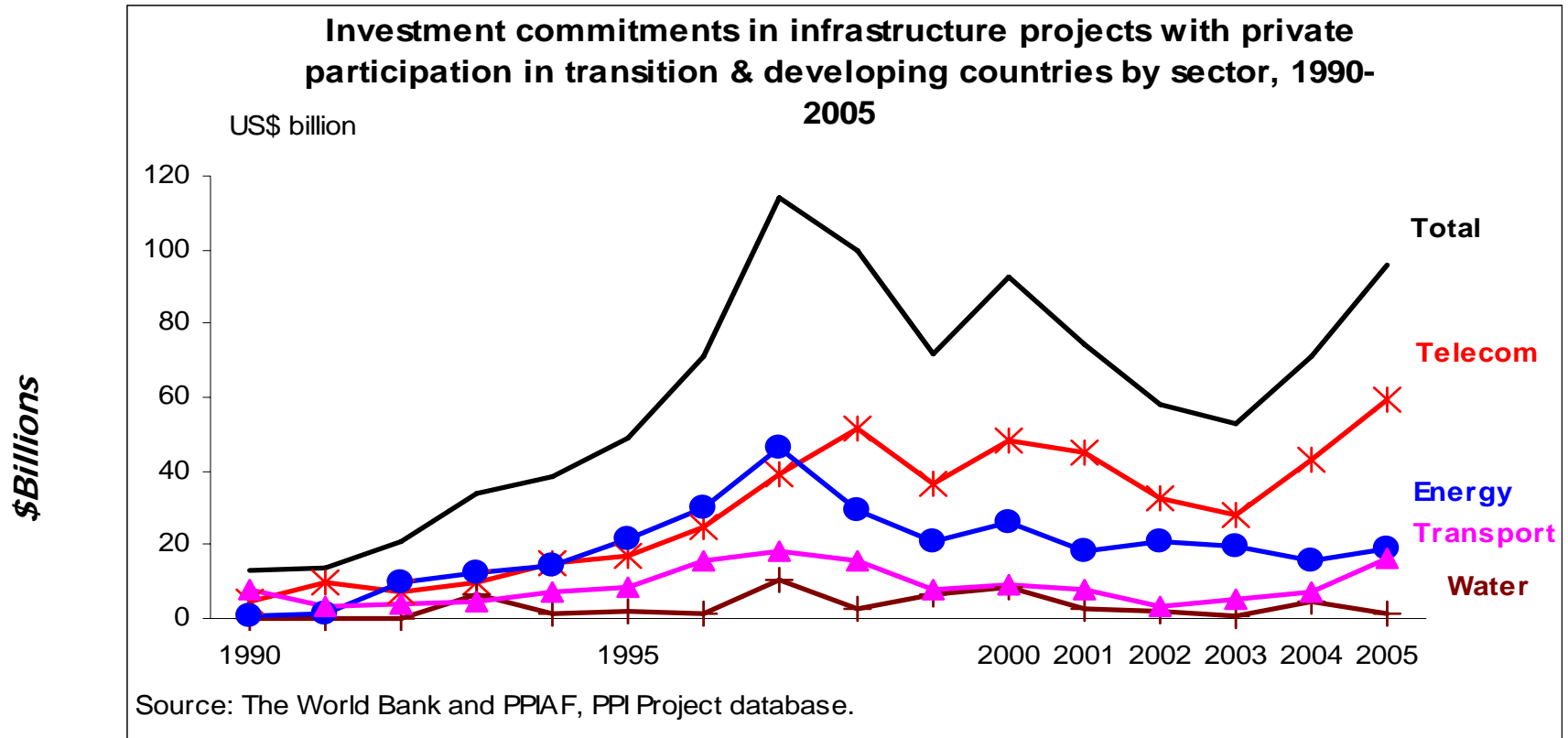
<sup>/1</sup> Source: World Bank Staff estimates (Estache-2005, Fay-Yepez, 2003, Dailami, 2003, PPI data base-2005, etc.)

# Private capital flows are at their best ....

2006 was a record year (US\$ 623 Billion)



# ... but little going into infrastructure (ex. Telecom)



Source of Private Participation in Infrastructure Flows : PPI Database, The World Bank

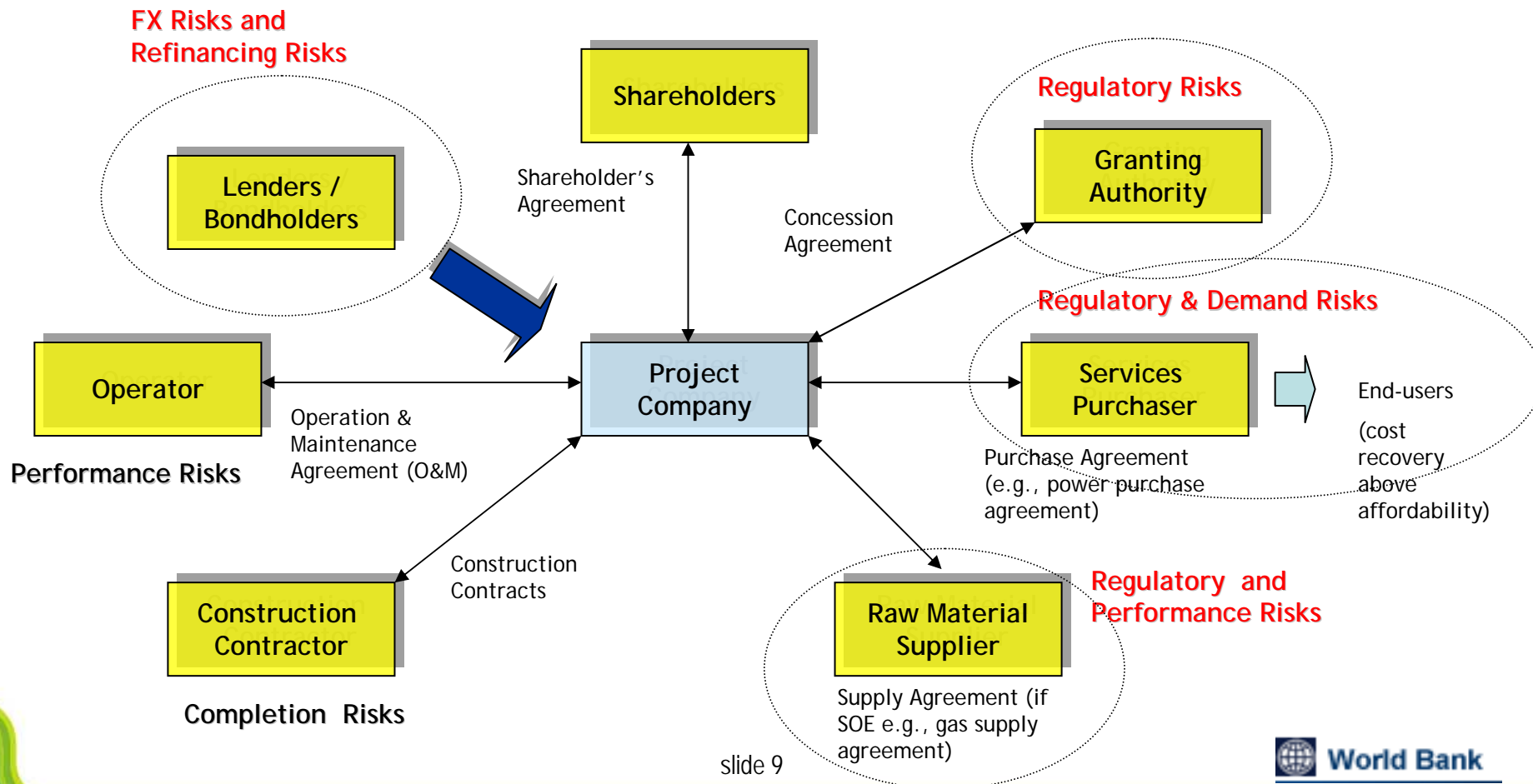
Source of Total Net Capital Flows: Global Development Finance, 2005

# Why is private capital not flowing to water, transport and energy sectors

- *For the private sector, at this stage, the risk-return ratio for infrastructure is unattractive in developing countries.*
  - The upfront capital commitments for infrastructure are typically high. Once the costs are sunk, returns are dependent on revenues allowed by the regulatory framework.
  - End-users tariffs are open to ex-post uncertainties. Similarly, the ability to collect and expatriate the returns on the asset may be compromised by shocks to the economy or changes in laws.
  - Global Capital Markets do not understand infrastructure related risks (nor do they have the time and appetite to learn and understand them).
  
- *Availability of more attractive options.*
  - Infrastructure stock in developed economies is also aging and in need of rehabilitation and expansion. Many developed countries are also favoring the financing of such demands via public private partnerships (PPPs). Private funds for infrastructure have thus gone mostly to developed countries or to the telecoms sector where the payback periods are generally shorter.

# Risks that private sector has difficulty underwriting

## Political (regulatory) and Macroeconomic Risks in PPPs



# World Bank Group (WBG) : Structure



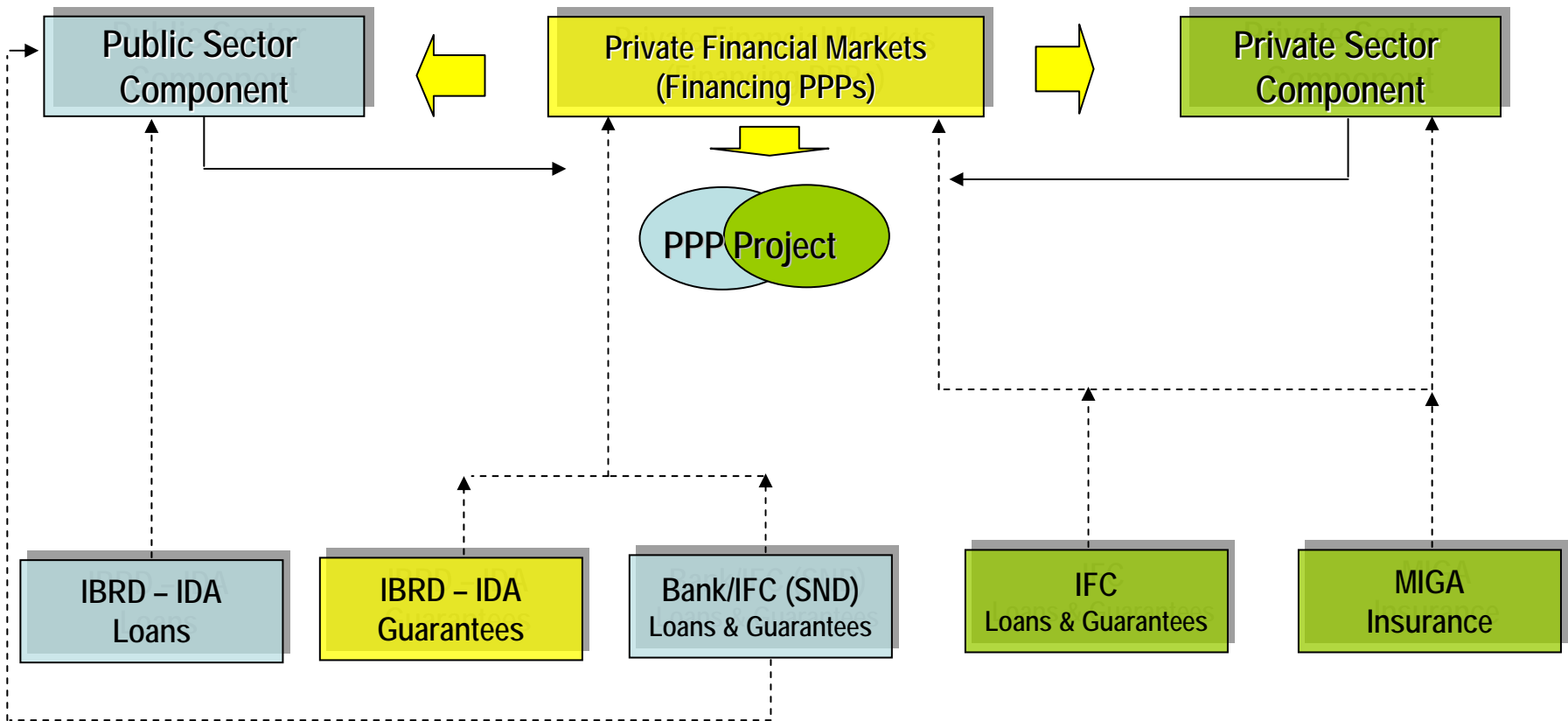
# World Bank Group : Financing Infrastructure

(2002 – 2007)

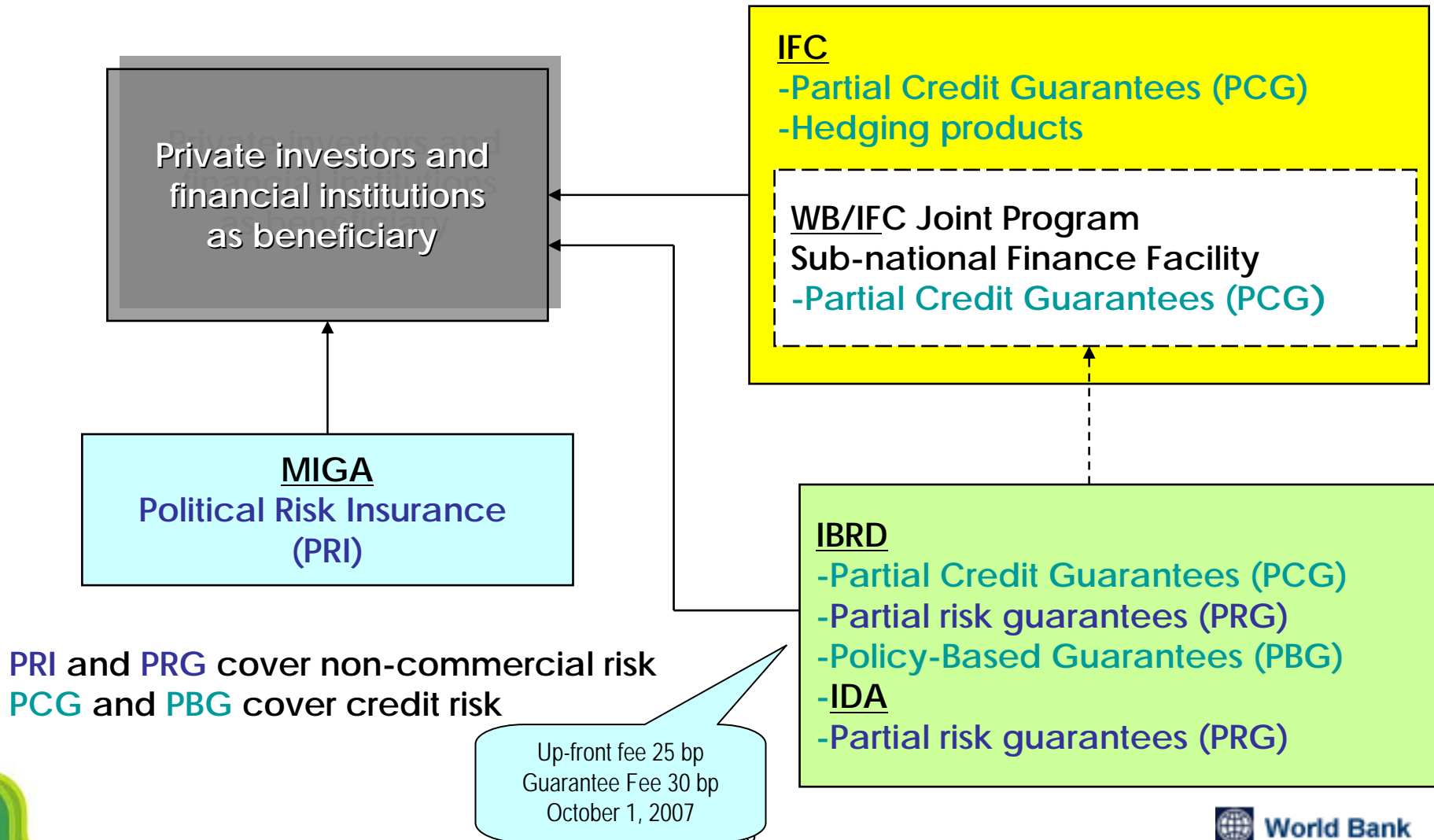
Product line line	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007
IBRD lending	2,502	3,148	3,595	4,359	5,275	5,942
IDA lending	2,563	2,161	2,832	2,559	2,712	3,839
Guarantees	115	75	59	414	60	160
<b>WB sub-total</b>	<b>5,237</b>	<b>5,439</b>	<b>6,596</b>	<b>7,452</b>	<b>8,140</b>	<b>10,217</b>
IFC lending	716	1,039	1,371	1,178	1,945	1,594
MIGA (energy only)	913	1,101	259	408	603	741
<b>WBG total</b>	<b>6,866</b>	<b>7,579</b>	<b>8,226</b>	<b>9,038</b>	<b>10,688</b>	<b>12,552</b>

(1) Figures in US\$ millions, World Bank Group Annual Reports

# WBG : Financial Support to PPPs



# World Bank Group : Guarantees Framework








# World Bank Group : Risk Mitigation Instruments (PPPs)

	IFC	MIGA	IBRD/IDA
<b>Products</b>	Private Sector  Partial Credit Guarantees (PCG)  Hedges for private sector clients (interest rate, currency and commodity swaps)	Private Sector  Non-commercial, political risk insurance (PRI)	Public Sector (Private Financial Sector) <u>IBRD &amp; IDA</u> Partial Risk Guarantees (PRG) <u>IBRD Only</u> Partial Credit Guarantees (PCG) Policy-Based Guarantees (PBG) Hedges for public sector clients (interest rate, currency and commodity swaps)
<b>Loans</b>	Yes	Yes	Yes
<b>Equity (Quasi-Equity)</b>	Yes	Yes	No
<b>Coverage (Risk)</b>	PCG: Full and timely payment of principal and/or interest up to a specified amount (cover all risks of non-payment)	PRI <ul style="list-style-type: none"> <li>• Currency convertibility and transferability</li> <li>• Expropriation</li> <li>• War and Civil Disturbance (incl. terrorism and sabotage)</li> <li>• Breach of Contract</li> </ul>	PRG: Government contractual obligations <i>including</i> : <ul style="list-style-type: none"> <li>• Currency convertibility and transferability</li> <li>• Expropriation</li> <li>• War and Civil Disturbance</li> <li>• Breach of Contract</li> <li>• Regulatory Risk, etc.</li> <li>• Subsidy payment (e.g. OBA)</li> </ul> PCG & PBG: Full and timely payment of principal and/or interest up to a specified amount (cover all risks of non-payment)

## World Bank Group : Risk Mitigation Instruments (PPPs)

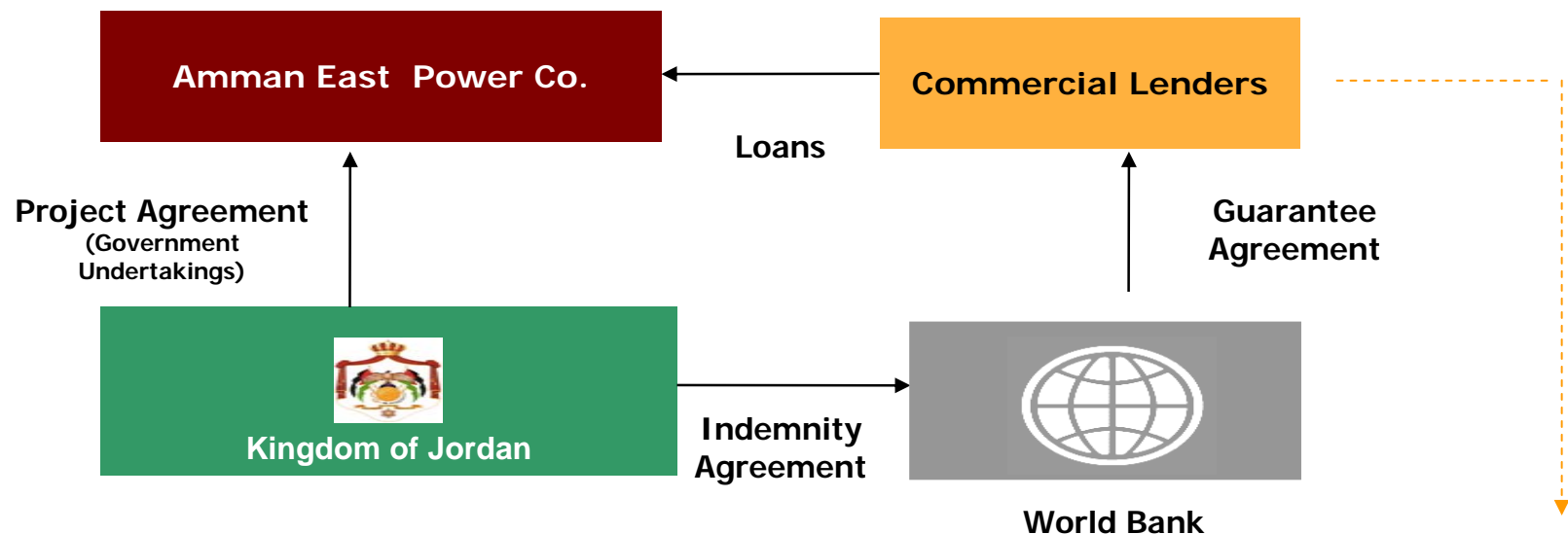
	IFC	MIGA	IBRD/IDA
Guaranteed Percentage	PCG: Determined on a case by case basis.	Debt: up to 95% Equity: up to 90%	PRG: Up to 100% of debt PCG & PBG: Determined on a case by case basis
Eligibility	Must be a member country	Must be a member country	Must be a member country
Tenors	Market based but IFC's involvement can lengthen tenors	Up to 15 years (20 years in some cases)	Consistent with borrower/project needs. Involvement can lengthen tenors
Amounts	Based on client's needs	Project: up to \$110mm (net) Country: up to \$420mm (net)	Based on project needs and CAS allocation.
Priority Areas of Focus	All IFC recipient member countries. Providing long-term local currency financing and development of domestic capital markets.	<ul style="list-style-type: none"> <li>• Africa</li> <li>• IDA eligible countries</li> <li>• South-South investments</li> <li>• SMEs</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• IDA eligible countries</li> <li>• No sector restriction</li> </ul>
Government Counter Guarantee	No	No	Yes

# Market Segmentation: IBRD/IDA, IFC and MIGA Guarantees

Institution & Product Type of Client	Public Sector w/ government guarantee	Public Sector (sub-national) w/ o government guarantee	Private Sector w/ government guarantee	Private Sector w/ o government guarantee	Private Sector w/o government guarantee (under Investment Protection Convention)
IBRD Partial Credit G.					
IBRD/IDA Partial Risk G.					
Bank/IFC Partial Credit G.					
IFC Partial Credit G. + Hedging P.					
MIGA Political Risk I.					
Applicability to PPPs	X	X	X	X	X

# Case : World Bank Partial Risk Guarantees

## "Amman East Power", Private Power Generation Project, Jordan



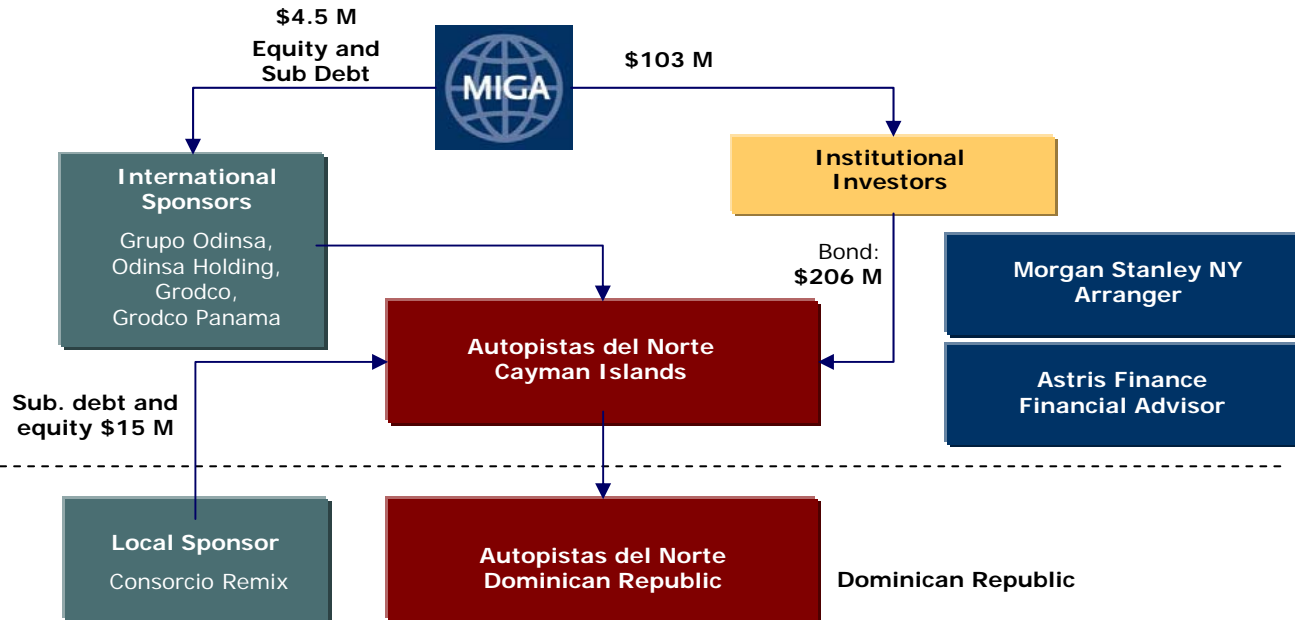
Financing Plan:

1. Loans (JBIC \$ 100 MM + OPIC \$ 70 MM + SMBC \$ 45 MM) <sup>/1</sup>
2. Equity (AES \$ 45 + Mitsui \$ 30 MM)

<sup>/1</sup> Guaranteed lenders covered under IBRD PRG  
Sumitomo Mitsui Bank Corp. and syndicated lenders

# Case : MIGA Political Risk Insurance

## “Autopistas del Nordeste” Toll Road Project, Dominican Republic

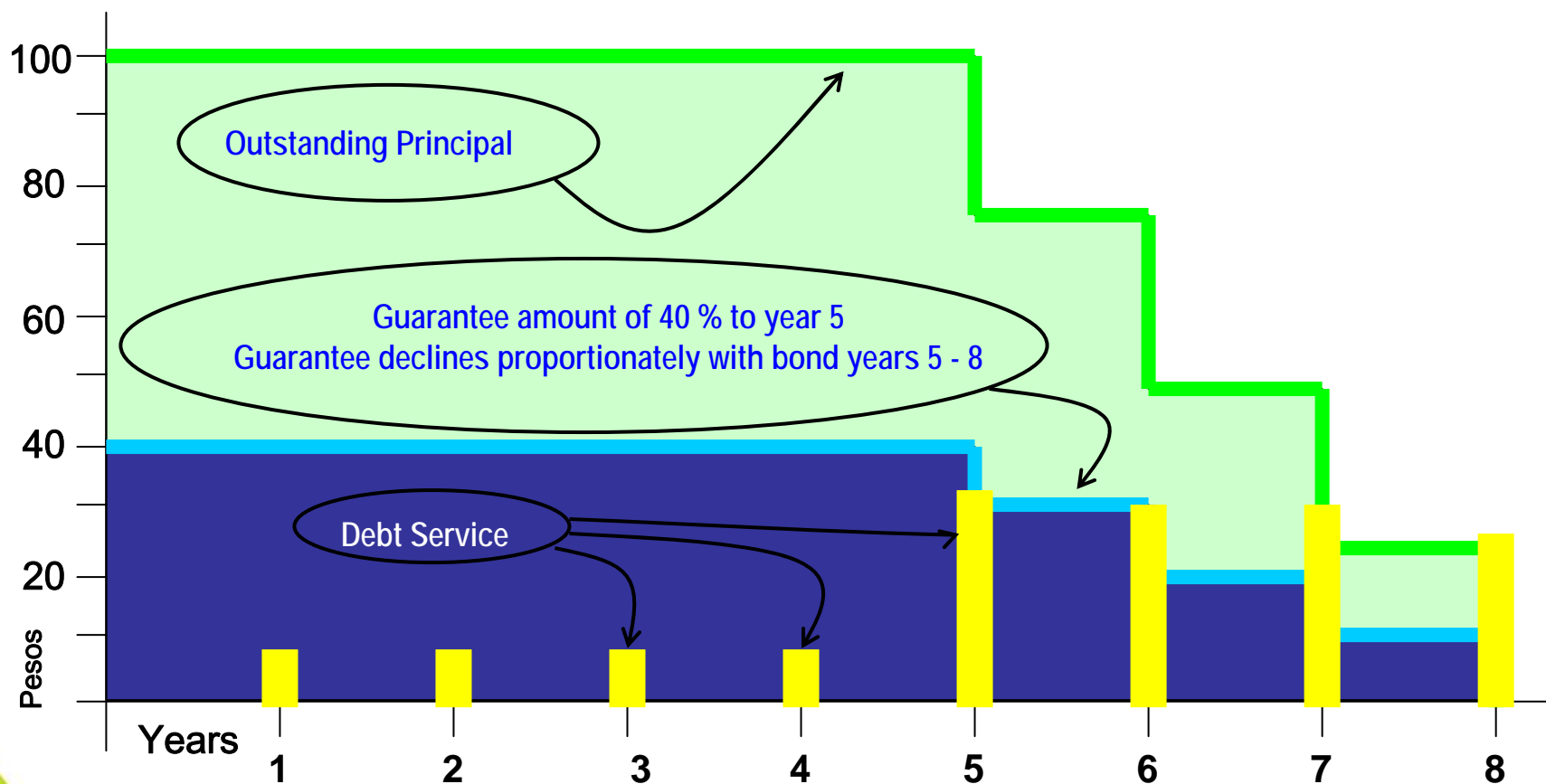


**MIGA supports an 33-year infrastructure concession financed through a capital markets transaction (“144a” private placement)**

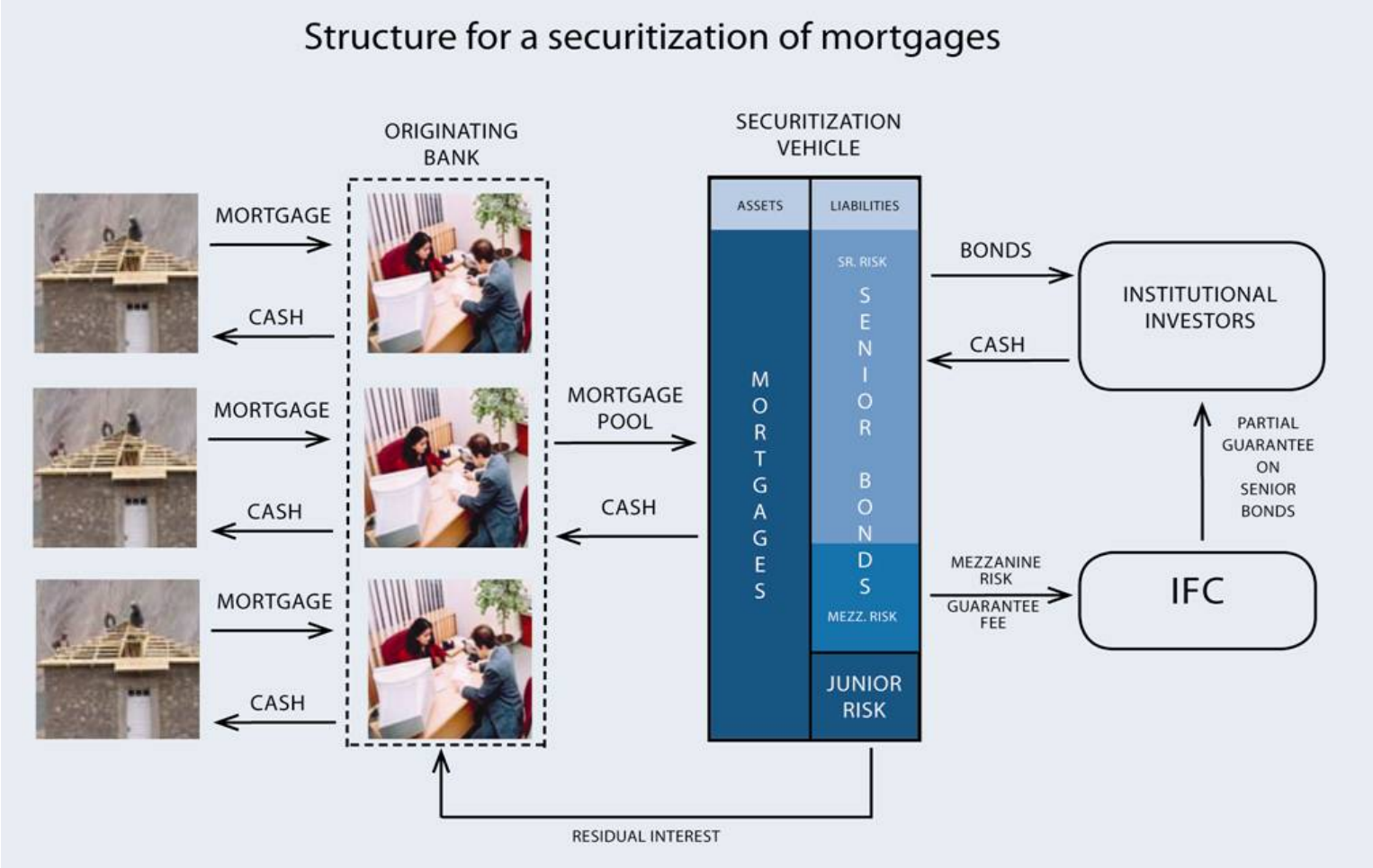
- ✓ Rating increase with MIGA coverage
- ✓ 40% oversubscribed (traditional institutional investors as well as retail)
- ✓ **Absent MIGA coverage, long-term financing was not available**
- ✓ Innovative and speedy use of PRI to raise a different for of financing

# IFC: PCG Structure for Corporate Bonds and Loans

8 Year Amortizing Bond with 10% Coupon and 40% Guarantee



# IFC Case : Mortgage Backed Securities



## New product development (PPPs) : Areas under consideration

### *Infrastructure Development*

- Local currency loans (fixed and variable)
- Wholesale Guarantees (Local Guarantee Funds to cover government contractual risks in PPPs – payment risks)
- Foreign exchange risks (via backstop liquidity facilities and credit derivatives – hedging instruments and currency swaps)
- Partial Credit Guarantees to IDA countries

### *Global Goods (climate change)*

- Catastrophe Risk Insurance (adaptation agenda)
- Reduction of CO2 emissions (carbon finance trusts and monetization of future flows of carbon credits)